Tanzania | June 2026

Kizazi Kijacho: qualitative findings on the implementation, outcomes and sustainability of a community-based parenting intervention

Report

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thrive

Acknowledgements

We are grateful to the facility and community health workers, parents and community leaders who made time to participate in the research and share their experiences. We would also like to thank the Regional Health Management Team and Council Health Management Teams in Dodoma Region for their support, including the time they gave to take part in interviews and their support with the coordination for data collection.

Data collection and analysis were supported by a team of research assistants and translators: Farida Katunzi (data collection and transcription), Macklina Mhagama (data collection, transcription and analysis), Beatrice Mkani (analysis), Shimwe Ngeze (data collection, transcription and analysis), Ashika Sharma (analysis), and Robert Sizya, Alex Rutaihwa and Musa Mantawera (transcription). Their teamwork and skills were essential.

The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) and D-tree were key partners for this research, providing guidance and background information. We appreciate their time and insights. We would also like to thank the wider Kizazi Kijacho research team for their support: in particular, Ingvild Almas, who co-leads the Kizazi Kijacho research programme with Bet Caeyers.

Recommended citation

Gooding, K. et al. (2026). *Kizazi Kijacho: qualitative findings on the implementation, outcomes and sustainability of a community-based parenting intervention*. Thrive report, Oxford Policy Management.
https://thrivechildevidence.org/resource-centre/kizazi-kijacho-qualitative-findings-on-the-implementation-outcomes-and-sustainability-of-a-community-based-parenting-intervention/

Disclaimer

The Thrive programme is funded by the UK's Foreign, Commonwealth and Development Office through its Global Research and Technology Development portfolio and by New Zealand's Ministry of Foreign Affairs and Trade (MFAT). It is managed by Oxford Policy Management in collaboration with the Institute for Fiscal Studies.

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Executive summary

Introduction

Tanzania set the ambitious goal of ensuring that by 2026 all children aged 0–8 years are on track to develop to their full potential. The National Multisectoral Early Childhood Development Programme (NM-ECDP) signals the government's commitment to achieving this goal. The NM-ECDP includes **support for parenting as a key focus.**

The Kizazi Kijacho ('The Next Generation') (KK) parenting programme in Tanzania responds to this national focus on parenting. KK was implemented in Dodoma Region from October 2022 to February 2025, and provided support for families from pregnancy until children were age 2. The programme aimed to strengthen parenting by improving the counselling on nurturing care delivered by community health workers (CHWs) and by supporting households' economic security through the provision of a cash transfer. KK was implemented as a randomised controlled trial (RCT) that compared three options: CHW counselling alone; an unconditional cash transfer (UCT) alone; and a combination of counselling and the UCT. **This report presents findings from qualitative research on KK.**

Research focus and methods

The report combines findings from three studies on KK: the qualitative component of a **process evaluation** conducted around 14–18 months after the start of KK, when children were aged approximately 1 year; a **qualitative endline evaluation** conducted shortly after programme closure, when children were approximately 2 years old; and a **study on sustainability and scale-up** conducted around nine to 12 months after the end of KK support.

The qualitative research was designed to complement findings from the RCT by explaining how the KK interventions supported parenting, or why they did not change parenting practice, conditions affecting this and unexpected outcomes. The qualitative research also provided evidence on the implementation of KK, including the processes through which KK influenced CHWs' and healthcare workers' (HCWs') delivery of services, and factors affecting implementation and sustainability.

The evaluations used a theory-based approach, based on the KK theory of change. Data was collected through interviews and focus groups with the implementing NGOs, local governments, facility HCWs responsible for supervising CHWs, CHWs, community leaders, and caregivers, with the specific sample varying between the three studies.

These qualitative findings should be interpreted in conjunction with quantitative evidence on KK's implementation and effects. The KK research team are producing mixed-methods outputs that triangulate and combine findings from this qualitative report with the quantitative data.

Findings

Household visits

Completion of the expected number of household visits varied between communities and households, and over time. Visits were affected by household availability and acceptance of CHW visits, and by CHWs' availability and motivation. For example, caregivers were sometimes unavailable due to farming or other household responsibilities, temporary migration, or village events, and some KK mothers were prevented from attending by their husbands. The community environment also affected the feasibility of visits, including issues of geographic access and infrastructure, and the availability of mobile phone networks. Completing visits was easier in communities where the CHW lived close to households and for households that were more central, and where the CHW could call households in advance. Postnatal care visits were sometimes missed because mothers went to stay with their family for delivery, the CHW was not notified of the birth, or the mother stayed in the health facility for some days after delivery. To address constraints related to distance, many community members, CHWs and other stakeholders suggested providing transport for CHWs.

Group sessions

In some communities, group sessions were held each month as expected. In other communities, group sessions were occasionally or often missed, sometimes due to the CHW being unavailable but more often due to limited caregiver attendance. Similar constraints to those affecting household visits reduced group attendance, such as farming, village events, distance to the meeting site or difficult access, limited phone network and insufficient interest. CHWs used several strategies to improve attendance, including holding two groups in different locations to make access easier for mothers.

In addition, a key challenge in many communities was the effect of UCT sampling on attendance. For households receiving the UCT, it sometimes encouraged engagement with KK and enabled attendance at group sessions. However, some households in UCT communities did not receive expected payments or their payments were delayed, and the end of the UCT discouraged attendance. In non-UCT communities, some caregivers thought it was unfair that mothers elsewhere received the UCT. Other projects that provided goods or money for group sessions also created expectations of material incentives that discouraged attendance without payment. The situation was exacerbated by insufficient explanation about the UCT for households and CHWs. These issues hindered parents' participation in KK activities and negatively affected relationships with the CHW in some communities. Persuading households to attend when they were frustrated by the lack of UCT required significant additional effort from CHWs, and some CHWs reported distrust and suspicion from caregivers who accused the CHW of taking the money. Many stakeholders suggested that the UCT should be given to either all or no KK households, to make implementation fair and to avoid these difficulties.

Group sessions were expected to include practical demonstrations of cooking nutritious food, with mothers contributing ingredients. When held, these practical nutrition sessions were appreciated by mothers, but in some communities, the practical session was not conducted because CHWs thought mothers could not afford ingredients or caregivers were reluctant to bring ingredients due to experience of other

projects providing the food.

Supervision

One HCW was selected at each health facility to supervise the KK CHWs. There were examples of strong supervision, with HCWs regularly attending CHW household visits and group sessions, holding planning meetings with the KK CHWs, monitoring CHW performance, and providing other support. Several CHWs and HCWs indicated improved supervision due to KK, supporting CHWs' skills and motivation.

However, HCWs' attendance at household visits and group sessions varied, and was sometimes limited, particularly due to high health facility workloads. HCW turnover was a key challenge, and newly appointed supervisors lacked sufficient training to understand KK and their supervision responsibilities. The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) and D-tree attempted to address HCW turnover partly by working with Council Health Management Teams (CHMTs) to secure an immediate replacement, but this was not always feasible.

KK supported quarterly CHMT and Regional Health Management Team (RHMT) supervision of the KK CHWs and HCWs, through joint visits with the implementing NGOs. The RHMT and CHMTs appreciated KK supervision visits because they were an opportunity to go beyond routine facility-level supervision to see activities in the community and allowed for more interaction with CHWs. Supervision from EGPAF and technical support from D-tree were appreciated by CHWs and HCWs.

The KK dashboard was designed to support supervision by HCWs, CHMTs and the RHMT, as well as by the implementing partners. Use of the dashboard varied between HCWs. Some reported regular use and found the dashboard useful, but use was affected by technical difficulties such as inaccurate and missing data, as well as insufficient familiarity with the dashboard for some HCWs. The RHMT and CHMTs' use of the dashboard was generally limited, but improved over time.

Supporting CHW performance

KK training and support brought significant gains in CHWs' knowledge and confidence. KK provided knowledge on new topics, and more information on topics where CHWs already had some experience. KK training workshops were generally described positively. HCWs reported some variations in CHWs' capacity to deliver the KK content effectively, which they often related to individual CHWs' personalities or intellect.

The app and flipbooks provided by KK supported CHW performance, helping CHWs to remember information and providing a structured approach for interaction with caregivers. Seeing pictures in the flipbooks helped caregivers to understand and recall information. There were often difficulties with the app, including software and hardware issues, limited phone network in some locations, and gaps in understanding among app users. The implementing partners worked to resolve technical issues, and user skills improved over time.

Gains in performance extended beyond work for KK, with many CHWs and HCWs finding their improved skills and the KK tools helped them to provide advice during non-KK activities.

KK increased CHWs' motivation, including through increased confidence in their work, positive impacts on households, and the stipend. The stipend helped CHWs to provide

for their households, contributed to transport costs, and supported acceptance of CHWs' work by their spouse.

Acceptability and community engagement

All stakeholders were positive overall about the KK activities and saw them as benefitting households and communities. Perceived positive changes in child development were a primary reason for valuing KK. The support for CHWs' and HCWs' skills, delivery and motivation was also seen as an important benefit.

Caregivers appreciated the group sessions and household visits for providing useful information and guidance, and felt the visits demonstrated care and support. Patient and respectful CHW behaviour further supported acceptability. Many parents asked for the education to be continued and expanded. Caregiver preferences for group sessions or household visits varied between individuals and communities, and many saw benefits of both formats. Household visits provided an opportunity for private and more detailed discussions, while groups were valued for sharing experience and advice. However, gaps in attendance for household visits and group sessions indicate variations in the extent to which KK was valued. The UCT and other financial or in-kind benefits from KK were also seen by some caregivers as a key benefit of the project.

Community members generally reported high levels of trust in the CHW, and in the advice provided by the CHW. Trust was supported by positive experience of the CHW's advice, and by the CHW's background, behaviour and professional skills. However, issues related to the UCT damaged trust in CHWs in some communities. While caregivers reported trusting the CHW's advice, gaps in implementation of practices advised by the CHW suggest the advice was not always considered important or fully believed, and some HCWs and CHWs also indicated gaps in the perceived credibility or authority of CHWs as sources of health information.

Community leaders helped CHWs with KK activities in some communities However, KK engagement with community leaders was limited. Several stakeholders thought more engagement with community leaders would facilitate CHWs' work.

Wider reach

Information provided through KK reached caregivers beyond the target KK households. Some other household or community members attended household visits or group sessions, KK mothers sometimes shared the CHW's advice with relatives, friends or neighbours, and some CHWs or HCWs integrated KK parenting information in their non-KK health service delivery. Several non-KK mothers made changes in parenting after hearing advice from the KK CHWs or mothers involved in KK.

Attendance of non-KK parents at household visits and group sessions varied between communities, and was affected by a range of issues, including household structure, proximity of households, availability of non-KK caregivers around their other responsibilities, awareness of the KK visits and group sessions among non-KK mothers, location of group sessions, an assumption that KK mothers were being paid and lack of material incentives for non-KK parents, overall functionality of the groups, and whether non-KK mothers were invited to attend. Some thought only mothers registered for KK could attend the household visits or groups and that other parents would not be welcome.

KK mothers often shared some information learnt from the CHW with friends, relatives or neighbours, particularly information about making toys. However, concern about negative reactions discouraged some KK mothers from sharing the CHW's guidance with others.

Household use of the UCT

Caregivers who received the UCT primarily used it for basic household necessities, and sometimes livelihood investments, and reported considering the child in decisions about UCT use. They described the UCT as significantly easing economic difficulties.

The role of mothers and fathers in decisions on UCT use varied between communities and individual households. Patterns were broadly in line with wider household decision making, but there were indications of more joint discussion or an increased role for women in decisions on UCT use. The UCT sometimes helped to improve household relationships or helped women to escape or manage difficult relationships, but there were examples of negative effects, with the UCT leading to arguments.

Effects of KK: drivers of change and changes in parenting

Gender relations and male engagement

KK aimed to increase fathers' involvement in parenting and maternal health. In each community, some fathers attended household visits, but usually this was only a few fathers, or attendance was rare or only for part of the CHW's visit. Attendance at group sessions was very limited. Attendance was affected by fathers' prioritisation income generation, by gender norms, and by the lack of a clear invitation to attend. Mothers sometimes shared the CHW's advice with their husbands, so some men received at least some of the information even when they did not participate directly, but with varying levels of detail.

Many mothers and fathers reported an increase in fathers' involvement in parenting, and in fathers supporting their wives and sharing domestic tasks. For example, they described fathers providing more help with household chores, purchasing food or other goods for the mother and children, attending clinics, and spending more time with the child and playing with them. Several caregivers indicated a closer relationship between the father and the child, which fathers enjoyed. Levels of male involvement in parenting and the extent of change varied between households and communities. Ingrained gender roles, low engagement in KK activities, time constraints due to engagement in income generation and migration to farms limited male involvement for some households.

Household decision making varied between communities and individual households. In some households, decisions were shared, sometimes due to women having their own income. In other communities, men were the primary decision makers, particularly for bigger household decisions and decisions related to household resources. Changes in decision making with KK varied, with no or little change for some households, while others indicated more joint decision making, or, more often, men retaining control but being more likely to agree when women said things like specific foods or clinic visits

were needed. KK advice meant men gained greater understanding of the importance of issues such as clinic attendance or nutrition, making them more likely to agree to women's requests. There were also reports of more male involvement in decisions related to parenting, through more joint discussion.

Changes in decision making brought some improvement in household relationships: for example, more joint planning and problem solving by the couple. Attending household sessions together and more joint discussions of childcare also brought some parents closer. Some mothers also reported a reduction in physical or verbal abuse, partly due to KK guidance that men should treat women kindly, particularly to protect the pregnancy or the young child. The extent of change varied between households, with some having positive relationships before KK, and others continuing to experience difficulties.

In addition to KK, other interventions and sources of advice contributed to changes in men's support for maternal health and parenting, decision making and relationships – for example, advice at the clinic, church, or through other projects. These other interventions were sometimes seen as the primary cause of change, and sometimes KK was seen as reinforcing this advice or providing more emphasis.

Caregivers' mental wellbeing and social networks

The KK theory of change anticipated improvement in caregivers' mental wellbeing through support from the CHW and the UCT. A range of personal and household issues caused stress for some caregivers, such as the health risks of pregnancy and delivery, economic difficulties and unsupportive household relationships. KK activities sometimes eased stress: for example, through the CHW providing reassurance and advice about managing stress, and through the social benefits of groups and enjoyment of playing with children. The UCT also helped to alleviate stress related to economic difficulties. Beyond KK, stress was also reduced by advice from other sources and by caregivers taking their own steps to relax, and safe delivery was often a primary cause of reduced stress.

Some mothers reported making new friends through the KK groups, or sharing advice and helping each other in between the group sessions. The development of new social networks was affected by the community setting and whether mothers already lived close together and knew each other. Support for new friendships may have been particularly important for more transient urban populations.

Changes in caregiver practices and in nurturing care

Changes in maternal health and parenting practices were widely reported across communities**,** including improvements in prenatal care and maternal nutrition; breastfeeding and complementary feeding; child health seeking, stimulation and early learning; and safety and security, including hygiene and discipline. Nurturing care practices were seen as improving for KK households compared to the past, and as better among KK households than among other community members. The extent of change and the level of evidence varied between practices. There was most evidence of change for stimulation and early learning, an area where information was rarely provided prior to KK or through other services. For maternal care, breastfeeding, child nutrition, child health and hygiene, KK was generally seen as improving practices, but some advice was already provided before KK and through other projects, and the extent

of change was more varied. Some changes in the approach to discipline were indicated, but corporal punishment persisted.

KK acted alongside other interventions and wider contextual changes that also improved caregivers' knowledge, motivation and opportunities for nurturing care. Several KK characteristics were seen as helping to strengthen caregivers' implementation of information that was already being provided through other channels, adding value to existing sources of advice. Individual counselling allowed more in-depth guidance that improved knowledge, skills and understanding; explanations about the importance and benefits of different practices supported motivation; regular conversations with mothers provided an opportunity for CHWs to identify and address misunderstandings or problems hindering implementation; frequent and repeated education provided reminders and reinforced information; and regular monitoring and follow-up motivated action as mothers knew the CHW would ask about their practice. Impact was also supported through timely advice, longer-term support, practical sessions, the involvement of fathers and other household members, use of the flipbook and improved CHW skills, and by positive encouragement and respectful care from CHWs. KK also increased households' opportunities to implement guidance by reducing the cost of recommended practices via homemade toys and suggestions on more widely available foods, and by increasing household resources through the UCT. Once caregivers started to implement new practices, their motivation was reinforced by seeing their child develop, by parenting becoming easier, and by emotional enjoyment.

The extent of improvements in parenting varied between households and communities, as individual, household and wider community factors led to different capacities, motivations and opportunities for change. In particular, households' economic status affected nutrition and other areas. Implementation was also affected by different livelihoods, location and community geography, household gender relations, and issues such as parents' alcohol consumption. Previous exposure to health services affected the added value of guidance provided through KK, and past parenting experience affected motivation to change. For example, earlier problems with maternal or child health encouraged parents to make changes, while perceptions that previous children had developed well reduced motivation to follow the CHW's advice.

Sustainability and scaling

To support sustainability, D-tree organised a series of meetings with CHMTs and the RHMT to discuss progress and ways to continue the activities. CHMTs presented plans to ensure the sustainability of interventions. Some activities in these plans were implemented, but activities involving additional costs were more challenging. Budget constraints were repeatedly highlighted as a barrier to sustainability and scale-up, limiting the provision of formal training, CHW allowances, and additional flipbooks. The RHMT's and CHMTs' attention to the plans also varied, as did their monitoring of continued implementation. All CHMTs reported a decline in supervision of KK CHWs and HCWs following the end of KK.

Within KK communities, KK CHWs continued to provide parenting education, primarily through routine health education and outreach activities. The KK guidance and flipbooks continued to be used by CHWs to provide education through these channels. Household visits by KK CHWs had stopped or were conducted only occasionally, partly

because CHWs no longer received an allowance, and partly because providing information through routine services enabled wider coverage. Among the sample health facilities, regular household visits were only conducted where the KK CHW was also part of the new government Integrated and Coordinated CHW programme; CHW in this programme were required to conduct visits and received an allowance.

Continued provision of ECD education by KK CHWs through routine channels varied between CHWs and health facilities, and was affected by support from HCWs, the CHWs' intrinsic motivation, and the opportunity costs of working without an allowance.

There was some spread of the KK training to other CHWs or HCWs, primarily through informal peer sharing or observation of the KK CHWs. Delivery of newer KK content by other CHWs was relatively limited. Scale-up among KK facility CHWs was affected by tensions between KK CHWs and those not selected for KK, and between new government CHWs and KK CHWs not selected for the government programme. Expectations that training requires allowances and a lack of flipbooks for non-KK health facilities also limited scale-up within and beyond KK health facilities.

Use of the KK app was not expected to continue in its current form, but EGPAF and D-tree were supporting integration of KK app content in the new government Unified Community System (UCS). They were also working with national and subnational governments to integrate early childhood development (ECD) in a range of other government systems, including curricula and guidance documents.

Using the routine health promotion activities as a forum for parenting advice extends reach, and makes continued provision more feasible. However, KK was seen as adding value over existing facility clinics and routine health promotion due to the regular follow-up and one-to-one counselling, which strengthened caregivers' implementation of the advice. Effects on caregiving may be reduced if education is delivered only through routine group sessions such as at clinics.

Conclusions and implications for future programmes and research

The findings suggest considerations for future parenting programmes to support implementation, sustainability, equity and effectiveness, summarised here.

- Delivery models need to accommodate household availability, migration, and local languages. Improved coordination between health facilities and CHWs could support postnatal care. App functionality requires adequate ongoing support.
- Effective implementation needs to consider support for CHWs' transport and allowances, supervision workloads, and HCW turnover.
- More community engagement could support acceptability and provide additional channels for sharing parenting guidance.
- Caregivers would appreciate guidance materials that they can retain at home, and continuing guidance as children develop.
- Addressing harmful practices, including negative discipline and gender-based violence, may require a wider range of community interventions and additional support for CHWs.

- Addressing economic constraints through social protection could support equitable implementation.
- Strengthening male involvement needs additional focus, including identifying delivery approaches that can facilitate and encourage men's participation.
- Provision of parenting services depends on health system functionality, and wider infrastructure, such as an adequate phone network and all-season roads. This underlines the importance of the government's ongoing work to strengthen primary health care and wider development, and the need for adequate funding to primary and community health services.

Acronyms and abbreviations

CFIR	Consolidated Framework for Implementation Research
CHMT	Council Health Management Team
CHW	Community health worker
CL	Community leader
COUNSENUTH	Centre for Counselling, Nutrition and Health Care,
ECD	Early childhood development
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
FGD	Focus group discussion
HCW	Healthcare worker
KK	Kizazi Kijacho
KKM	Mothers participating in the KK project
MMAM	*Malezi, Makuzi, maendeleo ya Awali ya Mtoto* (early child development)
NM-ECDP	National Multisectoral Early Childhood Development Programme
Non-KKM	Mothers not selected for the KK project
RCT	Randomised controlled trial
RHMT	Regional Health Management Team
TZS	Tanzania shillings
UCS	Unified Community System
UCT	Unconditional cash transfer
VEO	Village executive officer
VHND	Village Health and Nutrition Day
VICOBAs	Village Community Banks

1 Introduction

Tanzania has the ambitious goal of ensuring that all children are on track to develop to their full potential (1). To this end, there has been significant progress in child health and nutrition, but further work is needed to end preventable deaths, reduce malnutrition and support children's full development. In 2022, only 47% of children aged 2–5 were on track in health, learning and psychosocial wellbeing (2). Within this overall figure, there was significant variation between groups and locations, with fewer children on track among poorer households, in rural areas, and when mothers had less education. Identifying sustainable, scalable approaches to support nurturing care is critical to improve child development outcomes.

The National Multisectoral Early Childhood Development Programme (NM-ECDP), launched in 2021, signals the Government of Tanzania's commitment to accelerating investment in early childhood development (ECD). The NM-ECDP is aligned to the global Nurturing Care Framework for Early Childhood Development and aims to address the holistic needs of children aged 0–8 years. It promotes a multisectoral approach covering health, nutrition, water, sanitation and hygiene, education, and social protection (1).

Support for parenting practice is a key focus of the NM-ECDP, in line with the emphasis on parenting interventions in global ECD strategies. Existing evidence indicates that parenting interventions can have significant benefits for child development (3), but there remain gaps in the evidence on how and under what conditions parenting support programmes work and on effective approaches to integration within health systems.

This report presents findings from qualitative research on the Kizazi Kijacho ('Next Generation') (KK) parenting programme. KK was designed to support parenting for children during the first 1,000 days by strengthening the counselling delivered by community health workers (CHWs) from conception until age 2, and by supporting households' economic security through an unconditional cash transfer (UCT) until age 1. KK involved a portfolio of research, including quantitative assessments of implementation, impact and costs, and qualitative research to explain how KK supported parenting, and to identify factors affecting implementation, effectiveness and sustainability. Quantitative findings on the costs and mixed-methods findings that bring together the quantitative and qualitative data on implementation and impacts are reported elsewhere, with further mixed-methods reports forthcoming[1]. This report focuses on the more

[1] Phase 1 costing study findings are available at https://thrivechildevidence.org/resource-centre/costing-parenting-and-cash-transfer-interventions-in-an-early-childhood-development-pilot-programme-in-tanzania/. The Phase 2 costing study report, mixed methods process evaluation and impact papers, and further quantitative papers, are forthcoming. Summary mixed-methods findings are provided in a policy brief available from the Thrive team in the following report: Kizazi Kijacho research team. (2026). *Evidence for sustainable parenting and cash transfer programmes in Tanzania*. Oxford Policy Management.

detailed qualitative findings**. It should be read in combination with the mixed-methods summaries that describe overall trends in KK implementation and average effects on parenting.**

In this introductory section, we provide background information on the KK programme (Section 1.1) and its theory of change (Section 1.2), followed by an overview of the research, including the different studies conducted under KK (Section 1.3), the rationale for the qualitative research (Section 1.4), and the research questions (Section 1.5). We also provide an overview of the report's structure (1.6).

1.1 The Kizazi Kijacho interventions

The KK research programme was designed to test the effectiveness of three packages of interventions designed to support parenting and child development: a parenting programme delivered by CHWs; an UCT that provided financial support to households; and a combination of both interventions. The programme focused on the period from conception until age 2, a critical stage for child health, learning, behaviour and psychosocial wellbeing. Activities were implemented in Dodoma Region from October 2022 to February 2025.

KK was structured as a multi-arm randomised controlled trial (RCT), with one arm for each of the three intervention packages and a control arm. The parenting programme was implemented in the catchment areas of 88 health facilities across all eight district councils in the region, covering 1,491 households. Households in half the communities in the parenting arm also received the UCT (77 communities, 728 households), with UCT and non-UCT communities located around the same health facility.

The parenting programme aimed to enhance caregivers' skills for nurturing care by providing advice on health, nutrition, safety and security, early learning stimulation and responsive caregiving. It combined the Care for Child Development approach developed by UNICEF and the World Health Organization with elements of the Reach Up parenting programme, tailored to the Tanzanian context.

Support for parents was delivered by existing CHWs through monthly home counselling visits, starting during pregnancy and continuing until the child was approximately age 2. CHWs also organised group sessions in the community once children reached 6 months on average. CHWs were trained in different aspects of ECD through a series of KK workshops, and provided with a smartphone and digital app to guide their work. This app notified CHWs about upcoming household visits or group sessions, and supported CHWs during the sessions by providing guidance on danger signs and reminding CHWs about the counselling information and activities to cover.

CHWs also received a smartphone and charger, a KK backpack, a participants' manual, sample toys, a KK t-shirt, and three flipbooks for use during counselling sessions:

- the standard government *Bango Kitita*, focused on health and nutrition; all CHWs should have copies of this flipbook, but in practice the Dodoma Region CHWs did not have copies before KK
- an individual counselling KK flipbook for household visits, with guidance on play, communication, responsive caregiving, and safety and security
- a group session KK flipbook with guidance on nutrition, play, communication, and responsive caregiving.

The individual and group session flipbooks were updated in February 2024 to integrate content for children aged 12–24 months.

One healthcare worker (HCW) at each health facility was selected to supervise the KK CHWs. These HCW supervisors received training and tools, including an app-based checklist to guide supervision, and access to an online dashboard that displayed data on whether CHW household visits and group sessions had been conducted. The data was collected via the CHW app and aimed to help HCWs monitor performance and take supportive action where needed. Local district and regional government also had access to this dashboard.

Under KK, CHWs were asked to conduct 31 household visits between the time a woman was 6 months pregnant and when children were 24 months old. This added 7 visits to the schedule recommended by the government at the time KK was implemented. They were also requested to organise monthly group sessions of 1.5 hours in length focusing on caregiver–child interaction and stimulation activities, targeting children from 6 months old onwards.

Implementation was overseen by EGPAF, particularly components around regular CHW and HCW supervision, and D-tree, who led app development. These NGOs also used the dashboard to guide their supervision and support.

The Dodoma Regional Health Management Team (RHMT) and district Council Health Management Teams (CHMTs) supported training for HCWs and CHWs, and joined quarterly supervision visits to provide oversight and guidance. In the last year of the project, a series of district taskforce and regional KK steering committee meetings were held to review progress and discuss future plans.

More detailed information on KK's design is provided in the baseline report (4) .

1.2 The Kizazi Kijacho theory of change

The KK theory of change was developed collaboratively between the qualitative research team and the KK design and implementation team (including the partner NGOs and KK lead investigators). An initial draft theory of change was produced using KK design documents, and this was then refined through workshop discussions (see Annex A).

This theory of change sets out the causal pathway for KK, including:

- inputs such as training for CHWs and HCWs, and provision of the digital App and flipbook
- outputs, including improved CHW and HCW skills and motivation

- immediate outcomes, including delivery of household visits, groups and supervision
- intermediate outcomes, or the drivers of change, including improved parental knowledge, increased trust in CHWs, more male engagement in parenting, and improved maternal health
- later outcomes, including changes in parenting practices
- ultimate impacts, including improved maternal and child health.

Alongside the overall theory of change, nested theories of change were produced for specific stages to present causal processes in more detail, including mechanisms of change (for example, how the provision of tools was expected to support CHWs' delivery of the ECD counselling) and assumptions related to aspects of implementation and context.

Although set out diagrammatically as a linear process from inputs to impacts, two-way interactions between different theory of change components were anticipated, including interactions between different outputs or outcomes, and feedback loops (5). For example, improved CHW service delivery was expected to strengthen community trust, which could in turn reinforce CHW motivation and service delivery.

1.3 Kizazi Kijacho research

As described above, KK was implemented as an RCT, with three intervention arms and a control group. The RCT examined the effects of the parenting and UCT interventions on parenting practices and child development outcomes at age 1 and 2, including children's cognitive, speech and language development; nutritional status; and socio-emotional development; as well as child-rearing practices and variations in impacts with household and maternal characteristics.

Complementary studies were conducted alongside the RCT to provide further information and to explain the RCT findings. These included a costing study that examined KK's cost effectiveness and the affordability of scale-up, and three rounds of qualitative research:

1. Qualitative research conducted as part of a mixed-methods **process evaluation** focused on the implementation of KK activities, conducted over December 2023 to April 2024, around 14–18 months after the start of KK, when children were aged approximately 1 year, and just over halfway through KK's implementation.
2. A **qualitative endline evaluation** focused on the effects of KK on parenting practices, and further implementation dynamics, conducted over February to June 2025, shortly after programme closure when the children were approximately 2 years old.
3. A **qualitative study on sustainability and scale**, conducted in November 2025 to February 2026, around 9–12 months after the end of KK funding and support for implementation.

This report presents findings from these three rounds of qualitative research.

Results from the RCT, the quantitative components of the process evaluation, and the costing study are reported elsewhere, including mixed-methods analysis that combines summary findings from this qualitative report with the quantitative data on implementation and effectiveness.[2] The purpose of this separate qualitative report is to provide more detailed qualitative findings that extend the information contained in mixed-methods outputs and to provide the underlying qualitative evidence.

1.4 Qualitative evaluation of processes, outcomes and sustainability: the rationale and focus

KK was a complex multi-component intervention, introduced into existing community and health systems. Implementation and effectiveness were influenced by interactions with different contexts, including the characteristics of implementers and households as well as the community and health systems in which KK operated (6). Understanding the effectiveness and value of this type of intervention requires evidence on what was actually implemented, to know whether any gaps in expected outcomes resulted from weak implementation or limitations of the intervention itself. Assessment also requires an understanding of the processes through which interventions led to outcomes, influencing factors, other contributions to change beyond the programme intervention, and unintended or unexpected outcomes. Examining implementation processes and how, why and under what conditions an intervention produced effects can help decision makers to consider whether the intervention could be transferred to other settings; potential adaptations and the essential components required to generate positive outcomes; and how the intervention could be optimised to support feasibility and effectiveness (6,7).

The process evaluation and qualitative endline evaluation aimed to produce evidence on these areas, examining the implementation of KK, the processes through which KK influenced service delivery by CHWs and HCWs and parenting practices, factors that affected implementation and outcomes, and unexpected outcomes. **Evidence on the implementation** of KK household visits, group sessions and supervision was important given potential risks to feasibility and sustainability in a stretched health system. KK made use of the existing government health system, with services delivered by CHWs. Health workers in Tanzania are often under pressure, and KK added activities to their workloads (additional home visits, group sessions, and provision of a wider set of messages). KK also included activities that could support CHWs in a stretched health system, such as additional training, the KK app, and supervision.

Examining the **processes through which KK influenced parenting practices, and contextual factors affecting this** (including reasons for a lack of impact in some cases), provides information on the mechanisms, enablers and barriers that lie behind RCT results. Considering KK alongside other influences on parenting also

[2] See footnote 1 (page 1).

helps to identify unexpected causes of change, and the added value or relative advantages of KK. Information on how KK produced effects can inform thinking on potential adaptations, including essential components. Information on factors affecting outcomes provides evidence on the conditions needed for parenting programmes like KK to be effective.

KK was designed to be **sustainable and scalable**, particularly through working via government health workers (CHWs and HCWs). Examining what has been sustained, how and why, and any early scale-up, can inform decisions on further scaling. Given KK's focus on CHWs, a key potential avenue for scale-up is the Tanzanian Government's Integrated and Coordinated CHWs programme, which runs from 2024 to 2028. This programme aims to expand and professionalise the CHW workforce, and to align and standardise support for CHWs across stakeholders. After recruitment to the programme, CHWs undergo six months of training, and they receive a stipend. The programme was being introduced in selected districts at the time of the KK qualitative endline evaluation, including Chemba District in Dodoma, where KK was implemented. Early experiences with this programme in KK communities were examined as part of the qualitative research on sustainability.

Analysis of implementation and sustainability focused on delivery of the KK parenting intervention, with implementation of the UCT only considered in relation to its effects on the parenting activities. Analysis of changes in parenting practices focused primarily on the influence of the parenting intervention, but considered the role of the UCT in households that also received the parenting advice.

1.5 Research questions

Research questions for the three qualitative studies documented in this report are set out below. These questions were developed based on the KK theory of change, the theoretical frameworks that guided the research (see Annex B), and discussion with the KK team. Questions were refined as initial qualitative data or preliminary findings from the quantitative studies pointed to further aspects of programme implementation or effectiveness that needed explanation. The questions are grouped around three areas: implementation; effectiveness (including changes in gender relations and male engagement); and sustainability.

Implementation

RQ 1 Fidelity, frequency and reach of KK activities

RQ 1.1 What factors influence the coverage and frequency of household visits and group sessions? What adaptations are made to delivery approaches?

RQ 1.2 To what extent is supervision delivered as intended, and what factors affect this? What are supervisors' experiences with the KK dashboard?

RQ 1.3 Is there reach beyond the target households, and, if so, through what channels, and what affects this?

RQ 2 HCW and CHW capability, motivation and workloads

RQ 2.1 To what extent are CHWs and HCWs able to deliver KK activities, considering workloads and individual capabilities, and what factors affect this?

RQ 2.2 How has KK affected CHW capacity and motivation, including the contribution of working tools such as the KK app and flipbook, skills training and stipends?

RQ 3 Acceptability to stakeholders and community engagement

RQ 3.1 To what extent are KK activities acceptable to caregivers, communities and government stakeholders, and what affects this?

RQ 3.2 Are some KK programme components seen by stakeholders as more acceptable and important?

RQ 3.3 How has KK affected trust in CHWs?

RQ 3.4 What role has community engagement played in KK?

Effects on parenting practices

RQ 4 Male engagement in parenting and household gender relations

RQ 4.1 To what extent have male partners participated in KK activities, and what affects this?

RQ 4.2 How has KK influenced male involvement in parenting, household decision making and relationships, and what affects this?

RQ 5 Effects on other drivers of change indicated in the KK theory of change

RQ 5.1 How has KK influenced changes in caregivers' mental health, and what factors affect this?

RQ 5.2 How has KK influenced changes in social networks, and what factors affect this?

RQ 6 Use of the UCT

RQ 6.1 How do households use the cash transfers, and does the UCT affect household gender relations?

RQ 7 Influence on parenting practices across different areas of nurturing care

RQ 7.1 How and through what processes does KK affect parenting practices? How do different aspects of the KK interventions' design and delivery influence outcomes, and are there other causes of changes in parenting, alongside KK?

RQ 7.2 What conditions influence the effects of KK, including factors at household and wider community levels that enable or constrain motivation and the ability to implement CHW advice?

Sustainability

RQ 8 Government plans and budgets

RQ 8.1 Have local governments planned for sustainability and scaling, and to what extent have plans been implemented?

RQ 8.2 Has support for ECD activities (including CHW stipends) been included in health facility or local council budgets?

RQ 9 Sustained implementation

RQ 9.1 Have household visits and group counselling continued after the end of NGO support, and how have activities been adapted? What factors affect continuation of activities, including any influence of the new government Integrated and Coordinated CHWs programme?

RQ 9.2 Are KK tools still being used (e.g. handbooks for CHWs, flipbooks, the app), and, if so, how?

RQ 10 Scale-up

RQ 10.1 Have KK activities been introduced in additional communities or districts, and, if so, how? What factors have affected scale-up, including any influence of the new government Integrated and Coordinated CHWs programme?

The focus questions from the list above varied between the three qualitative studies:

- Questions on **implementation** were the primary focus of the process evaluation, with the endline evaluation providing further information, particularly data on longer-term trends in performance and exploration of questions arising from earlier analysis.
- The **effects on parenting practices** were the main focus of the endline evaluation.
- **Male engagement** was a focus of both the process and endline evaluations. Men's participation in KK activities was considered at both stages, while changes in male involvement in parenting and household decision making had more focus in the endline evaluation.
- **Sustainability and scaling** were a particular focus of the final study conducted a year after KK support ended, but the process evaluation provided early indications on this, and the qualitative endline examined initial local government and health facility plans for sustainability.

In practice, while focus questions differed between studies, data on implementation, effectiveness, and sustainability emerged from each study. For example, answers to interview questions on sustainability often provided additional information on implementation, and information on effectiveness was often raised during the early process evaluation interviews. As such, **answers across the research questions draw all three qualitative studies**.

Aspects of the research questions on implementation and effectiveness were also addressed through the KK quantitative surveys and monitoring data. For

example, the quantitative analysis (reported elsewhere)[3] measured the frequency and reach of household visits and group sessions, and levels of change in areas such as caregiver trust in CHWs, CHW motivation, mental wellbeing, male engagement and parenting practices. The qualitative research reported here was not designed to assess the prevalence of different issues or average patterns. Instead, it aimed to provide more understanding of stakeholder experiences and perceptions regarding implementation and effectiveness, and to examine the contexts and processes underlying quantitative trends. This included identifying factors that enabled or hindered implementation and outcomes, examining the causes of change (including the contribution of other initiatives alongside KK), and identifying unexpected issues or outcomes.

1.6 Report structure

Following this introduction, Section 2 describes the research design and methods, and Sections 3–5 then present the research findings. The structure of the findings sections broadly follows the set of research questions outlined above, with some adjustments to bring together related information, and to incorporate issues emerging in the research. Questions related to implementation are the focus of Section 3, including implementation of household visits and group sessions (Section 3.1); implementation of supervision (3.2); CHWs' and HCWs' capability, workloads, and motivation (3.3); acceptability of KK, and community engagement (3.4); and wider reach of KK advice beyond target households (0).

Section 4 focuses on questions related to KK's outcomes and effects on parenting, including changes in male engagement and household gender relations (4.1); caregiver mental wellbeing and social networks (4.2); the role of the UCT in supporting nurturing care (4.3); and changes in caregiver practices (4.4). The processes through which KK led to change, conditions influencing outcomes, and the role of KK alongside other initiatives are indicated throughout these sections. Based on evidence across different parenting practices (4.4.1), we then bring together information on the core aspects of the KK interventions' design and delivery that supported change (4.4.2) and contextual factors affecting the level of change (4.4.3).

Questions on sustainability are addressed in Section 5, including government plans (5.1); sustainability at KK health facilities (5.2); and scale-up to non-KK CHWs and health facilities (5.3).

Finally, Section 0 provides conclusions and suggests considerations for future programmes and research.

[3] Mixed-methods and quantitative process evaluation and impact papers are forthcoming. Summary mixed-methods findings are provided in a policy brief available from the Thrive team: Kizazi Kijacho research team. (2026). *Evidence for sustainable parenting and cash transfer programmes in Tanzania*. Oxford Policy Management

2 Methods

2.1 Research design

The qualitative research studies used a theory-based approach, based on the KK theory of change (see Section 1.2). Earlier stages of the theory of change, from inputs to immediate outcomes, were the focus of the process evaluation, while intermediate and later outcomes were examined in the endline evaluation. The research questions, interview guides and analysis also drew on frameworks from the literature on evaluation of complex interventions, implementation science, health systems, and sustainability (see Annex B).

2.2 Data collection

As set out in Section 1, this report combines findings from three rounds of qualitative research. The timing of data collection for the three studies is set out in Table 1.

For each study, qualitative data was collected through interviews and focus group discussions (FGDs) with stakeholders at regional, district, health facility and community levels, to understand their experiences and perceptions of KK activities.

We reviewed KK documents and data to obtain background information for each study, including annual reports from implementing partners, reports from KK taskforce meetings with local governments, and quantitative monitoring and survey data. This material provided information on programme activities, community contexts, progress, enablers, and challenges, which informed the sample and interview guides (see below).

Table 1: Study timing and district, facility and community sample

Study	Data collection period	KK programme stage	Child age	District sample	Health facility and community sample
Qualitative process evaluation	December 2023 to April 2024	14–18 months after the start of KK	Approx. 1 year	Dodoma and Chemba	3 KK health facilities in each district 1 KK catchment community per health facility **Total:** 6 health facilities and 6 communities
Endline evaluation	February to June 2025	0–4 months after KK ended	Approx. 2 years	Dodoma, Kongwa and Chemba	1 KK health facility in Dodoma, 2 in Kongwa and 3 in Chemba (the number of facilities varied between districts to enable inclusion of one urban area while covering other sampling criteria) 2 KK catchment communities per health facility **Total:** 6 health facilities and 12 communities
Sustainability study	November 2025 to February 2026	9–12 months after KK ended	Towards 3 years	Dodoma, Chemba and Bahi	2 KK health facilities in each district CHWs from all communities around the health facility (KK and non-KK) **Total:** 6 health facilities and their surrounding communities

2.2.1 Sampling

Sampling of districts, health facilities, communities and individuals was purposive, based on selecting participants who could provide different perspectives on KK, and different contexts that might influence implementation, effectiveness and sustainability. Sample selection drew on programme monitoring, baseline and midline survey data about community context, implementation performance, and outcomes.

District, health facility and community sampling

Table 1 summarises the district, health facility and community sample size for each study. The number of districts and health facilities per study was designed to maximise variation within study timeframes and resources, while retaining a sufficiently small sample to allow in-depth qualitative analysis.

All data was collected in the Dodoma Region where KK was implemented. The sample of districts, health facilities and communities was designed to provide diversity in regard to RCT arm, community context, CHW and HCW

characteristics, and KK performance.

Specific criteria varied between the three studies in line with the focus research questions. For the **process and endline evaluations**, the following criteria were used to select health facilities and communities:

- **KK RCT arm:** As described in Section 1, KK involved four arms: CHW provision of parenting advice only; UCT only; parenting advice and the UCT; and a control without KK support. Data was collected from **health facilities in the KK arms with parenting advice**, in line with the research focus on understanding implementation, effects and sustainability of CHW support for parenting. Randomisation for the parenting only or parenting+UCT arms was at community level, with some communities around a health facility only receiving CHW parenting advice and some also receiving the UCT. The qualitative sample included communities that only received the CHW parenting advice, and communities that received the UCT alongside parenting support, to understand whether and why the UCT affected KK implementation and outcomes.
- Different **community contexts** that could affect implementation: These contexts included rural and urban or peri-urban communities; varied levels of accessibility (e.g. paved roads and access in the rainy season); and differences in communities' socioeconomic status (e.g. education levels and household wealth). This information was obtained from the KK baseline survey.
- Different **CHW and HCW characteristics**: CHWs' age and gender, and varied KK workloads for HCWs (number of KK CHWs supervised), were identified as potentially affecting implementation of activities and trust or engagement with parents. This information was obtained from the KK baseline survey and monitoring data.
- **Varied levels of KK implementation by CHWs and HCWs**: To enable insight into factors affecting implementation, we sampled locations with varied frequency and reach of household visits, group sessions and HCW supervision. This information came from preliminary quantitative monitoring data, and for the endline, also from the KK midline survey. Implementation performance was considered at community level, including CHWs with stronger/weaker delivery of household visits and groups against expected frequency, and at health facility level, including health facilities where performance for all supervised KK CHWs was generally stronger, weaker, or mixed.

For the **endline study**, sampling of communities additionally considered **variations in parenting practices and child development**, indicated by preliminary midline survey results. Health facilities were selected to include communities with below- and above-average performance on a selection of indicators, such as exclusive breastfeeding, child health seeking, stimulation, discipline and stunting.

Sampling criteria for the **sustainability study** considered some similar issues, but also additional criteria to address the questions on scale-up:

- As for the process and endline evaluations, all sample health facilities were in the **KK parenting arms**, because of the interest in understanding the sustainability of the CHW parenting support.
- As for the process and endline evaluations, the sample included CHWs serving **communities that only received CHW support for parenting and communities that also received the UCT**, because the earlier research indicated that the UCT affected caregiver engagement and feasibility of implementation, and so could affect sustainability.
- Inclusion of health facilities where **some catchment communities and CHWs were not part of KK** (i.e. facilities with some CHWs who were trained and supported by KK, and some CHWs who were not), to understand any scale-up of KK knowledge and activities to the non-KK CHW and communities.
- Inclusion of health facilities with indications of **more significant and more limited progress on sustainability**, to understand barriers and enablers. Identification of these health facilities was based on information from the RHMT, CHMTs and implementing NGOs during initial interviews. We recognise that the information provided by these stakeholders may not match actual health facility activity, but their views provided a starting point for identifying and exploring factors affecting sustainability.
- Selection of health facilities where KK monitoring data indicated **relatively good implementation** of household visits and groups; if activities were not implemented during the KK project, continuation was unlikely and barriers were likely to be similar to those identified as affecting implementation in the process and endline evaluations.
- Inclusion of **rural and urban** health facilities, as the process and endline evaluations indicated that these different conditions affected feasibility of implementation, and so could affect sustainability.
- Selection of health facilities with **more than one KK CHW**, to understand any differences in continuation between KK CHWs at the same health facility, and to increase the sample of KK CHWs.
- Inclusion of some health facilities where some CHWs had been trained for the new **government Integrated and Coordinated CHWs programme**, to understand whether this affected sustainability (this criterion led to the inclusion of Chemba District, as the only district in Dodoma Region where the new programme had been introduced at the time of the research).

For the **endline evaluation and sustainability** studies, sampling also focused on health **facilities not included in the earlier rounds of research**, to the extent possible while applying other sampling criteria, to maximise new data.

Participant sampling

Interviews or FGDs were conducted with stakeholders involved in KK oversight and implementation, target caregivers, and some wider community members. The sample varied between the three studies in line with the focus research questions, and to ensure new data built on earlier findings and addressed key evidence gaps.

For each study (process evaluation, endline, and sustainability), interviews and FGDs included:

- **regional and district health governments** (RHMT and CHMTs), as key stakeholders responsible for oversight and decisions on sustainability and scale
- **NGO implementing staff** (D-tree and EGPAF), to obtain background information on KK activities and their experiences of progress and challenges
- **HCWs** responsible for supervising the KK CHW at each sample health facility
- **CHWs** involved in KK; for the sustainability study, CHWs not involved in KK were also included, to understand any spread of KK practices to their work.

The process and endline evaluation samples also included **male and female caregivers** involved in KK. For mothers, we conducted interviews and a FGD to benefit from the different advantages of each format (for example, opportunities for more in-depth information and discussion of sensitive topics in interviews, and opportunities for participants to build on each other's ideas and to hear a wider range of views in FGDs). For the endline evaluation, mothers who were not part of KK were also included to understand the wider reach of the KK activities. Caregivers were not included in the sustainability study because it focused on enablers of and barriers to sustained or scaled implementation by districts, health facilities and CHWs.

Community leaders, such as a Health Facility Governing Committee member, the village chair or the village executive officer (VEO), were interviewed for the process evaluation to understand views on KK among key community stakeholders who could potentially support sustainability, and to draw on their understanding and experience of households' engagement with KK and parenting practices. Community leaders were not included in the later studies because of their limited engagement with KK and because they would not have been able to provide first-hand experience related to the endline and sustainability study focus questions.

For the study on sustainability and scaling, we aimed to interview **HCWs who had been trained by KK but moved to non-KK health facilities**. Turnover of HCWs is common in Tanzania, as health workers often move to other health facilities or leave for training. Several HCWs who were trained for KK left their original health facility. This could potentially support scaling if these HCW introduce the KK activities at their new health facility. We hoped to interview HCWs who transferred from facilities that were part of the KK parenting arm to health facilities either not included in KK or in the UCT only or control arms, to understand whether they had implemented any of the learning from KK in their new facility. We identified 11 HCWs who were transferred from information in KK annual reports. However, we were only able to contact five of these HCWs due to contact information being unavailable or phone calls going unanswered, and, of these, only three were working in primary healthcare facility roles where KK activities would apply.

Table 2 summarises the participant sample for each study. In total across the three studies, 128 interviews or FGDs were held, with 305 participants. Interviews were sequenced, starting with the implementing NGOs and then local governments for background information and their insights, which were then further explored through community data collection.

Table 2: Participant sample

Participant category	Process evaluation (2023–4)	Endline evaluation (2025)	Sustainability study 2025–6
NGO implementing staff	FGD with each of EGPAF and D-tree (2 in total)	FGD with each of EGPAF and D-tree (2 in total)	Interview/joint interview with each of EGPAF and D-tree (2 in total)
RHMT	1 FGD with RHMT members	1 joint interview with RHMT members	1 joint interview with RHMT members
CHMT	In each sample district, 1 FGD with CHMT members (2 in total)	In each sample district, 1 FGD with CHMT members (3 in total)	1 joint interview (1–2 people) with each CHMT in Dodoma Region (8 in total)
HCWs and CHWs involved in KK	1 CHW and 1 HCW interview per health facility (6 CHW and 6 HCW interviews in total)	2 CHW and 1 HCW interviews per health facility, apart from one facility where no HCW was present (12 CHW and 5 HCW interviews in total)	1 HCW interview and 1 CHW FGD per health facility The FGDs included KK and non-KK CHWs (6 HCW interviews and 6 CHW FGDs in total)
Parents/caregivers who were target KK households	Mothers: 2 interviews and 1 FGD per community (12 interviews and 6 FGDs in total) Fathers: 1 FGD per community (6 in total) All caregivers were in target KK households	Mothers: 1 FGD per community in all sample communities and 1 interview in most sample communities (8 interviews and 12 FGDs total) Fathers: 1 FGD in half the communities, one community per health facility (6 in total)	
Mothers who were not included in KK		1 FGD with mothers not involved in KK in half the sample communities, one community per health facility (6 in total)	
Community leaders	One joint interview (e.g. with 2 people) per community (e.g. VEO or village chair, and chair of the Health Facility Governing Committee) (6 in total)		
HCWs who moved away from KK health facilities during KK			3 remote interviews, one of which was very short
Total number of FGDs and interviews	47	55	26
Total participants	87	161	57

2.2.2 Interview content and approach

The focus for interviews and FGDs varied between the three studies, in line with the research questions and stage of KK implementation, and between participants depending on their role in KK. Broadly, questions covered:

- overall views on and experiences with KK – all three studies
- experience of conducting or receiving the household visits, group sessions and supervision – process and endline evaluations
- CHWs' and HCWs' capability and motivation – process and endline evaluations
- wider reach of KK counselling beyond target KK households – process and endline evaluations
- changes in mental health, social networks and parenting practices – endline evaluation
- use of the UCT – endline evaluation
- male engagement with KK activities (process and endline evaluations) and changes in male involvement in parenting and household gender relations (endline evaluation)
- plans for sustainability or scaling (process and endline evaluations) or steps taken and current progress (sustainability study).

In relation to changes in parenting practices, caregivers were asked open questions about what they had learnt during pregnancy and after their child was born and what changes they had made. This was followed by questions on the broad topic areas covered by KK, including care during pregnancy, nutrition, health seeking, stimulation, hygiene, safety and discipline. The use of open questions helped to identify areas of learning or changes in practices that were most strongly recalled, and that might have been unexpected or that were not explicitly covered in the topic guide questions.

To understand the contribution of KK alongside other interventions, we structured interview questions to first ask caregivers openly about where they had learnt different information or why they made changes in parenting, before asking about the information received from the KK CHW and whether this KK information was new. CHWs and HCWs were also asked about the provision of nurturing care information through other channels and projects.

Endline interviews drew on data about parenting practices from the midline survey and on monitoring and midline data on the implementation of household visits, group sessions and supervision, to support discussion. For example, data on exclusive breastfeeding, stunting and time spent playing with children were used during CHW and HCW interviews to ask for their views on why rates varied between communities around their health facility or were lower than average for the district. This helped to prompt additional reflection among CHWs and HCWs, and openness about the challenges faced. Data on household visit coverage, group session frequency and attendance, attendance by husbands or non-KK parents, and supervision coverage were also used to support discussion of challenges faced in implementation.

Interviews and FGDs were conducted by three experienced Tanzanian researchers who were familiar with the context. These researchers were not involved in KK's design or implementation. Mothers were interviewed by a female researcher and fathers by a male researcher, to support openness. Interviews and FGDs were audio recorded and transcribed and translated into English.

Data collection for each round was staggered to allow for initial review of transcripts and analysis before further interviews or FGDs were conducted. This allowed us to review topic guides to clarify questions, incorporate issues where more information was needed or to shorten sections where earlier data showed consistent patterns.

2.3 Analysis

Qualitative data was analysed using a framework approach, based on thematic coding of transcripts and combining data from all sources in an Excel matrix. Framework analyses has been increasingly used for policy research and evaluations because it provides an efficient, transparent and systematic way to organise and triangulate data (8). Separate framework matrices were used for each study (process, endline and sustainability). For each study, initial themes for the matrix were developed based on the evaluation questions, and themes were then adjusted and added to clarify the focus and incorporate emerging issues. Later analysis for each study initially used a within-case approach, triangulating data from different stakeholders in each community and health facility, followed by cross-case analysis to compare experiences. Ongoing team discussions were used for each study to discuss and clarify emerging findings.

Quotes from across the three qualitative studies are presented throughout the findings. The first letters of the identity code after each quote indicates the study – process evaluation (PE), endline evaluation (EL), or the sustainability and scale-up study (SS). The codes also indicate the stakeholder type: CHW, HCW, community leader (CL), CHMT, RHMT, mother who was part of KK (KKM), mother not selected for KK (non-KKM), and father involved in KK. The district name is indicated for health facility- and community-level stakeholders, with numbering and letters relating to different sample health facilities and communities for each research round. For CHMTs, a number is used instead of the district name to support confidentiality.

2.4 Research ethics

The KK qualitative research was approved as part of the wider KK study by the Tanzania National Institute for Medical Research (NIMR) (Number: NIMR/HQ/R.8c/Vol.I/2430) and the Tanzania Commission for Science and Technology (COSTECH) (Number: RCA 2022/250).

Participants were provided with information on the study's purpose, the use of data, confidentiality, and their right to decline or withdraw participation. All participants provided their informed consent to participate and their consent to audio recording of their responses.

2.5 Limitations

CHWs, HCWs and caregivers in the same community often provided differing accounts of KK implementation and change in parenting practices. For example, caregivers sometimes reported a greater degree of behaviour change than observed by CHWs, and HCWs' accounts of implementation were sometimes more critical than accounts from CHWs. This may partly reflect respondent bias, with parents and CHWs presenting a positive picture of their own performance. However, different accounts are also likely to reflect different experiences, expectations and knowledge: for example, individual households responding differently, different ideas on what constitutes significant change or acceptable performance, and different levels of information on household behaviour and CHWs' work. During analysis, data was triangulated within and between interviews, identifying areas of consistency and difference, potential reasons for disparities, and the more reliable evidence (for example, considering first-hand knowledge and consistent accounts within interviews).

Several steps were taken to counter the potential for respondents to give positive accounts designed to please the KK programme team or to show themselves or colleagues in a positive light. These steps included taking time to build rapport before interviews, reminding participants that the interviewers were not part of the KK implementing team and that the programme wanted to understand difficulties and problems, using the monitoring or midline quantitative data on implementation or outcomes to probe for difficulties, and using phrasing that normalised criticism or difficulties. For example, questions to CHWs on their experience of changes in parenting practices were introduced by explaining that 'We know that behaviour change is difficult, and some families move faster than others. We can expect that KK won't have improved everything, and there will be quantitative data to see what has and hasn't changed'. Similarly, questions to caregivers were phrased in ways that could make a negative response or different options more acceptable: for example, 'Some families say the support from CHWs made them less stressed, and others say the visits didn't change how worried or stressed they were. How was this for you and your family?'

Reports from CHWs, HCWs and local governments on changes in parenting were subject to limitations in their knowledge of household practices. CHWs had regular information on parenting practices for KK households through conversations during visits and group sessions as well as observation in the community, but, as acknowledged by CHWs during interviews and FGDs, they relied on reports from caregivers for information on behaviour outside KK sessions. Likewise, CHWs and HCWs had some insight on wider community behaviour through health facility and outreach services, as well as observation in the community, but areas of parenting such as discipline, time spent on play and other behaviour that takes place largely in private within homes were less easily known. Reports may also have been based on generalisations from observing a few individuals, rather than average community behaviour. To mitigate this, interviewers reassured CHWs and HCWs that they understood it was not possible to have full knowledge of all household behaviour, and asked about their confidence in the information they shared and the basis for their views (i.e. how they knew about household practices). We also triangulated data across

participants, and relied primarily on reports from those with the most direct information: for example, focusing more on information about changes in parenting from caregivers themselves and CHWs, rather than CHMTs or HCWs who had more limited direct contact with households.

Our analysis points to several mechanisms that affected implementation of the KK activities and parenting practices, such as the motivational effects of seeing changes in children's development, believing that advice was reliable due to consistency across sources of information, or taking advice more seriously because it was emphasised repeatedly and frequently. The analysis also indicates contextual influences, such as individual experience of parenting, community geography, or HCW turnover. We have drawn on some formal frameworks to help conceptualise and categorise the findings (see Annex B), but further analysis could extend the use of theories from a range of disciplines and apply frameworks in more detail to deepen the understanding of how KK produced change. For example, ideas from diffusion of innovation theory or behavioural science such as social proof could apply to the spread of parenting practices beyond KK households, and insights on cognitive mechanisms such as habit formation could support further understanding of continued implementation of nurturing care. Clarity on the underlying mechanisms could in turn support future adaptations of the interventions. More explicit classification of factors affecting implementation and sustainability against determinants indicated in the Consolidated Framework for Implementation Research (CFIR) or other frameworks might also provide further insights, and help contribute to wider evidence on factors affecting adoption and sustainability.

Theory-based evaluations using qualitative data assess causality by tracing intervention effects, identifying processes through which effects are generated and examining alternative explanations. This involves a generative understanding of causality based on identifying underlying mechanisms, rather than the successionist or counterfactual logic of causality involved in experimental research (9,10). The generative or process-oriented approach can indicate whether, how and under what conditions interventions lead to effects, and unexpected outcomes, but qualitative findings alone do not show average effects or the extent of change.

Similarly, generalisation from qualitative findings involves developing transferable insights that may apply in similar situations or contexts (theoretical generalisation), rather than generalisation from a sample to a population (statistical generalisation) (11,12). Purposive small-scale sampling enables the depth of analysis and contextual richness needed to understand the processes and conditions involved in producing effects and the details of situations. This contextualised explanation indicates how findings could apply beyond the immediate sample, suggesting that in similar contexts, the same outcomes may be seen. For example, the qualitative findings do not predict the proportion of all CHWs in KK who missed household visits, but can instead suggest that under conditions of long distances to households and limited transport, CHW visits may not be conducted.

The qualitative studies are intended to complement the separate RCT and quantitative process evaluation findings, reported elsewhere,[4] which involve a larger representative sample and provide evidence on patterns across the KK study communities, the extent of effects, and effect sizes. The findings in this report should therefore be interpreted alongside these quantitative results. Bringing together these complementary approaches offers a more comprehensive understanding of the intervention's effectiveness and pathways of change, strengthening the overall understanding of causality.

[4] See footnote 3 (Page 9)

3 Implementation of Kizazi Kijacho activities

This section examines the earlier stages in the KK theory of change, focusing on implementation of the household visits and group sessions (Section 3.1) and supervision (3.2), CHW capability and KK's contribution to CHW and HCW skills and motivation (3.3), acceptability and community engagement (3.4), and wider reach of the KK advice on nurturing care (0).

3.1 Implementation of household visits and group sessions

RQ 1.1. What factors influence the coverage and frequency of household visits and group sessions? What adaptations are made to delivery approaches?

Completion of the expected number of household visits was easier in communities where the CHW lived close to households or where there was a reliable phone network. As well as the community environment, coverage was affected by household availability and acceptance of CHW visits (for example, the effect of farming or temporary migration), and by CHW availability and motivation. Postnatal care visits were sometimes missed because mothers went to stay with their family, the CHW was not notified of the birth, or the mother stayed in the health facility after delivery. To address constraints related to distance, many community members, CHWs, and other stakeholders suggested providing transport for CHWs.

Frequency of group sessions and caregivers' attendance were sometimes affected by constraints such as farming responsibilities, village events, distance or difficult access, limited phone network, or insufficient interest. CHWs used several strategies to improve attendance, including holding two groups in different locations to make access easier. Beyond these constraints, the UCT provision was a key influence on group attendance. For households receiving the UCT, receipt of the transfer provided motivation to engage with KK. However, perceived unfairness or lack of direct material benefit related to randomised UCT sampling, inconsistent payment and the end of the UCT hindered participation in KK activities and negatively affected relationships with the CHW in some communities. This was exacerbated by insufficient explanation for households and limited information for CHWs about the UCT. Persuading households to attend when they were frustrated by the lack of UCT required significant additional effort from CHWs, and some CHWs reported distrust and suspicion from caregivers who accused the CHW of taking the money. Many stakeholders suggested that the UCT should be given to either all

or no KK households, to make implementation fair and to avoid these difficulties.

KK CHWs were expected to visit each registered household approximately once a month, with more frequent visits during the postnatal period. Group sessions were expected to be held once a month, for all KK households. This section examines delivery of the KK household visits and group sessions by CHWs, describing factors that affected coverage and the ways CHWs sought to address constraints.

3.1.1 Reach and frequency of household visits

Factors affecting coverage of household visits

CHWs often reported being able to conduct visits largely as expected, at least for most households, or with only minor delays. Some CHWs took steps to ensure all visits were conducted, including agreeing visit times with households, providing reminders, and rescheduling if needed. Reminders and monitoring through the KK app also helped and encouraged CHWs to schedule visits in line with the KK guidance.

> 'Overall, 90% to 100% of the households were visited every month. Some visits were postponed, for example if they had an emergency and were not around or I arrived and found the mother was ill, but otherwise I never failed to visit. We had a system of checking the schedule and following up via phone to ensure the visits took place as planned.' EL Chemba1a CHW

> 'I didn't face many challenges with the home visits. Once in a while, I would call a household to say I was coming, but when I arrived, no one was home – but that was rare. Most families were very cooperative and kept to what we agreed; unless they had an unexpected challenge I visited them every month, as expected.' EL Dodoma1a CHW

Some CHWs also provided **informal support between KK visits**: for example, providing advice when asked or conducting brief visits to check on the household. Some parents mentioned that they could call the CHW for advice if needed or visit them if they lived nearby. Even if the CHW was not actually contacted between visits, their presence in the same community provided reassurance that support was available.

> 'If I face any challenges, I call her and she explains things to me, and when I get time, I go to her for advice and more explanation.' PE Chemba1 KKM

However, completion of the expected number of household visits varied between communities and households, and over time. **Frequency and reach were affected by household availability and acceptance of CHW visits**, by **CHWs' availability and motivation,** and by the **community environment**.

In relation to household factors, a combination of **insufficient availability or interest meant CHWs sometimes arrived at a household to find the caregiver was absent or busy**, even when the appointment had been made in advance. Caregivers were sometimes unavailable due to village events such as funerals,

farming or other household responsibilities, or due to moving away permanently or temporarily. Farming was a dominant livelihood activity in many communities. Households were often busy with planting, harvesting or herding, and sometimes relocated closer to farms or moved with pastoralist cattle herding. Herding responsibilities were year-round, whereas arable farming particularly constrained household availability during the planting (December – March/April) and harvesting (April/May – June/July) seasons.[5] In communities where farms were close to households, making time for CHW visits around farming was easier than in communities where farms were at a distance that required families to either relocate or make long daily journeys. CHWs were sometimes able to schedule visits in the evening or at weekends when caregivers were not farming. The effects of farming also varied with parenting stage and associated effects on women's labour force participation. For example, one CHW found that women were more available for visits during pregnancy because they were resting and not away herding. Other income-earning activities also reduced caregivers' availability, particularly in peri-urban and urban areas.

In a few communities, **alcohol consumption or production** affected caregiver availability. Mothers and CHWs in some communities described alcohol consumption as common and as affecting parenting for some households, including some KK families (see Section 4.4.3). One CHW reported missing visits to two mothers who were often not at home and drinking in the evening. The CHW may have perceived alcohol use to be heavier than it really was: for example, mothers might only have been socialising briefly after work. However, observation during the FGDs also indicated that heavy alcohol consumption might have affected caregivers' ability to engage in KK activities.

> 'There were two households that were very difficult to visit. Those families drank alcohol, so in the evenings they were usually drunk and not at home. You can't educate a drunk person. The following morning, they'd already be off doing other things.' EL Chemba2a CHW

In relation to the **acceptability of visits,** parents who participated in interviews and FGDs were positive about the KK visits and described benefits of the advice (see Section 3.4.1). However, the gaps in availability described above resulted in part from variations in the extent to which caregivers valued the CHW's advice and prioritised CHW visits in household schedules. Low acceptability of visits among caregivers was also indicated more explicitly as a constraint: some households were reluctant to be visited or not interested, or spoke unkindly to the CHW, which discouraged future attempts to visit. For example, one CHW had difficulty securing time from an older mother and a mother who was previously a CHW, as they saw little value in the CHW's advice, given their existing knowledge. Visiting households who did not want the advice caused stress for some CHWs.

> 'There was one mother who was a little stubborn because she was a CHW in the past, so she acted as if she knew more than you. And there was another mother who already had a lot of children and raised them without that KK education, so she saw new education as a waste of her time. When you go there, she sometimes gives you the cold shoulder or hides inside. So it was

[5] Information on seasons taken from the Kizazi Kijacho End of Project Report EGPAF, 2025.

> hard to visit her.' EL Chemba3a CHW

> 'We were assigned some households that were not willing to cooperate. When it's time for a visit, you're already stressed because you know you're going to find a mother who is very resistant.' EL Chemba2a CHW

Receipt and non-receipt of the **UCT also affected the acceptability of visits**, in both non-UCT and UCT communities. It was harder for CHWs to persuade households that did not receive the UCT to make time for visits, and UCT sampling, inconsistencies in delivery, and the end of the UCT led to suspicion and criticism of the CHWs, which discouraged visits.

> 'There is one household that normally gives me hard time. When KK members were being paid, that household did not receive payments, so when I went there, he would mock me for not paying them.' EL Chemga3b CHW

> 'The other reason for missing visits is about money. The money started very well and later on they cancelled the package. That brought a very big challenge. When you arrived at a house, they would ask you about money – "You used to give us money, where is it now? You must be using the money".' EL Chemba3a CHW

The effects of the UCT on implementation are discussed further in Section 3.1.3.

Patriarchal gender relations also affected household visits, with the acceptability of visits among husbands affecting women's availability and opportunity to attend. Where men dominated decision making, a few husbands refused visits or prioritised other livelihood activities in household timetables.

> 'In our community, whatever the father decides, the mother will follow. If the father decides they don't want to participate, the mother is also unable to do so.' PE Dodoma1 father

There were also a few reports of **intimate partner violence** limiting household visits and group participation, with physical violence against a mother or household arguments related to KK activities. One CHW felt ill-equipped to handle barriers related to a controlling husband and violence against the mother, and saw working with households affected by gender-based violence as an area where CHWs need more support.

CHW availability was mentioned as a constraint in a few communities. A few CHWs were away or unable to work for periods of a few months, for example to attend the new government CHW training in late 2024. Some HCW and local government officials also reported that some CHWs were less committed to KK activities or were busy with other work or household responsibilities, including their own farming during planting or harvesting seasons.

In relation to the **community environment**, the distance to households and their accessibility affected household visits. Long distances sometimes required CHWs to spend significant amounts on transport, which discouraged attempts to visit and limited opportunities to reschedule if the caregiver was unavailable when the CHW arrived. For example, one CHW spent around Tanzania shillings (TZS) 20,000 on transport for each visit to households in a more distant area of the village, and TZS 25,000 per group session: this meant transport costs exceeded the monthly stipend of TZS 50,000 if the CHW needed to make more than one trip

for household visits.

Roads to some households were impassable during the rainy season, and other barriers to reaching households were also mentioned in some communities, including reports of lions and other dangers in one village. Unreliable phone networks and in some cases limited phone ownership among mothers also made it difficult for CHWs to arrange visits in some communities. Conversely, visits were easier in communities where the CHW lived close to households and for households that were more central, and where the CHW could call households in advance. Distances sometimes meant CHWs were late, which led to missed visits as caregivers could not continue waiting for the CHW to arrive.

> 'Households are far apart and we faced difficulty reaching mothers for the household visits. Transport costs would be around TZS 2,000 to go and another TZS 2,000 to return. Sometimes we did not arrive at the time agreed, and mothers were discouraged. They would call to cancel on us, or tell us that their husbands wanted them to go somewhere.' SS Dodoma1 CHW

A range of **additional factors** were also indicated as enabling or hindering visits. For example, in one community, the CHW was part of the same clan as most KK mothers and related to them, and they lived close together. This may have contributed to more regular visits due to mutual social obligations between the KK mothers and the CHW, as well as the ease of making appointments.

The different issues of availability, acceptability and community environment interacted. For example, limited phone network and long distances exacerbated difficulties related to busy farming seasons, as the caregiver was less likely to be at home and it was harder to call in advance or to reschedule. These issues affected the overall frequency of visits and led to differences in the level of contact between households. For example, CHWs sometimes made fewer visits to caregivers whose houses were further away or less accessible, who were busier with farming or other activities, or who were less accepting of CHW advice. Difficulties with access and availability had significant costs in time and money for CHWs.

> 'Many of my clients live very far, and the motorbike fare to go there is very high, 20,000 shillings return. If they are not there, you need to go back another time. The payment of 50,000 is sent to us after three months, so you need to use your own money and then later on, it's returned. Also there is no network, so you can't call the mothers, and those mothers are Masai, so you arrive and find they have been told to go herding. Rain also makes it difficult – when there is a lot of rain, the road there is bad and even a motorcycle can't get there. These things give me a lot of challenges.' PE Chemba3 CHW

> 'It was difficult visiting some mothers. You'd already talked with her and told her "I'm coming tomorrow", and she agreed, but when you arrived you wouldn't find her. You'd call her and she'd say, "I'm in the field, I'll come later". So, I had to wait. Sometimes I had to go back, even three times – I would go today and not find her, she'd tell me to come another day, I'd go and still not find her.' EL Kongwa1b CHW

> 'In village A, they come from a tribe that often migrates, so sometimes when you go, they are not there. Floods are also a problem, and during the rainy season the CHW couldn't reach some places. In village B, the problem was

> distance, and many families are farmers, so the CHW arrives and doesn't find them. For village C, households are on the main road and close to one another – it's easy to conduct visits there.' EL Chemba2 HCW

Several CHWs and HCWs reported additional difficulties with availability during mothers' postnatal period, which meant some postnatal care visits were missed (in line with quantitative data indicating a particular gap in postnatal coverage). Difficulties included the CHW not being notified of the birth, delivery taking place at the district hospital rather than the local dispensary, or the mother staying at the health facility for a few days after delivery, which meant that initial postnatal care visits were missed. In addition, mothers often went to stay with their family for delivery and for a period afterwards (sometimes a month or more), which generally prevented CHW visits, although there were reports of one CHW travelling to the other village to undertake visits. Mothers also sometimes declined initial postnatal care visits because they were too tired or in pain following delivery, so the CHW respected their preference and let them rest.

Addressing constraints

Frustration at caregivers being absent when appointments were scheduled meant some CHWs resorted to additional measures to ensure caregivers were available when they arrived. For example, one CHW made KK mothers sign an agreement indicating the visit date, and warned that if they were not at home for the next visit, the CHW would show the signed agreement to the local leaders.

To address constraints related to distance, many community members, CHWs and other stakeholders suggested providing transport for CHWs (either a bicycle or an additional transport allowance) to improve the implementation or sustainability of household visits and to allow CHWs to reach households easily when needed. **Adding more CHWs** was also recommended by several stakeholders as a way to cover households, given distances as well as population size.

> 'She should be supported with transport. She tries her best – sometimes a household could be four or five kilometres away, but this woman walks all that distance. She has a big workload because she has no means of transport.' EL Chemba3b father

> 'Households are scattered, so if they got bicycles it would help their visits and reduce transport costs. One CHW has a household on the border of another district, and he complains that if he goes there, he will spend a lot of money, so he ends up not going.' PE Dodoma1 HCW

> 'Another challenge is the distance covered by CHWs. The CHW transport fee is fixed so sometimes they have to spend extra money to reach distant clients, and they might decide not to go. The transport fee could be increased.' EL CHMT2

Towards the end of KK, Bahi CHMT took action to provide CHWs with transport. Bahi CHWs reported difficulties reaching households in more remote communities and associated transport costs during a KK taskforce meeting. In response, the CHMT worked with the district nutrition coordinator to ensure that some bicycles purchased for nutrition activities were allocated to KK CHWs.

While moving away from the village generally meant a household did not receive

KK support, there were **examples of CHWs providing advice for mothers who moved** either permanently or temporarily. For example, one CHW described using phone calls to advise a mother who usually lived elsewhere for work, and explaining the toys and games when the mother visited the village; data from the phone calls was submitted in the KK app.

3.1.2 Group session frequency and attendance

Factors affecting group session frequency and coverage

Group sessions were expected to be held each month. **Some CHWs and KK mothers reported that sessions were held monthly** and **attended by most KK mothers.** This was helped partly by scheduling groups at times agreed with mothers, reminding mothers about attendance, and making efforts to ensure the group content was entertaining; several mothers reported that they enjoyed the sessions (see Section 3.4.2).

> 'The group sessions happened monthly, except one month when we were called for a training, but we resumed the next month. All 10 mothers came each month. People were very happy when we met and played with the children. We cooked meals together, it was very fulfilling. Everyone was responsive.' EL Kongwa1a CHW

> 'Last month, some could not make it because of rain, but normally they all attend. Tomorrow is the day for our group – I have already invited them and I normally remind them, and I always let them plan a meeting time that suits them.' PE Chemba1 CHW

> 'Group sessions are conducted without a problem. Maybe someone will have an emergency, so they don't attend 100% every month, but almost everyone attends. They listen to you, you all sing together and you are all happy. They prefer meeting in the morning, they see the schedule considers this, and we finish on time so they can continue their other activities. Maybe I was lucky to get people who see the education is important.' PE Chemba2 CHW

However, in some communities, groups were occasionally or often missed, or only a few mothers attended. Groups were sometimes not held if the CHW was unavailable, for example when the CHW was away for government training or due to CHW turnover, but limited caregiver attendance was the more common reason for sessions being cancelled. In some cases, CHWs paused attempts to organise sessions due to low turnout. Some mothers complained that group sessions were sometimes cancelled or very short because few other mothers came, which meant mothers who did attend missed out on expected activities.

Attendance was affected by several issues. First, there were similar constraints to those seen with household visits: for example, caregivers being busy with farming or other economic activities, village events such as funerals, the distance from households to the meeting site or difficult access due to rain, and limited phone network that hindered arrangements and reminders. These issues sometimes meant households did not attend, or they arrived late. As for household visits, patriarchal gender relations also affected attendance, with some KK mothers prevented from attending by their husbands.

> 'The group sessions were difficult to implement. Households are far apart,

> and during the farming season it was difficult to get the mothers, and sometimes their husbands refused permission. For instance, the husband may plan that on that day the whole family will go to the farm, so that means the woman can't come for the group.' SS Dodoma1 CHW

However, support from male partners also enabled attendance for some KK mothers. For example, one mentioned that her husband was a *bodaboda* driver and sometimes provided a lift when the groups were held too far away for her to walk.

As for household visits, **insufficient interest in the KK group meetings** also affected attendance in some communities, with some mothers complaining that the information and activities were always the same, or prioritising other activities, such as watching football.

> 'They became used to the sessions and started joking that the teaching was always the same. That reduced attendance. At one point, the village executive officer wrote them a letter because each time I went, they were not there, or sometimes they came when it was too late to do anything.' EL Chemba3b CHW

> 'If you arrange the group on a day when there is a big football match on television, the mothers who are football fans don't come because they go to watch the football.' EL Kongwa2a CHW

Beyond these issues, **a key challenge reported in many communities was the effect of UCT sampling on attendance.** Where the UCT was provided, this sometimes encouraged or enabled attendance, including by reducing the opportunity cost of missing other livelihood activities, covering transport to the group, or as a more general incentive. In many non-UCT communities, caregivers thought it was unfair that mothers elsewhere received the UCT, or they thought attendance was not worthwhile due to the lack of direct material benefit. In UCT communities, difficulties arose because some households did not receive expected payments, or their payments were delayed, and the end of the UCT hindered attendance as KK mothers were no longer being financially incentivised. These effects of the UCT are discussed further in Section 3.1.3.

In some communities, **other projects provided goods or money when people attended group sessions**, and this also contributed to an expectation of material incentives that reduced motivation to attend KK sessions.

> 'In the past, another project gave people things every time they met, like soap, groundnuts and flour. So people started thinking that whenever you meet as a group, you have to be given these materials. This caused problems.' EL Kongwa2b CHW

Beyond the UCT, **material incentives through other KK components also affected attendance**. For example, in one community, attendance improved when KK mothers were encouraged by receiving a small payment in the first quarter of 2024, presumably linked to the KK RCT survey.

> 'There was a time they were given incentive like airtime vouchers, so they became more engaged, realised that attending was actually very important and started attending more regularly. We don't know who gave them the airtime but sometimes they would interview me or them.' EL Chemba1b CHW

Addressing constraints

CHWs used several strategies to improve attendance. A common approach was dividing KK mothers into two groups that were held in different locations, to reduce the distance, or alternating the group location. This approach improved attendance in some communities, but not in others. Another strategy was linking the KK groups to Village Community Banks (VICOBAs), either starting collective savings and loans within the KK group or attaching the KK session to existing VICOBA group meetings. This sometimes helped to improve attendance, but depended on continued participation in the VICOBA activities.

There was also some **reliance on threats**, a more negative approach than enhancing acceptability. For example, after an incident in which mothers did not attend the group on a day when KK visitors where present, one CHW received support from the VEO, who wrote to the KK mothers warning that they would be penalised if this was repeated.

Practical nutrition demonstrations during groups

Group sessions were expected to include practical demonstration of cooking nutritious food, with mothers contributing ingredients. Mothers who took part in the practical nutrition sessions described them as useful. However, in some communities, the nutrition practical was not conducted because caregivers did not bring ingredients or expressed reluctance to provide them, or because the CHW did not propose the practical because they thought mothers would be unable or unwilling to provide the ingredients. This was sometimes related to low household incomes, but also to suspicions linked to other KK villages receiving the UCT, or expectations set by other projects that provided ingredients for group cooking, for example at Village Health and Nutrition Days (VHNDs). Time constraints during the meeting also led to practical sessions being omitted.

> ‘We ended up not doing the practical. For nutrition days, a stakeholder normally brings money. Our community gets used to this, so if you start asking them to bring ingredients, they raise questions. So I never asked them to do this.’ EL Kongwa2b CHW

> ‘You need to try and get money from your husband, who says “you should be given money in the group”. Sometimes he doesn’t understand. If you have your own savings, you buy the ingredients. We tell our CHW that it is expensive and ask “Why can’t you complain to KK so that they provide us with the ingredients?”’ EL Chemba1b KKM

> ‘We are supposed to cook but after the CHW has taught us how to prepare the food, there is no time left and we are told to go and prepare food at home. It would have been better if we had longer sessions with time for mothers to prepare food and enjoy it together.’ EL Dodoma1a KKM

Where cooking demonstrations were conducted, some mothers found it easy to bring ingredients because they had adequate warning and shared the costs, but low incomes made it difficult for some, and some CHWs used their own money to cover contributions from group members with a lower income.

> ‘Everyone brought what they could. Some might not contribute, depending on their situation. Sometimes you can see their economic situation made it difficult. When there’s no money, things get tough. I usually helped as the

facilitator – if someone didn't bring something, I might support them with 5,000 shillings just to make sure we had what we needed.' EL Kongwa1a CHW

'We managed to bring ingredients for cooking because we were each allocated one thing to bring – it wasn't like one mother had to bring all the ingredients. In addition, the meeting date is scheduled ahead, so you save a little at a time to get the money. It's not like you meet today and then you are asked to bring the ingredients tomorrow.' EL Kongwa1a KKM

3.1.3 Effects of the unconditional cash transfer on implementation of household visits and group sessions

For households receiving the UCT, receipt of the transfer increased their motivation to engage with KK, supported the costs of attendance (such as transport), and reduced the opportunity cost of missing other livelihood activities.

'At the beginning we were being given 77,000 shillings. If I use this money for farming activities, like planting and weeding, when I am called to attend the group session, I am comfortable that my farming activities are settled. Then I am ready to attend even if it means borrowing transport fees.' EL Chemba2b KKM

However, **UCT sampling, inconsistent payment, and the end of the UCT, together with insufficient explanation for households and CHWs' limited information about the transfer, affected the acceptability of KK and trust in the CHW**. This reduced caregivers' participation in KK activities and caused significant difficulty for some CHWs.

Communities located around the same health facility and close together were often split between UCT and parenting only RCT arms. Social networks and other links between caregivers in these communities meant households often knew that only some KK participants were receiving the UCT. **In many communities without the UCT, the sampling led to reluctance to attend group sessions and, in some cases, to participate in household visits**. Some caregivers who did not receive the UCT felt it was unfair that they were expected to attend groups without receiving any financial reward, or they prioritised livelihood activities that would bring financial benefit. These effects were widely reported by HCWs and CHWs, and some caregivers also indicated that they or other mothers were unhappy about only some KK households being paid.

'The groups didn't go well. Parents were paid in some villages, but in our area, they were not paid. When this information reached others, those who weren't being paid started questioning – "Why aren't we being paid while others are?" That became a big challenge in coordinating groups.' EL Chemba2a CHW

'What I don't like is that these groups are divided between two places. I hear that our fellows get an allowance, but we don't get one, that is the challenge. We keep asking ourselves, "what is the problem?"' PE Dodoma2 KKM

Misunderstandings or miscommunication during KK registration or surveys sometimes added to difficulties, as some households in non-UCT villages understood from the survey and registration teams that they would receive

regular payments. CHWs lacked the information they needed to explain the situation to caregivers.

> 'It seems they told parents that there would be a payment for participants, but some groups within the ward do not receive any cash. When my group learned that their colleagues in another village received cash, they lost motivation and responded poorly to KK activities. As a result, managing the group has become extremely tough. They don't want to attend because they were promised something – they forget that they are coming to get education that can help them, and because they were promised their priority becomes money.' PE Dodoma1 CHW

> 'I don't know who exactly they were, but some people came and visited the households we are serving and said "We conduct assessments. Every month one member of each household will be paid money." But my clients were not paid and in other neighbourhoods, people were paid. That brought confusion. My clients started asking me "Why are others getting paid and we are not?" I told them "I don't know anything about that". Because when those people came, we weren't told they'd be visiting households, or that they'd be doing assessments, or that households would be paid. So I was trying to explain honestly that I didn't know anything about it. I reported it to the supervisor, who said "just continue with your visits. Maybe they are still in the process and your households will be reached eventually". That issue held us back.' EL Dodoma1b CHW

Within UCT communities, logistical issues meant some households did not receive the expected payments, or payment was inconsistent. Exact reasons for the gaps in payment were unclear from community discussions, but EGPAF reported a range of difficulties, such as phone numbers not being registered, delays in verifying numbers, and network issues.[6] In addition, some target beneficiaries did not have a phone and so nominated someone else to receive the payments, and sometimes this nominated person did not share the money and claimed they never received it. **Timing of payments** also sometimes varied between households within a UCT community due to technical issues with phone numbers and networks, leading to uncertainty over payments and concerns about unfair treatment.

> 'Households heard that people were paid in certain villages. That was the point where people here started to erupt. I tried to contact the KK team, and they started to pay the households. But the way they did it, one was being paid first and others not paid. So the one paid would tell her fellows and others would ask, "Why haven't I been paid?" Later, all of them got paid, but one was not paid at all due to losing the phone line.' EL Chemba3a CHW

The end of the UCT payments, when children were aged 1, also reduced motivation to engage with KK in some communities. This reduced attendance at group sessions, caregiver availability for household visits, and husbands' support for their wives to attend.

> 'If it was still like the past when we used to get money, I wouldn't fail to attend. Even if I had something to do, I would stop doing it because I know that I get money by going to the group. Now, sometimes you are getting

[6] Kizazi Kijacho End of Project Report EGPAF, 2025

> ready to go for work, you are called to meet and you think "let me go and earn money first". When thinking of money to buy food, do you think you can think about something else?' EL Kongwa1a KKM

> 'There are challenges with group attendance because they were provided with allowances for a while but later the allowance was cancelled. This affected the groups. Some came and some didn't. People generally look at what they will gain because even their husbands tell them "you go there each month – what benefits are you getting?" If the husband finds some income is generated, he will even bring her to the group.' EL Chemba3a CHW

Persuading households to attend when they were frustrated by the lack of the UCT **required significant additional effort from CHWs**. The UCT distribution also **affected CHWs' relationships with households**. Some CHWs reported distrust and suspicion among caregivers who did not receive the UCT or when the UCT ended, with accusations that the CHW was taking the money. Criticism and harsh language from some parents were discouraging and made it difficult for the CHW to undertake household visits. As discussed above, CHWs often had limited information on the UCT, which added to the difficulties because they could not explain why only some households received the money or why the UCT ended. CHWs told households they were not involved in the UCT process, but this was not always understood or believed. Some CHWs also gave communities potentially misleading information to reassure them – for example, suggesting that households might get payments in the future, which risked creating of unrealistic expectations.

> 'People would go to events in the next village and hear their peers say, "I'm in Kizazi Kijacho and I'm getting 70,000 every month". Then someone here would feel bad, because they weren't receiving anything even though they were also in the project. They even got upset with me, saying "Maybe this woman is eating our share". They would still come to the KK sessions, but reluctantly. They started asking me what was going on. I'd tell them, "Be patient. You might be paid too". They felt like I wasn't taking it seriously, and they thought maybe I was getting money. I'd tell them "we don't even have a dispensary. Those in the other villages have a dispensary – maybe that's why we're not being paid". That's what I told them, but I didn't really know anything about the payments.' EL Kongwa1b CHW

> 'The interest in responding or attending is lower now. When they stopped paying, people began asking questions. "Why aren't we paid, and you're being paid? We're working for you." The blame wasn't directed to the KK team or the project, they blame the CHW – we're accused of receiving money but using it for ourselves. That issue has affected us a lot.' EL Kongwa1a CHW

Many stakeholders suggested that the UCT should have been given to either all or no KK households, to make implementation fair and to avoid these difficulties.

> 'When I meet with CHWs, you find that the biggest challenge is cash. Therefore, our opinion is that if cash is important, it should be provided to all, or if that's not possible, then better stop paying anyone, there should be equality.' PE Dodoma1 HCW

> 'If the project starts again, either we should all not have cash transfers, or they should all receive them to remove that confusion. Because it seems

there's no equality – some are receiving while others are not, even though it's the same project.' EL Dodoma1a CHW

Reflecting the interest in material incentives, **many parents suggested that providing money or goods would encourage participation in group sessions**, including by men, and enhance the value of KK for households more generally. Some CHWs also recommended providing incentives to encourage attendance.

'Some of my friends didn't attend because they said "we receive education, but we spend a lot of time and at the end of the day we don't get paid anything", so they would go to earn some income. Maybe you could support parents and give them nutritious flour, so the parent is sure that even if they don't get money, at least they get flour for their child. It will motivate her and she will appreciate what she receives.' EL Dodoma1b KKM

'A little money, even if it's not a lot, could help significantly. I have worked in volunteer projects for a long time in Tanzania, and I've seen that whenever there is even a small financial incentive, there is a lot of motivation. If the participant is questioning whether or not to attend, they realise that it is better for them to go, gain knowledge, and at the same time receive a small amount of money.' EL Chemba1a CHW

3.2 Supervision

RQ 1.2 To what extent is supervision delivered as intended, and what factors affect this? What are supervisors' experiences with the KK dashboard?

There were examples of strong supervision by HCWs, with HCWs regularly attending CHW household visits and group sessions, holding planning meetings with the KK CHWs, monitoring CHW performance, and providing other support. Several CHWs and HCWs indicated that KK improved supervision, and this supported CHWs' skills and motivation.

However, HCW attendance at household visits and group sessions varied, and was sometimes limited, particularly due to high health facility workloads and HCW turnover. Where the original HCW was transferred or left for studies, newly appointed supervisors sometimes lacked sufficient training to understand KK and their supervision responsibilities. EGPAF and D-tree attempted to address turnover, partly by working with CHMTs to secure a replacement supervisor, but this sometimes took time and there were persistent challenges in some locations.

KK supported quarterly CHMT and RHMT supervision of the KK CHWs and HCWs, through joint visits with the implementing NGOs. The RHMT and CHMTs appreciated KK supervision visits because they were an opportunity to go beyond routine facility-level supervision to see activities in the community and because they allowed for more interaction with CHWs. Supervision from EGPAF and technical support from D-tree were also appreciated by CHWs and HCWs.

The KK dashboard was designed to support supervision by HCWs, CHMTs and the RHMT, as well as by EGPAF and D-tree. Some HCWs reported using the dashboard regularly and finding it helpful, but others encountered technical

difficulties such as inaccurate and missing data, and some lacked familiarity with the dashboard. The RHMT and CHMTs' use of the dashboard was generally limited, but improved over time, and some found it a useful tool for identifying gaps in performance and supporting supervision.

KK involved supervision of CHWs by a HCW at the facility, and supervision of CHWs and HCWs by the implementing partner NGOs (EGPAF and D-tree) and by the CHMTs and the RHMT. This section examines experiences with these different levels of supervision, and use of the KK dashboard that was designed to support supervision through collating data on CHW implementation of household visits and group sessions.

3.2.1 HCW supervision

One HCW was selected at each health facility to supervise the KK CHW. **There were some examples of strong supervision**, with HCWs regularly attending CHW household visits and group sessions, holding joint meetings with the KK CHW for planning and problem solving, monitoring completion of CHW visits, and providing other support, such as making toys together. Some HCWs took additional steps to support CHWs' performance, such as arranging for weaker CHWs to accompany a stronger CHW during a KK session to enable learning. Effective supervision helped CHWs to solve problems and increased their motivation. Several CHWs and HCWs reported **improved supervision due to KK**, including a more systematic or thorough approach, more regular meetings and more frequent contact, improved feedback through observation of CHW interactions with households, and closer relationships between CHWs and HCWs.

> 'The current supervision is better and it has built our capacity. Our supervisor is there when you are teaching, so if you make a mistake, she tells you – you learn exactly what was wrong and you correct it. The current supervision has also built our trust because it's frequent – it's different with someone you go with once a month compared to someone who comes after years, it means you're not scared when they watch you teach. If you compare the past and now, this supervisor is also very knowledgeable and capable – when we get stuck, she is the first to help us.' PE Chemba2 CHW

> 'The supervisor has become more active, he works more closely with us than before. I think the training improved his supervision skills. Before KK, he used to assign us activities then he would not bother to follow up, but in KK, he sometimes joins us on household visits. We even hold regular review meetings with all CHWs every month, which was not done before. When he attends the visits, if you make mistakes, he can add information and correct the mistake, and if parents ask a more medical question, the supervisor can respond better than I could, so his presence is very useful. After completing a session, he takes us through the checklist, commenting on each aspect, and encouraging you to improve.' PE Dodoma3 CHW

> 'Before KK, I didn't usually hold meetings with the CHWs. I now realise how important it is to get together to discuss different issues that come up in the community and work out how to handle them.' PE Dodoma3 HCW

However, **HCW attendance at household visits and group sessions varied, and was sometimes rare**. High health facility workloads limited attendance for several HCWs, particularly where they were the only HCW at the health facility or had additional responsibilities as the health facility in-charge. Where workloads were usually more manageable, visits were sometimes missed if they conflicted with higher-priority activities, such as an outreach session, or when visits were postponed due to households being unavailable.

> 'I was alone at the health facility for almost three years, so I did not implement supervision as required. We have a big population to serve, so it's difficult to get time for supervision, and sometimes I completely failed to go. Even when those from the headquarters came for supervision, when they found me alone with a lot of patients they would tell me to just continue and they would go with the KK CHW. I don't know what criteria they used to select the supervisors. I wouldn't have chosen myself, because the staff shortage meant I couldn't implement properly.' EL Kongwa2 HCW

The time of day when KK activities took place affected HCWs' availability: for example, one HCW indicated that it was easier to attend because the CHW arranged KK visits for the late afternoon or evening to suit household availability, and this was also after the HCW's work at the health facility ended. Distance was also a factor, with CHWs in communities that were easier to access sometimes receiving more supervision visits, and less supervision when the HCW lived further away from the health facility (including sometimes in a different district).

Some **HCWs adjusted the expected KK supervision** to reduce the time required or to accommodate timetable clashes: for example, only supervising groups rather than household visits, or vice versa, or supervising a household visit instead if they missed a group session. There also appeared to be **different understandings of the expectations** for supervision. For example, some HCWs said they were expected to supervise a group session and household visit for each CHW each month, but a few thought that once groups started, supervision of household visits was no longer expected, or that attending a household visit by just one of the CHWs they supervised each month was sufficient.

HCW turnover was also a key challenge for supervision. Many HCWs at the sampled health facilities moved to a different facility or left for studies. Newly appointed supervisors often lacked sufficient training to understand KK, their responsibilities, and use of the supervision checklist and dashboard. The next KK refresher training was often several months after they were appointed, and the training assumed some existing knowledge and so did not always provide sufficient information for new HCWs. Induction support from the implementing NGOs was sometimes insufficient, and peer HCWs sometimes also lacked sufficient understanding to provide advice (e.g. on the dashboard) or lived too far away. In some cases, new supervisors were only appointed after an extended period: one sample health facility had no supervisor for over a year. Communication to CHWs on HCW transfers was sometimes inadequate, such that they were not informed that an HCW was leaving or who would assume supervision responsibilities and when.

EGPAF and D-tree attempted to address turnover partly by working with CHMTs to secure an immediate replacement, but this was not always feasible. They also aimed to support new HCWs through providing initial guidance during quarterly

supervision or project officer visits, as well as through CHMT support, prior to the next refresher training, and by addressing any difficulties by phone. However, this support was not always effective in building HCW skills and understanding, partly due to differences in availability and motivation among HCWs: some HCWs did not communicate problems where they needed help, and more senior HCWs sometimes lacked time to gain familiarity with KK around their other work.

Some **HCWs who lacked time to observe visits were still seen by CHWs as providing good support**: for example, through providing frequent guidance by phone and by monitoring visits via the dashboard.

> 'My supervisor was supportive. She would regularly remind us about doing household visits. There were times when I hoped she'd be present, but she wasn't due to other duties, but even when she couldn't come, if I encountered any challenge I would inform her and she was quick to respond and give me advice.' EL Dodoma1b CHW

Where supervision was more limited, or where new HCW supervisors lacked understanding of KK, **some CHWs thought they had sufficient understanding and skills to conduct the KK work independently**, or they could get help from other health facility colleagues. However, **some CHWs with limited supervision felt they lacked support** to address problems, such as low group attendance or difficult household cases, or they wanted more feedback on their work. Complete absence of a supervisor added further difficulties: for example, a lack of support when caregivers were referred to the health facility. HCW absence also hindered CHWs' ability to check data syncing and to communicate with the NGOs implementing KK.

> 'I needed more support. My supervisor was rarely available, she attended very infrequently. For example, she never attended the group sessions, not even once. For the household visits, in the beginning she assisted, but after that I was going alone. She would only come if she heard guests were coming. Honestly, I really lacked support.' EL Chemba2b CHW

Beyond support for the CHW, **a benefit of HCW attendance at household visits mentioned by one HCW was improving the HCW's own familiarity with community members**. This could potentially support health facility services: for example, through improving community trust in the HCW (particularly given that health facility staff were sometimes seen as less approachable than CHWs, see Section 3.4.4) and through improving HCWs' ability to provide tailored and applicable advice. Further research would be needed to understand this effect, but it may have been an unanticipated benefit of household-level HCW supervision.

> 'Through KK, we became closer to many people we didn't know before. We used to go to their home, you build a friendship, you start getting to know each other, whereas before you just saw each other from afar. If you visit them, you see the actual life they live.' PE Chemba1 HCW

3.2.2 RHMT and CHMT supervision

KK supported quarterly CHMT and RHMT supervision of the KK CHWs and HCWs, through joint visits with EGPAF and D-tree. The contribution of CHMT supervision to performance was not widely emphasised by HCWs and CHWs. However, when CHMT visits were discussed, CHWs indicated that the **visits were appreciated** for providing helpful feedback and showing the community that KK was important, which supported the CHWs' authority (see Section 3.4.4 for further information on trust in CHWs).

> 'The district officers supervised and guided us. After client visits, they would tell us what we did well and areas that needed improvement. This helped my performance because I understood where I needed to focus more. The collaboration between the health centre and district levels also gave the project broader visibility. The community saw district leaders were directly involved, and this increased their trust in the project because they saw it was even valued by higher authorities.' EL Chemba1a CHW

For their part, the **RHMT and CHMTs appreciated KK supervision visits** because they were an opportunity to go beyond the routine CHMT facility-level supervision to see activities in the community and to interact more closely with CHWs. They saw their involvement in supervision as important to address problems, including CHW turnover, gaps in community engagement, or difficulties encountered by CHWs and HCWs, and as important for sustainability. There were several **complaints from CHMTs about insufficient involvement** of some relevant CHMT members in supervision, and concerns about EGPAF officers visiting CHWs without alerting the CHMT. This situation was largely the result of budget constraints and the expectation that allowances would be paid to CHMT members. KK expanded CHMT engagement over time to include additional CHMT members in supervision: for example, involving the social work or reproductive and child health officers as well as the CHW coordinator.

3.2.3 Supervision by the implementing partner NGOs

Supervision from EGPAF and technical support from D-tree were appreciated by CHWs and HCWs. For example, some CHWs noted that EGPAF staff provided useful feedback when they observed visits and that the NGOs helped to solve problems, particularly with the app. One HCW saw close contact with the KK team as supporting impact and distinguishing KK from other projects that rarely visited the village.

> 'KK did a lot of supervision. I have seen [this other project] only once in two years. KK have been coming to do supervision and calling us for meetings, they have been closer to us, and that has brought more impact. It's different from those who come once a year – that can't bring significant changes.' EL Chemba1 HCW

> 'I would get support. Even when I had phone issues, I would call them and they would guide me: "Where exactly are you stuck?" They would instruct me, "Try this, try that". And truly, when you tried that, you'd see things working well.' EL Chemba2b CHW

There were some areas where CHWs thought implementing partner supervision

could have been improved. For example, some CHWs mentioned occasions when they felt NGO officers criticised the CHW unfairly and showed a lack of trust, or they thought the NGO officers did not fully understand the realities of CHW work, such as distances to KK households. In addition, NGO support could not fully compensate for absent HCWs because healthcare issues for which HCW support was needed, such as managing referrals or difficult household cases, were outside of the NGOs' role.

3.2.4 Use of the Kizazi Kijacho dashboard

The KK dashboard was designed to support supervision by HCWs, CHMTs and the RHMT, as well as by EGPAF and D-tree.

Use of the dashboard varied between HCWs. Some saw it as a useful tool and reported using it regularly to check CHW visits.

> 'I always look at it. The dashboard is useful because it tells you the visits that were conducted in a month and which were very short. Even if I have not supervised them, I know the CHW went for visits. Based on that information, I ask the CHW why visits are missing and if there is a problem.' PE Chemba1 HCW

However, **many HCWs encountered technical difficulties with the dashboard**, such as inaccurate and missing data, being unable to access the dashboard, or phones being lost or developing faults. Some lost trust in the dashboard because of inaccurate data and so called the CHW to monitor visits instead. Replacement HCWs who had not attended the initial training sometimes had particular difficulty accessing and interpreting the dashboard, and needed more guidance.

> 'I failed to use it. When I told EGPAF, they told me to contact another HCW, but I don't have time to contact them for guidance. I once opened it and it shows names and numbers and when you scroll down it shows the name of supervisors, that's all. I was confused by the numbers, I couldn't do anything.' PE Dodoma1 HCW

RHMT and CHMT use of the dashboard was generally limited, with some forgetting how to access it and never using it. However, **use improved over time**. For example, the RHMT gained access in late 2024, and one RHMT member then used the dashboard to monitor progress and alert CHMTs if the data indicated performance gaps. Some CHMT members who did use the dashboard also found it useful for monitoring CHWs' performance and identifying where action was needed.

> 'Using the dashboard you can track CHWs – sometimes they might think no one sees what they are doing but they can be seen in the dashboard! When I see the work is not being done, it's easy for me to alert people in the councils. We also use it at the facility during supervision. I found it be such a useful tool. It is very accessible and easy to use.' EL RHMT

> 'I use the dashboard to monitor CHW performance, mainly by checking their visits to see who is performing well and who is facing challenges. The dashboard tracks whether a CHW actually went for a visit and, more importantly, whether they spent the right amount of time there and performed the required tasks. I also look at which supervisors might be

> struggling: for example, who is not going out to help the CHWs. After analysing the data and identifying someone with an issue, I report this to their supervisor.' EL CHMT3

The **KK NGO partners worked to support dashboard use** by reviewing the dashboard data with CHMTs during taskforce meetings, seeking feedback to improve the dashboard (such as increased customisation for each district), and providing monthly calls for CHMTs to discuss technical challenges. This support started in the second year of KK, and one lesson highlighted by D-tree was the need for regular engagement and advocacy with local governments to support dashboard use and ownership.

As well as technical difficulties, limited prioritisation of the dashboard by CHMTs was partly linked to routine use of other data sources, such as the main government health management information system, other reports produced by CHWs, and other dashboards, as well as direct information from supervision and calls with HCWs. This suggests that integration within routine data systems could support dashboard use. Inclusion of ECD data within the new government Unified Community System (UCS), a digital decision support and reporting tool for use by CHWs during home visits, is one part of this integration (see Section 5.3.3).

3.3 CHW and HCW capability, workloads and motivation

RQ 2.1 To what extent are CHWs and HCWs able to deliver KK activities, considering workloads and individual capabilities, and what factors affect this?

Supervisors noted some differences between CHWs in their ability to deliver KK content and engage with parents. Performance was not consistently linked to education levels, gender or age, and instead often attributed to individual intellect or character, without a clear underlying cause.

KK activities were generally compatible with other CHW workloads, although there were occasional indications of reduced visits to other households due to prioritisation of KK. HCW workloads constrained implementation of KK supervision at some health facilities.

Views on the relative feasibility of groups and household visits varied, depending partly on whether the CHW had encountered more difficulty with group attendance or with reaching households and finding parents at home.

RQ 2.2 How has KK affected CHW capacity and motivation, including the contribution of working tools such as the KK app and flipbook, skills training and stipends?

KK training and support brought significant gains in CHWs' knowledge, confidence and performance. KK provided knowledge on new topics, and more information on topics where CHWs already had some experience. KK training workshops were generally described positively.

The app and flipbooks provided by KK supported CHW performance, helping CHWs to remember information and providing a structured approach for interactions with caregivers. Seeing pictures in the flipbooks helped improve caregivers' understanding and recall of information.

There were often difficulties with using the app, including software and hardware issues, limited phone network in some locations, and gaps in understanding among app users. The implementing partner NGOs worked to resolve technical issues, and users' skills improved over time.

Gains in performance extended beyond work for KK, with many CHWs and HCWs finding their improved skills and the KK tools helped them to provide education during non-KK activities.

KK increased CHWs' motivation: they gained more confidence in their work and saw positive impacts on households, and the stipend helped CHWs to provide for their households, contributed to transport costs, and provided justification for their work with other household members.

KK aimed to support high-quality implementation by CHWs and HCWs through building their skills and knowledge via training and supervision; by providing working tools, such as a smartphone with the KK app installed, the flipbooks, and HCW supervision checklist, and through providing a quarterly motivational allowance. The qualitative research examined this KK support, along with views on CHWs' competence and the feasibility of delivering the activities around their other workloads.

3.3.1 CHW delivery of Kizazi Kijacho content

Views on CHWs' performance during household visits and group sessions came from HCWs, local governments, and the implementing NGOs, as these stakeholders had experience across different CHWs through their supervision roles.

Several HCWs thought the KK CHWs they supervised all had equivalent levels of ECD knowledge and provided the same information to caregivers because they attended the same KK training and had the same tools (phone and flipbook). However, HCWs **reported variations in CHW capacity to deliver the KK content effectively**. Some CHWs were more fluent and confident with the material, delivered sessions in a more engaging and enjoyable way, and were better at motivating mothers to attend and to follow the parenting advice. There were examples of CHWs taking steps to ensure good delivery: for example, one CHW reported practising and making notes in advance of group sessions so that – unlike another CHW at the health facility – she could deliver the material without reading from the flipbook.

> 'I enjoy my work, so I do my best to provide the education well. Although I use the guideline strictly, you can't just read out the information, so I normally prepare at home and practise the day before the session. I read and take some notes, so that when I am there the mothers don't get bored because I don't spend a lot of time reading the flipbook – I talk as if I'm

> narrating a story, which makes learning entertaining. I have seen other CHWs busy with the flipbook in a way that sometimes they get lost in the details, they read everything – even the instructions for the CHWs!' PE Dodoma3 CHW

The reasons given for variations in CHW delivery skills varied, and HCWs often related performance to individual CHWs' personalities or intelligence levels. Experience as a CHW and with previous projects was mentioned as helping performance, but some HCWs also pointed to strengths among newer CHWs. Community trust in the CHW was also seen as important for supporting interactions with parents, and this trust was affected by factors such as length of service (see Section 3.4.4).

Age and gender were not seen as consistent determinants of CHWs' counselling skills or interactions with caregivers. Some stakeholders thought older CHWs often had more initial difficulties with the KK app, but age could also bring more experience and established community relationships, and many HCWs thought that age did not determine performance.

Views on the importance of education levels also varied: Several HCWs pointed to higher skills and quality of counselling among more educated CHWs, but some CHWs who had only attended primary school were also praised as among the most effective at the health facility, including due to their long experience.

A challenge for effective delivery mentioned by one CHW was **language**. Swahili was not widely spoken in some communities, and it was hard to translate some Swahili information from the KK guidance into local languages, particularly where there were several tribes who spoke different languages and where the CHW was not confident in them all. As well as hindering his work, the CHW thought that language barriers discouraged attendance by some mothers.

> 'Language was a challenge. Some words cannot be translated to the local language. You try to explain through actions – "do this and this" – but it is all very difficult. You find mothers staying away because of language.' EL Chemba3a CHW

There is only **limited evidence on the influence of different languages from our research**, but this may be an important area for further assessment to ensure that language barriers do not restrict communication and parents' engagement.

3.3.2 Feasibility of managing Kizazi Kijacho workloads

KK activities were added to existing CHW workloads. **CHWs generally indicated that KK did not affect their other responsibilities** because they were able to plan their time. However, there were a few reports of CHWs reducing visits to non-KK households due to their new KK workload. This effect on non-KK work is likely to have varied depending on CHW roles pre-KK and the extent of their wider responsibilities.

> 'Before KK I used to visit other mothers to provide education. After KK started, I reduced the number of visits to mothers not in KK, because I had to do the KK activities, and they needed attention and careful work.' EL Chemba3a CHW

HCW also indicated that KK did not negatively affect their other work, for example because they could do supervision visits after health facility clinics ended. However, the gaps in HCW supervision due to health facility workloads suggest that expected KK duties were not always feasible; other health facility duties took priority, and this hindered KK implementation.

CHWs had **different views on the relative feasibility of the household visits and groups**. Some saw groups as easier to implement because they could reach more people with a smaller demand on CHWs' time, did not require travel, and could expand coverage, but others thought groups were harder to organise due to difficulties with attendance. These different views partly reflected varied CHW experience, with some CHWs struggling with low group participation and others facing long distances to households and missed visit appointments.

> 'With the group, I can meet 10 people at once whereas I might go to a household and despite agreeing to meet the day before you find she is not available. With the group, it is very easy.' EL Kongwa2b CHW

> 'With household visits, it takes time to cover the whole village and you won't manage to cover the entire community, so it's better to use group sessions.' PE Chemba1 CHW

> 'The home visits work better and faster than group sessions. Dealing with groups is challenging, and some people will not attend.' PE Dodoma2 CHW

The perceived efficiency of group sessions in regard to CHWs' time and wider reach was a key reason behind the reliance on group teaching following the end of KK support, as discussed in Section 5.

3.3.3 Kizazi Kijacho's contribution to CHWs and HCWs' knowledge and skills

KK training and support brought significant gains in CHWs' knowledge, confidence and performance, as reported by CHWs, HCWs and local governments.

KK provided knowledge on new topics, and more information on topics where CHWs already had some experience. Content around cognitive development, stimulation and early learning was often new, including advice on talking with children, the importance of play and making toys. For more familiar topics, such as nutrition, KK provided additional or more accurate content that was not covered in other project training. **Improved confidence** in teaching was also widely reported, with CHWs feeling confident about the information and able to provide education to larger groups.

> 'It has added to my knowledge because in other organisations or the government, we were not given a structured way to educate people, based on evidence. With KK, I can read through my books properly, then come and teach, ensuring that I explain things clearly. I now understand, for instance, what type of food a 6-month-old baby should be introduced to, in what quantity, and how often. KK has increased my knowledge; it is different from other sources, because KK has truly given us clear guidelines.' EL Chemba1b CHW

> ‘There are many things I didn’t know but learnt through KK. For example, that toys help develop a child’s brain. Truly, it has helped me. I can now stand and teach in front of a group of mothers, not just the small KK group. I’ve become experienced in weighing children – when I go to health and nutrition days in neighbouring villages, they assign me to do the weighing because I have a lot of experience from KK.’ EL Chemba2b CHW

> ‘Our skills have improved. After KK training, we were outstanding CHWs and many people in the community trusted us and trusted what we did. Even our supervisors were proud of us.’ SS Dodoma1 CHW

> ‘KK really pushed me. It made me grow. Honestly, the CHW I was before KK and the CHW I am now are completely different.’ EL Dodoma1b CHW

> ‘KK has instilled confidence in the CHWs. Before KK, they had difficulty standing in front of even five people. Now, even if it is a group, the CHW can stand and present on their topic.’ SS Dodoma2 HCW

HCWs also reported improvements in their own skills and knowledge due to KK training. As for CHWs, this included new knowledge on child development and some new information on more familiar topics such as nutrition. Sometimes the information was already known, but HCWs gained more understanding through applying the information in practice.

> ‘I already had the knowledge, but when you actually do something and start seeing real changes or impact, it becomes more meaningful, you become like a witness to it.’ EL Kongwa1 HCW

> ‘The training was beneficial because we learnt things we didn’t know. Even though we are health professionals, there are things we didn’t know such as when a child is in the womb they can hear, or when a child is born, how far they can see. I learned that by encouraging the child, they make more effort to try and learn better – if they do something wrong, you should congratulate them and tell them how to do it the right way instead of telling them they are stupid. After the training, I became confident because I knew what I was going to supervise.’ PE Chemba1 HCW

These benefits extended beyond work for KK, with many CHWs and HCWs finding that their improved skills (as well as the KK tools, see below) helped them to provide education during non-KK activities. For example, several CHWs used additional knowledge on nutrition learnt through KK when providing advice at VHNDs, and the KK tools and experience helped to improve the content and delivery of CHW advice at the clinic or in other non-KK activities. The new topics around stimulation and early learning introduced by KK were also adopted in wider work by some CHWs. Some HCWs also used the information learned in KK in their work at the health facility or during outreach.

> ‘With the KK training, we go into things in depth, more than in other projects. When we do other work, we apply some of the knowledge from KK. For example, with breastfeeding, I learned how the mother should hold the baby and her breast, and I applied that during health and nutrition days.’ EL Chemba2a CHW

> ‘One major thing I’ve gained is improved skills in child development and parenting: for example, talking to or playing with children. It has changed the

> way I do things. It's even helping in my other responsibilities as a health worker, including in clinical work, and with the play corner at the clinic. For example, we encourage pregnant mothers to talk to their babies before and after birth, we've integrated this into our counselling.' EL Kongwa1 HCW

This wider use of KK information is discussed further in relation to reach beyond KK households, see Section 3.5.3.

Some CHWs also indicated **benefits of KK training and experience for activities beyond their CHW role**. For example, one CHW appreciated that his experience in KK supported his responsibilities in the church. Several CHWs and HCWs also described using KK learning to improve caregiving for their own children or grandchildren: for example, using the KK toys and engaging in positive discipline.

> 'I've used the skills from KK in several ways. Through interacting with people, you gain skills you can carry into different sectors. The creativity I developed through KK has also helped me in other places. For instance, I serve in our parish church, and the experience I gained through KK helped build my confidence, my ability to stand before people, express myself clearly, and explain things. If it weren't for this KK role, I don't think I'd be doing what I'm doing now in church or in other areas. KK moved me from one stage of life to another. It gave me a platform to grow.' EL Dodoma1b CHW

> 'I learnt new things through KK. I realised that before I could help others, I had to apply the teachings in my own household. So it helped me personally. I have children whom I support by educating them, and I have grandchildren that I play with using KK materials. So, overall, I have been very happy with the project, it has really helped me.' EL Dodoma1a CHW

> 'I personally am a parent. I was not aware of how to talk with my child or how to understand my child. These are skills I gained from KK.' EL Chemba2 HCW

3.3.4 Training

KK training workshops were generally described positively by CHWs and HCWs. Workshops were appreciated for providing new knowledge and skills, as suggested by the quotes in the previous section. Joint training for HCWs and CHWs provided shared knowledge and meant they could remind and support each other afterwards. Views on the content were mixed: a few CHWs or HCWs expressed concerns that the training was too theoretical and that facilitators sometimes lacked patience with those participants who took more time to understand the material. This improved in later workshops, with training becoming more practical, explanations becoming clearer, and improvements in facilitation.

> 'Everything was fine and well understood. I did not see a gap. The teachers are friendly, there are no problems at all with them, and the schedule wasn't bad.' PE Chemba1 HCW

> 'I like the way they facilitate the training now, they have improved. In the beginning, the trainers didn't give detailed information and that made it difficult to understand, leading to many mistakes in the field. We used to just sit and listen, it was too theoretical. For the last two trainings, they provided more clarifications, and one of the facilitators made sure everybody

> understands, using practical examples. For example, they used to tell us to go and make a toy, and people brought something completely wrong, because they didn't understand. Nowadays, we do everything together with them.' PE Dodoma3 CHW

There were also mixed views on training **logistics.** Some CHWs and HCWs thought the workshops were well organised but some thought the training days were too long, and noted difficulties with delayed provision of allowances for the initial training, which caused difficulties or anxiety about payments for accommodation and subsistence. As with facilitation, CHWs and HCWs thought these issues improved in later workshops.

While the full series of training workshops supported CHWs' and HCWs' skills, there were **difficulties with ensuring adequate training for CHWs or HCWs who joined KK at a later stage**. As noted in Section 3.2.1, the next training workshop was sometimes several months after a replacement HCW was appointed, and because workshops built on earlier training, they did not always sufficiently cover the information needed by new HCWs.

3.3.5 Kizazi Kijacho tools: use of the app and flipbook

Tools provided by KK supported CHWs' performance, including the app and flipbooks. These tools helped CHWs to remember information, provided a structured approach for their interactions with caregivers, and standardised CHWs' service delivery. CHMTs and other stakeholders saw these tools as an important contribution made by KK.

> 'A positive aspect of the project is that CHWs received training and were given job aids, such as smartphones with a special app. The app provides prompts on what they should explain to the caregiver. There are also flipbooks: mothers are shown pictures, asked to describe what they see, and the CHW provides explanations. The materials mean the CHWs all provide the same standard of information. Having the flipbooks and other materials has been of great help.' PE CHMT1

> 'Supporting the CHWs is important because they need something to remind them of what to do when they visit a household. Having a flipbook helps guide them, so they don't have to rely on memory. The mobile phone also acts as a reminder, it prompts them, ensuring everything is done properly. That design is really well-structured and has made KK's work easier.' EL CHMT3

KK app and phone

CHWs and other stakeholders saw the KK app as helpful: it saved time compared to paper-based reporting and incorporated data checks, and it provided reminders of when to visit households and detailed guidance during visits. The app also motivated CHW action by tracking whether visits had been conducted.

> 'The app is very important because everything has been simplified. The system is well planned, the modules flow perfectly, and that simplifies my work because I don't need to think about my next step, the system guides you step by step. The system has also spared us from the chaos of paperwork; writing is difficult, but with the system, when I finish that's it, I verify my data and sync, there is no need to write and compile any notes.

> With the app, once you sync the data, anyone can access them instantly, so it's easy if the government wants to monitor progress. With paper, you have to wait for reports from each village, ward, district and region, and then you compile them before analysis, it's a very long process.' PE Dodoma3 CHW

> 'KK forced the CHWs to be accountable for the families they had to visit, as if they did not visit then the phone app would indicate red and alert them to do the visit.' SS Dodoma1 HCW

Beyond use of the app, the smartphones provided by KK also supported CHWs' work through enabling access to the WhatsApp groups established by KK to share updates, and through easing communication, both with households to arrange visits and with other CHWs and the HCW. This also facilitated HCW supervision. Phones were also used for non-KK work: for example, sending photos of outreach activities to the local government.

> 'KK simplified communication. In the past, CHWs did not have phones so if you needed the CHW, you had to walk all around the village just to get hold of them. With KK, they were provided with phones so we could easily access them.' SS Dodoma1 HCW

Implementing NGOs, HCWs and CHWs also reported **widespread difficulties with use of the app**, including software errors, hardware issues with particular phones, limited phone network in some locations, and gaps in CHWs' and HCWs' understanding of how to use the app. Technical issues also affected the recording of supervision visits by HCWs. Many software and hardware issues were addressed over time through work by D-tree and EGPAF, although CHWs and HCWs also reported new difficulties arising. HCWs and CHWs also gained more expertise in using the app over time, through training, support from colleagues and supervisors, and experience; some CHWs who were previously unfamiliar with smartphones saw gaining these skills as an important benefit of their involvement in KK.

> 'Initially the phone system was not easy, not only for CHWs but also for us – we had a lot of problems. There were things like log in here, tap there, etc. But the more we meet, the more we learn and gain experience from others – now I'm very confident, I can log in and access everything, I am not afraid anymore. Now every month I provide information by phone, I share it on the WhatsApp group.' PE Chemba2 HCW

> 'Although I didn't have much experience with modern smartphones before, I'm grateful that I learned how to use them well through the training, and I didn't have any issues storing and sending data. I never knew how to use a smartphone or applications, but through KK, I learned. This is one of the benefits I gained from KK.' EL Chemba1a CHW

While there were improvements, difficulties in using the app for some CHWs led to **errors in monitoring data**, which discouraged HCWs' use of the dashboard (see Section 3.2.4). Qualitative information on the completion of household visits was often inconsistent with quantitative data provided through the app – in particular, several CHWs and HCWs reported more visits than were indicated in the quantitative records and noted difficulty recording or syncing data in the app. Some recorded data may also have been inaccurate due to difficulties in using the app or the online supervision checklist. For example, one HCW thought the

supervision form did not accept certain data on group attendance, and could only be submitted if data was entered inaccurately. Another mentioned that issues with the Swahili translation of the HCW checklist led to uncertainty and guesswork. Further analysis of the monitoring data would be needed to understand and verify these issues.

> 'It forces you to lie about the attendance so that you can complete the form.' PE Dodoma1 HCW

> 'The checklist form was translated into Swahili, but when we started the visits, some Swahili words were still difficult to understand, so you had trouble interpreting. At the end of the day, you filled it in just based on guesses. The Swahili translation should be made simple and easy to understand.' PE Dodoma1 HCW

Difficulties with the app led to additional work for some CHWs to ensure data was complete and submitted. For example, one CHW reported that initial household visits were often missing or showed as incomplete in the app, so they had to visit these households for a second time. Limited network coverage in some villages required CHWs to travel to other locations for data syncing and upload. For example, one CHW reported travelling 20 minutes by motorbike to a location where they could upload data, at a cost of TZS 10,000 each time.

There were very few concerns from caregivers about CHWs using the phone during visits; phone use was seen as normal in this context, and sometimes increased trust in the CHW because it indicated that they were officially appointed.

> 'I believe the CHW because he has received training. Even that phone he has was given to him for this programme, so I trust him a lot. He couldn't buy a phone like that by himself.' PE Dodoma1 father

The purpose of the phone was not always known or understood, but caregivers mostly thought it was for recording information or communicating with higher managers. However, a few mothers disliked the CHW recording videos of them, and had concerns about where the videos would be shared.

KK flipbook

As noted in Section 1, KK provided CHW with the standard government *Bango Kitita* flipbook focused on health and nutrition, and with KK flipbooks that provided additional content for household visits and group session.

The flipbooks supported CHWs' delivery of services and their communication with caregivers. Flipbooks provided guidance and a reminder for CHWs, and seeing pictures helped improve caregivers' understanding and recall of information.

> 'The flipbook is full of knowledge and educates the CHW. It reminds them of things they would have forgotten, it shows them everything and they can use it as a reference.' PEChemba1 HCW

> 'The flipbook is good because we look at pictures, and she guides us, reads what's written, and we learn from the book. Showing us the pictures helps us understand what actions to take.' PE Dodoma3 KKM

> ‘Explaining and looking in the book are two different things. The flipbook is really important because it has pictures showing how to play with a child. If the CHW was teaching without a book, we would not understand – without seeing the pictures, how would we know how to make the drawings and toys?’ PE Chemba2 KKM

Several mothers and CHWs suggested that caregivers should be given copies of the flipbook, to help them remember the information between visits. More copies would also make it easier for mothers to see the pictures during group sessions.

> ‘The CHW should be given more flipbooks so he can give us copies and then we can look at the pictures. If you are sitting far from the CHW, you cannot see the book well, so it is difficult to answer questions.’ EL Chemba1a KKM

> ‘We would like KK to provide us with these flipbooks, because these books contain a lot of information, and there is a difference between someone reading for you and when you have a book in your own hand.’ EL Chemba1b KKM

> ‘Providing participants with reading materials such as flipbooks could help because when they go home, they will have something to read, and when they later meet with their CHW, it will serve as a reminder and reinforce what they have already learned at home, making it easier for them to remember and apply it.’ EL Chemba1a CHW

The government Child Health Booklet (a home-based medical record kept by parents) has been updated to incorporate messages on responsive caregiving, early stimulation, nutrition, and safety. EGPAF has been working with the World Health Organization and the government to support and evaluate rollout of this updated booklet. By providing messages in a document that is held by parents, this booklet may partially meet caregivers’ interest in having copies of the KK flipbook; this could be reviewed based on the findings of the evaluation supported by EGPAF.

3.3.6 CHW motivation

Several CHWs indicated that **their motivation was increased by involvement in KK.** Motivation was partly intrinsic, and related to increased confidence in their work as a result of the KK training (as described in Section 3.3.1), more community appreciation of CHWs’ support, and improved child development.

> ‘I feel proud. The training motivated me, because I learned many things through KK – it transformed my abilities and confidence, and my understanding of ECD improved. When I walk in the street, I see people pointing and saying “she is a CHW”, they appreciate my service and sometimes ask for your advice. This is because of the work I do for KK – they often see me visiting my clients, whereas before KK we rarely visited households. I am respected. The responses I receive during visits are also encouraging: when I carry my bag heading to household visits, I feel important because the mothers enjoy the education, and the more they enjoy I am also motivated, and that makes happy.’ PEDodoma3 CHW

> ‘My satisfaction has increased. Over the last two years, I have learned many things through KK that have improved my life; I am now smarter than I was

> before – I did not know how to use smartphones but now I do, and I have become competent in training many mothers in many topics that I did not know about previously. I used to be terrified of teaching women or visiting them in their homes, but everything has changed for the better; I am happier.' PEDodoma2 CHW

The stipend was also mentioned by many CHWs as an important benefit of KK. It helped CHWs to provide for their own households, contributed to transport costs associated with CHW activities, supported motivation, and provided justification for their work with other household members. HCWs and local governments also emphasised the importance of the stipend for motivating CHWs.

> 'Previously, the system was not okay, we were only volunteering. But in KK, we are given TZS 50,000 per month. It helps us to push some things in life. It has brought me a little social change. I have even built a hut, whereas before I didn't have a hut to live in.' PE Dodoma1 CHW

> 'Through this KK project, we receive stipends, which motivates us. I am grateful for what I receive. Nowadays, if I tell my husband that I have work to do at the facility, he understands.' PE Dodoma3 CHW

> 'I am grateful because it has had an impact on me. Even economically, it has empowered us because I was given TZS 50,000, and if I have activities to do, that amount helps me in some way. If I have children in school, I can also buy their necessities.' EL Chemba1b CHW

> 'They would push themselves knowing that at the end of the month they would be given an allowance.' SS Dodoma1 HCW

However, there were **concerns that payments were sometimes delayed**, and several CHWs expressed a preference for monthly rather than quarterly payments to help them budget. In addition, as indicated in Section 3.1.1, **some CHWs spent significant resources on transport** to distant households and used the stipend to cover these costs, reducing the benefit of the stipend for the CHW's household and personal responsibilities. Several CHWs and other stakeholders suggested increasing the CHW allowance, including to cover transport costs (as indicated in Section 3.1.1), as well as to provide motivation and encourage a focus on CHW work rather than other livelihood activities.

While the stipend was motivating for KK CHW, some **negative effects on the motivation of other (non-KK) CHWs** were reported. One HCW indicated performance gaps among non-KK CHWs at the health facility due to their KK colleagues being paid, and some non-KK CHWs described reducing their effort because only KK CHWs received allowances.

> 'We worked with them, but you know, if we are working together and I find that you are getting something while I am not getting anything, I get discouraged. So, when KK started, I said "let the KK CHWs work because they are getting allowances". I would only come to the health facility when the HCW called me.' SS Dodoma2 non-KK CHW

The lack of a stipend for non-KK CHWs affected wider implementation of the KK approaches, and the **end of the stipend also reduced motivation for KK CHWs.** These issues are described further in Section 5 on sustainability and scaling.

3.4 Acceptability of Kizazi Kijacho and the role of community engagement

RQ 3.1 To what extent are KK activities acceptable to caregivers, communities and government stakeholders, and what affects this?

All stakeholder groups were, overall, positive about the KK activities and saw them as benefitting households and communities. The perceived impact on improved child development was a key driver of acceptability. CHWs, HCWs and local government representatives also pointed to the benefits of training, tools and stipends for CHWs, and parents saw CHW visits as providing useful advice and demonstrating care.

Caregivers appreciated the groups and household visits for providing useful information and guidance. Visits also demonstrated care and support, and patient and respectful CHW behaviour further supported acceptability. Many parents asked for the education to be continued and expanded. The UCT and other financial or in-kind benefits from KK were also indicated by some caregivers as a key benefit of the project.

However, low group attendance in some communities and gaps in household visit attendance suggest that while activities were generally acceptable for caregivers, they were not always seen as sufficiently important to be a household priority.

A small minority of households did not want to take part or decided to leave the programme, occasionally due to rumours about the real intent of KK but more often due to dissatisfaction with the lack of material benefits if they were not receiving the UCT.

RQ 3.2 Are some KK programme components seen by stakeholders as more acceptable and important?

Preferences for groups or household visits varied between individuals and communities; many caregivers and other stakeholders saw the benefits of both formats and described groups and household visits as playing complementary roles. Household visits provided an opportunity for private and more detailed discussions, while groups were valued for sharing experience and advice.

RQ 3.3 How has KK affected trust in CHWs?

Community members generally reported trust in the CHW, and in the advice provided by the CHW. Trust was supported by positive experience of the CHW's advice, and by the CHW's familiarity, respectful behaviour, and professional training and skills. KK strengthened trust through increasing CHWs' activities and training. However, issues with UCT payments damaged trust in CHWs in some communities, and there were sometimes gaps in the perceived credibility or authority of CHWs as sources of health information. Gender and age were not consistent influences on the acceptability of CHWs and were often seen as less important than training and commitment.

RQ 3.4 What role has community engagement played in KK?

Community leaders helped CHWs with KK activities in some communities. However, KK engagement with community leaders was limited. Several stakeholders thought more engagement with community leaders would facilitate CHWs' work.

Aspects of acceptability were referred to throughout the previous sections, including variations in caregivers' prioritisation of, and willingness to attend, household visits and group sessions (Section 3.1), CHMTs' views on involvement in supervision (3.2), and stakeholder views on the KK training, tools and support (3.3). Across these issues, there were perceived positives (such as receiving the allowance, flipbooks, training, and closer supervision), and concerns (such as the effects of UCT sampling, a request for more frequent CHMT supervision, or technical limitations of the app).

This section focuses directly on the acceptability of KK, considering overall stakeholder satisfaction with the KK activities, households' agreement to participate in KK, and views on the relative merits of household visits and groups. We also describe community trust in CHWs and the involvement of community leaders, as factors affecting acceptance.

Acceptability is a continuum, ranging from strong enthusiasm to reluctant engagement. It can also change over time and vary between different aspects of an intervention, with stakeholders positive about some aspects but dissatisfied with others (13). As such, acceptability is not just about the decision to participate in KK: households may decide to enrol but not find the activities sufficiently attractive to always attend, or they may participate but be uncomfortable with some aspects of KK. In line with this, we consider what caregivers and other stakeholders saw as the positives and negatives of different KK activities, and how views varied between people and over time.

3.4.1 Stakeholder satisfaction with Kizazi Kijacho activities

All stakeholder groups, from the RHMT to parents, **were positive overall about the KK activities and saw them as benefitting households and communities.** Participants often spoke highly of KK, pointed to personal or wider benefits from the programme, and suggested that the activities should be extended to other households and communities. Perceived positive changes in children's development were a primary reason for valuing KK among all stakeholders. Caregivers described children involved in KK as developing faster and being more active or intelligent than their previous children, and many stakeholders pointed to differences between children in KK households and others. Comments particularly emphasised cognitive development: for example, children talking at an earlier age, understanding things more quickly or being able to recognise different objects at an earlier age. Some stakeholders also pointed to improved health and growth for KK children. These changes were consistently attributed to KK activities, including increased stimulation, play-based learning, and caregiver–child interaction.

> 'KK has brought a lot of good things, there have been big achievements. We have seen this from parents who describe differences in children born before

and after the programme.' EL RHMT

'Parents gave very positive feedback. They felt good about being visited, and they appreciated their children receiving stimulation materials. You could actually see a difference in the children, which was truly encouraging. The families that were visited felt supported.' EL CHMT3

'KK has indeed contributed to changes. In my sub-village, when I look at the health and development of children in KK, the difference is obvious: they are healthier than children not in the programme. KK has contributed a lot.' PE Dodoma3 CL

'KK is quite a good project. There were achievements – mothers got knowledge on things like playing, food, how to live with their children, seeking hospital care when their children get sick. Other mothers started to ask if they could be included as well! Mothers participated and they enjoyed it. The children were healthy, they were active, different to other children who were not part of the project.' EL Chemba1 HCW

'This is my ninth child. Since I started raising children, this is the one I have seen to be truly intelligent because of the training and guidance. This one seems smart and very cheerful. When he wakes up in the morning, he doesn't cry at all, he starts laughing, which is different from the others – they would just cry immediately they woke up. So this Kizazi Kijacho programme should continue, it is good.' EL Chemba1b father

The **support for CHWs' and HCWs' skills, delivery and motivation**, described in Section 3.3, was also highlighted by local governments, HCWs and CHWs as an important benefit of KK.

'The ECD knowledge of CHWs in the areas with KK is different to the knowledge of CHWs in areas KK has not reached. When we do supervision, you can see the difference in responses from CHWs that are in KK. KK has really contributed, because the CHW has twice the ability they had before, and this means they have more impact.' SS CHMT1

'Honestly, I saw the project was good. Very good actually, I've never seen a project like that. Things went smoothly. The training they gave us was good. Even in terms of payment, it was good. We worked together well.' EL Kongwa1b CHW

Local government representatives also commented positively on other aspects of KK's design, such as working with CHWs who were familiar with the community; involving the different levels of health facility, district and regional managers; combining household visits for individual counselling with groups for sharing experience; starting during pregnancy; and alignment with the government's interest in strengthening ECD.

'This model used by KK is actually very good. The approach of using CHWs alongside their supervisors is good because the CHW know the households much better than their supervisor or I do. They understand the households and can determine the best way to engage them.' EL CHMT3

'One good thing is that we have been involved at the regional, district and facility levels. Second, healthcare workers supervise the CHWs. This is good because they are within the community and can be easily engaged and

> support the CHWs more closely than someone at district level, and they have some experience to guide the CHWs. Also, it's good that the CHWs are implementing this project: the Minister of Health has insisted on investing in CHWs because they can contribute to health services, they can identify children with needs and link them to the healthcare provider. As a nation, we are implementing the ECD programme. KK help by doing what we are supposed to do.' PE RHMT

At household level, caregivers appreciated the groups and household visits for **providing useful information and guidance.** In particular, they highlighted advice on play (including making toys and learning materials), talking with children, nutrition, and to some extent safety, with less mention of advice on health topics such as malaria prevention and vaccination. This aligns with the topics that were newer for caregivers, as described in Section 4.4.1.

> 'I liked his visits. There were things I learnt: for example, about the food groups and child nutrition. I didn't know them in depth but through his visits I have been able to understand more.' EL Kongwa2b KKM

> 'For me, I find these visits good. When he comes, you share information. He changes your thinking and understanding. The moment I see him, I know he has come to teach us something. He brings new information each time he visits, adding another topic. If you have forgotten something, the CHW reminds you about it. All the advice and topics were good.' EL Kongwa2a father

> 'The project is good, this knowledge has helped us a lot. It has brought a lot of changes. If possible, KK should be continued to support others who have not been covered.' EL Chemba1b KKM

Visits were also appreciated by caregivers because they **demonstrated care and support**, and **patient and respectful** CHW behaviour further supported acceptability.

> 'I liked the way he teaches. The CHW listens to you, and you can listen to him, and you can understand each other. He is not strict. He is gentle. If there is an area you don't understand, he explains and helps you to understand.' EL Dodoma1b KKM

> 'The good thing is I feel comforted. I see how much I'm cared for because there are so many people in this village, why would he waste time coming to visit me and finding out about my child's health? That's all I like.' PE Dodoma2 KKM

> 'Personally, what I like most is that the CHW visits us at home. He comes to see how the child's health is progressing, and he gives us education. When you are visited, it shows they care about you.' EL Chemba1b KKM

Many **parents asked for the education to be continued**, to cover more topics and later child development stages: for example, providing games for older children or teaching children further skills to support them in school. Some also suggested that including basic education for mothers would strengthen the programme.

> 'They should give the CHW more materials because when he came here last month, he told me that my child has reached 2 years and his books don't go

beyond that.' EL Chemba1a KKM

'When we attend the group sessions, we learn how to play with children. But we don't have much education as mothers. Some mothers have not been to school at all, they don't know how to write. It would be good if they could teach us as well'. EL Dodoma1a KKM

While parents reported seeing the CHW's advice as useful, the gaps in attendance for household visits and group sessions, and the difficulties encountered by some CHWs in convincing caregivers to attend, suggest **variations in the extent to which KK activities were valued or considered acceptable. Caregivers sometimes saw the KK activities as useful but not as sufficiently valuable to justify the time and effort involved in participating, or to outweigh their concerns about the programme.** As described in Section 3.1, caregivers sometimes prioritised other activities, including essential livelihood activities but also recreation. Low attendance or reluctance to attend also resulted from areas of dissatisfaction, such as perceived unfairness related to the UCT distribution. Particularly in non-UCT communities, where there was no direct material benefit, some caregivers saw the benefits of education as insufficient to compensate for the opportunity costs and time required for attendance (see Section 3.1.3).

'With group sessions, people didn't like them very much; they felt it was a hassle. They felt they were not seeing any benefit because they don't receive anything directly. It's just education, they go play with the children, and perhaps it's the same thing every month, so they don't see it as meaningful. If ask them to come, they ask "is there any allowance?" That is their main focus. They don't want to know that participation is for their child's benefit.' EL Chemba2a CHW

'Enhancing the groups to provide additional support would be helpful. In another area, mothers in these KK groups are given training and a small allowance to help them. That builds your enthusiasm to attend the group, you get advice and get something, the incentive makes people see the importance of attending. Here, some people said, "I'm not going to just sit idle for hours!"' EL Chemba2a KKM

'People say the group is just wasting time: "you are just going to play with children?" When I'm busy doing hairdressing and see I'm needed for the group, I find it better to do hairdressing to get money. Everyone is busy, and working for a livelihood is prioritised over other issues. Distance is also a challenge – if you think of going to the group place, on a hot day, you decide "let me rest, let them proceed". Maybe there should be TZS 5,000 for transport every time we meet.' EL Dodoma1a KKM

As suggested by the preference for receiving incentives when attending groups, some caregivers also indicated that the UCT and other financial or in-kind benefits were a key benefit of KK. For example, some mentioned compensation related to the KK lab experiment or other research activities as the most important thing they gained from the project, and others highlighted the value of the UCT for their household (see Section 4.3.1 for information on caregivers' use of the UCT).

'The thing I remember most from KK is that day we gathered at the church. We learned some games, and later we were given gifts or money depending

> what colour you choose. It helped, not just in parenting but in improving life at home – if you don't have money to buy something, when you receive a gift, you can buy it.' EL Chemba2a father

> 'The main benefit from KK was that she was given a small amount of money, and we were able to buy some things that will later help the child.' EL Chemba2a father

3.4.2 Stakeholder views on the relative benefits of groups and household visits

Caregivers, CHWs and HCWs had different views on the relative advantages of groups and household visits, and many saw benefits of both formats.

Household visits were seen as providing an opportunity for private discussions, more questions from parents and more time for detailed explanations, which helped promote understanding. Some mothers also mentioned attendance by male partners as a benefit of household visits (reflecting very low male engagement in group sessions, see Section 4.1.1). Household visits also avoided the travel costs and time required to attend group sessions in more scattered villages.

Groups were valued for sharing experiences and advice, and for mutual learning and problem solving. Mothers learnt from the questions asked by others. For some mothers, groups built **new connections** and social networks (see Section 4.2.2).

> 'I like the group sessions because we discuss, we get to know each other and find out where other people come from. When we face challenges, we help each other to solve them, we learn together and share our understanding.' PE Chemba2 KKM

Groups also provided caregivers with practical experience of cooking and making toys, which helped to address difficulties in understanding how to make toys following the household visits (see Section 4.4.1). Mothers also enjoyed singing together and seeing their children having fun playing together. Playing with others was recognised as improving children's social skills, but mothers also described the pleasure of socialising and being with their children.

> 'I like it when we come to the group and start singing, that makes me happy. When we sing, we are asked to croak like a frog, we are told to cluck like chickens, bark like a dog … how are you supposed to croak like a frog? You start laughing and it makes us happy.' PE Chemba2 KKM PE

Balanced against this, some mothers found it hard to concentrate in group sessions due to children shouting and moving around. Household visits were quieter and calmer, so mothers could listen without interruptions. In addition, some mothers thought their children were shy and upset in groups, and so preferred household visits.

Caregivers, and CHWs and HCWs, **often saw advantages of both** the groups and household visits, feeling they played complementary roles.

> 'When we are in a group, there are things I learn from my fellow mothers, and when he comes to my home, I understand more because we are just two.'

PE Dodoma1 KKM

As for overall satisfaction, caregivers' positive comments on groups and household visits should be considered in light of the attendance gaps described in Section 3.1, particularly for groups.

3.4.3 Agreement to participate in Kizazi Kijacho

KK monitoring reports show that the **vast majority of households invited to join KK agreed** to be enrolled in the programme (with only around 1% of target households declining to take part), and of households who registered, less than 1% had decided to withdraw at the time of the one year follow-up).[7] Some community stakeholders also reported that other households who were not selected wanted to join.

Willingness to participate changed over time: some caregivers became more comfortable with KK once rumours were addressed or they saw the benefits, so decided to join or became more supportive of participation, while other households became more dissatisfied and decided to leave.

Uncertainty about the KK team's motivations and intentions was one cause of refusal to join or a later decision to withdraw. In particular, there were rumours about **freemasonry** in several communities. Stemming partly from historical dynamics, freemasonry has often been the subject of conspiracy theories in Africa and associated with nefarious activities, including blood sacrifice and illicit wealth generation, and similar accusations have affected engagement with other development projects in Tanzania and elsewhere (14). Support from community leaders helped to address rumours and encourage participation.

> 'In one household, the husband of a young woman said he did not wish to participate after hearing rumours and claiming we were doing something related to the freemasons. I reported this to my supervisor, who advised me to meet the village chairman. I explained the challenge, and the chairman convinced the man to agree to the project. However, he only permitted the wife to attend, he refused to be involved himself.' PE Dodoma1 CHW

Some households also declined to participate or withdrew due to the lack of **immediate material benefit** in non-UCT communities. According to EGPAF reports, this was by far the most common cause of decisions to withdraw.

> 'In our community, people are very used to receiving things that are tangible: for example, money, food. When you just give someone education that will benefit them later, they don't really value it. Many households felt like "we're wasting our time. We're leaving our work, and then we get nothing", so some asked to be removed.' EL Dodoma1b CHW

In contrast, some caregivers who initially saw the programme as either lacking any benefit or as suspicious **gained interest when they saw positive effects** and benefits for KK mothers and their families. There were also examples of family members in households that did join becoming more positive about participation when they saw the effects on their children. For example, in one community, some husbands reportedly criticised participation by their wives, but later became

[7] Based on quantitative monitoring and midline data.

more supportive.

> 'Some husbands of the KK mothers thought the activities had no benefit. Many told their wives, "Those are scammers. Be careful. If they deceive you, that's your problem." Later, after more education and exposure, they started to see this is actually something good. Especially after seeing positive changes in their own children, they realised this education is meant to help the whole family.' EL Dodoma1b CHW

The individual backgrounds of CHWs also affected the acceptability of involvement. For example, one CHW previously focused on HIV, which meant households were initially wary that visits or group attendance would lead to assumptions that they were HIV positive and associated stigma. These concerns were addressed through clarifications and encouragement from the CHW.

3.4.4 Community trust in CHWs and CHWs' advice

The KK theory of change anticipated increased community trust in CHWs due to improved CHW services and support for households. The effects of KK on parenting practices in turn depended in part on caregivers trusting the CHW's advice.

Community members – including caregivers involved in KK, other mothers, and community leaders – generally reported high levels of trust in the CHW, and in the advice provided by the CHW. Trust was supported by positive experience of the CHW's advice, and by the CHW's background, behaviour and professional skills. Specific enablers of trust included:

- **CHWs coming from the community and being known to community members**, or being familiar from previous work in the health facility and as a CHW. Some CHWs were well-known in the community and had worked as CHWs for many years, and parents were used to asking them for help.
- **CHWs demonstrating reliable and respectful behaviour**. For example, visiting households on the arranged date, speaking kindly and patiently, and being flexible (for example, arranging visits around household preferences).
- **CHWs' experience and training**. For example, considering that the CHW had expertise because they provided advice at the health facility or had undertaken training. The CHW providing clear explanations and showing confidence when teaching also increased trust, and visits by the KK team supported an understanding that the CHW had been professionally trained.
- **Experience of the CHW's advice being useful** and **seeing the benefits** for their child's health and development. Caregivers were sometimes uncertain about the reliability of some advice – for example, on newer practices around stimulation – but gained trust when they saw their child respond (see Section 4.4.1). Demonstrating practices such as play during visits also helped to convince parents the value of these activities.
- **Alignment of information** from the CHW with guidance at the health facility.

> 'These nurses at the clinic use harsh language and insult us. CHWs are not like that. The KK CHW and her group use very good language. They speak well with people, care about people. Some people don't listen to you. The KK

> CHW is very serious and focused.' EL Kongwa1b father
>
> 'There was no advice that we doubted. This lady has been around for a long time, so we're used to her. We understand she's been trained by the KK professionals, and when they come, they involve her in their work. We believe the teaching she gives us is correct, because she has been trained by those experts. So we trust her.' EL Chemba3b father
>
> 'Trust in the CHW has increased. He is a hard worker. He works with dedication, and he is punctual. He is honest and does what he says – if he tells you he will visit you tomorrow, it is true, he will come. In short, he is good.' PE Chemba2 KKM
>
> 'This CHW is trustworthy. She provides good advice and teaches us many things, she helps with vaccination, and she is a government person. She doesn't behave badly and she is close to people. If someone has a problem, she gives up her time and she is quick to come and help us. Trust has risen because of how she teaches us.' PE Chemba1 KKM

Relationships between the CHW and households were obviously close in some communities: for example, some KK children referred to the CHW as 'grandmother' and some CHWs looked after the children while their mothers were being interviewed.

Some KK CHWs had not previously worked as a CHW, and some caregivers were not previously visited or served by the KK CHW, so they could not comment on changes in trust since before KK. However, where community members could make the comparison, most reported that **trust in the CHW had increased**. The reasons for this increase were similar to the factors affecting trust more generally, including additional training and CHW expertise; caregivers obtaining further information from the CHW; CHW activity and support for families increasing and becoming more visible, including through household visits; CHWs' demonstrating commitment and care by making the effort to visit families in their home (including more distant households); and indications of consistency, due to continued visits. The role of household visits in supporting trust in CHWs indicates potential risks for trust where project closure reduces visits.

While trust was generally high, several HCWs and CHWs reported situations where **issues related to the UCT damaged trust in the CHW**, with caregivers sometimes suspecting that the CHW was taking the money. As discussed in Section 3.1.3, this affected engagement with the KK activities and made the CHW's work harder.

While caregivers reported trusting the CHW's advice, **gaps in the implementation of parenting practices advised by the CHW** (see Section 4.3), including practices within household capacities, suggest that CHW advice was not always considered important or fully believed. Some caregivers, CHWs and HCWs said that some KK parents saw no reason to change their parenting behaviour because they believed their older children had developed well, so the CHW's advice seemed unimportant. In addition, while most caregivers who reported finding some new advice surprising nevertheless tested it to see if there were benefits (as above in relation to play), there were occasional examples of caregivers finding some advice too implausible:

> 'There was this advice on talking to a child while still in the womb – to be honest, I didn't practise it. I thought "will the kid hear me?" I felt like I'd only be talking to myself. That advice surprised me a lot.' EL Chemba2a KKM

Comments from some HCWs and CHWs also indicated **gaps in the perceived credibility or authority of CHWs as sources of health information**. For example, one CHW without secondary education initially lacked credibility with parents, although this was reported to improve when parents realised she had the knowledge to provide sound advice. In addition, while caregiver familiarity with the CHW was often identified as supporting trust, several CHWs and HCWs thought that advice from local CHWs was taken less seriously than advice from outsiders or more authoritative figures, such as HCWs, the CHMT, or the VEO.

> 'You know, we Africans really like it when a visitor comes, and we respect them more than someone familiar. So, if you say, "Tomorrow I'm coming with so and so", you'll find people at home. But if you say it's just you alone, it's a challenge. As the Swahili say, "a prophet is not accepted in their own home".' EL Chemba2b CHW

> 'Going to the household with a supervisor who is a nurse has made the community see that without a doubt, this thing is reliable.' PE Chemba2 CHW

> 'The government should be involved in providing education, because this will bring impacts. The VEO should speak. Because we, as health workers, just speak, but we don't have authority – one person may take it seriously while another may see it as unnecessary. Sometimes people say "We were raised this way, and we turned out fine". But if the government officially addresses the issue, people will change.' EL Chemba1b CHW

Caregiver **preferences in regard to CHWs' age and gender varied**, and tended to be based on assumed characteristics: for example, preferring an older CHW with parenting experience and seeing older CHWs as more reliable and likely to maintain confidentiality, or seeing younger CHWs as more educated and as having more strength to travel between households. Some mothers found it easier to discuss more personal issues or areas such as sexual and reproductive health with a female CHW, but other mothers said they were used to discussing these issues with male health workers at the facility. One male CHW also noted that household visits could be harder for male CHW due to potential jealousy or distrust from husbands. **Many caregivers thought that gender or age were not important, and that adequate training and commitment were key for a good CHW**.

3.4.5 Engagement of community leaders

Community leaders, including the VEO and Health Facility Governing Committee, had responsibilities related to community health and supporting CHWs in the KK villages. For example, community leaders sometimes helped with health education campaigns or used village meetings to share health information; some community leaders had been involved in organising selection of CHWs; and some CHWs reported to VEOs for other projects, particularly on nutrition.

Community leaders helped CHWs with KK activities in some communities, particularly through talking to households that were reluctant to engage, to encourage them to accept CHW visits; encouraging households to follow the

CHW's advice; allowing use of the village office for KK group meetings; and promoting group attendance (as indicated in Section 3.1.2). There were also examples of community leaders providing opportunities for CHWs to give education on the KK topics through community meetings. In one health facility, the ward executive officer had been impressed by the activities and, through discussion with the CHW, purchased a mat for children to play on during VHNDs.

However, **KK engagement with community leaders was limited**, with no formal engagement, and only brief informal contact during KK supervision in some villages. Among the community leaders interviewed, including VEOs or village chairmen and Health Facility Governing Committee representatives, some knew about KK from discussions with the HCW or CHW, and they were positive about KK activities. However, others were not familiar with KK, only aware of some activities, or had only a superficial understanding of the programme.

Several **stakeholders thought more engagement with community leaders would facilitate CHWs' KK work**, by promoting the importance of ECD and encouraging parents to implement CHWs' advice. This was linked to the perception discussed in the previous section (Section 3.4.4) that external stakeholders and senior government officials would have more authority and influence than CHWs. The proposed balance between encouragement and enforcement by local leaders varied between stakeholders. Community leaders were also seen as important to support sustainability and to provide opportunities for additional parenting education through community meetings.

> 'Citizens tend to take the government seriously. If local authorities were involved in monitoring, it would be more effective and easier to enforce the activities. They could ensure that every month, new toys are created and used. For example, a local leader, such as the hamlet chairperson, could go around checking and asking, "Can I see the game for March?", and if someone fails to show it, they could be fined. Voluntary programmes often face challenges and are not always sustainable.' EL Chemba1a CHW

> 'I strongly recommend that leaders, elders and influencers from the community need to be engaged at a start, and during quarterly evaluation meetings – let them come and see the impact. This engagement would help to minimise bad practices related to cultural and traditional beliefs, patriarchal elements. During the KK initiation meeting, these influential people were not involved.' PE CHMT2

> 'If local leaders are engaged, that would mean good ownership and sustainability. We are the link; we meet with the community but also with the local government authority. If I am empowered as the leader, I can spread the knowledge to other people through my platforms. In the XXX project, from the start, everything was participatory. With KK, I have never been invited or engaged in any way.' PE Chemba1 CL

3.5 Wider reach of Kizazi Kijacho advice beyond the target households

RQ 1.3 Is there reach beyond the target households, and, if so, through what channels, and what affects this?

Information provided through KK reached caregivers beyond the target KK households. Some household or community members beyond the invited caregivers attended KK household visits or group sessions; KK mothers sometimes shared the CHW's advice with relatives, friends or neighbours; and some CHWs and HCWs integrated KK parenting information into their non-KK health service delivery. Several non-KK mothers made changes to parenting after hearing advice from the KK CHW or mothers involved in KK.

Attendance of non-KK parents at household visits and group sessions varied between communities and was affected by a range of issues, including household structure, proximity of households, availability of non-KK caregivers around their other responsibilities, awareness of the KK visits and group sessions among non-KK mothers, location of group sessions, assumed payment for KK mothers and lack of material incentives for non-KK parents, overall functionality of the groups, and whether non-KK mothers received invitations to attend – some thought only mothers registered for KK could attend the household visits or groups and that other parents would not be welcome.

Although KK mothers often shared some information learnt from the CHW with others, particularly information about making toys, concern about negative reactions discouraged some KK mothers from sharing the CHW's guidance with others.

KK was not explicitly designed to support parents beyond the sample KK households, but there was some expectation of potential spillover effects within communities. The qualitative research examined whether and how this spread occurred.

Information provided through KK often reached caregivers beyond the target KK households. Some other household or community members attended household visits or group sessions; KK mothers sometimes shared the CHW's advice with relatives, friends or neighbours; and some CHWs and HCWs integrated KK parenting information in their other non-KK health service delivery.

Several **non-KK mothers made changes in parenting** after hearing advice from the KK CHW or mothers involved in KK. As well as extending changes in parenting to non-KK children, **this spread of information provided some KK mothers with additional support from people around them**. Non-KK mothers, relatives and older siblings who had attended KK activities or been taught about the CHW's advice by KK mothers were able to look after a KK child and play the games taught by KK while the KK mother was busy. This also meant other household members supported practices that they might otherwise have discouraged or potentially

prevented.

> 'I discuss the advice with my husband and family members – for instance, my older children. I involve them in those games, so that if I'm busy and the child wants to play, they can play all the games with him. … Sometimes I leave my child with a neighbour since I sometimes discuss the games with her, and when she is not busy, she plays with my child together with her children.' PE Chemba2 KKM

> 'Something which made it easy for me to follow the advice on pregnancy was that when the CHW came to teach me, my mother-in-law was nearby. After she heard that advice, she would not tell me to go and fetch water. The moment I didn't want to eat certain food, she would ask "which food would you like?" and I would be given that food. I stopped doing farming and just did housework, light chores. Farming and other heavy duties were done by others. If I had just come and told my mother-in-law "I have been told not to do ABC", she would have refused and told me I was lying and just being lazy, but because the CHW came to talk about this at home, that helped me a lot.' EL Chemba2b KKM

3.5.1 Attendance at KK household visits or group sessions

In most communities, some caregivers beyond the KK parents had attended household visits. Usually this was just a few people or just a few visits, but in some communities, attendance by non-KK relatives, friends or neighbours was common.

> 'When the KK CHW comes to visit my neighbours, I can go and meet them, listen, see what they are doing, and understand and ask questions.' EL Kongwa1b non-KKM

> 'When we were teaching at their home, after we finished, neighbours were asking them what was going on. And now neighbours, brothers and others sit together in these trainings. They are involved in playing those games with the child.' PE Chemba2 CHW

Some non-KK mothers who lived close to the KK households reported listening to or watching the visits from nearby, rather than attending openly.

> 'When the KK CHW visited our neighbour, you would see her talking to that mother with a book – saying "here there is ABC, here there is ABC". I used to peep there. [Laughter] I could see pictures of a child and a mother seated with her children, but I couldn't hear what she was saying clearly.' EL Dodoma1a non-KKM

Attendance at group sessions varied similarly, with no or occasional attendance by non-KK caregivers in most communities, but more regular attendance in some villages. Some non-KK mothers enjoyed the sessions, including the singing, found the information useful, and implemented what they learnt.

> 'We are taught how to parent the child and about nutrition. … You have to start teaching the child when they are still young by talking to them, and feeding them nutritious foods once they are six months old…When you speak to the child when they are still young, they grow intellectually.' EL Kongwa1b non-KKM

Among non-KK mothers who attended household visits or groups, **several changed aspects of their parenting**: for example, making toys or preparing more nutritious porridge for their child.

> 'When the CHW visited, my sister arrived. She stayed and watched the CHW teaching me different games. She enjoyed it, and when she is with her child, she tells her "play like so and so was playing".' EL Chemba1a KKM

> 'There are things I learnt from the KK CHW: for example, mixing the five food groups, playing with the child – I was not doing that before. I have seen big changes. For example, in one session with my neighbour, we were taught how to hold the child when breastfeeding – now he breastfeeds well.' EL Kongwa1b non-KKM

Attendance by non-KK caregivers at household visits and group sessions was affected by a range of interacting issues:

- **Household structure**: If other relatives or older siblings lived with the KK mother and were at home when the CHW arrived, they sometimes attended the CHW visits.
- **Proximity of households**: Where houses were close together, neighbours could see visits taking place and observe the activities or attend easily. For example, this was mentioned in an urban area where some families rented rooms in a shared compound.
- **Availability of non-KK caregivers around their other responsibilities**: Livelihoods and domestic responsibilities varied between individuals and communities, affecting whether relatives or neighbours were at home and had time to spare. The timing of visits also affected availability: for example, in one community, the CHW conducted household visits after work hours when neighbours and relatives were relaxing together, so others were often at the household when the CHW arrived.
- **Awareness of KK, household visits and group sessions among non-KK mothers**: Some non-KK mothers did not know about KK or were unfamiliar with the activities. This is likely to have been affected by social networks within communities, as well as the location of sessions and the approach to inviting parents who were not in KK (see below).
- **Location of group sessions**: Some non-KK mothers did not attend groups because they were held a long distance from their house. In some communities, groups were held in public places where other mothers could see the groups and stop to listen, whereas groups held in the houses of KK mothers or other more private locations reduced opportunities for passers-by to join in. Holding KK groups at the health facility or at outreach clinics was particularly valuable for enabling wider attendance, as other mothers were waiting and could join the KK group.

> 'During clinics, before the health facility workers do clinic activities, the KK CHW teaches the KK mothers. That means that if we come for the clinic, even if I am not a KK group member, I get to learn something as well.' EL Kongwa1b non-KKM

- **Permission and invitations to attend**: Some CHWs told other mothers about the KK group or household sessions, encouraged the KK mothers to invite others, or told non-KK mothers they were welcome to join if they asked. KK mothers also sometimes invited their friends or relatives.

> 'Other mothers who are not part of the programme followed us when we were conducting a group session, and said they needed to participate to get that education. They participated until the end of the session, and they were happy.' PE Dodoma1 HCW

> 'People from outside KK come to listen to the household visit. Some even ask me to register them, but I explain that I'm not the one who makes that decision. I tell them that the most important thing is to come and learn with us. And since the mothers are also allowed to invite others, they often do.' EL Kongwa1a CHW

However, **many non-KK mothers thought only mothers registered for KK could attend household visits or groups, and assumed they would not be welcome**. Some mentioned that the group already had the required number of participants so there was no space for them to join, or they thought they were not eligible, for example because their child was slightly older. Some were discouraged from asking if they could attend after being told they could not register for KK, but many did not ask because they assumed they were not allowed or that people would think them strange for asking.

> 'They only call the group members. I have never been invited, and you can't just go without being invited directly.' EL Chemba1b non-KKM

Not being officially part of the group also meant some mothers just listened briefly, rather than joining the full session.

> 'I attended the group session once but if you are not a beneficiary, you have to just listen when passing by and move on after five to 10 minutes. I was interested to learn more. I told the CHW but it seemed like I did not qualify.' EL Kongwa1b KKM

Some KK mothers were also unaware they could invite other people to the groups, and there were a few examples of uncertainty among HCWs or CHWs about whether others should be invited.

Assumed payment for KK mothers and lack of material incentives: Some non-KK caregivers did not want to attend without receiving money or goods. This was partly due to the precedent set by previous projects, but also due to perceived or real payments to KK mothers, including the UCT. Seeing cars used by the KK team added to expectations that those attending the KK activities should be paid, because these vehicles indicated that the programme had resources.

> 'I invited others at the clinic and when I visited their households. I told them they could participate in KK lessons, and I told the KK mothers to tell their friends to attend. However, they don't want to attend without getting anything. In the past, people were given things like soap, flasks and flour from [XXX Foundation] that sampled pregnant women and provided education on how to feed children. So when I invite people, they ask "how come [the foundation] did ABC?"'. ELKongwa2a CHW (UCT community)

> 'They don't agree to come for group sessions because they say "you are benefitting and if I go there, I'm just watching. What benefit do I gain?"' EL Kongwa1a KKM (UCT community)

Overall functionality of the groups: In communities where groups were often cancelled due to low participation by KK mothers, wider attendance was necessarily limited.

3.5.2 Kizazi Kijacho caregivers sharing information

KK mothers often shared some of the information learnt from the CHW with friends, relatives or neighbours: for example, on breastfeeding, nutrition, health seeking or interaction and stimulation. This was sometimes in response to questions from other mothers when they saw the KK activities, or when another mother mentioned a problem with her child.

> 'My neighbours, my relatives – I usually share this information. I tell my younger sister that if you do this and this, it may help your child's health. Don't leave the child without clothes, and if the child needs food, give the child the food they will eat so they are satisfied, don't leave the child behind without preparing food for her. And she has now understood and cares for her child well.' EL Chemba1a KKM

Sharing information about making toys was particularly mentioned. This often occurred when other caregivers saw KK caregivers making toys or saw children playing with them. Information often spread via children playing together, as non-KK children played with the toys at KK households, thereby benefitting directly and attracting the interest of their parents.

> 'This KK mother told me how to make toys, like the board, dolls and other games. She said that by doing this the child grows intellectually, such that when the child is older, when they start school, she will be able to recognise different colours.' EL Kongwa1b non-KKM

> 'After seeing our children with the toys, everybody started to make cars for their children and now they play together. So you'll find children driving together while playing together.' EL Chemba1a KKM

The toys are perhaps the most easily visible change in parenting practices, which may have contributed to the spread of this information. They are also more novel and entertaining than topics such as health seeking, and less sensitive than practices such as family planning or hygiene.

While most KK mothers indicated some sharing of information, **only a few of the non-KK mothers interviewed recalled receiving information from KK mothers** about what they were taught by the CHW. This is likely to be partly due to the specific sample and social networks; some non-KK mothers interviewed did not know any KK mothers well, and KK mothers often described only sharing information with a few people. Information may also have been shared without the recipients knowing the guidance was based on information from KK. Further analysis of social networks and wider sampling would be needed to fully understand the spread of information.

However, beyond issues of social networks and sampling, there was evidence of **KK mothers sometimes choosing not to share the CHW's guidance**. Some non-

KK mothers explicitly asked KK mothers what was discussed by the CHW, and thought the KK mothers were unwilling to give them the information.

> 'I asked someone who was visited what they were taught and she did not give me a clear answer, she just told me that "if you want to know you will have to find the CHW on your own". She will just tell you the CHW came to visit my child, she doesn't give you any guidance.' EL Dodoma1a KKM

For their part, **some KK mothers were discouraged from sharing the advice due to mixed reactions from other community members.** With the toys, although, as described above, other parents were often interested, reactions to the toys from non-KK parents varied and were sometimes negative. Some community members saw playing with children as unnecessary or inappropriate behaviour for an adult, saying that playing was 'childish' or that the toys had no benefit.

> 'They say "you are fools, you are just wasting your time…you are given these toys like children".' PE Chemba3 KKM

> 'When other people see me playing with my child, some see it as good but some think I don't have work to do. They say you are wasting your time, the lessons are useless.' EL Dodoma1b KKM

Sometimes, other parents changed their views when they saw KK children developing. For example, KK mothers in one community reported that other parents initially dismissed their efforts as a waste of time. However, upon seeing what KK children could do, or observing their own children enjoy playing with the toys, these parents began asking for guidance to make similar toys and books themselves.

Concern about similar negative reactions meant several KK mothers were hesitant to advise others. Some had received negative responses in the past, or had concerns that the advice would be unwelcome and that they might be seen as arrogant. Some KK mothers had been told by other mothers that the KK groups were a waste of time due to the lack of material incentives, which also discouraged information sharing. The ease of sharing advice may have varied depending on the sensitivity of the topic, the KK mother's relationship with the other caregiver, and whether advice was requested. For example, one KK mother shared information only with household members due to negative reactions from other parents.

> 'Sometimes they discourage us. For example, I gave someone advice on nutrition and she said we are proud because we attend the group so we think we are teachers. Since then, I was afraid to give her advice, even when her child is sick. So we decided to keep quiet.' EL Chemba3b KKM

> 'It would be hard to tell my neighbour to sweep – she would get annoyed and say I was full of myself. Other people don't dress their children properly, but you can't ask them about it, it might bring a misunderstanding.' EL Chemba1a KKM

There were also a few examples of mothers not sharing the information more widely because they thought this was not allowed due to KK being a research project and only some mothers being selected, or they were uncertain whether it was permitted.

> ‘Participant P3: I've never advised anyone. We know that we have received advice because we were the ones chosen – many people were pregnant and had children, but we were the only ones chosen. But maybe there's no need to worry and we can talk with others, or maybe that's wrong? I don't know now.
> Participant P2: You’re not wrong because they said they are doing research. Once their research is finished, they will reach other people, but for now, they've just chosen some mothers. For now, I can't tell any other mother what I'm taught.’ PE Dodoma1 KKMs

Some **fathers also reported sharing information** received from the CHW with others, including information on nutritious food for young children and making toys, and there were a few examples of men becoming advocates for the visits and very active in passing on information.

> ‘I told a neighbour that during those visits we are taught how to mix different cereals for children's food, and to pay attention to the child's health and play games...he was just giving his child normal porridge without any nutrients and playing with his child traditionally, not in the way we are taught. He believed the advice, and we even went to my house to see the way my child was playing, and I showed him how that diet is mixed and prepared. He really liked it.’ PE Chemba2 father

However, generally, **information was passed on more by mothers than fathers**, partly because men were less engaged in KK and less familiar with the advice. Some fathers thought their limited direct contact with CHWs might mean they would pass on incorrect information. In addition, gender roles framed parenting discussions as women’s responsibility, and some thought mothers tended to share information more, whereas fathers paid less attention to other people’s activities.

> ‘We don’t share because we are not competent in that education because we are not the ones who attend the trainings, we learn from our wives. So, it is difficult for us to spread second-hand information because you are likely to make mistakes.’ PEChemba1 father

> ‘I have never discussed the advice with other people. I see childcare as the mother’s responsibility, so I would not get very involved, and discussing with someone else would be difficult, I don’t know where to start.’ PE Dodoma2 father

> ‘Some non-KK mothers have changed, through meeting KK mothers in the community. For mothers, even if they meet briefly, they share what they are doing and where they are going. For fathers, however, they just think these people are doing their own things. Fathers are busy with other issues.’ EL Kongwa2a father

As well as informal information sharing**, non-KK mothers also received advice and information from KK mothers during VHNDs or clinic sessions led by the CHW or HCW**. For example, sometimes KK mothers were asked to demonstrate how they played and talked with their children, or they shared the knowledge from KK when answering questions, and this helped other mothers to understand and trust the advice.

> ‘We say we have our role models right there among the mothers who receive

> services. Other mothers outside KK learn through them, so the education is spreading. For example, a question might be asked about feeding or breastfeeding, and a KK mother will stand up and speak positively. Those around her get to understand better, they see "oh, so it's like this", different from if it was me, the health worker, speaking.' EL Kongwa1 HCW

As suggested by the mixed reactions to advice from KK mothers, the **implementation of advice by other mothers varied**, with only some making toys or changing other aspects of parenting.

> 'Everyone has their own ideas. At nutrition day, when we are cooking together, if I show them how we mix foods in KK and someone refuses and says we can't do that, I leave them to do it the way they like. I might give some small advice – if they buy it, well and good it is practised, and if they don't, it's also well and good because everyone has their own way of cooking.' EL Chemba1b KKM

Implementation by non-KK mothers was also reduced by information being passed on only briefly, without the detailed explanation needed to understand required action.

3.5.3 Spread of knowledge through non-Kizazi Kijacho CHW and HCW services

As noted in Section 3.3.2, many **KK CHWs and HCWs used the skills and knowledge gained through KK in their wider work**, including teaching at the health facility clinic, VHNDs, and, in some cases, household visits to non-KK parents. Non-KK household visits were sometimes undertaken as routine CHW work or as part of other projects, but sometimes took place ad hoc if a mother asked the CHW for help or if the CHW was passing by.

The topics covered in this wider work were sometimes restricted to pre-KK focus areas of health and nutrition, with KK bringing some additional details or improved teaching skills. However, some CHWs and HCWs incorporated the additional topics introduced by KK around stimulation and early learning (for example, showing how to make toys), and some non-KK mothers indicated learning about these areas from the CHW (for example, during clinic sessions).

> 'The CHW normally advises us about parenting. She normally teaches us when we go for the clinic. She says we should prepare food for the children that has a mixture of five food groups. She advised us to make toys for the children. Instead of buying rattles, we can get a bottle or put different coloured materials and show the child. The child is happy when they see these different colours.' EL Kongwa2a non-KKM

Some CHWs used the KK flipbook during outreach sessions, at the clinic or when visiting non-KK mothers at home. Some also used the KK toys: for example, taking these to the quarterly VHNDs.

> 'If the topic aligns with something from KK, and you can clearly see it on the flipbook, then it's good to use it. We actually use them often, not just for KK members. Very recently, I used them during a seminar in our neighbourhood when presenting on safe environments, so I was reading directly from the flipbook.' EL Kongwa1a CHW

The app was generally not used beyond KK visits and groups: CHWs did not need to record data, and some mentioned other reasons for not using it, such as the phone containing confidential household details. There were a few reports of CHWs using the app for guidance during household visits, but information on this was inconsistent, with no strong evidence.

Providing advice on stimulation and early learning through wider-reaching routine activities such as clinic sessions and VHNDs became more widespread towards the end of KK, as a means of sustaining the activities. This is discussed further in Section 5.

As well as sharing KK guidance through these routine activities, **some HCWs and CHWs were also asked directly for help by non-KK mothers** after they saw CHWs visiting KK households or the toys made by KK mothers: for example, asking for help on making toys or requesting home visits.

4 Outcomes for caregivers: drivers of change and changes in parenting

This section examines the intermediate and later outcomes in the KK theory of change. It looks first at male engagement in KK activities and parenting (Section 4.1), effects on caregivers' mental wellbeing and social networks (4.2), and household use of the UCT (4.3), areas indicated in the KK theory of change as supporting nurturing care. We then examine changes in household practices on maternal health and parenting, considering KK's contribution across different aspects of nurturing care (4.3).

4.1 Male engagement and effects on gender relations

RQ 4.1 To what extent have male partners participated in KK activities, and what affects this?

In each sample community, some fathers had attended household visits, but usually this was only a few fathers, or attendance was rare or only for part of the CHW's visit. Attendance at group sessions was very limited. Fathers' attendance was affected by their prioritisation of income generation, by gender norms, and by the lack of a clear invitation for fathers to attend. Mothers sometimes shared the CHW's advice with their husbands, so some men received at least some of the information even without participating directly, but with varying levels of detail.

RQ 4.2 How has KK influenced male involvement in parenting, household decision making and relationships, and what affects this?

Many mothers and fathers indicated an increase in fathers' involvement in parenting, supporting their wives and sharing domestic tasks: for example, more help with household chores, purchasing food or other goods for the mother and children, attending clinics, and spending more time with the child and playing with them. Several caregivers indicated a closer relationship between the father and the child, which fathers enjoyed. Levels of male involvement in parenting and the extent of change varied between households and communities. Ingrained gender roles, low engagement in KK activities, time constraints due to engagement in income-generating activities, and migration to farms limited male involvement for some households.

Household decision making and KK's influence on decision making varied between communities and individual households. In some households, decision making was already shared, sometimes due to women having their own income. In other communities, men were the primary decision makers, particularly for bigger household decisions and decisions related to household resources. There was no or little change in decision making for some households, but others indicated more joint decision making, or, more often, men retaining control but being more likely to agree when women said certain things, like specific foods or clinic visits, were needed. KK advice meant men gained more understanding of the importance of issues such as clinic attendance or nutrition, making them more likely to agree to women's requests in these areas. There were also reports of more male involvement in decisions related to parenting that were previously left to women, through more joint discussion.

Changes in decision making contributed to improved couple relationships in some households, for example with more joint planning and problem solving between couples. Attending household sessions together and discussing childcare together also brought some parents closer together. Some mothers reported a reduction in physical or verbal abuse, partly due to KK guidance that men should treat women kindly – particularly to protect the pregnancy or young child. The extent of change varied between households, with some having positive relationships before KK, and some continuing to experience difficulties, with little or no improvement.

As well as KK, other interventions and sources of advice contributed to the changes in decision making, relationships and men's role in maternal health and parenting, including advice at the clinic and church and other projects. These other interventions were sometimes the primary cause of change, and sometimes KK reinforced this other advice or provided more emphasis.

In relation to gender relations, KK aimed to increase fathers' involvement in parenting and support for their wives, including during pregnancy; to increase women's roles in decision making, through the counselling and allocation of the UCT to women; and to improve household relations and reduce intimate partner violence, through the UCT reducing poverty-related stress and increasing female empowerment, and through the CHW support leading to improved antenatal care checks and access to health services.

This section examines men's attendance at household visits and groups, changes in men's role in parenting, and the influence of KK on household decision making and relationships. Across these areas, there was some correlation between communities with higher levels of male involvement in KK activities, more male involvement in parenting and maternal health, and a stronger female role in decision making. For example, in one community, women had little power in decision making, male attendance at KK activities was very limited and there was little consistent evidence of increased male involvement in parenting. In another community, decision making was largely shared pre-KK, male attendance at household visits was higher than elsewhere, and men's role in maternal health and childcare increased. However, this pattern was inconsistent. For example, in

one urban community, decision making was shared and women had significant economic power, but male attendance at KK activities was limited, partly due to limited time around income-generating activities. Elsewhere, attendance at KK activities was limited but changes were still reported in men's involvement in parenting and shared decision making, or decision making remained largely with men but fathers' involvement in parenting increased. These mixed patterns indicate the complexity of gender relations and the need to examine different dimensions.

4.1.1 Involvement of fathers in Kizazi Kijacho activities

In each sample community, some fathers attended household visits, but usually this was only a few fathers, or attendance was rare (for example, one or two visits only) or only for part of the CHW's visit. **Attendance at group sessions was very limited**, with no attendance by men in many villages. Quantitative data (reported elsewhere) indicated increased male attendance in year two of implementation, but in the qualitative sample communities, low engagement was still reported at endline. Most CHWs said there had been no change, or that attendance fell as men lost interest, with only one report of increased attendance when men started to see benefits from the KK activities. A combination of interacting issues reduced male attendance, including the prioritisation of income generation, gender norms, and the lack of a clear invitation to fathers to attend.

In relation to **income generation**, visits and groups often took place when men were at work. Men sometimes received insufficient prior notice of visits to rearrange work activities, and some suggested the CHW should inform them further in advance so they could plan to be home, or that the CHW should visit on weekends when they are not at work. For many men, even if they had notice of the KK visit and thought they should attend, income generation was a priority, particularly given economic pressures. This was sometimes described as a rational split of labour, with the wife attending the session and passing on information while the husband earned essential income for the household.

> 'It's rare to find a man at home during visits. If you're lucky, you'll find the father there once in a while, and maybe you can talk to him, but mostly, it's just the mother. Often, even if he's home, he'll say something like, "welcome, but continue with the mother, I'm leaving now". We informed them they should attend. Right from the start, from registration all the way through the sessions and visits, they knew.' EL Dodoma1b CHW

> 'You know, we men are different from women. When morning comes, the first thing we think about is how to hustle so the family can get food. So it's really hard to stay at home, even if you're informed about the visit, because your schedule already has other things waiting for you.' ELChemba2a father

> 'I think the mothers attending is enough. She goes, and tells me about it afterwards, and I understand the information. I think it's okay that she goes there and I go elsewhere to work – if I didn't go to work, things would fail and you would wonder why my children are starving and do not have anything to wear.' PE Dodoma3 father

> 'He usually visits on work days, so we miss it, we're busy. It would be better if he visited at the weekend, we would be at home and learn more. Also, the

> CHW should provide information ahead of time, make an appointment, and not just show up unexpectedly, because when he does, he often finds us not at home. Even on the day he comes, he can remind me. It would help us plan to attend.' PE Dodoma1 father

Financial incentives were sometimes suggested as important to address the opportunity cost of attending and so attract men. In line with the interest in material incentives discussed in earlier sections (Section 3.1.3 and Section 3.4.1), this also reflected expectations set by other projects.

> 'Many fathers withdraw because of the tough economic situation. When they're told to sit in a meeting, they feel it's a waste of time. We see other organisations invite people to stay in offices for two or three hours and then give them transport money. But for us, we sit, finish, and go home empty-handed. If the organisation could give a small token or allowance, it will attract men to attend. We gain parenting knowledge, but on the other side there's the time issue.' EL Chemba2a father

Norms about gender roles meant discussions of pregnancy and parenting were seen as primarily the mother's role, with men prioritising economic activities.

> 'I didn't find many at home. I followed up with them. I give notice of visits. They'd say, "No problem, you're very welcome", but when I arrive, they're not there. Others say, "That's women's work. She'll tell me what's needed".' EL Kongwa1b CHW

The **extent to which CHWs invited men to attend varied between communities, and between household visits and group sessions.** Reports were sometimes inconsistent, with CHWs indicating that men were invited but fathers saying they were not told to attend, which may suggest invitations were sometimes insufficiently communicated and understood.

For household visits, some CHWs made efforts to invite men directly, and one CHW also mentioned trying to keep men engaged during visits by asking fathers questions first. However, there were differences between CHWs in the extent to which they emphasised male attendance and in their understanding of whether men needed to attend. Some fathers also reported that they were invited to attend, but others did not know they were expected or welcome, even asking during the interview whether they were allowed to listen to the CHW. Some had assumed they were not needed because the CHW asked for their wife, thought the discussion was private and restricted to the mother, or thought that staying would indicate distrust in the CHW.

> 'She gives us notice a day or two in advance, saying she's coming the day after tomorrow to talk about something specific. Then before the next day, she reminds you, even in the morning, she'll call to remind you that she's coming. When she arrives, she tells you things that you appreciate as parents, it's good advice.' PE Dodoma3 father

> 'The CHW he has never said I should take part. I would be interested but I would not want to interfere with their discussion – when someone visits your home about something specific for the mother and child, when you start interrogating him it would seem as though you are suspicious or you don't want him to provide the service, so I just stay quiet because I know my wife will tell me everything after he has left.' PE Dodoma2 father

> ‘When she comes, we go to the coffee place so that the mother and CHW have a chance to do their work in peace.’ PE Chemba1 father

> ‘The CHW really preferred mothers. She tells them not to leave, to stay home. Now, if you are not told to wait, then you continue with your activities.’ EL Chemba1b father

> ‘I was thinking, when the CHW comes to the house, sometimes the discussions concern the woman. But maybe I can ask if it concerns me too? I’ve asked the CHW before, and she said “it’s just our conversation”, for her and the mother. But when you hear what they discuss, some things seem to concern fathers. When she comes and finds me at home, am I allowed to listen until the end?’ EL Chemba1b father

Knowing that men would often focus on their work, one CHW selectively invited men to the visits about topics they thought would be hard for the mother to recount afterwards:

> ‘No father will give you his time for every visit. For some topics, even if only the mother is there, you can teach her, and she can later share the information with the father. However, for more complex topics that might be hard for the mother to explain to the father, we ask the father to attend if he can. For simpler topics like environmental hygiene, it’s easy enough for the mother to explain.’ EL Kongwa1a CHW

Invitations to fathers were more common for household visits than for groups. Some CHWs indicated encouraging men to attend the groups, directly or via their wives, but several did not know men were supposed to attend group sessions, or thought men’s attendance was more important for household visits and that groups were only for women.

> ‘In the groups, we were directed that only women should attend. Men never really attended. In household visits, it was a must that both be present, both mother and father. In the group, it wasn’t mandatory. If someone had time, they could come.’ EL Kongwa1b CHW

> ‘For home visits, I usually inform them that we need to see the mother, the child, and the father. But I never told them directly that the father is also required to attend the group sessions. I didn’t know that men were also supposed to participate in the group sessions.’ EL Chemba2a CHW

> ‘I encourage mothers and fathers to attend – it is a family matter, and all family members are encouraged to attend. When I visit them for the household visit, I tell them about the group session, and after each group session, I emphasise to mothers that they should send my invitation to their husbands to attend the next group session, and I would emphasise the same when I go for household visits.’ PE Dodoma3 CHW

> ‘We were not given information that we should come and participate in these group sessions. If we had been informed, we would have attended.’ EL Chemba1b father

> ‘The mothers normally meet. You are told that they need your wife to come. So I am not told to attend. They only need the mother.’ EL Kongwa1b father

Groups were sometimes **seen as a space for women**, where men were not invited

or would feel uncomfortable.

> 'He has never attended. I have never explained the groups to him. He would ask, are there other men there? If they are not there – do you think modern men can agree to sit together with women?' EL Chemba2a KKM

> 'I have never attended because they were told that only mothers should go there. So it would be difficult to go when you are a man.' PE Dodoma1 father

Invitations were also affected by lines of communication. When mothers did not have phones or their phone could not be reached, CHWs sometimes arranged visits via the husband's phone, which made it possible to invite fathers directly. In other cases, CHWs asked mothers to invite their husbands, which may have meant that invitations were not consistent or clear, particularly when (as in the case referred to in the quote above) women assumed their husbands would be reluctant to attend.

While overall levels of attendance were low, there were examples of highly engaged fathers who regularly attended household visits, sometimes telling other fathers about the benefits of KK.

> 'I heard about KK from a young father who was sharing information about the programme with his colleagues. It is rare to find a young father engaging in parenting programmes. He was explaining that KK deals with ECD, they train us on how to take care of a child, playing with them, communication and how to be closer to your family. He was positive, and you could sense that the words were coming from his heart. He could not keep the information to himself.' PE Chemba1 CL

Despite fathers' limited direct involvement in KK activities, they often **heard at least some of the advice from their wives**. The extent to which information was shared varied between households, with some regularly discussing the visits in detail afterwards and others discussing the information only sometimes or briefly.

> 'We have never been invited to the group. However, immediately our wives return from group sessions, they tell us what they have been taught. We ask them what took place, and they tell us the games they were taught. We discuss it together well.' EL Kongwa2a father

> 'My wife would just give information like "A certain man came to visit". Then if you ask what he said, she'd say, "He came to see the child", and that's where it ends. I don't remember that she told me something specific.' EL Chemba2a father

Men's familiarity with the advice from the CHW similarly varied, with some talking in detail about the guidance from the CHW and others having difficulty remembering what topics were discussed.

> 'P: She explains very good things to us.
> I: What things?
> Many things. She said do this, do that…
> I: Can you be specific, what exactly did she explain? That's what I want to understand.
> P: I don't remember.' EL Chemba1b father

Despite varied attendance and familiarity with the information, fathers who were interviewed spoke positively of the CHW visits and groups, as described in relation to caregiver satisfaction with KK in Section 3.4.1. Fathers saw the CHW as providing useful information and supporting their child's development, and they also appreciated the care shown by the CHW for their family's wellbeing.

> 'I think it has brought great success when he comes to visit us. It helps solve the challenges of the child and even us parents. We always ask ourselves what should we do for this child of ours, what have we been instructed to do?' PE Chemba1 father

Several mothers, fathers, CHWs and HCWs suggested there should be more focus on male engagement in KK. Some thought men would take the information more seriously or get clearer information if they were taught by the CHW directly, rather than learning via their wives. In addition, if men were more involved, they could attend the session if the mother was away. In one community, fathers suggested that they would prefer a group specifically for men, but others indicated the value of learning together as a couple. This suggests acceptable models for involving men may vary between communities, requiring community consultation.

> 'It would have been better if we were called to attend together, the husband should also be present so that he also knows the importance of these issues. He should listen directly rather than me teaching him, because then he would implement the advice more.' EL Kongwa1b KKM

> 'We should be taught together, so that we understand and take in what the CHW advises in the class, rather than asking each other questions, because the mother might forget some things that are really important.' EL Chemba1b father

> 'I would like us as men to have our own separate group where we could share our challenges, and have an expert advising us, in the same way they do with mothers.' PE Chemba1 father

> 'KK focused a lot on mothers, while fathers were left aside. KK should consider fathers as well so that they know how to parent children or about child growth. Some husbands don't know what the mother needs when she is pregnant. If they get KK education, the community will develop.' SS Chemba1 CHW

4.1.2 Changes in male involvement in parenting

Many mothers and fathers reported increased paternal involvement in parenting, support for their wives, and help with domestic tasks. CHWs and HCWs also reported some changes in this area. Examples included fathers sharing household chores (such as fetching water, purchasing food or other goods for the mother and children), attending clinics with the wife and child, spending more time with the child and playing with them, and sometimes engaging in more positive discipline, including for older children. Reports were sometimes backed by observation during data collection of men playing with their child or taking care of children while mothers were busy. The role of KK fathers was seen as having increased compared to their previous behaviour (for example, with earlier

children), and as more involved than fathers in non-KK households.

> ‘The KK education has transformed our husbands. In the past, men were not aware about parenting. They were not even aware of the food a child was supposed to eat. Now, men have been educated that children have to take fruits, vegetables, meat, and they often buy these foods for the children. If you tell him something is lacking in the household, he understands and brings it. This is different from the past.’ EL Chemba1b KKM

> ‘In the past, you couldn’t tell your husband to mind the child while you collected firewood. They would say “I don’t have time to spend with the child. Am I a woman? If you want to go, take your child”. Now, you can leave the child with your husband. Even going to the clinic, your husband wouldn’t go with you, but now when the child falls sick, we go together, he goes to collect medicine, he goes to the diagnosis departments, he carries his child when we return home, and he continues monitoring the child’s health. In the past, this was not the case.’ EL Chemba1b KKM

> ‘My husband didn’t even want to hold the first child. But through these trainings, he holds the child, he loves the child, and there are big changes. For example, now, as soon as he returns home, he starts talking with the child.’ EL Kongwa2a KKM

> ‘The way we are raising this young child is different. We are closer to this child – we play with them, or sometimes set aside time. In the past, we did spend time, but less. Now we try to create more time to be involved in raising these children properly. You can see the difference in the children - the younger one seems sharper and more aware. Although we all work and get busy, those of us in the project get regular training and reminders from the CHW, both for the mothers and for us as fathers. We’re encouraged to participate. So, I think that’s why we spend more time with our kids than other fathers who haven’t been part of KK.’ EL Chemba3b father

> ‘The CHW taught us how to raise children, and when a child makes a mistake, how to discipline them. They say that sometimes we use aggressive language and that affects the child. Before, I didn’t know you could guide a child in a polite way. If you don’t, later you will realise you’ve emotionally harmed the child. I’ve realised that before, I used to speak to them harshly. Now I understand there's a better way to talk to them. Even for the older children, sometimes it’s necessary to put the stick away and instead give them advice.’ EL Chemba3b father

Several caregivers reported a closer relationship between the father and the child, and fathers described enjoying this closer relationship.

> ‘If you return home, you need to show the child that you care for him by hugging him or something like that. And when the child sees you, he knows that “my friend has arrived”. I enjoyed it very much.’ PE Dodoma1 father

> ‘In the past, the child would be scared to come close to me. I used to shout at them. This project is very good because now, after receiving the KK education, we are loved by our children. When I arrive home, the older children run towards me to hug me, even though I didn’t bring anything for them. In the past they used to hide when I arrived or run to their mother. Now, we laugh with each other and we are happy together.’ EL Kongwa1b

father

There was also **more support from men during pregnancy**, such as permitting reductions in heavy physical work and providing for maternal nutrition; this is described in Section 4.4.1.

Levels of male involvement and the extent of change varied between households and communities. Some CHWs and HCWs thought that fathers' involvement in childcare remained limited, or that improvements were restricted to one or two households. Several fathers also said there was no change in how they looked after their younger child (including fathers in some communities where male involvement in parenting was reported as limited), and some acknowledged inconsistent implementation of the CHW's advice. Ingrained gender roles, insufficient engagement in KK activities, time constraints around income-generating activities, and migration to farms limited male involvement in parenting.

> 'Male participation in all households is low, whether they are in KK or not. It's just a societal mindset. Men often see health, especially maternal and child health, as something that doesn't concern them, they see that as women's issues.' EL Chemba2a CHW

> 'Some fathers have no time to spend with their children, maybe because of the many responsibilities they have. Some leave in the morning and return in the evening so tired that they can't play with their children.' EL Dodoma1a CHW

> 'I admit that sometimes we're given the advice but we don't implement things as required. I think that's just a human challenge. Everyone has their own life and things going on, and you might feel like it's not really important, let me go hustle and find money – that seems more important than doing this for your child. Even myself, sometimes I don't do everything that has been taught, maybe because of that pressure of life and so on.' EL Chemba3b father

> 'There is no difference between us and non-KK fathers, we live life in the same way. When my wife was pregnant this time, the care was the same. I don't think there was any change. The way I raised the first, second and third child, it's all the same. Caregiving hasn't changed. The same way we cared for the older one is how we cared for the younger one.' EL Chemba2a father

As well as advice from the CHW, other KK activities contributed to changes in men's involvement in parenting. For example, some caregivers referred to changes in men's behaviour following the KK registration session or KK surveys.

> 'I started seeing playing with the child as my responsibility because of education from those who were visiting us and asking us questions. They asked things like "how many times have you played with your child?" You realise that "indeed, I have never played with my child". So when this person left, I started asking myself, "does this mean playing with the child is my responsibility?"' EL Kongwa1b father

Non-KK activities and interventions also contributed to an increase in men's support for their wives during pregnancy and their involvement in household chores and parenting, including education through the church, at health clinics,

and by community leaders, and, in one community, a meeting for men organised by the district council. Some specific areas of male involvement were also due to other health system interventions: in particular, fathers' attendance at antenatal care sessions was emphasised during routine health facility advice, and sometimes required for women to receive services, in line with government guidance (15).

> 'I was taught by our pastors in the church. When a man wants to marry, they ask you whether you understand your responsibilities when you get married. Then we had the first child, and when my wife was pregnant with the second child, KK started. What really helped me was the training from the pastor, but KK trainings reminded me and added to what I already knew.' EL Kongwa1b father

4.1.3 Effects on gender relations and decision making

Changes in household decision making

Household decision making varied between communities and individual households. In some households, decision making was shared, and women took some decisions without needing to consult their husbands. This was sometimes related to economic status, including in an urban area where women often had their own income, but was also reported as a norm in some more rural communities. Shared decision making was often described as long-standing, and as the usual practice before KK.

> 'If I have enough money, then I buy these essentials and if I don't, I tell him and we cooperate, he adds some money.' EL Dodoma1a KKM 02

> 'We collaborate. We put an idea on the table, discuss it and then get a final decision. We make decisions equally. There is nothing like me deciding on everything. We also collaborated in the past, this is our custom.' EL Dodoma1a father

> 'In our community, decision making is all about discussing what to do together as father and mother. Everyone gets to share their idea. There is no difference now. Decisions are made in the same way as in the past.' EL Kongwa2a father

> 'It's always been the case that if my husband thinks of something, he engages me, I think about it and if I think it's a good suggestion, I say it's good and let's proceed. In the same way, if I have an idea, I tell him, and we discuss it.' EL Kongwa2a mother

However, **men were often the primary decision makers**, particularly for bigger household decisions and decisions related to household resources**.** Decisions were sometimes discussed jointly or women were consulted, but men often made the final decision.

> 'I have not seen any change in decision making because I'm the one with authority, I am the head of the family. Whoever wants something must pass through me, I have to give permission. On some issues, I might decide to refuse. What will she do? She cannot do anything.' EL Kongwa1b father

Women sometimes had more responsibility for decisions related to health,

childcare and domestic tasks, such as clinic visits and cooking, although men sometimes retained the final decision in these areas.

> 'Decisions concerning what to cook are made by the mother. For other household plans, you discuss together: for example, whether to buy a mattress or build a house.' EL Kongwa2b mothers

> 'There are everyday decisions that a woman makes, like attending the clinic or what to cook, but women haven't yet been given room for the bigger decisions like whether to sell a cow.' EL Chemba1a CHW

> 'There are some decisions I make as the man, but there are others, like clinic-related matters, those are the woman's responsibility because she's the one involved, she knows the last appointment date. She might just inform me. But I, as the man, make the final decisions. If something doesn't seem right, I won't agree to it. There haven't been any changes.' EL Chemba2a father

Some **KK mothers saw male decision making as a source of stress,** but as something that had to be accepted to avoid arguments and a risk of violence.

> 'The husband makes every decision. He says that he is a man and no one can decide for him. As a woman, you just listen to what he decides. It causes stress. You might tell him you want something or that the children need something, but he doesn't like it and you fight. If I am a woman and he is a strong man, what can I do?' EL Chemba1b KKM

In some households, as shown by the quotes above, there was **no or little change in decision making** over the period of KK implementation, with men continuing to dominate decision making. This was attributed to long-standing cultural and social norms, and to men's economic power and control over household resources, including farming income.

> 'Women's role in decision making is the same for KK and non-KK households. This depends on the tribe. I don't think KK has any effect on that. They have been raised with the belief that a woman cannot make decisions by herself and the husband has to give the final say. This attitude did not start yesterday or today, it's something that has been there for ages, they have grown up seeing that.' EL Chemba2 HCW

> 'There hasn't been much change, women's role in decision making is still very minimal. I think it's because of long-standing traditions. It's deeply rooted in the community's mindset that the man is everything at home. You hear it with children – mothers say "Wait until your father comes home", so children learn that the father has the final word in everything. That's how society has shaped things, and that makes it very difficult for women to have an equal say.' EL Dodoma1b CHW

Elsewhere, women's role in decision making was seen as having increased, to varying degrees. For example, some households indicated more joint decision making, or, more often, men retained control but became more likely to agree when women said that certain things, like specific foods or clinic visits, were needed. KK was seen as contributing to these changes, as men gained more understanding of the importance of issues such as clinic attendance or nutrition, making them more likely to agree. KK also advised women to discuss issues such as food and family planning with their husbands, and for one KK mother, seeing

pictures of men and women together in the flipbook encouraged her to discuss issues with her husband. The UCT also sometimes supported an increased role for women in deciding how to spend the money (see Section 4.3.2).

> 'There is a difference compared to the past. In the past even if it was the date for clinic, you could be told "today, we are going to farm, don't go to the clinic. What is so important there?" But now, after getting such education, we understand if you go to the clinic, you will be able to know if your child's health is progressing well. So now, he tells me to go to the clinic.' EL Chemba1a KKM

> 'In the past, when I used to talk to my husband about buying things, he didn't listen to me, he would say "just figure it out on your own. Just wear those clothes". Now, he responds positively. Or even before you can tell him that we don't have clothes, he says that after we have harvested, we will sell two bags of maize so that I can buy clothes for the children as well. I think these changes have been influenced by the KK CHW's trainings.' E LKongwa2a KKM

While the focus was generally on a growing role for women in decision making, there were reports of increased **male involvement in decisions on parenting** that were previously left to the mother. For example, some fathers discussed women now sharing more information with them on areas such as clinic visits to jointly discuss issues, and some mothers described men now initiating purchases of nutritious foods for the child without having to be asked to do this by their wife.

> 'In the past, all decisions regarding clinic matters and so on were made by the mother alone, but now we are together. There has been a big change. Before, we were just told, "Today we are going to the clinic". We didn't even know what was happening at the clinic. But now, after KK, the mother calls you, shows you the card, and you discuss together. We are all involved now.' EL Chemba1b father

> 'After being taught by the CHW, there have been changes. In the past, I had to emphasise to him that "we need to do ABC". Now, sometimes he will say "today, do ABC for the children": for example, changing the children's food. He decides himself. Before, they never saw the importance of these things. At least we see an improvement.' ELKongwa1b KKM

Changes in household relationships and abuse

Changes in decision making brought some **improvement in household relationships**: for example, more joint planning and problem solving between the couple. Several mothers described a more understanding and harmonious relationship with their husbands related to fathers providing for material needs or giving permission for activities. Some couples began working more closely together to address economic constraints to support the child. Attending household sessions together and more joint discussions of childcare also brought some parents closer.

> 'KK has led to closeness, because sometimes my husband and I sit together and discuss the children and plan for the household. We didn't do that in the past.' EL Chemba2a KKM

> 'In the past, if you told the husband there were no household essentials, he

> would say “go and find work, I am not going”. Now, there have been changes and he has understood from the CHW what needs to be done. Now, if you tell him there are no essentials, he provides. We help each other. If we need to do casual labour, we do it together.’ EL Chemba1a KKM

> ‘After KK came, we became closer to our wives – even kisses have increased! Now when it’s time to sleep, you hear, “My husband, the CHW said this and that”. For example, if she goes to a group session, when she comes back, she explains it to me. So, you become close, you talk, you have a conversation. In the past, she just told you the child’s weight, nothing else. Those conversations make us closer to our wives.’ EL Chemba1b father

There were also **some reports of reduced abuse of wives by their husbands**. Several caregivers reported a history of arguments and physical or verbal aggression. KK CHWs advised men to treat women respectfully, and to avoid arguing during pregnancy or when children were nearby, due to the risk of harm. There were also a few examples of direct interventions by the HCW or CHW when a KK husband was known to be abusing their wife.

> ‘Sometimes we included husbands in the sessions. For example, we taught them that yelling at a pregnant woman or burdening her with chores is a form of abuse and causes stress. As the men learned this, they started to be more supportive and understanding toward their wives.’ EL Dodoma1a CHW

> ‘There have been changes in how people behave in their households. I know the community well, so I know if there was a pattern of violence in a particular household. After the KK training, over time, you start seeing those behaviours reducing. The violence hasn’t disappeared completely, but it has reduced. For example, before, the tone a husband used to call his wife was harsh or disrespectful, he would shout for her, but now it’s different. You can tell the education has had an effect.’ EL Dodoma1b CHW

Some women reported changes such as not being shouted at by their husbands and being treated more kindly. There were also occasional reports from men of women becoming more understanding towards their husbands due to the CHW’s advice. As shown by the quotes below, men still retained control in some households, and reasons for not abusing women were sometimes related primarily to protecting the child’s health rather than a more transformative change in understandings of gender relations and rights. Similarly, mothers sometimes recalled the advice as focused on ways to avoid immediate harm (for example, by running away when the husband was angry), rather than as promoting more transformative change in the husband’s behaviour.

> ‘Since we got this education, we don’t get scolded by men while pregnant. They know that might cause harm. Currently, we don’t even argue. Men used to speak harshly but now if he sees you have made a mistake, he just tells you “I don’t want you to do this thing” calmly.’ ELChemba1a KKM

> ‘During the KK pregnancy, if the husband wanted to scold you, he was aware that if I got stressed and angry, the unborn child would also get stressed and might have disabilities. After giving birth, the CHW emphasised that when the father is quarrelling and you are angry, take the child away to be with other children, and then he can scold you.’ EL Chemba1b KKM

> ‘Some women fight with their husbands and get beaten and hit in the

> stomach, but we were taught by KK that when the fighting starts, it's better to run to protect yourself and your unborn child.' EL Chemba2a KKM

> 'The relationship has changed. Sometimes when a woman is pregnant, she becomes irritable. But when women receive education, that brings changes. You even find the woman tries to soothe you. Sometimes you're tired, and she comforts you. So this education has improved things. They sympathise with us more. When we come back from work, you'll find she's not as harsh as before.' EL Chemba3b father

However, some households and communities reported little or no change in relationships. Sometimes, couples were close before KK, with a history of sharing ideas and collaborating, but a lack of change was also mentioned for some households where mothers described male dominance over decision making and frequent arguments. Others pointed to regular ups and downs of relationships, with short-term arguments, for example linked to economic stress,

> 'Arguing is normal, and it is there. This hasn't changed.' EL Chemba3b KKM

> 'The relationship with women hasn't changed. Arguments can't be avoided, but we resolve them and life goes on. Of course, if you don't bring her sardines, she'll be angry, but what can you do? You just tell her to cook wild okra. Those small issues always pass, but our initial closeness remains the same.' EL Chemba2a father

Physical violence against women was also reported as common and persistent in some communities, with no change since KK started.

> 'Gender-based violence exists, there are women who are beaten and scolded frequently. The community just sees it as normal. I haven't seen any change – violence is just the same as before KK.' EL Chemba2a CHW

As well as KK, several other interventions contributed to changes in decision making, relationships and gender-based violence: for example, advice at the clinic and church, a meeting organised by the district council, and other projects, such as a gender and nutrition project implemented by the Centre for Counselling, Nutrition and Health Care (COUNSENUTH)[8]. Sometimes these other sources of information were the main reason for changes in decision making or improved relationships, and sometimes KK reinforced other sources of advice or provided more emphasis through repeated information. Information received during KK registration or research activities also contributed to changes in household relationships. Changing individual contexts also affected decision making: for example, one couple discussed issues together more after the woman started a business and gained her own income.

> 'One day all men were called at the village offices by people from the district council. I don't know what they were taught. Since then, I started noticing changes in his behaviour and in our family, including his relationship with his

[8] This programme began in 2018. It aimed to improve maternal and child nutrition, as well as gender equality. Activities included supporting the VHNDs, as well as a Baby Friendly Hospital Initiative and community discussions through *mguso* groups, described by COUNSENUTH as a 'transformative reflective leadership approach' that involves discussions on nutrition and gender equity. COUNSENUTH. (2021). *A community-based gender-driven nutrition programme: Report on a mid-term evaluation survey conducted in Chemba Districts, Dodoma Region.*

> daughter and me and even his mother. In the past we used to fight. Serious physical fighting. One day we fought seriously when the child was inside the house. However, since that day when men were called to the village offices, he has never slapped me. We have never argued again. In the past when I tried asking him for money, he would respond harshly and we would start arguing. Now, I can ask and he just replies gently, like "I don't have money right now, maybe wait", and later on he will bring the money as promised.' EL Chemba2b KKM

> 'Our husbands realised they were wrong to quarrel with their wives when they are pregnant. So they are slowly trying to change. We received this advice from the doctors at the health facility, they educated us a lot. And when KK started, the CHW also kept emphasising it and she even involved our husbands.' EL Chemba1b KKM

> 'Previously, there were many cases of physical abuse, wives being beaten, expelled from their homes, and mistreatment of children. However, the education provided by COUNSENUTH, along with KK, has brought positive changes, and the community has become more aware of the dangers of violence. COUNSENUTH has a group called Mguso, which, upon identifying challenges in a household, intervenes and provides education on the consequences of violence and the benefits of peaceful living. This has contributed to the decline in gender-based violence. KK has also contributed, as we teach both fathers and mothers that when they argue, they harm their children mentally and physically. This helps them to understand the consequences of violence and change their behaviour.' EL Chemba1a CHW

There were **differences between CHWs in whether they understood advice on gender relations and gender-based violence to be part of the KK curriculum**. Some thought gender-based violence was covered in KK modules, but others said KK did not include information on decision making, gender relations or gender-based violence, or they could not remember whether it was included, and that advice on these areas was provided through other projects, such as the COUNSENUTH gender and nutrition project. Sometimes, CHWs integrated information from this other project in their KK visits.

> 'In KK, equality and mutual needs are not there, we provide that education through COUNSENUTH, and there's training through the government that we can direct them to. But when I go as a KK educator, if we sit and talk, when I'm not working through the system, we can discuss those things because I can't go today and then again tomorrow for this issue, so I can link it and add my information on equality.' EL Chemba1b CHW

There were **a few examples of KK causing difficulties for relationships, sometimes leading to violence** against women. This was reported occasionally in relation to arguments over use of the UCT (see Section 4.3.2), and there were also examples of abuse linked to attendance at KK activities and provision of material goods.

> 'There was one husband, the day when KK came to give gifts, he refused to come. So she came with her brother, and the next day, when the husband learnt that she received gifts, we heard that the husband and the wife fought. This was November or December 2024. The wife was beaten. The problem was the gifts which she had received. The wife's brother had received a bed

sheet and the husband was annoyed and became angry.' EL Chemba3b CHW

4.2 Caregivers' mental wellbeing and social networks

RQ 5.1. How has KK influenced changes in caregiver mental health, and what factors affect this?

A range of personal and household issues caused stress for some caregivers, such as the health risks of pregnancy and delivery, economic hardship, and difficult household relationships. KK activities sometimes eased stress, including through CHWs providing reassurance and advice about managing stress, social benefits of the groups, and the enjoyment of playing with children. The UCT helped to alleviate stress related to economic difficulties. Beyond KK, advice from other sources, and caregivers taking their own steps to ease anxiety, were also important, and safe delivery was often a primary cause of reduced stress.

RQ 5.2 How has KK influenced changes in social networks, and what factors affect this?

Some mothers reported making new friends through the KK groups, or sharing advice and helping each other between the group sessions. The development of new networks was affected by the community setting and whether mothers already lived close together and knew each other. Support for new friendships may have been more important for more transient urban populations. Overall, changes in social networks did not appear to be a major area of impact for KK, based on the qualitative data.

The KK theory of change anticipated improvement in caregivers' mental wellbeing through support from the CHW, an increased role for women in household decision making, and the economic benefit of the UCT. The theory of change also envisaged a role for the KK groups in strengthening mothers' social networks, which it was expected would provide support in times of need and, through this, support caregivers' mental wellbeing, household health and child development. This section examines these two drivers of change.

4.2.1 Caregivers' mental wellbeing

Caregivers were asked about anything that had made them worried and any changes in their levels of stress, including due to KK. **Experiences varied between individuals**: some said they had not experienced any worries or stress, and others reported several areas of anxiety. The main **causes of anxiety often related to pregnancy**, including risks of danger to the mother and child from illness during pregnancy and around delivery, and the financial costs of childbirth, particularly in the event of complications. Other **economic difficulties** were also a common cause of stress, including the costs of regular household expenses such as nutritious food, and financial difficulties for mothers when partners were absent

or did not provide support. For mothers, **relationship difficulties and household arguments** also led to significant stress, including crying, loss of appetite and other physical symptoms.

Advice and support from the KK CHW were seen by many caregivers as reducing stress. Reassurance and encouragement from CHWs helped mothers to feel calmer, and CHW visits showed mothers that someone cared about their wellbeing and provided an opportunity to share their concerns. Guidance on health and nutrition helped parents manage difficulties, such as when the child was ill, and taught them how to reduce risks, reducing uncertainty about how to support their child. Being able to call the CHW for advice when needed also provided reassurance. CHWs also advised women to avoid worrying, including to protect their health during pregnancy and to support breastfeeding, and suggested ways for parents to reduce stress, such as talking with friends. Playing with children during visits also helped to reduce stress. Benefits for caregivers' mental wellbeing were **more evident for mothers than fathers** because mothers had more direct contact with the CHW, but some fathers also mentioned that KK helped to reduce stress, particularly through the reassurance provided by the CHW's guidance and support.

> 'When I was pregnant, I was worried and the CHW advised me that these worries can cause you problems. She said you should stop worrying and if you are worried, don't stay alone but go somewhere where there are people, to minimise such stress. That is what helped to me during that time.' EL Kongwa1b KKM

> 'During my pregnancy I was very stressed because I was in a lot of pain and I wasn't sure I would deliver safely. My partner also caused distress. When you're abandoned in that situation, you keep wondering who will help when you get sick, where will you get the money for assistance, if I was told I needed an operation, what would I do? The CHW advised me, and that truly helped me. For example, they said "don't worry, don't be anxious, you will deliver safely, soon you will be fine". That advice really lifted my spirits.' EL Chemba2a KKM

> 'As parents, we normally ask ourselves "what should I do for my children?" The KK trainings give us hope that, if we follow the advice well, then if anything happens, it will be God's will. This reduces your stress.' EL Kongwa1a father

> 'Here, income is very low. So when your wife is pregnant, you think a lot about how it will be, how you will get her to the hospital. But the CHW told us that if anything happens, always inform me. Honestly, I was very close to the CHW, she would come to our house often, or I would call her and she would come. That really gave a sense of security.' EL Chemba1b father

KK groups also helped to reduce stress for some mothers. Sharing information and experiences with other mothers during KK groups helped to alleviate their worries: for example, by showing them that other families faced similar or greater challenges and by enabling them to obtain advice from others. Spending time playing and laughing together in the groups and playing at home also distracted mothers from their worries and supported their emotional wellbeing.

> 'At the group session, some people know you well, so when you are unhappy,

> she asks why, you share your situation and she gives advice. You also see that others have similar or even worse challenges, but they are living happily, so why should you be stressed? After you share stories and exchange ideas, you find you are no longer stressed.' EL Dodoma1a KKM

> 'When I have stresses at home, when I come for the group session, we laugh, I am able to forget the stress, and I leave with a peaceful mind thinking about playing with the child.' EL Kongwa1a KKM

As described in Section 4.1.3, KK, along with the advice received from health facilities or other sources, also **improved household relationships** and **increased the support mothers received from fathers**; for some mothers, this helped to reduce stress related to harsh treatment or arguments.

> 'I was stressed and worried all the time, because when you get pregnant, certain behaviour changes, and that made my husband complain and argue. However, at the health facility, we were advised how men should handle such situations so they don't make the pregnant woman stressed. I remember the day the KK CHW visited us and advised us both, and my husband really changed. That restored my peace.' EL Kongwa2b KKM

However, there were **cases where advice from the CHW added to caregivers' worries**, in particular through concerns that an inability to implement the advice would lead to difficulties for their pregnancy or child. For example, one mother was worried for her pregnancy because, against the CHW's advice, she had to continue heavy work due to the need for income, and another worried that her child would catch pneumonia because she could not afford the warmer clothing recommended by the CHW. Her stress was later eased by support from her husband. The costs of buying food for practical nutrition sessions during KK groups also caused anxiety for some mothers, as mentioned in Section 3.1.2.

> 'I was unhappy during pregnancy. The work I did was very hard – walking long distances while carrying heavy loads, that caused pain. We were advised that a pregnant mother should not carry heavy items because it's dangerous. But I had no choice because of my circumstances. If you avoid hard work, how will you eat? That situation made me very anxious.' EL Chemba2a KKM

> 'We had been taught that we should not leave the child bare. At that time, I had no money to buy clothes, so this worried me a lot – sometimes I used to cry thinking my child would get pneumonia. My stress ended when her father brought a thick tracksuit, stockings and a hat. This really encouraged me and my worries stopped.' EL Chemba2b KKM

CHWs' advice was not always sufficient to alleviate stress: for example, economic constraints still caused anxiety. The **UCT helped to alleviate stress** related to economic difficulties: for example, covering costs associated with delivery or ongoing household expenses. It also helped some women who usually relied financially on their husbands or others to pay for necessities, and supported women in difficult or abusive relationships.

> 'When we reached about six months, the nurse told us there were some complications with the pregnancy. They advised us to go to the city for delivery or if she felt unwell. That scared me a bit, and I realised I needed to prepare financially for any challenges. When we were close to delivery last

> year, God blessed us and I received some funds from KK, about 77,000 shillings in November.' PE Dodoma3 father

> 'I was very stressed, I had no money, electricity units were finished and that day I had fought with my partner. I was with my children in this darkness and looked at my phone and found I had received 77,000 shillings. This is what saved me. We paid the electricity and life went on. Through this, we were helped a lot.' EL Dodoma1a KKM

While caregivers often said the CHW's support helped with stress, **advice from other sources, and caregivers taking their own steps to ease their anxiety, were also important**. Sharing worries and receiving advice or reassurance from friends, neighbours and relatives was often mentioned, along with prayer, focusing on other things, and activities that took their mind off anxieties. Advice from the health facility or the health facility being nearby to provide support if needed also helped to reduce stress.

> 'When I am very stressed, I normally decide I need to go and sit with friends. We exchange ideas on other issues, and at the end of the day you find that the stress is over.' EL Kongwa1b father

> 'If I am angry, I go to my friends and I find they are discussing something that makes you laugh, they are at peace and they make you happy, then you share a few things, exchange ideas, and the stress is minimised, you have peace.' EL Dodoma1a KKM

Anxiety related to both the costs and safety of pregnancy and delivery – the main worry indicated by many caregivers – was alleviated after a safe birth, and **safe delivery was often a primary cause of reduced stress.**

> 'I was very stressed when she was pregnant. Because she might get a fever or she might be taken to the hospital and die from the pregnancy. So, automatically you are full of fear. After she has given birth, we don't have worries.' EL Kongwa1b father

> 'Our worry was only until she got to the health facility and safely gave birth. That's when we feel at peace, we feel safe. While she is there, the costs keep rising, but once she is discharged, you only spend money on returning home. So, at least then, the costs go down a little since you are taking care of her at home as a mother.' EL Chemba1b father

4.2.2 The contribution of groups to social networks

Some mothers reported making new friends through the KK groups, and sharing advice and helping each other between the group sessions. Examples included reminding each other of the CHW's advice, helping each other make toys, or providing material support (such as food) when needed.

> 'I got a friend – we did not know each other before but we started supporting each other. For example, she can come and say "I need groundnuts", then I give her. I couldn't go to this person for help before, but now we support each other. We advise each other about parenting.' EL Chemba3a KKM

> 'We knew each other before the group but when we met, we would just exchange greetings and go on our way. When you are brought together in the

> group and you start to discuss things and advise each other, then you get to know each other. When we meet now, we share news and discuss things, different from the past. KK brings us together.' EL Dodoma1a KKM

The **contribution of groups to social networks varied between individual mothers and communities.** Several mothers indicated that they did not exchange advice or support each other outside of group sessions. Some mothers did not make new friendships because they already knew each other well before KK – for example, due to households being close together – and some had little contact with other KK mothers outside the group or chose not to make close friendships due to a sense of distrust towards other community members. The value of the groups for new friendships was particularly evident for some mothers in an urban area, partly reflecting a more transient population: some mothers had only moved to the area recently and others only knew each other a little before KK. Where groups were not held or attendance was low, the contribution to social networks was necessarily limited; this was seen in one community with low group attendance, where some KK mothers who participated in an FGD did not know each other's names or children.

Overall, while some mothers did report changes in their friendships or support for parenting through these networks, the role of social networks was not emphasised by parents as a major driver of change. Further research would be needed to understand any influence on social norms and the extent to which networks contributed to parenting.

4.3 Use of the unconditional cash transfer to support nurturing care

RQ 6.1 How do households use the cash transfers, and does the UCT affect household gender relations?

Caregivers who received the UCT primarily used it for basic household necessities, and sometimes livelihood investments, and reported considering the child in decisions about UCT use. They described the UCT as significantly easing economic difficulties.

The role of mothers and fathers in decisions on UCT use varied between communities and individual households. Patterns were broadly in line with wider household decision making, but decisions on UCT use appeared, overall, to be more collaborative or to involve a greater role for women compared to wider household decision making. The UCT sometimes helped to improve household relationships or helped women to escape or manage difficult relationships, but there were examples of negative effects, with the UCT occasionally leading to arguments.

In the KK parenting plus UCT arm, caregivers received six bi-monthly cash transfers of TZS 77,000 ($33), provided to the mother's phone or to another contact nominated by the mother (such as the husband). The KK theory of change

envisaged that transfers could ease economic constraints on nurturing care, support female empowerment, and reduce gender-based violence related to economic stress. The qualitative research examined how households used the UCT and decided on its use, and any effects on gender relations.

4.3.1 Household use of the unconditional cash transfer

Caregivers who received the UCT primarily used it for basic household necessities, and sometimes for livelihood investments. Common purchases included food; clothes for children and other household members; other household expenses, such as soap, utility bills or rent; livestock, such as goats or hens; and farming inputs, including land and labour. A few invested in other activities to improve their livelihoods, such as a clothing business, or joining savings groups. Some households also saved money for future emergencies, and the UCT helped during emergencies, such as when the child was ill or when household relations broke down. **Many described the UCT as significantly easing economic difficulties**: it allowed parents to provide for basic needs and to implement maternal and child care practices advised by the CHW, and sometimes supported future economic prospects through investment in livelihoods.

> 'That money transformed my life because at that time, life was very difficult. For example, we were told to eat nutritious food – fish, eggs, milk, meat, and similar. I had no money to buy these ingredients, but once this money was sent, buying them was no problem. When the first money was sent, we had no food in our household, so we bought one sack of maize. We used the second money for farm preparations. The third money was when my child was born, so we used it to buy clothes for the child. We also bought millet as I needed to eat nutritious porridge after delivery. We bought baby oil for the child, soap. I didn't have that pressure around buying small essentials. If you have no money, the child has no hat, no stockings, and you can't get nutritious food.' EL Chemba2b KKM

Parents reported considering the child in decisions about UCT use because they knew the UCT was for the child's benefit, though some noted flexibility to also support other household members. This focus on the child was sometimes related to investments and longer-term needs, rather than immediate daily essentials.

> 'That money helped with child's upbringing. When the money came, we'd spend it on food and clothing, try to save a little for emergencies. You could say "this is for her mother" and maybe "let me have a little", but it was meant for the child, there was guidance. We even decided to buy chickens, to serve as savings for the child, but we kept in mind that this money is meant for the child's care, so if the money runs out, you can sell the chickens and meet any arising needs.' EL Chemba3b father

> 'That money was sent only for the KK child's needs, but I made sure that all the children were benefitting. Food is always in the house, so I bought clothes. I didn't want to favour the KK child, so I bought clothes for all the children.' EL Kongwa1a KKM

> 'We bought the child's food and food for the household, clothes for my child, potatoes, bananas and other foods. He was the reason for receiving that

money, so I wanted to change things for him.' EL Chemba2b KKM

'We decided to construct a house, so we had to buy iron sheets, blankets and a mat. We decided to buy these things so that we could remember and show the child that "there was KK and this is what I bought for you"'. EL Chemba3a KKM

Changes in food purchases varied between households, with some indicating no change in either the type or quantity of food, but others buying a wider range of food, buying additional ingredients more consistently, buying in larger quantities or purchasing spare supplies for future use to support food security. For some households, the UCT helped to provide food during leaner seasons before the harvest. Food purchases included grains such as maize, wheat flour, millet, rice and pasta; more fruit and vegetables; proteins such as meat, soya and groundnuts; dairy, including milk and eggs; and cooking oil. The KK advice on nutrition encouraged use of the UCT to purchase more nutritious ingredients.

'Rice for mixing in maize, groundnuts, millet. Where can you buy these items if you don't have money? In the past, I bought these when I could get money but during KK, I was receiving money for the KK child and I would buy them to maintain his health.' EL Kongwa1a KKM

'The main thing was that some of us hadn't harvested yet by then, so there was urgent need for food.' EL Chemba3b father

4.3.2 Gender roles in decisions on the unconditional cash transfer, and effects on household relations

The role of mothers and fathers in decisions on UCT use varied between communities and individual households. Patterns were broadly in line with wider household decision making (see Section 4.1.3), with more joint decision making or control by women where this was normal household practice, for example in urban areas where women had their own income sources. However, decision making on UCT appeared, overall, to be more collaborative or with more of a role for women compared to other household decisions. Some women who described their husbands as the usual decision makers decided on UCT use themselves, including in some households where the UCT was sent to the husband's phone. Fathers had been advised that the UCT was intended to support the mother and child, which encouraged space for decision making by mothers. Most men described decision making as joint, and women generally described making decisions either alone or in consultation, although with men still having the final say in some households.

'If you ask a husband, they say "I don't even touch that money. It is money for the mother and children alone. She makes a budget and decides what to buy herself – it's up to her".' EL Chemba3a CHW

'I have always decided what to do with the money, my husband has never taken part in such decisions. If he needs money, I might send some to him or buy household supplies, but he has never decided what to do with the money.' EL Chemba2b KKM

'For us, my number was being used. When they sent the money, I would show

> her, and we discussed what we should do with it.' ELKongwa2a father

> 'We used to plan together after receiving the money, but he was the one deciding.' EL Kongwa2a KKM

Decision making was generally not described as controversial, with evident household needs supporting joint views on the priorities for UCT use.

> 'We decided to buy maize and farm inputs. This was a joint decision because everyone could see we had no food in the household – nobody objected.' EL Chemba2b KKM

There were **some reports of the UCT contributing to improved household relationships**, because women no longer needed to ask their husbands for money, which reduced fights, or because couples discussed UCT use together. For some women, the UCT **helped them to escape from, or to manage, difficulties in the relationship**: for example, the UCT supported one mother when she was forced out of her home by her husband and needed to rent a room, and helped another to pay urgent bills when she was unable to ask her husband for money due to a fight.

> 'The fighting used to start as soon as I asked for money from him to buy things. After receiving that money, where will the fight start from? If you are not asking for money from him, he finds it better. We no longer fight as we used to in the past.' EL Chemba2b KKM

However, there were **examples of the UCT having negative effects on household relationships**. A few cases were reported of disputes over use of the money, and arguments related to the UCT being sent to the phone of the husband or another relative and used without the mother being informed. Sometimes the HCW or CHW intervened to restore relations, but on a few occasions these disagreements contributed to couples separating, or to the mother deciding on UCT use without consulting her husband

> 'We expected that they would use the money to buy foods for the child, but when they get money, they start fighting with the husband, some families have had conflicts because of the money. I remember one marriage where it seemed the woman was getting money and the husband wanted the money – it made a mess.' PE Chemba1 HCW

> 'There was a difficult incident where, when the woman initially received the money, they used it for necessary household expenses. But she was using the husband's phone, and he liked drinking. When the next round of money came, he didn't tell the woman and just used it for his own purposes, things only he knows about.' EL Dodoma1a CHW

> 'I informed my husband about the first and second rounds of money, but then we didn't agree on some other money which was sent and there was conflict. After that, when the money was sent, I would decide how to use it. He once asked if they only sent me the money twice, and I told him that was all. He is not aware that this money helped us to buy food and pay electricity bills, he thinks that I used my money while we know that it was KK money.' EL Dodoma1a KKM

4.4 Changes in caregiver practices

RQ 7.1 How and through what processes does KK affect parenting practice? How do different aspects of the KK interventions' design and delivery influence outcomes, and are there other causes of changes in parenting, alongside KK?

Changes in practices for maternal health and parenting were widely reported across communities, including improvements in prenatal care and maternal nutrition, breastfeeding and complementary feeding, child health seeking, stimulation and early learning, and safety and security, including hygiene and discipline. KK households' implementation of nurturing care practices was seen as having improved compared to their past practice, and as greater than among non-KK households in the community.

The extent of change and the level of evidence varied between practices and communities. There was most evidence of change for stimulation and early learning, areas where information was rarely provided prior to KK or through other services. For maternal care, breastfeeding, child nutrition, child health and hygiene, KK was generally seen as improving practices, but some advice was already provided before KK and through other projects, and the extent of change was more varied. Changes in the approach to discipline were indicated, but corporal punishment persisted.

KK acted alongside other interventions and wider contextual changes that also supported caregivers' knowledge, motivation and opportunities for nurturing care, such as advice provided at health facilities and through other projects. Several KK characteristics were seen as helping to strengthen caregivers' implementation of information already provided through other channels, adding value to existing sources of advice. Individual counselling allowed more in-depth guidance that improved knowledge, skills and understanding; explanation about the importance and benefits of different practices supported motivation; regular conversations with mothers provided an opportunity for CHWs to identify and address misunderstandings or problems hindering implementation; frequent and repeated education provided reminders and reinforced information; and regular monitoring and follow-up motivated action as mothers knew the CHW would ask about their practice. Impact was also supported through timely advice, longer-term support, practical sessions, involvement of fathers and other household members, use of the flipbook, and improved CHW skills, as well as by positive encouragement and respectful care from the CHW. KK also increased households' opportunities to implement guidance by reducing the cost of recommended practices, via advice on how to make homemade toys and on foods that could be more easily obtained, as well as by increasing household resources through the UCT. Once caregivers started to implement new practices, their motivation was reinforced by seeing their child develop, by parenting becoming easier, and by emotional enjoyment.

RQ 7.2 What conditions influence the effects of KK, including factors at household and wider community levels that enable or constrain motivation and ability to implement CHW advice?

The extent of improvement in parenting was affected by individual, household and wider community factors, which led to different capacities, motivations and opportunities to change practice. In particular, households' economic status affected nutrition and other areas. Different livelihoods, locations and community geography, household gender relations, and issues such as alcohol consumption were also influenced KK's effects on parenting practices. Previous exposure to health services affected the added value of the guidance received through KK, and past parenting experience affected motivation to change: for example, earlier problems in child and maternal health encouraged change, while perceptions that previous children had developed well reduced motivation to change practices.

Changes in maternal health and parenting practices were widely reported across communities. The extent of change varied between practices and households. This section first sets out reported changes in different aspects of nurturing care (including maternal and child health, nutrition, hygiene and safety, stimulation and responsive caregiving, and discipline), and the role of KK in bringing about these changes (Section 4.4.1). We then synthesise and summarise information from across different practices on the processes through which KK contributed to change and KK's added value over existing sources of advice (Section 4.4.2). Section 4.4.3 then summarises household, community and health system factors that affected the extent of improvement in parenting practices. Section 4.4.1 is particularly useful for readers who want to understand how KK influenced specific practices such as maternal health or nutrition, whereas Section 4.4.2 and Section 4.4.3 provide more synthesised evidence on the different processes and conditions involved in supporting or constraining change.

4.4.1 Changes in maternal and parenting practices

Rather than providing new health and nutrition advice, KK aimed to integrate early learning and stimulation messaging into existing CHW health and nutrition services, and to reinforce standard health and nutrition messaging through more frequent counselling. Changes reported by community stakeholders reflect this focus.

Parents, CHWs and HCWs reported a wide range of changes resulting from KK, including improvements in prenatal care and maternal nutrition, breastfeeding and complementary feeding, child health seeking, stimulation and early learning, and safety and security, including hygiene and discipline. Some caregivers reported significant influence of the CHW's advice on their parenting practice. Caregivers, CHWs and HCWs also pointed to greater implementation of nurturing care practices in KK households compared to other households in the community.

> 'In almost everything I do, I have to remember something the CHW told me. I cannot go the whole day without remembering CHW's advice.' EL Dodoma1a KKM

> 'When you look at those mothers who were in KK, they are totally different from mothers who were not part of the KK project.' SS CHMT1

> 'When you look at the community, others have not changed yet. They don't have this closeness with their children that we have been taught. For us, we have experienced changes, but for them, you can see that really there are no changes. There is a big difference between those who have received this training and those who have not.' EL Kongwa1b father

The extent of change and the level of evidence varied between practices and communities. Overall, the qualitative data provided most evidence of change for stimulation and early learning, an area where advice and information were rarely provided prior to KK or through other services. For maternal care, breastfeeding, child nutrition, child health and hygiene, KK was generally seen as improving practice in KK households, but the extent of change and the degree of difference compared to non-KK households were more varied. For these areas of practice, some advice was already provided before KK and through other projects, and non-KKM and community leaders reported changes in parenting beyond KK households due to other community interventions, routine health services and wider developments. KK did provide some new information on these areas, but – in line with KK's aim, as described above – KK's effects also resulted from the provision of further explanation, regular reminders, more emphasis, and monitoring by the CHW. These features of KK meant that caregivers had more understanding about why and how to implement recommended practices, and took existing knowledge more seriously. This added role of KK is discussed further in Section 4.4.2. Changes in practices related to discipline were widely reported, but there was continued use of corporal punishment. As indicated in Section 2.5, this qualitative evidence on change needs to be considered alongside the findings from the quantitative surveys.[9]

New learning and changes in practices reported by caregivers were sometimes inconsistent with national and international guidelines. For example, several caregivers mentioned adding sugar to children's porridge, or reducing rather than stopping physical punishment. There was also one report of a CHW bringing sweets for the child. It is not possible to know from our data whether CHWs sometimes provided information or behaved in ways that were not in line with guidelines, or whether these examples reflected recall issues among caregivers. However, these examples do suggest that further education may be needed to ensure caregivers – and potentially CHWs – fully understand recommended practices.

The sections below describe changes in knowledge and practices for different areas of maternal and nurturing care, including causes of changes, and household or community factors affecting improvements.

Pregnancy and maternal care

KK CHWs provided advice for women during pregnancy and in the postnatal period on topics such as antenatal care clinic attendance, maternal nutrition, taking iron and folic acid supplements (FeFo), HIV, malaria prevention, family planning, danger signs, preparing for birth and early stimulation.

[9] The impact and mixed-method process evaluation papers are forthcoming. A preliminary policy brief is available on request: Kizazi Kijacho research team. (2026). *Evidence for sustainable parenting and cash transfer programmes in Tanzania*. Oxford Policy Management.

Changes in knowledge and practice

Many caregivers, CHWs and HCWs reported improvements in prenatal care and delivery over recent years. Advice on pregnancy and reproductive health was provided through several sources, including health facility education, community meetings and other health promotion campaigns and projects. These non-KK services meant that **improvements in maternal care were sometimes community-wide rather than specific to KK households**. For example, increased facility delivery was widely reported, but generally occurred across the community, driven by health facility advice, wider information campaigns, and bylaws that imposed penalties for home delivery, rather than just by KK. Similarly, CHWs and HCWs around some facilities saw little difference in antenatal clinic attendance between KK households and other households, with improvements across the community in recent years due to a range of projects and interventions. Some also described practices such as use of mosquito nets and prenatal supplements as common before KK, due to routine health promotion or earlier projects.

> 'I haven't seen much difference in people coming to the clinic, because there are other CHWs who have been working under Benjamin Mkapa since 2020 and they identify pregnant women and refer them to start attending the clinic early. In the past, many were giving birth at home, and they would start attending the clinic in the last few months, but after the Benjamin Mkapa intervention started, the CHWs started visiting them.' PE Chemba1 HCW

> 'Before KK, they were attending clinic. We started giving education about clinic attendance a long time ago. People are already used to this.' EL Chemba3b CHW

Non-KK mothers who were interviewed had also received advice on antenatal care and the importance of facility delivery, and some non-KK mothers and community leaders described improved health facility services or interventions such as penalties as supporting clinic attendance and knowledge on pregnancy across the community.

> 'Now there is more awareness. Now at our dispensary, if you go to give birth, the service is good. When you explain, you are listened to well and you are served well. Everything is well taken care of. So now, honestly, we are satisfied, there are no problems like before. Services have become better, we are informed about everything properly, and we understand.' EL Chemba1b non-KKM

> 'I have noticed a significant increase in women seeking health services. In previous years, not many mothers attended the clinic, but currently many mothers and community members seek health services at our facility. This is because health services have improved and people are more aware of the quality of services, so they think that if they go to the dispensary, they will receive the treatment they need. When a patient goes there and her health condition is well treated, that increases the confidence in the service provided.' PE Dodoma2 CL

> 'We initiated a penalty for women who delay and skip antenatal care and postnatal care attendance. For example, if she was supposed to attend the clinic this week but she fails and skips two more weeks, when she comes the

> next time she is charged a fine and asked to clean the dispensary surroundings. Because of this punishment, many women follow the advice to attend.' PE Chemba1 CL

Previous advice through other health promotion activities and clinic services meant **some KK mothers reported little or no new information through KK or little change in maternal care practices**.

> 'With previous pregnancies, we used to attend the clinic, we would be given medicine for boosting the blood. We were advised to eat more fruit. There is no difference.' EL Chemba2a KKM

However, **many HCWs, CHWs and KK mothers did point to some changes compared to past pregnancies and differences between KK and other households**. Changes attributed at least in part to KK included earlier and more consistent antenatal care clinic attendance; improved use of prenatal nutritional supplements (FeFo) and mosquito nets; changes in maternal nutrition, with a wider variety of foods and more frequent meals; more preparation for delivery, such as ensuring they had warm clothes ready for the new child and supplies for use at the health facility; more awareness of danger signs; only taking medications prescribed by a health worker, rather than those purchased from local drugstores; reducing heavy physical workloads; avoiding stress; and increasing the spacing between children.

> 'There is a difference. They attend clinics regularly, take FeFo supplements as required, and sleep under mosquito nets. KK mothers follow all these more closely now. These things were happening before KK but not at a high level.' EL Chemba1a CHW

> 'Regarding danger signs during pregnancy: initially, some women would treat them as normal, but after receiving education they learned that if certain signs appeared they must seek care immediately because it indicates danger.' EL Dodoma1a CHW

These changes in practice resulted partly from new knowledge. In line with the multiple sources of advice on maternal care in communities, many KK caregivers had already received at least some of the advice provided by the KK CHW during earlier pregnancies and through other channels, particularly routine health facility education, but also TV campaigns, radio listening groups, and other projects. Their mothers, other community elders and sometimes friends were also important sources of advice for some KK caregivers. However, **most KK mothers gained some new information from the KK CHW.** The extent of new information and specific topics learnt only through KK varied between mothers, but a few described new learning across multiple aspects of pregnancy.

> 'This education introduced us to things we didn't know. We were taught that if you are stressed, you can watch television to avoid the stress because if you stay stressed when you are pregnant, your child will not have good health and you might face problems when giving birth and lose the child. We were advised about eating nutritious food, hygiene, frequent bathing, eating food that can boost your blood, things like that. From the clinic, we were not taught anything. We would just test for pregnancy, and we were advised to drink grape juice to boost our blood, but not other issues. A date to attend the clinic would be written but whether you went or not was upon you. KK

> has taught us that we should attend the clinic often, because if you don't attend, you will face problems later. I was not aware of these issues, KK taught us a lot.' EL Chemba2a KKM

Talking with the child before delivery was particularly mentioned as new advice. This was surprising information for many mothers, but they were positive about this practice, feeling it made the child happy and improved the bond between the child and mother.

> 'People knew a child needs to eat a variety of foods. Even playing with children, some already did that. But what was new to them was the idea of talking to the baby while still in the womb. That was unfamiliar. They didn't know you could start bonding or communicating with a child during pregnancy.' EL Kongwa1a CHW

> 'I liked stroking and talking to my infant while it was in the womb. When you do that, the child becomes happy and knows it is with mum. When you play with it, touch it like that, you just feel that the child is also playing, and you know it is happy today. I did not know about this at all before.' EL Chemba1a KKM

For most aspects of prenatal and delivery care, KK played a more significant role through reinforcing advice provided at the health facility and elsewhere, rather than through providing new information. The CHW checked the clinic card and provided regular reminders and more emphasis and explanation, which improved caregivers' understanding and motivation to implement the advice.

> 'This advice is normally given, but without much emphasis. When someone watches you closely and comes every month and discusses the same issue each time, that makes you follow the advice. When it's emphasised like that, you believe what is being said.' EL Dodoma1a KKM

> 'The CHW and the doctors at the health facility used to advise us about preparing for delivery, but we didn't follow the advice. The CHW monitored us frequently, so our conscience changed and we started preparing for delivery in time.' EL Chemba3b KKM FGD

> 'When I was pregnant the first time, we were advised at the clinic that a pregnant woman should eat at least five meals, and two meals should be nutritious, but I didn't take it seriously. When I was pregnant with this KK child, the CHW visited us often. Every time she came, she would remind us to try hard to eat five meals. She insisted that this is required for a pregnant woman. That is when I started following the advice. I tried hard to eat fruits, take milk.' EL Chemba3b KKM

> 'KK has strengthened mothers' commitment to attending clinics, getting vaccinations, using FeFo, using mosquito nets, and so on. Because when we visit them, we ask to see the clinic card, so they realise that next time, if they don't go to the clinic, they will be noticed because the card will show it. So they are reminded regularly, and even the app sends reminders for us to remind mothers to attend clinic appointments. This has strengthened their adherence to maternal and child health services. So KK mothers attend the clinic every month, while others attend irregularly.' EL Chemba1a CHW

The use of prenatal nutritional supplements provides one example of the

additional role played by KK. Most pregnant women received nutritional supplements, but for KK mothers, adherence was supported through additional advice from the CHW on the importance of the supplements and how to avoid side effects.

> 'I started hearing about these issues when I attended the antenatal care clinic. But you know how things are done in our health centres – they just stand there and speak generally like, "Hey, you, pregnant mother should not do heavy work, you should eat all food groups and the like". The CHW comes all the way to our homes to teach us. This was a good practice because we used to just be told "make sure you take medicine" without knowing what the medicine was for. When the CHW came, she provided more information – "this medicine helps you and your child in the womb. It protects the child against diseases. You need to take it". The CHW explains in detail so that I understand the importance.' EL Chemba2b KKM

> 'Before, I would be given medicines, but when I returned home, I would throw them away. When you go to the dispensary, the staff have limited time, so sometimes you don't get any education, maybe there is only one health worker and there are other patients, so you don't get any advice. So you ignore the medicine, not knowing you might be putting the child and yourself in danger. The CHW told me that a pregnant woman must attend the clinic, and if she is given medicine, she is supposed to take it to protect the unborn child from various illnesses. That was something I truly took seriously.' EL Chemba2a KKM

> 'Before, when you were pregnant, you would be given medicine at the health facility but think "this medicine causes nausea" and throw it away – we all did this. But we were advised by the CHW that these medicines should be taken when going to sleep or with food. During previous pregnancies, I had blood level nine or 10.* When I gave birth to this KK child, I had blood level 13 or 14. I realised that is because I took the medicine seriously, unlike in the past.' EL Dodoma1a KKM. * Meaning a haemoglobin concentration of 9 or 10 g/L; the World Health Organization threshold for anaemia in the third trimester is haemoglobin <11 g/dL

Increased support from husbands for maternal care

Improved maternal care was also enabled by increased male support during pregnancy. Many mothers indicated changes, such as their husband reducing their wife's workload, helping with heavy chores, providing additional food for the mother and buying items needed for delivery and the new child, in part due to advice provided through KK. This support was important given male dominance of household decision making and finances (see Section 4.1.3).

> 'We learnt that when you are pregnant, you need to reduce heavy work, and just do normal tasks. The father or husband has to help you with the work. If you usually go to the farm, you have to stay at home. In the past, fathers did not understand, they were not taking care of us. You are pregnant and very tired, and they are telling you to collect firewood. After getting advice from our CHW, we told fathers what the CHW advised, and they understood.' EL Chemba1b KKM

> 'Now if pregnant, we are cared for by our husbands. You are brought fruit, you are offered more time to rest so you don't need to force yourself to work.

> Your normal activities are reduced, even fetching water – if it's a bucket, go ahead but don't carry a jerrycan. If he has time, he goes to fetch water with a wheelbarrow. You are brought different kinds of vegetables, or sometimes meat – sometimes he only brings meat for me, not others, and says we are prioritising your health.' EL Chemba1b KKM

> 'My husband was present when I was taught by the CHW. During my past pregnancies, if I told him that I wanted to eat ABC, he would tell me I was just being greedy. After he was educated, he became aware and would buy it for me. So for this pregnancy, my husband really cared about me.' EL Chemba2a KKM

Some fathers also reported receiving new information about antenatal care. Some fathers already had most information from the health facility, and others struggled to recall the advice received through KK, but several fathers indicated new learning from the KK CHW: for example, on maternal nutrition, avoiding heavy work, acting on danger signs, and talking with the child before birth.

> 'When the woman is pregnant, my understanding was that I would just parent the child once they are born. After the trainings, I came to understand that I am supposed to start parenting when the child is still in the mother's womb, and that my main responsibility is taking care of the mother and the child. CHWs also advised that you need to be close to the mother when she is pregnant, because there are many issues which can come up and these issues need a joint opinion – when you don't collaborate, it creates challenges for the mother. This is when I understood that the responsibility to take care of pregnancy is not for the mother alone.' EL Kongwa1b father

> 'We were advised that when a woman is pregnant, she should not do strenuous work. Before, we used to take our wife to work, maybe on the farm and carrying buckets of water. But we learnt that when a woman is pregnant, she should be allowed to rest and she should not do hard work. This was new to us. We also gave them fruits and special foods. Before, we used to just tell them to eat, we didn't understand. After getting this education, we struggled to buy the required food.' EL Chemba1b father

> 'The KK CHW advised that if you see the mother is sick, go to the health facility. Sometimes we used to think "it's just cough, it will just stop". But the KK CHW said no, you should rush to the health facility, and you should go with her.' EL Kongwa1b father

> 'We were taught how to talk to the child when she is still in the womb, using good words. From what the KK CHW was teaching us, when you talk to the child in the womb, the child can hear you. So the KK CHW, honestly, there are things which she has changed in me.' ELDodoma1a father

Past experience as motivating change

As well as CHW support and follow-up, **changes in maternal care were also motivated by past experience of difficulties during pregnancy**. Some mothers thought following the CHW's advice helped them to avoid problems experienced in the past, such as premature delivery or miscarriage.

> 'The health facility and my peers used to tell me about taking medicine or going to the clinic, it's just you sometimes neglect things if you haven't encountered something bad. I decided to try applying the advice by looking

> at the situation I encountered with previous pregnancies when I experienced some bleeding. Because of being told that might be the solution and the CHW regularly emphasising that, I said "Let me put this into practice to see if there is a difference with this pregnancy, perhaps there won't be any more bleeding". After I applied that advice, I saw success, I did not experience any problem until I delivered.' ELChemba2a KKM

Constraints to change

The **extent of change in maternal care varied between households**, and some KK mothers did not implement all the CHW's advice on pregnancy. For example, one CHW said that some KK mothers stopped taking FeFo due to experiencing nausea, despite the CHW's advice. Economic constraints were also a barrier. In particular, maternal nutrition was affected by inability to afford nutritious foods or living far from locations where food was sold. The need to earn income also meant one woman had to continue a physically demanding job throughout pregnancy (as mentioned in Section 4.2).

> 'Food is found here in the centre, but some households live far away. They can't access these things every day. Mothers would call me and say "I haven't been to the centre in a long time. Please help, tell my husband to bring me some if he passes by the road, because I can't reach there myself". She wants something, she knows it's beneficial because we've educated her, but she lives far away, so following the "five food groups" was a bit difficult.' EL Chemba2b CHW

There were also some reports of male decision making continuing to limit implementation in some households: for example, restricting clinic attendance or use of family planning.

> 'Issues that don't change in families are related to family planning, and this is due to their husbands. I think they don't want to change at all. Because for a wife you don't plan for your husband that I need a child.' EL Chemba3a CHW

Wider health system gaps, such as medicine stock outs, also sometimes hindered implementation of some antenatal advice.

> 'When there are difficulties related to pregnancy, you are now advised that your wife needs to take certain medicines. The problem in the community is finding the medicine: you discover that the dispensary is empty of medicine, so you have to hunt for them elsewhere. You cannot find those drugs in our little pharmacies. So it becomes another challenge.' PE Dodoma1 father

Breastfeeding

CHW advised mothers on topics such as early initiation of breastfeeding, exclusive breastfeeding, frequency of feeding, and proper positioning and attachment.

Changes in knowledge and practices

Many mothers, CHWs and HCWs reported changes in breastfeeding for the KK child, including exclusive breastfeeding, continuation of breastfeeding until age 2, improved positioning, concentrating on the child while breastfeeding, frequent and sufficient feeding, and attention to hygiene. For example, some described taking children to the farm to enable frequent breastfeeding, and allowing children

to feed until they stopped by themselves. Several caregivers saw changes to breastfeeding as improving their child's health and growth. Specific changes in breastfeeding varied between households, with some mothers already practising some of the recommended approaches with their previous children.

> 'In the past, I would leave the child at home playing with friends and go to the farm. I would return in the afternoon and that was when the child could be breastfed. But the child needs to breastfeed often. Now, we take the child to the farm until they are 2, so you can breastfeed them at any time. Even when you go to collect firewood, you need to take your child. In the past, it wasn't done this way. The previous children were frail because I was leaving them for a long time. This child is already intelligent.' EL Chemba1a KKM

> 'With the previous child, I started feeding her on tea but for this KK child, I never fed him on anything until he was 6 months. I found there was a difference. He did not disturb us. We used to say that if he cries, he is crying for tea. He did cry, but the moment I breastfed him, he would feed until he'd had enough and then he would sleep. In the past, we believed that if the child cried, they were hungry or maybe the mother's milk was too light for the child to get satisfied. But we were advised not to give the child tea until they are 6 months, and I got to understand that any amount of milk is enough for the child when they are young.' EL Dodoma1a KKM

As well as advice from the KK CHW, knowledge on breastfeeding was supported by advice at the health facility, VHNDs, community meetings, and other projects (e.g. COUNSENUTH – see the discussion of child nutrition below). Widespread advice from the health facility and these other sources meant that in some communities exclusive breastfeeding was common among non-KK mothers, with CHWs and HCWs seeing little difference for KK households.

> 'If there is a mother giving something else to the baby, I think it is maybe one among many. A large percentage of mothers are now aware of the importance of breastfeeding their babies exclusively for 6 months, because of the awareness created by CHWs educating all mothers, even outside the project.' EL Chemba1 HCW

> 'They had that knowledge even before the KK project started, because they were attending clinic and receiving education about breastfeeding. There were also village meetings where maternal and child health was discussed. In general, the difference between KK mothers and others wasn't that big, but it was there.' EL Chemba2a CHW

However, **in most communities, CHWs and HCWs saw some difference in breastfeeding practices between KK parents and other households**: for example, KK mothers were less likely to feed their child other foods before 6 months.

All KK mothers already had some information on breastfeeding prior to KK and through other sources. Some mothers already had most of the information provided by the KK CHW. This depended partly on previous parenting experience and the quality of earlier advice. For example, one mother explained that she received thorough advice from a health facility during her first pregnancy in Dar es Salaam, so she did not gain new information on breastfeeding through KK.

> 'I learnt about breastfeeding from my first child, because I used to attend the clinic. I was living in Dar es Salaam and I got good education and

> understanding from the clinic advice in town. We were taught for more than two hours when pregnant, so we learnt a lot.' EL Chemba2b KKM.

However, almost all KK mothers indicated that they gained some new information or understanding on breastfeeding through the CHW visits. The extent of new information provided through KK, and specific areas of new knowledge, varied between mothers and communities, but included careful positioning, focusing on breastfeeding, frequent feeding and feeding on demand, and feeding until the child had finished. For some caregivers, knowledge on hygiene related to breastfeeding, early initiation, exclusive breastfeeding and continued breastfeeding for 2 years were also new. Some fathers also remembered new learning on breastfeeding from the KK CHW, for example on breastfeeding for long enough.

Additional information received through KK, including on positioning and breastfeeding for long enough, **helped mothers understand how to give their child sufficient breastmilk**, which in turn supported exclusive breastfeeding. Changes in technique meant children received enough milk and so did not cry for more food, reducing the temptation to provide other foods.

> 'From the CHW, I understood how I am supposed to hold my child when breastfeeding – I used to just hold the baby anyhow, not in a proper way. There are things we didn't know, like you need to hold the nipple for him, use your hands to hold the baby while he feeds, make sure the baby gets the foremilk, the middle milk, and the hindmilk until he lets go of the breast on his own. I have seen the benefits – if you hold your baby well and concentrate, look at your baby when they are being fed, ensure all your nipple is in the baby's mouth, then he breastfeeds well and becomes satisfied, different from the way we did it before.' EL Chemba1a KKM

> 'You find mothers saying "my milk is light, just like the water from washing rice". We didn't know that was the water for the child, and you need to breastfeed the child until you satisfy their thirst and then they start on the real food. People didn't understand this and would just breastfeed for a short time. The child would cry and mothers would say the child was difficult and would not get satisfied with milk, so needed to be fed porridge.' EL Dodoma1a KKM

Personal advice and practical support from the CHW also improved mothers' understanding. For example, the CHW watching how the mother held the baby and demonstrating ways to improve positioning helped mothers to understand and remember what was needed. The CHW was also able to identify and help solve problems, such as advising on adequate maternal nutrition if mothers had concerns about insufficient milk.

> 'They also used to educate us at the health facility, but with KK there was more emphasis and the CHW would ask you to hold the child so they could see how you breastfed your child. There is a difference between what someone just tells you to do and what is done practically. For example, the CHW would say "please hold the child, show me how you breastfeed your child", then explain "that is not the right approach. You are supposed to sit straight, hold the child with this hand, place your other hand here", and so on.' EL Dodoma1a KKM

As well as providing new guidance, KK went beyond established sources of breastfeeding advice by providing **more frequent education, additional reminders, follow-up or monitoring, and more explanation of the importance of breastfeeding.** This strengthened mothers' understanding and motivation to apply existing knowledge received through other channels.

> 'Those within KK receive education every month about breastfeeding and how to give supplementary foods to their children. This is different from those who get education only during clinic days, and then only if they get to the clinic early because we offer education before we start other clinic services.' CHW ELChemba1a

> 'With the previous children, I would think "why is the child upset?" and I would give them a little porridge. For these children, we have not fed them porridge. The difference with KK is that the CHW monitors us by visiting us, it is like we were afraid and decided to follow the advice.' EL Chemba3b KKM FGD

> 'Those in KK were better at breastfeeding because the mother knows that any day, at any time, the CHW might visit her home. The CHW might find her feeding the baby before six months, so she becomes cautious.' EL Chemba2b CHW

As for maternal health, **negative past experience** also helped to motivate implementation of breastfeeding advice.

> 'I gave my other children porridge while they were still young and they often got stomach ache or diarrhoea. Now that we only breastfeed, the milk protects the child and she has good health.' PE Chemba1 KKM

Barriers to change

Change was generally reported as widespread among KK mothers, but CHWs and HCWs in some communities indicated that some KK mothers did not practise exclusive breastfeeding. The reported reasons included established habits of returning to farming and leaving infants with other caregivers, or experience of feeding previous children other foods without any problems.

> 'There are some tribes that think giving children other meals is normal. So telling them to stop, it is a new thing and they won't listen to you. When a child is 2 months old, she leaves him and goes to farm. If you tell her, she says, "I am going to earn money farming". Also, when a mother already had a lot of children, she is used to feeding them before 6 months, so telling her that children should only have breastmilk comes as a surprise. She tells you "All my children have grown that way, I did this and they grew up".' EL Chemba3a CHW

Insufficient maternal nutrition and concerns that children were not receiving enough food also hindered breastfeeding for some mothers. As discussed in relation to maternal care, there were improvements in maternal nutrition, but economic constraints limited adequate diet for some households.

> 'They were difficult times. I went through extremely hard periods after the child was born. The food was really inadequate, and there wasn't sufficient milk. If a mother doesn't eat the proper foods to boost milk production, she won't have enough milk. You'd eat leafy vegetables, which lack fat, you can't even have tea!' EL Chemba2a KKM

> ‘Concerning nutrition, sometimes the challenge is lack of ingredients. Sometimes costs are too high. When prices are okay, you can buy them and do things as advised. For example, when my wife was breastfeeding it was a season when we had no food inside the household. I had the responsibility of ensuring we get things to eat. During this period, things that will not lead to death have to be foregone so as to save the family because of the cost.’ EL Kongwa1b father

Child nutrition

The KK guidance included information on complementary feeding, such as different food groups and portion size. CHWs also measured upper arm circumference and checked for anaemia, and they referred malnourished children.

Changes in knowledge and practices

Across communities, **caregivers, CHWs and HCWs reported changes in the food given to young children**, particularly greater dietary diversity and more frequent meals. Many caregivers described adding more ingredients to porridge for children, including a wider variety of grains, proteins and vegetables, and giving children fruit. Some discussed changes to ensure children were fed frequently, such as taking food for the children when they go to the farm. As well as supporting nutrition for the KK child, some **parents also provided more nutritious food for their older children**, often as the same food was prepared for all, or because older children saw the meal prepared for the KK child and wanted to try it.

> ‘We got to understand that it is important for the child to eat five times a day. I’ve done things differently for this KK child, because I prepare porridge for her in the morning, then around 11:00 am she has fruit, or if there is no fruit at least she eats porridge before having lunch. With the previous children, once I prepared porridge, they could wait for lunch, and I never thought they were supposed to take something in between.’ EL Dodoma1a KKM

> ‘For the five older children, I used to prepare porridge from sorghum, finger millet or maize, and just add salt or groundnuts. After attending KK, I discovered that there are six food groups, and each group has its role. That’s when I learnt that if you mix rice with vegetables, milk, groundnuts, it’s better nutrition than what I prepared in the past. Through KK, I have learnt a lot about nutrition. I don’t get the same illnesses I had before, and my child is doing well.’ EL Kongwa2a KKM

Advice on nutrition was provided through multiple channels, including at the health facility, quarterly VHNDs, and through other projects, as well as by the KK CHW. In one community, caregivers also mentioned receiving text messages about nutrition. Some villages had multiple nutrition projects. For example, the gender and nutrition programme implemented by the NGO COUNSENUTH was mentioned in Chemba communities sampled for the process and endline evaluations as contributing to improved nutrition. Projects that began before KK provided a basis for further improvement.

> ‘On the topic of nutrition, KK, along with previous organisations like Lishe

> Endelevu[10], has helped. They came before KK and did a good job. KK picked up from there. So KK didn't start from scratch, it built on what was already there, and now the mothers are more aware. KK has pushed us forward. We've made progress, thanks to these combined efforts.' EL Kongwa1a CHW

Many KK mothers already had some information on nutrition through these channels and from their experience with previous children. **However, most KK mothers described gaining some new information or understanding from the KK CHW**. For example, several mothers had some prior knowledge of the need to mix ingredients, but did not fully understand how to choose ingredients from different food groups (for example, previously mixing different grains without any protein). Some also learnt about additional or alternative ingredients, the frequency and quantity of food needed (including at different ages), or techniques to encourage children to eat, such as using different or attractive utensils.

> 'We got education on nutrition at the dispensary, they also prepare food. The thing the KK CHW taught us that I didn't know was about adding bell pepper, carrots – I learnt that those things can replace green vegetables. At the clinic, they just tell you to prepare a nutritional flour for the child, they just say mix peanuts, rice and beans. We weren't taught things like putting carrots, bell pepper or sardines at the clinic, we learnt that from KK.' EL Chemba2a KKM

> 'We were taught by the CHW to keep changing the utensils or to use shiny or attractive ones, as when the child gets used to the utensils, they start refusing to eat. We were not aware of it before. For me, that was the advice that helped me most, because my children used to refuse to eat. Now, when I put the food on a different plate, he eats the food.' EL Kongwa1b KKM

As for other aspects of parenting, the **extent of new knowledge varied between KK households.** Some had information and **followed good practices before KK**. For example, one mother knew what to feed children, from previous pregnancies and from relatives, and continued with the previous approach.

> 'I learnt about this with my first child. I also learnt from my aunt how she used to take care of her children. I learnt then that you need to mix up the child's food. For me, I continued practising what I did with my first child because, the way I used to feed my first child, he was rarely ill.' EL Chemba2b KKM

KK provided **more new information for caregivers with limited previous exposure to health education.** For example, one mother explained that she rarely attended the clinic due to herding responsibilities and distance, so nutrition information was new for her and led to some changes in child feeding (although, from the description, this did not extend to ensuring adequate dietary diversity).

> 'For the previous children, I used to feed them on milk but for this child, I mix the food so that sometimes I give the child porridge, soft ugali. This was because of the advice from the CHW. I didn't know about this before. In the

[10] Lishe Endelevu ('Sustainable nutrition') was a five-year project (2018–23) funded by the United States Agency for International Development to improve nutrition for women of reproductive age, children under five, and adolescents across 23 councils in Dodoma, Morogoro, Iringa, and Rukwa regions. The project was implemented through a consortium led by Save the Children. https://resourcecentre.savethechildren.net/pdf/Lishe-Endelevu_FS_4th_August-2022.pdf

> past we would be grazing livestock, and we largely depended on milk. We rarely attended clinic, because we stay right in the interior, in the bush.' EL Chemba2b KKM

As well as providing new information about nutritional needs, **KK supported changes in nutrition by encouraging implementation of advice already given through other channels**. KK was generally seen as having additional impact over other sources of advice because KK education was more frequent, with monthly home visits and group sessions compared to quarterly VHNDs, and the education was more personal, either one-to-one or in smaller groups. As for maternal care and breastfeeding, KK visits provided additional emphasis, more explanation of the importance of dietary diversity and the different food groups, and regular CHW follow-up and monitoring of the child, which reinforced understanding and motivation. Sharing information on nutrition and motivating each other in the KK groups also supported implementation.

> 'The changes in nutrition are mostly due to KK because there is close supervision, household visits, assessing the child's condition, and speaking to parents one-on-one. The KK mothers receive education and follow-up regularly, unlike COUNSENUTH, who follow up after several months.' EL Chemba2a CHW

> 'We were aware of mixing food, but we just took it for granted. We used to think it was not that important and ignore it. However, the education had more emphasis. That is why we realised we were ignoring important things. Moreover, we are the people growing these ingredients, yet we were not utilising them. Therefore, KK education had an impact.' EL Chemba1b KKM

Once CHW advice encouraged initial implementation, motivation to implement nutrition guidance was reinforced as **mothers saw benefits for their child's development**, and experienced **easier parenting because the child cried less**.

> 'I learnt that I need to feed the child with nutritious porridge. I had heard about it but I never put it into practice. I would just prepare normal porridge, as the child's growth was okay. With this KK child, I understood that if you feed the child nutritious porridge, the child's intellect keeps growing. I changed because he seemed to be more active than the previous children. When you are taught frequently, you have to follow the advice or the CHW will be like "how come I am teaching this person every day but she does not practise what I am teaching her?". Through following what you are taught, you see the results when the child becomes active. Through practising, you realise this advice is helpful.' EL Chemba3a KKM

> 'The CHW's advice has given me motivation to focus on my child's nutrition. As soon as you feed the child well, when the child is satisfied, she doesn't cry. It's the same for any human body – if you are often crying and not getting satisfied, the body will not be strong. After eating something with all six food groups, something nutritious, it strengthens her body, makes her grow well and she doesn't cry. Once the child gets satisfied, she cannot disturb you.' EL Chemba2b KKM

> 'The advice I liked most was about preparing food for children, I really liked that, because once my child eats that way, I see he is satisfied and become healthier. We were taught that if you prepare porridge for your child, you can add fat like sesame, groundnuts and other things. I've seen that after starting

> to cook nutritious porridge for my children, it has increased their weight.' EL Chemba1a KKM

KK also helped to enable improved nutrition by addressing barriers related to gender relations or economic constraints. For some households, **more support from husbands** (as described in Section 4.1.2) helped to provide more diverse food. Some fathers gained new information about child nutrition through KK.

> 'Concerning the foods which the child needs to feed on and the like, personally I had never heard about them.' EL Dodoma1a father

> 'We were taught how to prepare food in ways that are more nutritious. For me personally, with those older children, honestly, we didn't have that knowledge. For instance, you take carrots, bell pepper or something else and make something like porridge. All these things help the child's brain and development. I wasn't aware you could mix things like that.' EL Chemba3b father

The **UCT and the CHWs' advice also helped to address economic or access barriers** to nutrition. As described in Section 4.3.1, the UCT helped households to purchase additional food, and CHWs provided guidance on local foods that were more easily available or more affordable**.**

> 'We thought that these nutrients were only found in meat, but even if you eat sardines, you can still get the same nutrients. So if you don't have meat, you can use sardines, if you don't have sardine you can mix in termites. The same nutrients are found in all these foods. So you shouldn't say you don't have money for meat.' EL Dodoma1a KKM

> 'The nutrition education is good, I enjoyed it a lot because it showed that many types of food are available in our environment. So instead of a mother wondering where she could find mangoes, she can pick other fruits such as baobabs, pumpkins, peanuts, sunflower, millet and other kinds of foods. A mother who gets the nutrition education can provide the child with nutrition at low cost, so that's one of the things I like about KK.' PE Dodoma1 HCW

Barriers to change

While many caregivers and CHWs reported improved growth and health for KK children due to changes in nutrition, the **KK midline survey indicated high malnutrition rates among KK children in some communities.** Community-specific midline findings were incorporated in interviews with CHWs and HCWs to support discussion of changes in child growth. Several CHWs and HCWs disagreed with this data, reporting that their regular growth monitoring showed no malnutrition among KK children, or rates lower than those indicated in the KK data. For example, one HCW explained that they had not seen any stunting among KK children, and that the villages around their health facility were recognised for low malnutrition.

> 'Maybe the people who were filling the information didn't know how to do it. I don't know how that data was reported. I don't think it's correct. I have been there for seven years. I haven't had stunted children, or it's possible they were there, but not many. I don't think any of the KK children were stunted. These two villages are reference centres – they are doing well on nutrition, and other health facilities come here to learn. We were even given a

> certificate of recognition on nutrition. If you say there is stunting, I'm shocked.' EL Kongwa2 HCW

Surprise and disagreement regarding the quantitative data may reflect several issues: for example, details of sampling in the specific qualitative sample communities, or differences in anthropometric measurement capacities or approaches between the survey and routine growth monitoring teams.

However, while the extent of malnutrition indicated in the quantitative data was higher than seen by CHWs and HCWs, **some HCWs and CHWs did report continued malnutrition among KK households**, and some thought there was little difference in child growth and malnutrition between KK and non-KK households. Improvements to child nutrition were limited by a range of factors. The most frequently mentioned barrier was **difficulty purchasing food**, primarily due to insufficient income but in some communities due to limited availability of different foods and distance to locations where food was sold. As described above, advice on more affordable or available food substitutes helped, but this did not fully address the barriers.

> 'KK has helped, only the challenge is the livelihood situation. Some mothers lack food, they have no resources, no money. There are even mothers with malnutrition. There is hunger in some households. They have no income. Some households have no land. So you find them just struggling.' EL Chemba3b CHW

> 'Foods like meat need money. At least these small foods like bananas don't cost much but meat is expensive. Millet is also not readily available in our community, so you need to order it. You need to have money.' EL Kongwa1a KKM

Several CHWs and HCWs also pointed to **ingrained norms and insufficient understanding** of the implications of the importance of dietary diversity. Some caregivers saw no need for change because they thought previous children or the current child were healthy and developed well. **Lack of support from husbands** also constrained change for some households. Although some husbands started providing different ingredients, as mentioned earlier, the extent of change in husbands' behaviour varied. Different barriers interacted: for example, where women did not have their own income, they relied on support from husbands, and husbands' support was affected by household and community norms, and by their own economic situation.

> 'I think people are not yet used to planning a balanced diet. We advise a lot but very little changes. It's because of tradition, they eat the food they are used to.' EL Chemba3b CHW

> 'We teach them about good nutrition, and some will cook a balanced meal during training. But when you follow up at home, you find that the child is still eating the same old unbalanced food as before. Often, the father would not be around during education sessions, so the mother might try to explain to the father, but he might dismiss it. Also, some didn't fully understand the importance – they'd compare their child to others and say "my child seems fine". So some of them just ignored it.' EL Kongwa1a CHW

> 'Our husbands, if you tell them we should prepare nutritious porridge, they

> tell you “where do you think that money will come from? Do you think we’ve got money to waste?” This brings us challenges. We want to prepare that porridge, but these ingredients need money, and we don’t have income. In our community, husbands generally think that if there is ugali or you have flour, there is no way you are changing to other food. They only look at whether you are full, there is no such thing as mixing food types – this is never done. Most people prepare ugali and beans, with few variations. So concerning food, there are no changes.’ EL Kongwa1b KKM

> ‘I was told that mixing foods can help your child grow well and develop intellectually, but due to my economic situation, there are times I fail to implement that advice. Because we are just hustling, I have small businesses, but some days business can go badly and you don’t even make a hundred shillings.’ EL Chemba3b father

Female-headed households sometimes faced particular economic difficulties, and for one mother, a more difficult economic situation since her husband died meant a deterioration in nutrition for the KK child compared to her earlier children.

> ‘For the previous children, I used to treat them well. For example, I used to give them banana and meat stew, sometimes I would boil milk, sometimes I would prepare nutritious porridge, I would give them fruit. For the KK child, because of the economic situation, he lacks most foods. When he wakes up, he can just get tea with one chapati then wait until lunch.’ EL Dodoma1b KKM

Low-quality health services added to risks of malnutrition and interacted with poverty, with children sometimes not taken to the health facility when they were ill or malnourished because the parents thought they would not receive adequate care.

> ‘Malnutrition is still there in KK families. If you send the child, when they get there, the services are not all that good and sometimes she is just given advice and told to go back home, so the mother is not satisfied with the service. When you advise her to take the child to the health facility, she just tells you “what service will I get there? It’s better not to go”. It’s also due to mother’s diet – there are times when there is no food, and some households have no food at all. So you find the mother is having difficulty eating, the child does not get enough milk, and when the child gets sick, the services are not that good. For sure, I have seen malnutrition. Non-KK and KK children are the same when it comes to malnutrition.’ EL Chemba3b CHW

Child health

KK CHWs checked the child’s clinic card and vaccination record, conducted screening for danger signs, and provided advice on topics such as malaria prevention and regular clinic attendance.

Advice on child health was also provided at the health facility, and in some cases through other projects, community meetings, or other CHW visits to households. Community leaders and some non-KK mothers pointed to improvements in child health seeking across the community due to education through these sources, improvements in health service access and quality, and interventions such as penalties if clinic sessions were missed. Similarly, several HCWs and CHWs thought there were no or only minor differences in practices such as child

vaccination and health seeking between KK households and others because advice on these issues was well-established and provided for all households.

> 'Taking children to the facility when they need health services, using mosquito nets, making sure children are vaccinated – that is no different since KK. Even before KK, they used to go to the clinics and get vaccinations. We had distributed mosquito nets before KK. Almost every household has mosquito nets.' EL Chemba3b CHW

> 'Things like clinic attendance and vaccination are talked about in many places. The parent hears about these issues during outreach and during home visits, the same thing is also said at the health facility. Education has spread through being provided on different occasions.' EL Chemba3a CHW

While changes due to KK were often seen as minor, some HCWs and CHWs pointed to **earlier health seeking when the child was ill, more consistent clinic attendance or more timely vaccination for KK children**, due to CHWs providing additional education and reminders, and checking the child's clinic card.

> 'In my KK group, there is no one who hasn't been vaccinated, and they bring them to the clinic every month without fail. Even the ones that are harder to visit and live further away in the hills, they take the clinic seriously. For non-KK households, there are some where the child doesn't go to the clinic unless you follow up.' EL Chemba2b CHW

> 'Parents used to come for vaccines, but sometimes a mother would bring a child of 10 or 11 months to get a nine-month vaccination. With KK, the CHW visits them and reminds the mother that this child is supposed to get vaccinated this month, so she comes in time.' EL Dodoma1 HCW

Many KK mothers already had information on issues such as taking children to the health facility when they were sick, only using prescribed medicines, and regular clinic attendance, from the health facility or other sources. Some were already following this advice and saw no changes since before KK.

> 'It was just normal advice that we were used to being taught during clinics.' EL Chemba3b KKM

However, **some KK mothers did report changes in their understanding due to the KK CHW's advice**. Specific areas of new information varied, but included, for example, learning more about the importance of vaccines and that a fever after vaccination was normal; only using medicines prescribed by the doctor; monitoring their child to identify danger signs, including potential disabilities, and seeking urgent intervention; or having previously thought attending the clinic was not important once the child had received basic vaccines but learning from the CHW about the benefits of regular clinic attendance until the child was 5.

> 'I tell you this education has given me a lot of knowledge. Even knowing about problems this child might have immediately after birth. Sometimes, after giving birth a child can be affected by something. If you identify this early enough, you can call our CHW for advice. In the past, you used to look at the child and think that is just how they were born. You would just keep silent as days passed. If you had gone to the hospital, you could have been helped, and this child could at least be hearing. So this knowledge has given me good guidance. I know that if the child is in this condition, I need to rush

> to the health facility so that they can help me. Therefore, KK education has helped me a lot.' EL Chemba1b KKM

Several KK mothers also described **improved implementation of advice that was previously known**, due to more emphasis, regular reminders, or monitoring by the CHW. For example, this was mentioned in relation to getting a diagnosis when the child was ill rather than purchasing medications, and more consistent clinic attendance, particularly beyond vaccine appointments.

> 'The advice on taking the child to the clinic on time, I had already heard about it but the problem was implementation. After being visited by the CHW, that's when I started implementing it. This was due to the regular emphasis: he was visiting us and motivating us repeatedly. That consistent motivation led me to be more diligent.' EL Chemba2a KKM

> 'We were taught about taking the child to the clinic with our previous children, but we just went for vaccination and we rarely cared about monitoring the child's weight. With these KK children, we are being closely monitored, sometimes there are even follow-ups via phone and we are asked questions. So, you think "it won't be good if I don't take the child to the clinic", because we are being monitored more closely.' EL Chemba3b KKM

> 'Concerning vaccinations, all the KK mothers completed them because they were being monitored by KK, so they were a bit afraid.' EL Chemba3b KKM

The **extent of change may have been greater for communities with less access to other regular child health services**. For example, one HCW described more significant changes in vaccine uptake for a remote community that relied on outreach clinics, whereas other catchment communities received advice through routine facility clinics.

> 'In that village, they were not even aware of vaccinations. They didn't know they were supposed to take their children for vaccination. You could find a child is 2 years old and they have never had any vaccination. For children who are in KK, the CHW inspects the clinic cards and educates them on how many times a child should be vaccinated and when.' EL Chemba2 HCW

KK also **supported child health through referral**, with CHWs identifying danger signs during household visits and liaising with the health facility. Some HCWs saw improved identification of children needing attention and support for referrals as a benefit of KK, and some CHWs mentioned that this was part of their role.

> 'There was close follow-up from CHWs, especially when there was a problem. The CHW was strict at following up until the beneficiary came to the facility for treatment. We now receive information from the CHWs on children who are sick, unlike in the past. This was never done before.' PE Dodoma3 HCW

> 'Sometimes they would call to tell us that they had found a child who was sick. If a sick child was found, then the CHW would refer them to the dispensary for treatment. In the past this was not the case, children were brought to the dispensary when they were severely sick, which made prognosis poor.' SS Dodoma1 HCW

> ‘We examine children, look at their palms, weight, general appearance, and can often tell if something is wrong. If we suspect an issue, we report it. I’ve personally reported about two of the 10 children because I saw the signs myself during assessment. We have tools to measure and monitor these things as CHW, we’re trained to look at things like blood levels or observe unusual weight loss. If something seems off, we report it.’ EL Kongwa1a CHW

There was limited information on referrals from the qualitative studies, so further evidence would be needed to understand enabling factors or barriers for effective identification and referral.

Hygiene and safety

The KK curriculum included advice on basic hygiene, such as handwashing and cleaning utensils, and prevention of accidents, for example care around sharp objects and fire.

Changes in knowledge and practices

Advice on hygiene and safety was provided routinely through other channels outside of KK, including health facility clinics, VHNDs, community meetings and other projects. Messaging during the COVID pandemic also contributed to earlier hygiene improvements.

> ‘Many people in KK use toilets and wash their hands with water and soap because they have received education. People did this before KK, especially in 2019 during the COVID-19 outbreak when the government announced that everyone should wash their hands frequently. So, when KK came, it was like a continuation of these efforts, and people continued the practice even after COVID-19.’ EL Chemba1a CHW

Perhaps reflecting standard provision of advice, **a few CHWs and HCWs said that advice on hygiene was part of their routine work and not an explicit or major component of KK**. For example, one CHW mentioned providing advice on hygiene and checking toilets as an additional activity during KK visits, rather than as part of her KK responsibilities.

> ‘In KK, all have toilets. Because when I go to a KK household, I don’t go for just one thing, I also check on toilets. You’ll find mothers have built their drying rack. All her milk containers are washed and drying there. These topics weren’t directly in the KK lessons, but you have to think outside the box and do extra.’ EL Chemba2b CHW

Some CHWs and HCWs described **community-wide improvements in safety and hygiene** due to health facility education and other health promotion campaigns, with **little difference between KK households and non-KK households**.

> ‘It is one of the CHWs’ responsibilities to ask mothers about whether they have a toilet and to advise them to have a water point for hand washing. These are not just KK CHWs but CHWs for the community. So I think this has touched everyone in the community because the CHWs were not only dealing with KK households alone, they still dealt with other households in the community as part of their daily responsibilities.’ EL Chemba2 HCW

However, some CHWs and HCWs thought hygiene and safety were better in KK

households due to the additional, more frequent education under KK. They described improvements such as parents being more careful about dangerous objects, more handwashing, and watching children more closely to protect them.

> 'Before KK, getting mothers to practise hygiene when feeding the child was a big challenge. They were careless, whatever way the child ate, that was it. But after KK, you'll find someone has prepared clean utensils, serves her child properly, and they stay in a clean place.' EL Chemba2b CHW

Mothers often already knew most or all of the information on hygiene and safety before KK, due to advice from the health facility, relatives, community members or other sources. Several caregivers had learnt safety or hygiene practices through watching their parents or other relatives care for children, and some saw these practices as common sense, reflecting household norms. **Many caregivers reported implementing recommended practices before KK.**

> 'I was aware of keeping dangerous objects away from the child before – I used to see my mother when she was taking care of my young sibling. For hygiene, it's not like I was taught by the CHW, I know that unclean things can be harmful to one's health, they can give the child diseases. As a parent some things come automatically, you just know this is a good thing for my child and this is not.' EL Dodoma1b KKM

> 'Making sure the child is clean, having clean utensils, you need to be careful with the child and stop him if he is heading to the road – it was just normal advice that we usually receive, and that was already there before KK. What I used to do with the previous child is the same as what I did with this KK child.' EL Chemba3b KKM

> 'Environmental cleanness or hygiene was not all that new. It has always been there. I have heard about this since when I was born and as I grew up, and we have practised this. We used to be taught at the health facility or public meetings. Local leaders would visit households to monitor hygiene. We were doing this in the past. The KK CHW was just reminding us.' EL Kongwa2a KKM

However, **a few KK mothers learnt some new information** from the KK CHW, for example how to distract children from dangerous objects.

> 'We learnt that as the child grows to the stage of crawling, you need to protect him from dangerous objects such as fire and water. All dangerous objects should be kept away from the child. You need to protect him – if you see him holding a knife, you can take it away from him by distracting him with something else attractive. I did not have this knowledge before and I just got it from KK.' EL Chemba2a KKM

Some **fathers also gained new information and a greater understanding of hygiene and safety** through KK.

> 'We were advised that in the morning before the sun is out, the child should not walk around without wearing warm clothes. Before, we used to leave the child without clothes. Now, we understand that it is not good for a young child to be exposed to cold. That is what we changed.' EL Chemba1b father

> 'You need to ensure the child is playing in a safe environment. In the past, I

> didn't have this knowledge. When I left home in the morning, I had no time for issues to do with the child's safety or hygiene. I didn't really care whether the child was dirty or not, I was busy doing other things. After getting this education, we realised that we need to be more careful and to check whether our house is a safe environment.' EL Kongwa1b father

Beyond new knowledge, several mothers also said that the **CHW's reminders, emphasis and monitoring encouraged more consistent implementation of hygiene and safety practices that were already known.** They gained more understanding of or belief in the importance of the advice, and did not want to be embarrassed by the CHW seeing their house unclean. They described changes such as paying more attention to washing the child's hands and to food hygiene, watching children more closely to check they were safe, taking children with them rather than leaving them with others, or being more careful when children were left with siblings or other people, and dressing children in warm clothes.

> 'We were aware that you need to prepare food in a clean environment, only that we were not taking it all that seriously. When the CHW started visiting us, that's when they started emphasising that "you are in this situation [pregnant], so you shouldn't be eating anyhow. If you prepare food in an unclean environment, you can cause health problems". It is good advice, and it brings good results. This becomes a habit – once you are used to it, you cannot change.' EL Dodoma1a KKM

> 'The CHW emphasises this information, and she visits us often. We are ashamed if the CHW visits us and finds the environment is unclean. So we try hard to practise this knowledge.' EL Chemba1b KKM

> 'I have always protected the child because as a parent you have to take care of them. However, after the CHW educated us, we had to become more serious. In the past, you could just trust anyone and leave the child with them, but now, if you want to leave your child with someone, you need to emphasise to them that they should be careful with the child in the kitchen and the child should not play with dangerous objects.' EL Dodoma1a KKM

Personal experience of children being injured also motivated action and added to the effects of repeated CHW advice. For example, one mother mentioned seeing other children being hit by cars, and others took more care about safety after accidents involving the KK child or their older children.

> 'We were told you need to be very careful, don't leave buckets without covering them, or don't leave the child alone when you have a fire for cooking. We already knew these things, but we neglected them. After the CHW emphasised the risks, we started following this advice. One thing that made me implement the advice is that my children used to get burnt, one on porridge, another on the fire, another with boiled tea on the stove. So I decided to follow the instructions, and this child has never been burnt. We were given that education frequently and reminded all the time.' EL Chemba2a KKM

Local examples that demonstrated the importance of safety were sometimes used by CHWs to reinforce the importance of their advice:

> 'There were examples in the community where something bad had happened to a child. When we gave education, we'd remind people of a real-life

> incident, like a child who was seriously injured or even died because of neglect. That reality made the mothers pay more attention and take the safety lessons seriously.' EL Dodoma1b CHW

Barriers to change

Reports of the extent of change varied: some CHWs thought hygiene or safety were among the areas with most improvement, but others described **only minor changes and continued gaps in hygiene and safety in some KK households**. Various barriers to change were indicated, including limited motivation due to not encountering problems in the past, poor household sanitation infrastructure, migratory lifestyles that discouraged improvements, household norms, and people's individual characters.

> 'There are very few who have toilets. People migrate, so if you try to advise them about building a toilet, they say "even if I build a toilet now, what happens when we move?". People are also used to bad practices, so you educate, but they won't change. I am getting old now but all along I have been inspecting toilet ownership and utensil drying racks, and still people are not changing. What can you do?' ELChemba3b CHW

> 'For household hygiene, there were changes, but very minimal. Sometimes this issue depends on the individual. There are people who, by nature, are not very clean even if they are given education. There are households that are not part of KK but maintain cleanliness better than some KK households. When it comes to hygiene, the difference is about personal nature.' ELChemba2a CHW.

> 'Hygiene was difficult to change for most households because of cultural beliefs, as some believe that the livestock or child faeces are not harmful, so when you educate them, they don't fully accept it. They are used to living with these faeces, especially in livestock-keeping communities. So, they think they have been living like that without any harm.' EL Kongwa2a CHW

> 'The education was delivered, but behaviour only changes in some households. In others, you'd still find the child left near something dangerous. Maybe it was just habit, maybe forgetfulness. She had the knowledge, she knew the situation was risky for her child, but she would tell herself, "I'm just here, nearby".' EL Dodoma1b CHW

Some comments by KK caregivers also **indicated parenting practices that could expose children to risks**: for example, leaving their own children with others who did not always care for them properly, or seeing other KK parents leave their children with busy neighbours who did not watch the child consistently. This may have resulted from limited choices, with mothers needing to leave the house for work and few childcare options, but further data would be needed to clarify the constraints.

> 'For my child, when I go to the farm, I leave him with his brothers and sisters, and sometimes they leave him, and you find him in a bad situation.' EL Chemba3b KKM

Stimulation, early learning and responsive caregiving

CHWs provided guidance on child stimulation, including play, communication, responsiveness to child behaviour, and making toys from local materials or using household objects as toys.

Changes in knowledge and practices

Increased interaction with children, including talking and play, was the area of clearest change due to KK. Advice about the importance of stimulation was seldom provided through other sources, and most caregivers, HCWs and CHWs said these topics were only taught through KK.

> 'It was only KK that taught about play activities. The clinic focused on nutrition and hygiene only.' EL Kongwa1b CHW

Across communities, CHWs and HCWs described increased interaction and play in KK households, with a difference between KK and non-KK households.

> 'Last month, I dropped in to greet the household. I found the mother playing with the child. Through the KK work, even if you don't conduct a formal visit, the knowledge stays with them. It's become part of them now. I saw for myself, "Wow, these things are working, they are continuing".' ELDodoma1 CHW

> 'The thing that has changed most is playing with children. KK households are really different to non-KK households. KK households started talking to children when they were still young. KK children are so inquisitive – if they find a book, they open it, whereas a non-KK child would just kick it. I told them that as soon as the child is born, you can speak to them. Parents used to laugh at me, but they still did it and that is why these children have become more active than non-KK children.' ELKongwa2a CHW

> 'There's a big difference between KK parents and others in how they interact with children. In non-KK households, you find that parents only communicate with their children when they need them or are ordering them to do something. But KK parents talk to their children, guide them, teach them new words. They saw the importance of talking to children regularly for the child's development. Play was also an area that changed significantly, and where I hadn't expected much. Parents came to understand that play is important for a child's development, to keep them busy and to help them learn. After parents created toys for their children, it brought significant change.' EL Chemba2a CHW

Many mothers and fathers described the CHW's advice on interaction and the importance of stimulation as new learning, which they had not heard before with previous children or from other sources.

> 'It's good because when I had my first and second child, I never had that teaching, like you have to talk to the child, play with the child. I didn't know about that. We were just giving birth, but it turns out you have to communicate with the child even while they're still in the womb. That's why we say the visits are good because what we've learned, we've never heard it anywhere else.' PE Dodoma1 KKM

As with talking to an unborn child, several parents initially found the advice surprising and hard to believe, but, through trying the practices advised by the

CHW, they discovered that children were able to respond and enjoyed the activities. **Many caregivers reported changes in their interactions with children**, including spending more time with their children, showing them different objects, talking more and playing with them, congratulating children, and engaging in responsive caregiving, such as eye contact, demonstrating affection and listening to their child. As described in Section 4.1.2, fathers also started spending more time with their children and playing with them.

> 'We traditionally think the child starts seeing after 40 days, but we were advised that the child starts seeing from day one, so you have to talk to him, sing to him, play with him using different toys. We thought this advice was foolish, but we thought 'let me try, is it true?' So we started doing that – getting that cloth with different colours and waving it across the child's eyes. And the child followed the cloth. That's when we started to believe it. Later, when the child was around 6 months, we were told to make books and draw things, show the child and ask him to repeat the words after you. I doubted this would work, but we made the books as advised and it worked out – the child was able to look at the pictures and try repeating the words. Sometimes when we were told to prepare a new toy, I hesitated – I thought I would be just giving myself a lot of work for no benefit. But I remembered how the child managed with the first game, and that encouraged me to continue making other toys.' EL Kongwa2a KKM

> 'We were taught to talk with the child when they are still very young. Before, we didn't know that you can talk to the child, we thought they couldn't understand. When the child was crying, you tried to calm him silently rather than talking to him. But the child needs to hear the mother's voice. We also learnt that a child starts to recognise things when they're young. When the child is breastfeeding, you see that indeed, the child looks at my face as they want to know me. When the child looks into your eyes, you need to look back at him and talk to him, don't look aside.' EL Dodoma1a KKM

> 'The things I initially thought were not essential turned out to be vital. When she asked us to draw pictures, at first I thought it was silly, but later, when she explained further, I understood and realised it was beneficial.' PE Dodoma3 father

> 'I came to understand that when you send a child to do something, it helps develop their brain and awareness. Every time you say "do this" or "bring that", they learn and begin to remember. It's different from how we used to do things before, when we just relied on routine, thinking the child will somehow figure it out with time, maybe if God allows. Now we realise that playing with the child every day actually helps build them.' EL Chemba2a father

A **few parents had heard about play or talking with children through other channels**: for example, some received brief information at health facility clinics, or heard similar advice through TV programmes or the church. Information at the clinic may have been linked to some KK CHWs introducing play as a topic in clinic sessions in order to spread the education to non-KK parents (see Section 3.5.3).

> 'I was already aware of some of these things because at church, we are taught about the same things. So I was aware of good parenting or that living well with the family is achieved through talking properly with each other,

> calling the child and talking to him gently, you can sit and talk, share stories, and through that the child builds understanding and they can also tell you things.' EL Kongwa1b non-KKM

Some caregivers also said they talked and played with their children before KK, seeing this as a natural part of parenting. A few saw little change in their interaction with children, but for some of these parents, KK gave them more understanding of the importance of play and talking with children, or they learnt new approaches such as a more structured approach to play or starting from an earlier age.

> 'It's normal to start talking to the child straight from birth, we've always done that. It's just that I didn't know that what I was doing was in line with the CHW's advice – you need to talk to the child politely, play with him well. What the CHW advised is what I was also thinking.' ELChemba3a KKM

> 'With previous children, we used to provide toys and play – even us, we played games when we were children. But there was a difference – there are more toys with KK and they have a lot of explanations. Also, we used to only give children toys when they were older – maybe 2 years or 6 months. We never gave toys to children of this age. When KK started, we introduced games and toys when children were one week old.' EL Kongwa2a KKM

> 'I used to play with the child even before I was taught. I already knew about this, although not in as much detail. Now, I play with him all the time, I talk to the child often, congratulating him if he does something correctly.' EL Kongwa1a KKM

The **guidance on making toys** was appreciated by caregivers, and CHWs, HCWs and local government officials thought that teaching parents to make low-cost toys was an important KK contribution.

> 'In the past we thought toys had to be bought in shops – we thought that we had to find money and buy them. However, they advised us that we can make them on our own. That was good.' EL Dodoma1b KKM

> 'Something which worked well in KK was the reduced cost of toys for community members. Instead of buying toys for the children, we were able to teach KK mothers, and they were able to make them with local materials. This was a good approach that helped parents.' EL Kongwa2 HCW

Caregivers described several benefits of closer interaction, play, and the toys. Many parents pointed to improvements in their child's development (a view also indicated in earlier quotes).

> 'What helped me was the advice about how to respond to the child and show you love him and care about him. I found this helpful because I can see that the child's intellect is growing fast, not like the first child.' EL Kongwa1b KKM

> 'The most helpful advice from the CHW was about playing with children. The KK child's development is different to my first child. My child now has more understanding. He can count numbers, when we teach them songs, he is able to sing. Sometimes he can get a book and start drawing. That wasn't the case with the first child. Imagine, the first is already in school but he doesn't know how to read. This KK child has got much better understanding.' EL Chemba3b KKM

Caregivers also reported a **closer relationship** with their child because of spending more time with them and the interaction. Play, toys and interaction also made **children and parents happy.**

> 'If you play the games he likes, he becomes happy. Sometimes he calls "mum, come and make a car for me, come and play". So I realised that through these games, he comes to understand that mum cares about me and she loves me.' EL Kongwa2b KKM

> 'We make toys that the child likes, and we also like them, and when you show the child, the child is happy and I get happy too.' PE Chemba2 KKM

> 'I like playing with the child. When I am resting, I play with my child, I laugh with my child, I ask the child "look at this", the child becomes happy, he laughs and I laugh as well.' EL Chemba1b KKM

A further benefit was that the toys **made parenting easier** by **distracting the child if they were crying**, and helping **the mother balance childcare and other tasks**. Children could play with the toys on their own or with siblings and friends while mothers undertook other tasks.

> 'When his friends are around, you can give them these toys and if I need to do some tasks nearby in the home, I can leave the child to play with his friends and go to cook.' EL Chemba1b KKM

> 'We were taught by the CHW about making toys. If the kid is moving towards the fire, you can give them toys to distract them and they play instead. If we are washing clothes, sometimes the previous children would disturb us, but with the KK child you can give her toys, tell her to sit, and proceed with doing your chores, and she won't disturb you. Before, you would be disturbed by the child and had to stop your work.' EL Chemba1a KKM

Barriers to change

While increased interaction was widely reported, there were also **barriers to spending more time with children**. In particular, livelihood activities such as farming and pressure to secure income reduced time for play, particularly during busy farming seasons (such as March, when the midline survey was conducted in some communities). Making time to play with children was easier for parents who spent more time at home. Short child spacing was also mentioned as reducing the time parents had to play with each child.

> 'I am usually with my child because I am not employed. Usually, we sit, talk, play, so I am with my child in most of the time. I don't know how it is for others. If someone has a job, they might have little time to be with the child.' EL Dodoma1b KKM

> 'The biggest challenge is probably time: they don't have enough time. Because here, it's a rural area, life is all about survival. One may go herding, another fetching water, people are busy, busy. Another challenge is that the children are not well spaced, there's no family planning. So the mother just dumps the small child with the older siblings, telling them – "Stay with the baby, I'll be back". Then she delays coming back. The next day she's off to collect firewood, or to herd, or fetch water. Time becomes even more limited.' EL Kongwa1b CHW

> ‘March is the farming season, and farming is our main occupation here. Fathers, mothers, and families in general are very busy with farming. Many mothers wake up very early to go to the farm and return home exhausted. So time to interact with children decreases because of farming activities. If a parent does not put in enough effort in farming, they may not get a good harvest later, which would have a greater impact on the household.’ EL Chemba1a CHW

In a few communities, CHWs also mentioned issues specific to certain households, including a mother who struggled to buy food and so had little cognitive bandwidth to think about play, or parents who spent less time with children because they regularly consumed alcohol. Some parents and CHWs also saw individual character, long-standing habits and norms, or a belief that previous children developed well without the additional stimulation as affecting parents’ motivation and implementation of the advice on play.

> ‘We have struggled a lot to make them play with their children. Changing an adult is a challenge. I think since I stopped visiting them two months ago, they have already started forgetting. They are not used to it. People get busy.’ EL Chemba3b CHW

> ‘A few households are still lagging; there are differences in understanding and application. For example, we introduced age-appropriate toys and games for children. In some households, you can see parents have grasped that well, they’ve created activities suited to their child’s age, and they play together, even if the parent is busy. They take it very seriously. But in other homes, you find only a few random games. It’s obvious they’re just trying to force it when you’re there. It depends on the individual parent’s mindset. Some still believe their child can grow and play without any organisation’s help, as many children were raised that way.’ EL Kongwa1a CHW

> ‘Sometimes you think, “how come these other children grew up OK? This is becoming a nuisance”. Making time to spend with children was challenging when you have other duties to do.’ EL Chemba3a KKM

Another challenge was **making toys**. Although caregivers described the toys as beneficial, many caregivers and CHWs said that making some toys was difficult for parents due to insufficient understanding or skills, difficulty in affording or obtaining the materials, or lack of time. Some CHWs also found it hard to make some of the learning materials, particularly drawings. A few parents relied on others to make some of the toys for them (again, particularly the drawings).

> ‘Some of the toys and learning material, I would find I couldn’t prepare them because of being busy. I would have liked to make them, but time was a challenge.’ EL Dodoma1a KKM

> ‘Creating toys for the children was a bit difficult. KK supported us, providing some items like boards. But some mothers tried to make toys and failed, so they would bring it to me and I would make it for them.’ EL Kongwa1b CHW

Several caregivers found the initial teaching about toys during household visits insufficient because they were shown completed toys or pictures rather than step by step construction. Making toys together in the group session, where the CHW and mothers could help each other, made it easier and supported motivation.

> ‘We are not taught practically. The CHW comes with something he has made at home and shows you. How he has made it we don’t know. Or he shows us in the flipbook, then tells us to go and make it. How will we make it when we have only seen it once in the picture?’ PE Dodoma2 KKM

> ‘I had difficulty making the book, I couldn’t manage the drawing. Then the KK CHW would organise for us to meet together. Those mothers who had already made the book would teach me and we did the drawing together. That made it easy for me – you can work it out when you watch how others make these books.’ EL Kongwa2a KKM

While groups helped, some caregivers still reported difficulties. **Some CHWs developed additional strategies to help with making toys**. For example, one CHW worked with students at an Islamic school to produce the drawings, and another split KK mothers into two sub-groups to make toys together before the main group session, although this was only partially effective.

Beyond skills and time, parents’ **motivation also affected the construction of toys**. For some parents, any benefits of the toys did not outweigh the effort required. Some CHWs thought parents gave unjustified excuses: for example, blaming a lack of materials when the CHW knew materials were freely and easily available locally. Some caregivers also acknowledged a lack of effort to make toys when they had the materials. Conversely, several caregivers reported persisting despite difficulty obtaining materials because they thought the toys were important.

> ‘We are asked to make these toys, but sometimes you find only one person has made them. Sometimes because of laziness, you have boxes but don’t make the toys. The KK CHW emphasises that “you can always call me so that I can meet with you and guide you”, but you find we stay silent and ignore making these toys.’ EL Kongwa2a KKM

> ‘You have to go around the community and pick up bottle tops, find different colours of cloth. It was a challenge. However, we understood the benefits.’ EL Kongwa2a father

There were also a few reports of **some KK mothers seeing the toys as unnecessary or seeing playing with children as an unsuitable activity for adults**, similar to the hostile views from some non-KK community members described in Section 0.

> ‘Children's games should be changed, because when I teach, mothers complain that we are playing games as if we were little children. They are ashamed to play like children.’ PE Dodoma2 CHW

> ‘There is one group member who disagreed with the advice. She said “those are foolish things, you are given these toys as if you were children, you are fools. Are children not already playing without those toys?”’ PE Chemba3 KKM

Overall, shortfalls in making toys are likely to have resulted from a combination of capacity and motivation, with the balance varying between households. There may also have been misplaced assumptions that the toys should fully resemble those in the flipbook pictures or available from shops. Several parents, CHWs and HCWs suggested that parents should be given toys and learning materials to

overcome these constraints.

> ‘When we make these books on our own, they don’t look like reality. If they come already printed, it will be easier.’ EL Kongwa2b KKM

Positive discipline

The KK curriculum included content on positive approaches to discipline, such as explaining gently, praising children, and distracting them from danger, rather than shouting or using physical punishment. **Parents reported learning about these positive approaches**, and **many described making some changes**: for example, using the toys to distract children from danger or explaining rather than immediately hitting children if they did something wrong. This was sometimes supported by observation during interviews or FGDs, with some mothers using gentle explanations to guide their child. Some parents thought the new approach to discipline had improved their children’s behaviour, compared to previous children, such as paying more attention when mothers told them to stop doing something. Some CHWs and HCWs also reported changes in KK households, and differences in the approach to discipline between KK households and others.

> ‘In the past, I was not aware. For example, I used to scold the child when he made a mistake. I would become so angry, beat him angrily. However, I learnt that you have to correct him politely – explaining “what you have done is wrong, you were supposed to do ABC”. I stopped beating the child because it might injure him. The child is still young, he needs to be shaped by his mother, and you need to treat him in a way that helps him develop.’ EL Kongwa2b KKM

> ‘In the past, when he was causing problems, I would beat him, and if he started crying, I would beat him again. But now, there is no beating. You just give him his toys and he stops causing problems. This child is different. When you tell him something like “stop doing that, sit down”, he sits down. If you say “move away from there”, he will move. In the past, they wouldn’t listen.’ EL Chemba1b KKM

> ‘In the past, when the child made a mistake, they used harsh language instead of correcting them calmly, and when the child did something good, they never congratulated them. Now they congratulate the child, and they have started using positive words when correcting children. For non-KK families, we educate them during the clinics, but some just take it for granted and discipline the child without following the advice.’ EL Kongwa2a CHW

Advice on discipline was also provided through other channels, including the COUNSENUTH project and associated Mguso groups, community and school meetings, the church, health facility clinics and other CHW education. Some non-KK mothers reported changes in discipline due to advice received through these channels, and some KK caregivers described wider changes in community norms towards discipline, beyond KK households.

> ‘I heard about this at the village government meetings. The chairman, VEO, or CHW say during meetings that when a child has done something wrong, you should not punish them too harshly, you correct them gently. And you should not speak to the child too harshly until he feels really bad, you should instead speak as if you are teaching him.’ EL Chemba3b non-KKM

> ‘There are some people who take a stick and start beating the child if they make a mistake. But nowadays, people are scared to do that to their children, such things are not happening now. I think this has changed due to education – our CHW goes round the community and tells people these things are dangerous, don’t mistreat children.’ EL Chemba1a KKM

While many caregivers indicated changes in discipline, **CHWs and HCWs in some communities reported limited changes, and several caregivers described continued physical punishment**. Even when describing changes in approach, several caregivers and CHWs described reducing rather than stopping corporal punishment: for example, explaining the problem to the child as a first step before beating them, or pinching rather than beating the child. In addition, observation of some mothers during FGDs and interviews contradicted reported changes in behaviour: for example, mothers were observed threatening to hit their child if they continued to shout.

> ‘To stop the child doing something wrong, I now warn him, pinch him, if you tell him to do something and he refuses, you just warn him – “I will beat you” – until he understands.’ ELChemba2b KKM

> ‘With the first child, I was sometimes harsh, sometimes beating him when he was young. When he cried, I used to beat him. Now when the child cries, I don’t beat him. When you see me beating him, you know it’s something serious.’ EL Kongwa2a KKM

> ‘Interviewer: if your child does something wrong, what do you normally do?
> P3: I beat him.
> I: You beat him?
> P3: Yes.
> I: Okay. How about number six?
> P6: I beat him if he does something which I don’t want.’ EL Chemba3b KKMs

A few caregivers described the **CHW as advising caregivers to reduce – rather than stop – their use of corporal punishment**. Further research would be needed to verify whether this was actually the CHW’s advice, but the reports from parents suggest that messages on ending violence against children were not adequately communicated and understood.

> ‘The KK CHW normally says, “if the child does something wrong, don’t speak to him harshly. You should advise him, pinch him a little bit, warn him”. Previously, we used to beat the children a lot and the child would run away. Now, even if you pinch them, because we play with them, they don’t run away. If I send him to collect something and he doesn’t bring it, I tell him to go back and collect it. If he doesn’t do it, I pinch him a little bit. But he doesn’t get annoyed when I pinch him, he is quickly friendly again and just plays.’ EL Kongwa1b father

> ‘We were told, for example, if the child is making mistakes, you can say “stop doing that because you will get injured”. Then you can beat them a little bit. You can say “I will beat you”. You punish them a little bit so that if they think of doing it again, they will remember that they will be beaten by mum.’ EL Chemba1b KKM

CHWs and HCWs pointed to **long-standing norms** as limiting the extent of changes in approaches to discipline.

> ‘These parents have ingrained habits, the belief that a child should be scolded or even beaten when they make a mistake. Changing such deep-rooted behaviours takes time.’ EL Dodoma1a CHW

> ‘For sure, they beat the children. That’s what they are used to doing, and they say that if you don’t beat a child, they won’t listen to you. It depends on someone’s character – there are some mothers who are cruel but there are other mothers who are calm. If a mother is cruel, even if you teach her several times, she will continue beating the child.’ EL Chemba3b CHW

4.4.2 Features of Kizazi Kijacho that added value and supported behaviour change

As indicated throughout the previous section, **changes in parenting practices were often supported by information from other sources beyond KK**, including health facility advice, other projects, community meetings and VHNDs, and by other interventions such as bylaws. KK contributed to changes alongside the roles of these other projects.

> ‘The way education is delivered nowadays in our village is very regular. As health workers, we hold regular community meetings. Education is also offered during clinics. When the health centre staff go to the community, they also offer education. So, while KK played a major role, the ongoing community health education from us also helped.’ EL Kongwa1a CHW

> ‘They got that education through the clinic. There were also public village meetings where maternal and child health matters were discussed. KK acted like fuel on an already burning fire – it boosted the efforts.’ EL Chemba2a CHW

KK added to existing sources of health education partly by providing advice on new topics and additional information on standard health and nutrition issues. This expanded caregivers’ knowledge of recommended parenting practices. In particular, KK was often reported as making a unique contribution through the advice on stimulation and interaction with children: for example, advice on the importance of play, how to make toys, and talking with unborn children while pregnant. Advice on pregnancy, child health, breastfeeding, nutrition and hygiene was routinely provided through other channels, and non-KK mothers also received advice on these areas. However, levels of prior knowledge varied, and caregivers often learnt some new information on these topics: for example, new information on breastfeeding technique or more detailed understanding of different food groups and meal frequency.

KK also helped to strengthen the implementation of information already provided through other channels. Several KK characteristics were seen as supporting implementation of caregivers’ existing knowledge, adding value to existing sources of advice and strengthening the impact on caregivers’ practices. In particular, KK provided additional information and support that strengthened **motivation** for caregivers, built **capability** by helping caregivers to understand the information and developing their skills to implement new practices, and enhanced **opportunities** to apply information through making practices more feasible.

Once caregivers started to implement new practices, positive experience

reinforced motivation. As well as reporting improvements in their child's development, many caregivers talked about parenting becoming easier or less stressful, and about enjoying seeing their children happy and building a close relationship with them. For example, mothers pointed to children crying less due to improved breastfeeding, adequate nutrition and toys, and to having more time for their own activities because children could entertain themselves with the toys.

This section draws on evidence across the different areas of nurturing care presented in Section 4.4.1 to summarise features of KK that added to existing health education activities and enabled or encouraged caregivers' implementation of CHW advice.

Delivery model

Individual counselling allowed for more in-depth guidance that improved knowledge, skills and understanding. Compared to routine group education through clinics or outreach activities, household visits provided more time for discussion and further explanation, and caregivers could ask questions. The CHW could also provide more tailored advice, including practical guidance such as on positioning for breastfeeding, which built mothers' skills to implement new practices.

> 'When the CHW advises you, you gain knowledge, and you can understand things because with the CHW, you are discussing issues face to face. At the health facility, we are just taught briefly. You don't have time to discuss with the health worker. With the CHW, you can sit together and ask questions, and she can explain properly so you understand. That is why you see some changes taking place. Someone advised at the health facility does not practice some things, but when she is advised by the KK CHW, she can implement them, because she gets ample time to discuss and understand.' EL Kongwa1b KKM

> 'Changes were influenced by education from all those projects. However, the biggest foundation was the KK education, because in KK we visit more frequently, we provide education directly, you meet the parent face to face. We are just two: me as the CHW and the parent, so the education sinks in more deeply. This is different from COUNSENUTH, where they come every three months and deliver education to a group of people, around 100, and then everyone disperses. It's easy for someone to just listen without taking action. That education is often not implemented as effectively as in KK.' EL Chemba2a CHW

Explanation of the importance and benefits of different practices supported motivation. Additional information from the CHW helped caregivers to understand the rationale for the recommended practices, including the benefits for their own health and their child's development, and the risks if the advice was not followed. This provided motivation to apply the advice.

> 'KK reinforced the importance of practices people already knew and added explanations about the benefits. For example, they may have played with their child before, but didn't know why that was beneficial. KK explained, "This specific game helps develop this skill", or "This kind of food has this nutrient that helps the child grow". So, it wasn't just what to do, but why to do it.' EL Kongwa1a CHW

> ‘It was easy for me to implement the advice because I wanted to see my child become healthy and strong. When we were being taught, we were told that if you don’t practice these things the child will not be able to grasp things quickly. The CHW advised us that these things would help the child to develop intellectually and to be strong.’ EL Dodoma1b KKM

Frequent and repeated education provided reminders and reinforced information. Continued monthly visits and groups, sometimes in addition to advice from the health facility or other sources, kept information in parents’ minds, strengthened understanding, and underlined the importance of the information, supporting parents’ capability and motivation to implement practices.

> ‘There is a difference because KK mothers meet for education twice every month, and then they hear information a third time through the clinic or COUNSENUTH project. So, they understand, and they take it seriously and change their behaviour because the information is repeated every time they meet. Someone who is not given education regularly might forget and stop doing it. So those not in KK receive education, but they may not take it seriously. The emphasis in KK has helped.’ EL Chemba1b CHW

> ‘The education provided through KK was given regularly, unlike the education from meetings or clinics, which is provided occasionally. We visit the mother every month and remind her. KK was very close to the mothers compared to other organisations. They were constantly reminded of the important things they needed to do, and they were followed up closely. That helped them to understand the importance.’ EL Chemba2a CHW

The value of more frequent education was also indicated in requests from some non-KK mothers for more regular groups because information at quarterly VHNDs is forgotten

> ‘Right now, if they give education, it’s very rare. I would like them to offer it more often. For example, they could form groups and set a fixed schedule. Not like how it is now, just waiting until the nutrition day to meet. There are things we forget because they’re not emphasised enough.’ EL Chemba2a non-KKM

Regular conversations with mothers provided an opportunity for CHWs to identify and address misunderstandings or problems hindering implementation. For example, when mothers had concerns about insufficient breastmilk or the side effects of nutritional supplements, CHWs were able to help by providing guidance on maternal nutrition or how to avoid side effects.

Regular monitoring and follow-up motivated action. CHWs monitored implementation of practices through household visits, asking mothers about their practices and reviewing clinic cards. This provided motivation to implement the advice as mothers knew they would be asked about how they looked after their child, and the CHW could identify gaps and provide further explanation or encouragement. This partly involved positive encouragement and close attention, but there was also an element of pressure to follow the advice, and fear of embarrassment. Caregivers did not describe this monitoring as something punitive: caution to avoid being caught failing to implement the recommended

practices was related more to respect for the CHW and a sense of accountability, given the CHW's repeated efforts, rather than fear of punishment.

> 'They need to be monitored. When we leave them alone without making follow-ups, they lose motivation to do things. KK families do more. For non-KK families, you might teach them to do ABC, but you don't follow up. You believe they have understood. There are some who do and there are others who don't. The difference is that for KK, we were making follow-ups. For KK, they had to do it because of the supervision.' EL Kongwa2 HCW

The potential to be questioned during KK surveys also motivated change, because KK mothers were aware they might be asked about their parenting practices.

> 'KK mothers are practising a lot, partly because they are monitored. Non-KK households have less motivation. KK mothers know that KK comes to interview them, so they fear that one day they might be asked about this. That makes them follow the advice.' EL Kongwa2b CHW

Timely advice helped to ensure parents had information when needed, and longer-term support gave time for behaviour change. KK advice started during pregnancy and continued for two years after the child was born. This was contrasted with other projects that only provided advice after a child was born, or only worked with each household for a short period. Advice was also tailored to the child's age, and caregivers noted the value of early information to ensure good care for the child from the start.

> 'That project on nutrition only taught a group for two months, not like the KK group which you stay with for two years. After two months, you choose another group. You can't find someone changing within two months.' EL Kongwa2b CHW

> 'She advised me about this on time, because when she was advising me, my child was still young.' EL Chemba2b KKM

Practical sessions supported understanding and motivation. Caregivers sometimes found toys difficult to make until they worked together with others in the group or received practical support from the CHW. Practical sessions for nutrition also provided guidance. These sessions built and shared skills, and enabled mutual support. Seeing what others had done and what was possible also provided encouragement.

Involvement of fathers and other household members in household visits encouraged their support for nurturing care. Some fathers and other household members heard the KK guidance either directly from the CHW or via the mother. This sometimes strengthened their support to change maternal health and parenting practices, which in turn gave mothers the permission or resources to implement the CHWs' advice. For example, this was mentioned in relation to the husband or mother-in-law supporting a reduction in demanding physical work during pregnancy, or providing money for nutritious food.

CHW counselling quality and tools

The KK flipbook supported understanding. As described in Section 3.3.5, seeing pictures helped caregivers to understand and recall information. There was also a sense of the pictures changing thinking and helping parents to imagine a different

situation, showing how families could act in the ways advised. For example, one mother described changes in her understanding of possible household relationships after seeing pictures of mothers and fathers supporting children together.

> 'In the KK education, we see the father, mother and child, the way they are planning issues, for example issues to do with games or children's toys. We see the father and mother teaching the child. Through this, we learnt that "okay, it is also possible for me and my partner to live this way, this is what can happen – just like these people are sitting there, a father, mother and child along with their toys". We can also sit together and discuss things well, plan our budgets. Those pictures made me understand this. These pictures have got good lessons. It means that this creates love.' EL Chemba1b KKM

KK training and tools supported the effectiveness of CHW communication. As explained in Section 3.3.2, KK training and tools built CHWs' skills and ability to communicate information clearly and comprehensively. For example, one CHW explained that it was hard to disentangle the influence of KK and other projects, because it was the same CHW (herself) giving advice on similar topics through both channels. However, KK training had improved her knowledge and confidence, which meant people now responded more positively. The tools also provided a structured approach, and CHWs pointed to increased influence on households because they could now explain information in a way that supported understanding.

> 'KK deserves credit for reaching many households, especially because the education provided was clear and practical. So yes, KK made a big impact.' EL Kongwa1a CHW

CHWs provided positive encouragement and respectful care. Trust in the CHW and in the CHW's advice supported implementation of the guidance, and positive feedback from the CHW was also motivating. A patient and respectful approach helped caregivers to accept and absorb the advice.

> 'When I see the CHW coming, I know she is coming to check on my child's progress. I don't have any fear because I like what the CHW teaches, and I like it when the CHW says "indeed, you do things well for your child". This motivates me. For any mother, when her child is growing and healthy, if someone else praises the mother – like "indeed your child is healthy" – she feels happy. That means she keeps feeding the child the same nutritious food, and when this person comes another day, she isn't afraid and knows that "this person normally praises me for taking care of my child well".' ELChemba2b KKM

> 'Advice from the clinic is good as well, but it's KK that has helped us a lot. With the KK CHW, we feel relaxed when she visits us or when we visit her. Sometimes these nurses at the clinic use abusive language, they use force. As you know, if someone speaks with good language, the education will sink in. The KK CHW and her group use very good language. They are able to speak well with people, living well and caring about people. The clinic staff are not like that.' EL Kongwa1b father

Supporting affordability

KK increased the opportunity to implement guidance by reducing the cost of the

recommended practices, and by increasing household resources through the UCT. Although cost remained a barrier, guidance on making homemade toys using local materials and information on more affordable, available ingredients helped to address some constraints. Providing resources through the UCT and other KK incentives also helped parents to implement the advice.

> 'That money helped us to follow the advice we were given – buying children's clothes, changing the diet, or maybe as a pregnant woman, you need to eat more sardines so the child can develop intellectually. If you don't have money, how will you buy it? But we were given money to use for buying food.' EL Chemba2b KKM

4.4.3 Household, community and health system factors affecting change in parenting practices

As shown in Section 4.4.1, the extent of improvements in parenting was affected by individual, household and wider community factors. Different contexts affected whether the information provided through KK was new, and affected caregivers' motivation and opportunity to implement advice. This section summarises these different factors and the way they enabled and constrained change for caregivers.

Household economic status was repeatedly indicated as affecting households' implementation of KK advice. Economic status particularly influenced nutrition, affecting the ability to purchase nutritious food and the frequency of meals. Income also affected how easily parents could pay for transport to the clinic, and whether they could change work patterns to make time for parenting and to allow mothers to rest during pregnancy: for example, whether they could afford to reduce working hours or hire casual labour to lessen family farming workloads. Economic pressures also made it harder for parents to think about changes in parenting because they were focused on the need to find income.

> 'When you have the money, you can buy anything children want. But if you don't have money, it becomes a challenge.' PE Chemba1 KKM

> 'It's not like we are not being advised, we are advised every day. However, when it comes to practising, we fail to do that because of our economic situations.' EL Kongwa1b KKM

> 'There is a certain KK mother who has never played with her child. She is busy every day, she has problems, she does not even have food. She will tell you "I am coming from somewhere looking for food, in my home there is no food, I don't even know what we are going to eat today. We shall sleep hungry." Do you think such a person will get time to play with her child?' EL Chemba3b CHW

There were different views on the significance of household income. Some CHWs considered that households sometimes blamed income when the real barrier to changing parenting practice was insufficient motivation, and several CHWs and caregivers pointed to cheaper food substitutes as helping to address income constraints. Concern about not receiving the UCT, or the UCT ending, may also have encouraged some respondents to highlight income as a constraint during interviews. However, the repeated mention of income across communities,

and the poverty levels indicated in the baseline data, suggest that insufficient income was a constraint for some households.

Different livelihoods affected parenting through households' economic status, as described above, and through other effects on caregivers' availability and time for parenting activities. CHWs and HCWs often pointed to differences in livelihoods between households and communities as affecting their availability to engage in KK activities and in parenting. For example, one CHW described differences between people involved in business, who had income and time to support their children; people involved in farming, who had less income and who were sometimes away for farming; and pastoralists, among whom, in the CHW's view, a cultural focus on cattle meant herding sometimes outweighed parenting.

> 'I have three groups in this community – farmers, businesspeople, and pastoralists. KK has helped them all, but the farmers and businesspeople have changed more. Among pastoralists, changes are slow, mostly because pastoralists spend more time focusing on livestock than childcare, the animals are sometimes treated better than humans. Businesspeople have better economic status. They can provide what the child needs, so they tend to adapt faster and their child receives better services. Implementing the advice is easier for businesspeople because it doesn't burden their daily routine. For example, businesspeople can afford transport and time to take children to clinics, while some farmers might be far away and lack money.' EL Kongwa1a CHW

Farming or other income-generating activities sometimes meant parents left their children with siblings or neighbours who did not provide optimal care, or meant parents lacked time to make toys or interact with children. For some parents, finding employment required migrating to other locations, reducing their contact with the KK CHW and exposure to the parenting advice.

Temporal variations in livelihood activities and economic status affected caregivers' capacities for nurturing care. Time for parenting was affected by seasonal farming duties, caregivers were sometimes not at home due to seasonal migration to other farming locations, and harvesting periods affected household income and availability of food.

Household location and communities' economic and physical geography also affected caregiving, including through the distance to shops where food was sold, the availability of different food types in local markets, the distance to clinics, and available transport options. Local environmental conditions also affected hygiene, with sandy soils hindering toilet construction. Improvements in child health sometimes resulted in part from wider infrastructure improvements, such as easier transport that enabled clinic access (rather than resulting only from KK or other health interventions).

> 'In the past, they did not attend the clinic due to transportation issues that meant many of them were unable to come to the facility. For example, in our area, the distance is more than 5 kilometres, making walking to the clinic difficult for many mothers. Now there are *bodabodas* [motorbike taxis] and *daladalas* [buses], so transport is accessible.' PE Dodoma1 CL

Household gender relations and wider gender norms affected engagement with KK, mental wellbeing and parenting practices. In some households, men

controlled income and dominated decision making. This sometimes limited women's involvement in KK activities and their ability to reduce heavy workloads, purchase different foods, or support their children's or their own health in other ways. In some households, women gained more involvement in decision making, or men gained more understanding and motivation to provide for women's and children's needs, increasing mothers' opportunities to practice nurturing care.

Household structure also influenced the ability to change parenting practice. Some female-headed households faced greater economic difficulties due to the lack of a male breadwinner. However, the effects varied depending on the mother's own financial status and her support networks: for example, one CHW mentioned a young single mother who had sufficient income because her own father was relatively wealthy and able to provide financial support, and some single mothers in urban areas had their own business to generate income. Sometimes children lived with a grandmother because the mother moved away for work, and one CHW thought a grandmother in her group was less motivated to engage with KK activities or to make changes to parenting practices, perhaps due to her long experience of childcare. The presence of other relatives could also affect opportunities for nurturing care: for example, through a mother in a law's support to change practices, or support with childcare from other household members.

Alcohol consumption among caregivers was mentioned in several communities as reducing engagement in parenting. This was particularly mentioned in relation to mothers, presumably due to assumptions regarding maternal responsibility for caregiving rather than higher alcohol use among women than men. Several CHWs and KK mothers, particularly in Chemba District, thought some mothers did not focus sufficiently on their children due to their consumption of alcohol. Some mothers were also involved in producing or selling alcohol, which reduced their time for caregiving.

> 'There is one mother who drinks. She spends most of her time out enjoying alcohol and doesn't prioritise child-rearing. She doesn't pay attention to where the child has played, what the child has eaten, or how many times they have eaten. But the other mothers, because they don't drink, they know how to communicate with their children, they prioritise nutrition, hygiene, and the child's needs. There's a clear difference between them.' EL Chemba2a CHW

> 'Our village has a culture of alcohol. You can't find a mother at home once alcohol is ready. So some mothers are thinking of beer all the time and don't spend time playing with children.' EL Chemba2b KKM

Previous experience of parenting affected motivation to implement advice. Some CHWs and KK mothers thought that some mothers with previous children were less interested in the advice and less likely to change practices because they already had experience of parenting and saw their older children as having developed well. For first-time mothers, the advice through KK was often newer.

> 'She tells you "I have already given birth to five children". So, even if you deliver the information, they don't really listen. When a mother is older and already had a lot of children, she is used to feeding them before six months. She will tell you that "All my children grew that way, I did this and they grew up".' EL Chemba3a CHW

> ‘If I had ever given birth to another child, I would have said “how come with this other child I did ABC and the child was able to grow?” However, this was the first child, so I had to follow whatever I was advised.’ EL Chemba2b KKM

> ‘Although we meet in the same group, there are some who receive the advice and leave it there – what they are taught goes in one ear and out the other. The CHW spends her time teaching us and emphasises that the child should be fed nutritious food, that we need to dress the child in warm clothes, but some mothers neglect the advice, thinking “how come I used to give my first child ugali every day and he was able to grow well?”. They don’t realise things have changed, and don’t follow the advice because of their past practice. They don’t see the advice as useful or see any benefits of changing.’ EL Chemba2b KKM

However, this pattern was not consistent, with some CHWs seeing no difference between first-time mothers and others. The effects seem to have depended partly on whether parents had experienced observable problems in the past. Not seeing any difficulties with previous children reduced the impetus for change, whereas experiencing previous difficulties with their own health or that of a child encouraged several mothers to adopt CHWs’ advice: for example, changing maternal care due to difficult past pregnancies, or taking more care to protect children from accidents after previous injuries.

Mothers’ education levels are widely evidenced as a significant influence on nurturing care. However, reports from CHWs and HCWs did not indicate a strong or consistent pattern in the effects of education. Some CHWs thought more educated mothers were quicker to understand the advice, and better able to read the flipbook for themselves. However, the information provided through KK was also considered understandable for mothers with less education, and more educated mothers were sometimes seen as taking the advice less seriously because they had more formal education than the CHW or more knowledge from other sources.

Cultural norms (for example, around breastfeeding, diet or gender roles) and **established habits** were seen as affecting caregivers’ motivations and the ease of behaviour change. Long-standing practices meant that behaviour change was sometimes a process of gradual improvement, with some households changing faster than others (reflecting ideas about early or later adopters).

> ‘When we talk of parenting, I think this is a continuous process. Each person had mastered her own way of parenting. Therefore, this needs time to allow a person to change and adapt to a new way of doing things. She was used to scolding a child, she has no time to play with a child, she just leaves the child playing with relatives. This has improved, but it continues to improve little by little.’ EL Chemba2 HCW

> ‘There are slight differences between the KK households. In any group of people, there will always be some who progress faster while others follow gradually. Some are doing very well, some are in the middle, and others are catching up slowly.’ EL Chemba1a CHW

> ‘As humans, everyone has their own behaviour. Some start following after hearing the advice, while another will say “this is difficult to do”. So these issues move slowly.’ EL Kongwa2b CHW

Similar to the ideas highlighted in the preceding quotes, stakeholders also pointed to **individual character or interest** as affecting change in parenting practices, and they sometimes without a clear understanding of the specific issue that was affecting motivation.

> 'There was one household which, when we agreed on something, she would say yes but when I visited her, she would give excuses. Her child's growth was delayed. I don't even understand what the problem was. It was not economic, she was being given the UCT. She had food. I failed to understand the problem.' EL Kongwa2a CHW

Health system factors affected the added value of KK and opportunities to protect children's health. One factor was previous access to health information and services, which affected the extent of change under KK. Where routine health services and other projects already provided advice and support on nutrition, child health or other topics, some caregivers already had some information and implemented practices advised through KK. Where access to routine health facility education was more limited, information through KK was newer for parents. For example, one HCW explained that the KK advice was particularly important in communities that did not have their own health facility and only received brief education around outreach for services such as vaccination:

> 'A pregnant mother in ELChemba2a is different from a pregnant woman in ELChemba2c. At ELChemba2a, mothers normally get this education because there is enough time at clinics, and there are not many people. She will come, she will be educated, and she will get other services. However, for the villages that don't have health facilities, like ELChemba2c, we only go on an outreach schedule to provide vaccination. You are focused on the task you went for, there are many people, and people are waiting for you to finish so they can leave. There is no time to provide education and little time to speak to people. These are already two different people.' EL Chemba2 HCW

Health service quality also affected parenting practice. Improved services were one cause of increased clinic attendance, and low-quality services could deter health seeking and adequate care. For example, one CHW described difficulties with referral because mothers questioned the value of attending the health facility, knowing that the child might not receive adequate care and treatment, and some parents described shortages of health products as hindering nurturing protection of their child's health.

> 'The clinics should be equipped with things such as medicines and mosquito nets, because sometimes children miss out on nets. Sometimes when you go to the hospital, you are told there is no medicine and you should buy it from a pharmacy, and that becomes a challenge.' EL Chemba1b non-KKM

These different factors interacted to either compound or reduce difficulties. For example, as described above, reliance on a single income caused hardship for some female-headed households, but this depended on the woman's own economic status. Likewise, involvement in farming sometimes reduced time for parenting, but some households with more resources could pay for casual labour, and a supportive husband could reduce pressure on mothers to prioritise farming.

5 Sustainability and scaling up of Kizazi Kijacho activities

KK aimed to support sustainability and scaling by working within the existing health system, by supporting existing CHWs and HCWs, by largely following the home visit frequency indicated in government guidelines, and by using government-recommended levels for CHW allowances. Sustainability was also supported through ongoing discussion with, and involvement of, national and local governments.

The qualitative research considered KK's sustainability in relation to the continued use of key KK components in the health facilities and communities where parenting support was provided during KK, including:

- continued provision of advice on nurturing care for communities, including the more standard components of health, nutrition and hygiene, and the newer topics of stimulation, early learning, and responsive caregiving
- continued household visits and group sessions to provide advice on nurturing care
- continued use of the job aids used during KK, specifically the flipbooks and phone app.

Scale-up was considered in terms of the expansion of the advice on nurturing care to additional parents within the KK villages and to other villages, including through training additional CHWs or HCWs who were not part of KK, and vertical scaling to institutionalise the activities in policies and budgets.

Constraints on government funding, annual budget cycles and a need to align multiple priorities inevitably affect the pace of progress. Interviews were conducted within a year of KK ending. As one CHMT emphasised, **progress would take time**, but steps towards sustainability and scale-up were being taken.

> 'We are struggling and doing our best. We have already started making steps. We will reach there little by little, as change is a gradual process.' SS CHMT4

The analysis in this section should be considered in this light, presenting initial steps. The findings also present a snapshot from early 2026, and the situation may have changed.

5.1 CHMT planning and budgeting for sustainability and scale

RQ 8.1 Have local governments planned for sustainability and scaling, and to what extent have plans been implemented?

To support sustainability, D-tree organised a series of meetings with CHMTs and the RHMT to discuss progress and ways to continue the activities. CHMTs presented plans for sustainability. At the time of the sustainability study, some activities in these plans had been implemented, but activities involving additional costs were more challenging. Budget constraints were repeatedly highlighted as a barrier to sustainability and scale-up, limiting the provision of formal training, CHW allowances, and additional flipbooks. The degree of attention given by the RHMT and the CHMTs to the plans for sustainability, and their monitoring of continued implementation, also varied. All CHMTs reported a decline in supervision of KK CHWs and HCWs following the end of KK. Scale-up and sustainability were seen as a gradual process that would take time.

RQ 8.2 Has support for ECD activities (including CHW stipends) been included in health facility or local council budgets?

Some activities required to support CHWs' provision of nurturing care advice were covered through routine expenses (such as quarterly council supervision), but budgets for regular CHW allowances, ECD training for CHWs, and flipbooks were generally minimal or missing. Council and facility budgets were tight, and had to cover other mandatory costs and priorities. However, there were some plans to include relevant expenses in future budgets, and some CHMTs pointed to health facilities with more income where they hoped some ECD activities could be included in the next financial year.

5.1.1 CHMT planning and monitoring

As part of KK activities to support sustainability, D-tree and EGPAF convened a series of district taskforce and regional KK steering committee meetings between June 2024 and February 2025. These meetings aimed to strengthen collaboration between the project implementation team, the RHMT, and CHMTs, and provided a platform to review data, share successes, address challenges, and explore opportunities for sustaining and scaling the project beyond its current timeline. Selected HCWs and CHWs also participated in these meeting to represent their colleagues.

At the regional steering committee meeting in February 2025, **CHMTs presented plans for continuing the ECD counselling**, including some activities that had already been completed (see Annex C for the plans that were presented). Activities included training additional CHWs, conducting supervision, expanding ECD counselling to other health facilities and across more caregivers, conducting meetings to discuss ECD, including ECD in budgets, providing the flipbooks, using existing platforms such as VHNDs or reproductive and child health clinics, advocacy to local leaders, and a range of other activities. Levels of ambition

varied between CHMTs: for example, training five, 30 or 92 CHWs.

The taskforce meetings prompted guidance from the RHMT to CHMTs, and from CHMTs to health facilities, on sustaining the activities, particularly through including the ECD information in routine health facility and outreach education sessions. This contributed to some continuation and scale-up of the ECD counselling (see Section 5.2 and Section 5.3). The meetings also led to some consideration of including activities in health facility and council budgets.

Some activities in the CHMT plans for sustainability were implemented, particularly more routine activities, such as ongoing ECD meetings and quarterly CHMT supervision or nutrition days. Implementation of activities involving additional costs, such as printing flipbooks, training other CHWs, or including ECD in budgets, was more challenging (see below). Based on review of the regional steering committee meeting report, the presented CHMT plans were in the initial stages of development, without detailed steps, responsible individuals, associated resources, and timelines, and they did not always match CHMTs' resources. **The attention given to the plans after the regional meeting also varied between CHMTs.** Some CHMTs had not met to discuss options or review progress since the last meeting funded by KK, around nine to 12 months prior. In some districts, ECD was discussed through regular *Malezi, Makuzi, maendeleo ya Awali ya Mtoto* ('Early child development') (MMAM) meetings, which covered related activities. These MMAM meetings provided a forum to discuss sustainability, although in some districts, CHMT members who were key for KK (such as the CHW coordinator) were not involved. Budget constraints were sometimes given as a reason for not meeting to discuss progress on sustaining KK activities.

> 'Since KK stopped, we have never held meetings to discuss sustaining KK activities because it was not in the budget. There are many challenges because there are issues to consider. We cannot have meetings as the district council alone. We have to involve HCWs as well as CHWs. For sure, we don't have this budget. So it is difficult to invite people who are coming from the community, you cannot call them without paying them something, transport and allowance.' SS CHMT1

District-level discussion did not require funding, yet it was sometimes incomplete. For example, some CHMT members lacked information on which ECD activities were included in the council budget (see below), and some had not fully considered ways to sustain or expand the activities.

> 'I: Have the CHMT or other stakeholders who were in KK tried to think about how to teach other CHWs who did not get an opportunity to be taught by KK? P: Not really.' SS CHMT2

RHMT and CHMT monitoring of continued implementation also varied. CHMTs reported a **decline in supervision of KK CHWs and HCWs** due to the end of KK support with transport and supervision allowances. Routine RHMT or CHMT supervision continued, but RHMT supervision only covered some districts, and CHMT supervision was sometimes infrequent due to lack of time or transport. Routine supervision also focused on the health facility, with limited time for discussion with CHWs or community visits, and it covered a wider agenda, which reduced the discussion of ECD and KK activities.

Some CHMT members did make time for at least short discussions with KK CHWs during routine supervision or through phone calls to HCWs or CHWs, and they encouraged further work. In other cases, there was limited deliberate effort to track whether activities were continuing, and the RHMT had not directly monitored district progress. This contributed to gaps in CHMTs' information about continuation of the KK activities.

> 'Something which we miss now is the opportunity to visit the district councils. During KK, we could go and observe them. We were depending on KK allowances, and as you know, it's a challenge for people to work without any allowance.' SS RHMT

> 'We normally follow up the KK CHWs just by phone. CHWs will just tell you that they have been teaching caregivers. Visiting physically is better. We don't have a specific supervision budget. If we go for a general supervision, we can call the CHW to meet, but we normally have very little time because there are a lot of issues to cover.' SS CHMT5

As shown in these quotes, the lack of budget for allowances or transport was often given as the reason for reduced supervision following the end of KK support. However, some noted the importance of CHMTs' commitment to ensure supervision took place despite budget constraints.

> 'We as the CHMT need to remind CHWs to continue implementing. We go for supervision. Why don't we use this opportunity to supervise CHWs? The budgeted amount can't be given by 100% but we could at least implement some activities.' SS CHMT3

5.1.2 Inclusion of activities in government budgets

CHMTs identified several items that needed to be included in health facility and council budgets in order to continue or expand provision of ECD education, particularly CHW allowances and printing additional flipbooks, but also refresher training or training more HCWs and CHWs, and supporting CHMT supervision. In the Tanzanian system, much of the budget is allocated directly to health facilities, so some CHMTs asked health facilities to budget for CHW allowances and sometimes for other costs, such as printing flipbooks.

> 'When we were planning, I ensured that all health facilities that were supported by KK put these activities in their plan. As you know, currently all the money is sent to the health facility, so the health facility is the one to plan what to do.' SS CHMT3

Some costs were covered through routine activities, such as quarterly CHMT supervision. CHMTs also included some funding for ECD in the Consolidated Council Health Plan budget, which the RHMT explained was now a national requirement. Perhaps reflecting the gaps in coordination and follow-up described above, some CHMT Reproductive and Child Health or CHW coordinators were unsure what support for ECD was included in the approved budget, because ECD allocations were led by the Social Welfare Officer. Some CHMT members and health facility staff were also unsure what was included in health facility budgets. However**, budgets for regular CHW allowances, ECD training, and flipbooks were generally minimal or missing**. Council and facility budgets were tight, and had to

cover other mandatory costs and priorities. Sometimes activities were included but then removed due to budget ceilings, and decisions on final budgets were sometimes made by other senior stakeholders.

> 'We plan, but the amount given for implementing these plans is usually smaller than what we planned and it does not allow us to implement all the activities. This is one of the challenges.' SS CHMT3

> 'Concerning buying flipbooks, that is not yet done. No training has been conducted. The big challenge is lack of funds. We depend on internal revenues, so when there are no internal revenues, we cannot get the money, and the district executive officer looks at the priorities. Just printing one flipbook costs money – a stakeholder can cover these costs, but as the government alone, we fail.' SS CHMT4

CHMTs and HCWs saw **CHW allowances** as important to provide motivation, to enable CHW to focus on their CHW work rather than other income-generating activities, and to recognise the contribution of CHWs to Tanzania's health system. In some districts, CHMTs were aware of some health facilities that did budget for regular CHW allowances, but this was usually only a few facilities and the amounts were low. Facilities sometimes included a budget line for a cleaner, with this allowance then in practice shared among CHWs. Rather than a regular allowance, support for CHWs typically involved allowances linked to specific activities such as outreach and vaccination campaigns.

> 'There are no government payments for CHWs at all. If there is an activity like the vitamin A or measles campaign, they get paid, but apart from that, they don't get anything. There should be a budget for CHWs, but our district council budgets are never enough to pay CHWs – there are council priorities that have to be covered. So that is why CHWs are failing to do the work. Although they do a lot of volunteering, if there was regular monthly payment, they could do good work without any problem. It demoralises many of them. They have got families who depend on them for food, clothing and many other needs. A CHW can't come each day when you don't give them anything – they need to do farming or any other activity, as long as their family gets something.' SS CHMT6

In line with this picture, sample health facilities did not have regular monthly CHW salaries in their budgets. Most had not attempted to include regular CHW allowances due to budget constraints, and a facility that previously did provide a small monthly allowance found this was cut during a higher-level review of their recent budget.

> 'Some CHWs were previously paid by the health facility, 10,000 a month [around £3], until the end of the last financial year. However, in the new budget, the section for CHW payment was removed based on the budget. We prepared the budget and presented it to the district coordinator. When the plan was returned, everything in this section for CHW payments had been removed.' SS Bahi1 HCW

Instead, budgeting for CHWs at the sample health facilities was restricted to allowances paid for specific activities, such as training or outreach sessions. Inclusion of these ad hoc allowances in recent budgets was sometimes prompted by HCWs' positive experience of CHWs' work under KK and the role of the KK

allowance in supporting CHWs' efforts; this suggests involvement in KK contributed to at least minor changes in financial support for CHWs, within budget constraints.

> 'This was included after KK reminded us that we need to do something, because if this CHW has been receiving some allowance, if we don't take action, we might fail in future. If the CHW at least receives 10,000 after three months, that is something.' SS Dodoma2 HCW

Ability to cover costs varied between health facilities, depending on their income; some CHMTs pointed to facilities with more income where they hoped some ECD activities could be included in their next budget.

> 'We decided to include these things in the forthcoming budget, for health facilities where we think they can do these activities because they get a good income.' SS CHMT7

CHMT budgets for ECD activities may increase in future years: some 2025–26 budgets were already developed when KK ended, and some CHMTs were planning to include more activities in their next budget.

Some CHMTs were receiving some support from other partners through other projects, for example to provide toys in some health facilities. However, a **reduction in partner support with the changing aid context exacerbated financial constraints,** as CHMTs had fewer partners they could ask for support, and those partners had more limited budgets.

> 'The DMO *[District Medical Officer]* instructed me to find and talk to stakeholders but as you know, all stakeholders dropped out. We have remained with very few stakeholders. I talked to all these stakeholders and they said that for now, they will not manage. None of them has shown interest in supporting this issue. They say their budgets are so limited, and you cannot force them.' SS CHMT7

During interviews, some CHMTs indicated a wish for further support from KK or other project partners to continue and expand the activities. However, some also underlined the importance of prioritisation or systematic planning to include activities in government budgets, even if these cannot cover everything. CHMTs also pointed to ways to scale up activities without additional budget, for example through integrating ECD training in other meetings for HCW.

> 'We still need your support as KK because there are very many health facilities which have been opened and are lacking such services. If at all you wish to scale up, we still really need support from KK.' SS CHMT3

> 'In my opinion, the district council could plan a budget so that when the project ends, we are able to sustain it ourselves. Our problem as a district council is that the project comes, we do well during project implementation, but after the project has phased out, we end up doing very badly. We are failing to sustain these projects. The district councils haven't planned their budgets well. Maybe it is because the district council also gets a limited budget, so when it plans, it fails to cover everything.' SS CHMT5

> 'Of course, we don't have a budget to educate these non-KK health centres but educating them is still easy. You can just use another meeting that has

> been called and provide education at that forum. Through that, you will have covered a large area as there would be HCWs from many health centres. Although the education would not be detailed, they will have grasped something, at least you will have tackled certain issues.' SS CHMT2

KK NGO partners considered that **earlier engagement with local governments could have supported ownership and allowed for a transition** of activities to the CHMT before KK ended. For example, this might have involved regular CHMT meetings to discuss progress and plan for sustainability from the start of KK in late 2022, rather than beginning taskforce meetings in mid-2024. However, there were also concerns within the KK team that evidence of effectiveness was needed before making decisions on scale-up. The tension between waiting for evidence and early planning was highlighted in RHMT discussions at the year one process evaluation, with different views on the right time to start preparing for transition to government.

> P01 'We were in the pilot stage, so when we do the project evaluation, then let's start thinking about integration…I think once you have done the endline evaluation and share the results, then we can discuss, that will give us direction on the next step.'
> P02 'I think that we will be a little late – we should start preparing before the project ends, maybe one or two years before so that people start coping – little by little, they start to accommodate it in their budgets and plans. You can't just wake up and start covering it today when there are so many other projects.' PE RHMT

5.2 Sustainability at Kizazi Kijacho health facilities

RQ 9.1 Have household visits and group counselling continued after the end of NGO support, and how have activities been adapted? What factors affect continuation of activities, including any influence of the new government Integrated and Coordinated CHWs programme?

Within KK communities, some KK CHWs were continuing to provide parenting education, primarily through routine health facility education and outreach activities. Household visits by KK CHWs had generally stopped or were conducted only occasionally, and the KK groups were not conducted. CHWs no longer received the allowance, and providing information through routine services rather than through the specific KK groups or household visits was considered more effective for wider reach and required less time and cost.

Among the sample health facilities, regular household visits were only conducted where the KK CHW was also part of the new government Integrated and Coordinated CHW programme; those in this programme were required to conduct visits and received an allowance. Several KK CHWs were not included in the government programme because they did not have the required secondary education; this sometimes led to demotivation, and it also meant these CHWs did not receive the allowance. Data on the effects of the new programme is limited because it had only been introduced in two communities

in the sustainability study sample, so further information is needed to better understand the effects.

Continued delivery of parenting education by KK CHWs through routine channels varied between CHWs and health facilities, and was affected by support from HCWs, the CHW's intrinsic motivation, and the opportunity costs of working without an allowance. In relation to HCW support, there was continued encouragement and monitoring in some health facilities, but supervision had generally declined or was restricted to the routine activities, due to issues such as the end of the HCW allowance, HCW turnover, and high workloads.

RQ 9.2 Are KK tools still being used (e.g. handbooks for CHWs, flipbooks, the app), and, if so, how?

CHWs were continuing to use the KK guidance and flipbooks to provide ECD education through the routine channels. Use of the KK app was not expected to continue in its current form, but EGPAF and D-tree were supporting integration of the KK app content in the new government UCS. They were also working with national and subnational governments to integrate ECD in a range of other government systems, including curricula and guidance documents.

5.2.1 Health facility planning

At the health facility level, HCWs' and CHWs' understanding of whether and how KK activities should continue varied over time. **At endline, shortly after KK ended, CHWs and HCWs indicated uncertainty and a lack of direction regarding whether or how activities should continue.** Some CHWs had been told to continue household visits by the CHMT or EGPAF, but others assumed visits were no longer needed – or in some cases permitted – because the project had ended. The end of the app system for data entry was also interpreted as a signal that activities should stop. Many CHWs were also unsure what they would teach if they continued visiting KK households because the KK curriculum ends at age 2, so the sessions in the flipbook had been completed. Use of the curriculum for new households with pregnant women or children under 2 did not seem to have been considered widely. At this stage, CHWs and HCWs were generally waiting for further guidance.

> 'I don't know if we will continue because we conduct the visits by following the flipbook and we have completed all the visits. As of now, we are not sure whether to continue because we haven't received any information about what will happen next. Even group sessions ended because they were designed to cover up to 23 months, so, for that as well, we will need new guidance on how to proceed. When I asked EGPAF about this, they told me they would come to the village to provide further information, but they have not yet come.' EL Chemba1a CHW

> 'You cannot do household visits because all the games in the guideline and flipbook are done – what will you teach?' EL Dodoma1 HCW

> 'They called us and said the project had ended. They paid us at the end of February, and said there would be no more payments. The project was over.

> So we weren't told to stop visiting exactly, but if the project ends, what will you go and do? The visits were only planned for up to two years, and the 24th month was February. The guide ended. There are others in that age group who aren't part of KK, but we haven't been given instructions to start visiting them. We can't just show up at someone's house and start giving advice without being sent.' EL Kongwa1b CHW

One year later, during the sustainability study, the situation was clearer. CHMTs reported advising CHWs and HCWs to continue providing ECD education, and health facility staff had been told to continue the activities by EGPAF project officers or CHMT supervisors, or during the KK taskforce and regional steering committee meetings. The level of guidance from CHMTs to HCWs varied, perhaps depending partly on the extent of CHMT supervision and on HCWs' recall and engagement. For example, one HCW had been regularly asked by the CHMT to continue and expand the activities, while another HCW had received little information and remained unsure what was expected.

> 'Whenever the district CHW coordinator and district RCH *[reproductive and child health]* coordinator came for supervision, they would ask us how the project was going, and they would ask how we planned to teach villages that were not part of the project. They emphasised this.' SS Dodoma1 HCW

> 'When the project was ending, the information was just sent through the WhatsApp group, so we didn't know whether we would be continuing with the project or not. What we were told was that CHWs should continue providing education.' SS Chemba2 HCW

Within health facilities, HCWs and CHWs had often discussed continuing the activities, with some HCWs encouraging CHWs to continue despite the lack of allowances.

> 'After returning from the regional KK meeting, we called CHWs and had a meeting with them. I told them that these services will continue to be provided and there will be monitoring as usual, although the incentives have been reduced: "The allowances will not be given but we should work as if we are working for our own benefit, because if you stop working when you are the one with experience in this package, it will not be good". We agreed that provision of KK education should be sustained: even if CHWs can't visit households as before, KK education can still be done through the clinic and outreach.' SS Bahi2 HCW

> 'It is not just KK but with every project we have ever had, each time the project ends, it has to be sustained. The project should not end there. Me and my supervisor made a plan that we should sustain this education so that people can continue getting it.' SS Bahi1 CHW

In some cases, health workers met community leaders to discuss continuation, sometimes with EGPAF support. For example, at one facility, KK staff attended a ward committee meeting with local stakeholders, where they informed local leaders that the project was ending and encouraged CHWs to continue activities. Another health facility met local leaders to ask for opportunities to present the parenting advice during community meetings.

5.2.2 Continuation of activities in Kizazi Kijacho communities

Continuation of nurturing care education: household visits, KK groups and routine health education

Household visits by KK CHWs had stopped or were conducted only occasionally, partly because CHWs no longer received the allowance that had previously supported their transport and living costs. Some stakeholders mentioned additional reasons for stopping household visits: for example, caregivers might be reluctant to make time for visits as they no longer received incentives and knew the project had ended, KK children were now beyond the age covered by KK materials, and the KK caregivers now had sufficient knowledge. Among the sample health facilities, regular household visits were only conducted where the KK CHW was also part of the new government Integrated and Coordinated CHWs programme. These CHW were required to conduct visits as part of their government role, and received an allowance (see further information below). CHMTs reported that visits were continuing at some other facilities, where CHWs were motivated and supported by HCWs.

> 'The household visits have reduced because some villages are very far, and at the beginning we were being paid, such that CHWs could plan how to reach these places.' SS Chemba1 HCW

> 'For me, it's about 8 kilometres from home to come here. You need to use a motorcycle. When I was still with KK, I used to be given a stipend, and I could budget 10,000 or 15,000 for buying fuel so I could serve my beneficiaries. After KK phased out, you know our life here is difficult, so if you take 2,000 shillings from home without a good justification, no one in the household will understand. Personally, that is what affected my work.' SS Chemba2 CHW

> 'After the project ended, we stopped doing the household visits. During project implementation, we were supported, which helped us and our families. You know we are adults, we have children who are in school. So the allowance and the airtime we got from the project enabled us to fully focus on the project activities. What we do now is wait for the clinic days and that is where we teach the mothers. Here, we are able to teach a large number of mothers at once and we do not use a lot of effort.' SS Dodoma1 CHW

The specific **KK groups were also not being conducted** in the sample communities, except in one sub-village where KK mothers had formed a social group for savings and other projects, with parenting education provided at their meetings. As for household visits, groups stopped partly because CHWs no longer received allowances to cover their time and transport costs, and because it was difficult to secure caregivers' attendance without the UCT or incentives related to KK survey participation.

> 'The groups which used to be conducted during KK are no longer being done. We only do this during the clinic. Mothers think they are wasting time attending a group when there is no payment.' SS Dodoma2 HCW

While household visits or the specific KK groups were generally not conducted, **KK CHWs in all sample communities were providing parenting education through routine health promotion activities**. KK content had often been integrated in health facility clinics and VHNDs, but some CHWs also provided parenting

education at other outreach sessions or community meetings. This approach of integrating parenting education in routine health promotion was discussed at the KK taskforce and regional committee meetings, and advised by EGPAF and CHMTs.

Using routine fora was seen as more feasible than dedicated KK groups or household visits because it required less CHW effort and did not need additional CHW allowances. Routine channels were also seen as more effective for household coverage: compared to the KK groups, clinic sessions were attended by a higher number of mothers, and mothers were attending anyway and so did not need any additional incentive or encouragement. (One CHW estimated that over 200 people attended their last clinic session; while that is an unusually high estimate, clinic attendance is usually significantly higher than the 4-7 parents who typically attended the KK groups). This comparative advantage was a further reason for stopping the KK groups.

> 'We decided to change because, for example, in my village I had 10 beneficiaries. We thought that, so the education could cover all mothers in the village, we should do these groups during clinics, at nutrition day and during community meetings, so that it can be a collective service.' SS Bahi2 CHW

> 'We found that this is the best approach because mothers will come for the clinic. It doesn't need a budget. It is routine.' SS CHMT4

Integration of the KK topics in routine VHNDs and clinic education often began before KK ended. As described in Sections 3.3.3 and 3.5.3, KK CHWs made use of their improved health and nutrition knowledge, and in some cases the new stimulation and early learning content, to strengthen their routine services while KK was underway. Integration of the additional content on topics such as stimulation and making toys became **more widespread after KK ended**. Education on these topics was generally delivered by the KK CHWs, because the KK training meant they had more expertise in these issues than the new government CHWs or other CHWs.

To support this integration, some **CHMTs had instructed health facilities to prepare a timetable** for presenting parenting topics in the routine health clinic sessions (which some sample health facilities had done). The CHMTs saw this formal timetable as important to guide CHWs and to ensure that facilities did plan for and provide the education, despite KK ending.

> 'We agreed with the health facilities where KK was being implemented that there should be a timetable for giving education during clinics. I also instructed them to update these timetables in January 2026. We thought that if we don't do this, CHWs will not continue working and think the activities were just for the project. Setting a timetable serves as a guideline for the CHW.' SS CHMT4

While provision of the education through clinic sessions extended reach and was more feasible in terms of time and budgets, stakeholder views on KK's added value (Section 4.4.2) and on the relative advantages of group sessions or household visits (Section 3.4.2) indicate potential **disadvantages of relying only on the routine health promotion activities.** When discussing preferred options, many mothers, CHWs and HCWs noted using groups rather than household visits

would help to manage CHW workloads and reach more people, but some preferred household visits or thought household visits also played an important additional, including allowing more in-depth, private and personal discussion. Some also pointed to disadvantages of using clinic sessions, particularly that there are often many activities to conduct and education might be rushed, and also that some mothers arrive late and so miss the education. The benefits of integration need to be considered against these potential disadvantages.

Factors affecting sustainability: CHW allowances, HCW support and motivation

Ongoing provision of information on parenting through **clinic or outreach education varied between KK CHWs.** CHMTs thought that only some health facilities were still providing parenting advice, and some HCWs reported experiencing difficulty in securing time from some KK CHWs. Across districts and health facilities, the **end of the allowance** paid by KK was seen as a primary cause of reduced CHW activity. As explained in relation to household visits, allowances were only paid to KK CHWs who were part of the government's new Integrated and Coordinated CHWs programme or involved in other projects. Other KK CHWs volunteered, relying on incentives linked to activities such as outreach or training. This reduced their motivation, and increased the opportunity cost of CHW work, as CHWs needed to earn income to support their households.

> 'Sometimes the CHW does not report to the health facility as they are doing personal activities. This makes continuation of the activities slow. The CHWs find they get little money, and without finding extra activities to do apart from health facility work, how will they meet their needs?' SS CHMT7

> 'They are still teaching, but it is not as good as during KK implementation. They do not have the commitment they had at the beginning because they do not receive that motivation they were given during project implementation. A CHW may think it's better to earn money instead of teaching a group of women for three hours without any pay.' SS Dodoma1 HCW

Where CHWs continued activities without the allowance, this was sometimes partly motivated by a wish to remain visible to health facility staff who might determine future allowances.

> 'As CHWs, we decided to continue KK education at the clinics because as CHWs we are volunteers – what we get is some allowance from projects and perhaps if there is a workshop. So for us to still be seen by the healthcare workers, for them to see that we exist and we are working, we need to continue with our activities and we decided to teach at the dispensary.' SS Dodoma1 CHW

The **costs and benefits of continued work without an allowance varied between CHWs**. For example, one HCW observed that at their health facility, the opportunity cost of continuing KK activities was higher for younger KK CHWs who needed to work, whereas an older CHW was not busy with other income-generating activities.

CHWs' intrinsic motivation was also seen as important for sustainability, linked to their belief in the value of their work and to their relationship with the community. For example, the older CHW mentioned above had a close relationship with the community due to many years of work as a CHW and due to

holding a respected religious role, which further encouraged their continued provision of parenting advice.

> 'It depends partly on the CHW themselves. How did the CHW perceive and value these KK trainings and activities? How does the community value the CHW? There are CHWs who really internalised KK education and value it as their own, they value people as their own and continue helping the community.' SS CHMT1

Continued activity by KK CHWs was also affected by the degree of **active support from HCWs** and HCWs' commitment to the ECD activities. **Some HCWs continued to support and motivate CHWs**, and some CHWs saw close HCW supervision as providing encouragement and follow-up to ensure CHWs attended to their responsibilities and sustained the parenting education.

> 'This depends on their supervisor. Apart from transport costs, if the supervisor or HCW is active and pushing the CHWs, it works out.' SS CHMT4

> 'After the project phased out, we met the facility in-charge. They told us that "although KK has phased out, the project continues and our people whom we are serving are still the same. Therefore, this is not the end of your KK activities – I want you to continue working. KK has left these tools with you so that you can continue using them". So our facility in-charge guided us. Now, if it seems like you're not working, our in-charge calls and asks where we are and tells us to come and teach. So we are still being supervised.' SS Chemba2 CHW

However, **HCW supervision of CHWs after project closure varied between health facilities.** As shown in Section 3.2, supervision quality varied during KK's implementation, and **supervision often declined after KK ended**. This was partly because CHWs were no longer implementing the regular household visits and KK groups, so these could not be supervised. Supervision was also affected by distances to villages and the end of HCW allowances (which meant there was no financial motivation or support for transport); by reduced focus on supervision with the end of monitoring by KK staff; and, in some cases, by an increased supervision workload because the new government Integrated and Coordinated CHW programme expanded the number of CHWs at some facilities (one HCW was now responsible for supervising 28 CHWs due to new appointments for the government programme). Turnover of HCWs also affected supervision, as some HCWs trained through KK and familiar with the ECD activities had left. HCW turnover also left some health facilities with fewer remaining HCWs, which further increased HCW workloads and reduced their time to support CHWs and ECD activities. These changes meant supervision was usually restricted to supporting CHWs during outreach or health facility sessions. Familiarity with the CHW's current work varied between HCWs: for example, one HCW was unsure whether the KK CHW was conducting household visits because he had not discussed that with her for a long time.

Continued use of KK tools

CHWs were often **still using the KK flipbooks**, alongside the government or other project flipbooks. The relevant flipbook was selected depending on the child's age and the topic being taught: for example, using the KK flipbook for sessions on games, or using another project flipbook for children older than 5.

The KK **app** was not being used, partly because CHWs were not undertaking household visits, and because the data system was no longer operational and CHWs did not need to submit data. Some CHWs also no longer had a working phone. Concerns about the limited sustainability of digital interventions were raised by one CHMT, based on past experience that many such projects were not sustained (a finding aligned to literature indicating that earlier digital interventions, in particular, were often small-scale and not sustained (19)). They urged partners to design projects that integrate new interventions within government systems.

> 'This issue of providing CHWs with phones, I never liked it because when the project has phased out, sustainability is always a problem. I have seen many projects, even government projects, where CHWs were provided with phones but when it phased out, it ended there. We should think about something which will be sustainable. I understand that as stakeholders, we have got our objectives and we must meet them so we can keep going to the donors. But our objectives must be able to integrate well in government systems.' SS CHMT2

The KK team did not plan specific use of the KK app following project closure, instead supporting continuation of the app content through integration in the new digital UCS (see Section 5.3.3). Some KK CHWs had recently been trained in the new UCS, which used the skills for digital data entry that they had gained through KK. As a government system, this support for the UCS provided the more integrated approach called for by the CHMT.

Effect of the government's Integrated and Coordinated CHWs programme on the continuation of activities

The Government of Tanzania has been working with partners to develop the **Integrated and Coordinated CHWs programme**, which is designed to increase the number of CHWs and to standardise training and allowances. Within Dodoma Region, at the time of the research, the programme had been introduced in Chemba District, with training conducted over 2024–25. Information about the programme's effects on continuation of the KK activities comes primarily from two health facilities in Chemba that were included in the sustainability study sample and where some CHWs were part of the new programme, as well as from interviews with local governments.

The new government CHW curriculum included information on ECD, although with more focus on health and nutrition components and less detail than KK on stimulation and early learning, and the curriculum did not include making toys (EGPAF and others were supporting the government to integrate ECD content). The new CHWs were required to conduct household visits, with a set number each month, and to report on this work.

Inclusion of at least some ECD components in the curriculum, the requirement for household visits and the provision of an allowance meant that the programme could support continuation of one-to-one parenting counselling for caregivers. CHWs and HCWs also noted that the programme had increased the number of CHWs, which meant more household visits could be undertaken and there were more CHWs to help with follow-up, for example if a child was malnourished. Additional training content and equipment were also strengthening

health services by extending the CHWs' role: for example, CHWs were able to conduct HIV and blood pressure tests, which meant people could get tested in their sub-village rather than queuing at the health facility.

However, **visits through the new government programme may provide less detailed guidance on some areas covered by KK due to different protocols, tools and training.** KK CHWs involved in the new programme had to follow the government household visit guide, which left little time to share additional KK content with parents. In addition, the new CHWs did not have the KK flipbooks with guidance on play and toys, and as stated above, training content on play and early learning was more limited. The more limited training on play and toys meant that education on these topics through routine clinics or outreach still relied largely on the KK CHW.

> 'Concerning playing with children, we didn't learn much about this. Generally, this was not taught in detail. We only learnt about if the child encounters a problem, how we should handle them, and how to create closeness with the child, but not in detail like KK did it.' SS Chemba1 new government non-KK CHW

Experience from the two Chemba health facilities suggests that the **effects of the new government training depended partly on whether the KK CHWs were selected** for the programme. Selection required secondary education, and some KK CHWs did not qualify because, despite sometimes having worked as CHWs for many years, they only had primary education. (At baseline, 10 out of 27 KK CHWs in Chemba had completed lower secondary education, and the CHMT reported that only five out of 255 CHWs included in the new programme were involved in KK.) Where KK CHWs were recruited for the new government programme, this supported sustainability because they continued to receive an allowance and were required to conduct household visits. Where KK CHWs were not selected, they sometimes became demotivated due to no longer receiving an allowance, and due to some resentment towards the new government CHWs. The newly recruited CHWs were thought to see themselves as the superior and legitimate providers, whereas the earlier CHWs thought some new CHWs lacked experience (at one health facility, only one of the 17 newly trained CHWs was previously a CHW). They argued that formal education did not make someone a better CHW. This loss of morale was reported as a wider problem in the district by the CHMT, with former CHWs who were not selected feeling that their role was redundant and they were no longer valued.

> 'CHWs who were in KK and who were not lucky to attend the government integrated CHWs trainings will stay at home because they are not paid. This will affect KK activities. However, KK CHWs who are in the government integrated CHW training know it's their responsibility to teach households and they are continuing to work, so they will sustain KK activities.' SS Chemba1 CHW

> 'After these CHWs went for the government training, KK CHWs lost morale for their work because some tell the others that "for me, I have been in the classroom". Some think they know more than the rest. You can see they are not on good terms.' SS Chemba2 HCW

> ‘To be frank, confusion has emerged between the new and previous CHWs. There are different understandings. They said things that discouraged us. The new CHWs consider themselves as the official CHWs recognised by government. For example, when the new CHWs introduced themselves in a community meeting, they said “now as the community, you should recognise us. We are the CHWs. We are the ones who have gone for studies. Don’t recognise these other CHWs. For these CHWs who worked in the past, their time is over”. These are young CHWs. They have just started. It is true that you might have studied up to Form 4, but there are still things you are not aware of. It is possible that you have studied but you haven’t reached my level. Maybe I only did training with an NGO for a few days but I might be more knowledgeable than you who has been in class for three or four months.’ SS Chemba2 CHW (not government)

One HCW reported difficulty encouraging KK CHWs who were not selected to continue working, because only the new government CHWs received payment.

> ‘After these new CHWs were brought, it became difficult to tell the previous CHWs to come and work when they were not receiving any stipends. These new CHWs are getting stipends. Usually, I work with these new CHWs because it is difficult to assign responsibilities to the previous CHWs. We try to work with them, but they present lots of excuses and claim they don’t have time.’ SS Chemba2 HCW

While there were tensions, **relationships between CHWs included in the government training and other CHWs varied.** Even where tensions were mentioned, there was some mutual support, for example with new CHWs asking more experienced colleagues for guidance on specific issues. HCWs were encouraging teamwork, and during FGDs, new CHWs and KK CHWs not in the government programme indicated a need to share knowledge and a commitment to working together (for example, through KK CHWs teaching their new colleagues how to build trust with households and how to make toys).

KK CHWs who were not part of the new programme requested that the government should also value their work, noting earlier CHWs’ long service and contribution to improved community health.

> ‘The government should recognise the importance of CHWs who were volunteering in the past and connect them with new CHWs. The government should recognise that we have made a lot of progress in health through working with these CHWs. These CHWs have helped a lot, but they are no longer valued. The government sees these CHWs as bathroom slippers that can be abandoned after bathing, and outdoor shoes are valued! The government should recognise that these CHWs need to be employed so that community activities can be done smoothly.’ SS Chemba2 CHW

These views were shared by CHMT representatives, who thought CHWs outside the government programme made an important contribution that should be recognised through an allowance.

> ‘Not all CHWs are being paid by the government. There are many CHWs who have worked for a long time, they don’t have the qualifications but they are hard working. Although they are not being paid, they still continue to volunteer. They are recognised in the community.’ SS CHMT1

5.3 Scaling up to non-Kizazi Kijacho CHWs and communities

RQ 10.1 Have KK activities been introduced in additional communities or districts, and, if so, how? What factors have affected scale-up, including any influence of the new government Integrated and Coordinated CHWs programme?

There was some spread of skills to non-KK CHWs at the KK health facilities, and occasionally to other health facilities. Formal training workshops for other CHWs had not been conducted due to the costs involved, and spread of the KK training to other CHWs or HCWs was primarily through informal peer sharing or observation of the KK CHWs. Some CHMTs or health facilities had used other options such as mentoring and on-the-job training, or using other district meetings to share information with non-KK HCWs.

Delivery of newer KK content by other CHWs was relatively limited at the time of the research. Scale-up among KK facility CHWs was affected by tensions between KK CHWs and those not selected for KK, as well as tensions between CHWs selected for the new government CHWs programme and KK CHWs who were not selected. Expectations that training required allowances, and a lack of flipbooks for non-KK health facilities, had also limited scale-up within and beyond KK health facilities.

In relation to vertical scaling, the implementing NGO partners were working with national and subnational governments to integrate support for CHWs in government systems and activities. This included work to include additional ECD components in the national supervision checklist used by CHMTs, the new curricula for CHW training, and the UCS digital system.

At the KK regional workshop, several CHMTs indicated plans to train more CHWs in ECD and to expand provision of parenting education to additional health facilities. This section examines scale-up to non-KK CHWs within the KK health facilities, and scale-up to other KK health facilities. It also looks at vertical scaling through integration of the KK approach in national government systems.

5.3.1 Scale-up within KK health facilities

Scale-up through sharing knowledge with other CHWs at the KK health facilities was the easier first step because this could be done without additional costs for transport or other allowances, and flipbooks were available at the facilities. **Spread of knowledge among CHWs in the same health facility was usually informal**. Non-KK CHWs often gained some understanding of the KK parenting information through watching KK CHWs present during clinic or outreach sessions, particularly on stimulation and making toys, and through non-KK and KK CHWs working together at VHNDs or other group sessions. Some KK CHWs had also shared information with other CHWs after the initial KK training, for example teaching others how to make toys.

> ‘When the KK CHWs are teaching at the clinics I usually attend, and when they teach about growth and development, I also learn some things. I have attended many sessions, so I understand the KK education. We are always together when doing CHW work around the dispensary, whenever they go, they phone me to join them. The topics that really caught my attention were about how to communicate with an unborn child, and about how the father should talk to the baby and spend time together. Also, placing children in the same age group together to play with different toys.’ SS Dodoma1 CHW

> ‘We teach each other when we are at the clinic, because we take children’s measurements together. We cooperate. We are all together.’ SS Bahi1 CHW

Some non-KK CHWs had provided the parenting education during public sessions. However, **teaching parents about stimulation and play generally remained the KK CHW’s role**. Topics for education were often divided among CHWs depending on their specific training, and non-KK CHWs had less knowledge and confidence in relation to these early learning topics. Non-KK CHWs also lacked the flipbook, partly because flipbooks were held by the KK CHW rather than at the health facility.

> ‘I may incorporate just a bit of education on playing games when I meet mothers in the street, but it’s not formal like I would do at the dispensary. I know my place when it comes to teaching mothers and I don’t want to interfere. I have the topics that I am competent in, and for the KK CHWs, we leave them to teach the topics they are competent in. The KK CHWs are the ones who are competent when it comes to playing games. They can deliver that education best. I can’t do it because I do not have the flipbooks or enough competence.’ SS Dodoma1 CHW

During interview discussions about the implications for sustainability if only KK CHWs could provide the education, some reflected that they should start sharing the flipbook and training non-KK CHWs.

> ‘You have given us a challenge. We will have to start sharing the information that we got from KK with our fellow CHWs. We will also have to share the flipbook, since we may also move from this village and then the education will be gone with us.’ SS Dodoma1 CHW

Further or more formal training within KK health facilities was limited partly by expectations that training required **allowances**. While some CHWs were seen as keen to share their knowledge or to attend training without financial incentives, expectations of allowances had limited attempts to organise training sessions, and reduced attendance when training was held.

> ‘Concerning provisions of KK education to non-KK CHWs, this was provided though the response was poor because CHWs expect that when they are called for a seminar, they should at least get something in return. This means that even if you conduct a meeting, at the end of the day they will have the information but putting the knowledge into practice becomes a challenge.’ SS Bahi2 HCW

Tensions between CHWs and **demotivation** for those not selected for KK and not receiving allowances also affected the spread of skills. Some CHWs who were not selected for KK were frustrated because only their KK colleagues received an allowance, and they felt their work had been sidelined and taken over by KK

CHWs. At one facility, some non-KK CHWs had been reluctant to attend meetings to learn about the KK topics, or to provide education in line with the KK guidelines afterwards.

> 'Non-KK CHW engagement with this is not good. We invited them several times to share what KK CHWs learnt, we met them twice. After we returned from KK training, we invited them. But only two non-KK CHWs attended, and the rest said they had emergencies. These two do provide ECD education, but they don't follow the guidelines. They rarely use a flipbook. They find it too much work. If you tell them to follow the KK guideline, they think you are forcing them. With these communities of ours, non-KK CHWs think KK CHWs are getting benefits. The KK CHWs used to receive allowances when they did these KK activities. This is where demotivation started.' SS Dodoma2 HCW

> 'You find one CHW telling a colleague that "you are being given an allowance and we are not getting an allowance". So when these non-KK CHWs are called to learn together, some CHWs are not ready to come.' SS CHMT1

The tensions between new government CHWs and KK CHWs who were not selected for the government training similarly affected sharing of skills. As described in Section 5.2.2, some KK CHWs thought some new government CHWs saw themselves as superior and did not want to learn from the KK CHWs, and CHWs who were not selected lost morale.

> 'I do encourage previous CHWs to teach these new CHWs about children's games. They haven't started teaching them. I think the challenge emerged after these new CHWs were introduced, such that for KK CHWs, the morale to do the work declined.' SS Chemba2 HCW

Where peer learning and on-the-job guidance did take place, it had limitations. Some CHMTs were concerned that KK CHWs lacked the skills to fully explain the KK curriculum, and they thought more formal training was needed to ensure positive results. In addition, non-KK CHWs only received brief information on a few topics, not detailed information across the KK curriculum.

> 'You find that just a few issues have been shared, but these other CHWs have not been taught everything that the KK CHWs were taught.' SS CHMT1

A lack of more comprehensive training may have contributed to the continued reliance on KK CHWs for parenting education.

5.3.2 Scale-up beyond Kizazi Kijacho health facilities

There had been **some scale-up of KK learning to CHWs or HCWs in non-KK health facilities**. As for sharing learning within health facilities, this was largely through **peer learning and mentoring**. In one district, the CHMT had used the ECD committee meetings (MMAM meetings) as a forum for sharing skills among HCWs. These meetings were conducted at the district headquarters and included all health facility HCWs. KK HCWs had taught other HCWs about the importance of play and how to make toys, so that they could support CHWs to provide this education. There were also examples of the KK CHWs providing mentoring for HCWs or CHWs at non-KK health facilities or attending a VHND in another village to provide guidance.

Some **CHMTs had also provided some information to health facilities not included in KK** during supervision, but this was brief guidance rather than detailed training.

> 'Each time we go for supervision, we give education. However, this is not done in depth. During normal daily supervisions, I can go to health centres that I know didn't receive KK education, call a few HCWs and tell them a few things. This is more like summary instructions, not like meeting them for training.' SS CHMT2

There was also some **provision of the parenting education around non-KK health facilities directly by KK CHWs**. In one district, the CHMT reported that some KK CHWs were attending clinics in nearby villages and facilities. This was affected by the provision of transport allowances, and was generally limited to facilities and villages near to their own facility.

Scale-up to non-KK health facilities was affected partly by a need for additional copies of the flipbook, to conduct training and for other CHWs to use the flipbook afterwards. However, flipbooks were not being printed due to limited budgets and the costs associated with printing a large colour booklet on thick paper.

> 'It is expensive because of its materials and the number of pages. It also needs to be printed in colour with pictures. I have not found any health facility which has budgeted for that.' SS CHMT3

Lack of allowances for the CHMTs, HCWs and CHWs to undertake or attend training was also a constraint. There were signs of partners potentially supporting additional training in some districts.

The transfer of trained HCWs to non-KK health facilities could potentially aid the spread of parenting advice. Only three short interviews were conducted with HCWs who had moved to non-KK health facilities, but these HCWs were providing education on simulation and play when teaching at clinics. One HCW had encouraged CHWs to teach these topics, but they had not made sustained efforts to spread skills, partly due to workloads.

5.3.3 Vertical scale-up: integration in national systems

The implementing NGO partners were working with national and subnational governments to develop systems that promote and support scale-up of community-level ECD counselling. This included work to integrate additional ECD components in the national supervision checklist used by CHMTs, the new curricula for CHW training, and the UCS. There was also ongoing work to support the revised Child Health Booklet for caregivers, which included more ECD content, and to support a standard operating procedure on integrating ECD in primary health care (20). Some of this work drew on EGPAF's other and earlier ECD programmes, particularly the Malezi project, which was used to help design KK. However, additional ideas and learning from KK were incorporated in EGPAF and D-tree's work with government, and the KK app formed the basis for their work to integrate ECD in the UCS. This is an evolving area of work in Tanzania, with ongoing developments and further progress since the KK research.

Conclusions

This concluding section summarises findings and suggests implications for future parenting programmes similar to KK, and areas for further research.

5.4 Summary of findings

5.4.1 Implementation of Kizazi Kijacho activities

Implementation of household visits, group sessions and supervision

Individual, household, community and wider health system contexts shaped delivery of household visits and group sessions and led to variations in coverage between households and communities. For example, CHWs' ability to reach households was shaped by community geography, road infrastructure and phone networks. Caregivers' availability was affected by household livelihoods, farming seasons and gender relations, and by caregivers' interest in and concerns about participation. CHWs' own circumstances and availability also affected delivery. HCWs' ability to manage supervision alongside their facility workload depended on adequate health facility staffing and the HCW's facility role, and HCW turnover disrupted supervision and reduced support for CHWs.

Implementation was also affected by aspects of KK design. In particular, the UCT supported attendance by recipient households while the UCT was paid, but the sampling approach sometimes discouraged attendance in non-UCT communities, and there were also difficulties in UCT communities after the UCT finished. Implementation was also affected by gaps in functionality of the KK app and associated dashboard data (including technological teething problems, as well as user errors and varied network coverage), and by limited KK engagement with community leaders. Some CHWs and HCWs worked with community leaders, but more systematic engagement might have supported CHWs' work through providing additional encouragement to parents.

HCW and CHW capability, motivation and workloads

KK supported CHWs' capabilities and motivation to deliver parenting advice. The combination of training and tools helped CHWs to teach about a wider range of issues and improved their ability to communicate and explain the information to caregivers. Supervision by EGPAF, HCWs and CHMTs, and peer guidance, helped to strengthen skills and address problems. Skills were further developed through the experience gained as KK progressed.

KK provided extrinsic motivation for CHWs, particularly through the allowance paid to CHWs and through the monitoring and support provided by the HCWs, EGPAF and CHMTs. KK also strengthened CHWs' intrinsic motivation, including through CHWs seeing the impacts of their advice on children's development, gaining more respect in communities, and feeling more confident and skilled in

their work.

Improved HCW supervision was supported by training, the allowance for HCWs, the dashboard, and guidelines or expectations regarding the frequency and type of supervision.

KK had some **positive and negative effects for HCWs and CHWs that were not explicitly envisaged or planned**. One benefit was additional knowledge to support their own children and to improve wider health facility activities. However, the stress related to UCT sampling, and potential damage to CHWs' community relationships, are important considerations for future trial design. The allowance for KK CHWs sometimes reduced non-KK CHWs' motivation, indicating the need to consider wider system effects.

Acceptability to stakeholders

Community and local government stakeholders appreciated the KK activities, particularly due to perceived benefits for child development. Caregivers generally saw the groups and household visits as providing useful information and guidance, and the UCT and other financial or in-kind incentives were also seen as a benefit. Improved CHW service delivery strengthened **community trust**. CHWs were already trusted due to their familiarity, experience and behaviour, and additional service delivery and further training added to positive perceptions of their commitment and expertise. However, there were areas of concern among caregivers, including distrust and a sense of unfairness or perceived lack of immediate benefit related to the UCT sampling, and KK sessions were not always sufficiently valued to be a priority for caregivers' time.

Wider reach

Information provided through KK reached caregivers beyond the target KK households through KK mothers sharing information, through wider attendance at household visits or group sessions, and through CHWs and HCWs using aspects of the KK curriculum in their routine work. This spread of information was affected by individual and community factors such as livelihoods, proximity, and social relationships, and by aspects of implementation, including the extent to which CHWs explicitly invited other mothers to attend and whether groups were held in public locations.

5.4.2 Supporting caregivers

Male engagement in parenting and household gender relations

KK supported **engagement of fathers in parenting**, through direct contact with the CHW and through mothers sharing the CHW's advice. There were also examples of more collaborative household decision making, improved household relationships and reductions in abuse due to the CHW advice and the UCT. However, fathers' attendance at KK activities was sometimes limited by issues such as household livelihoods and gender norms, and by insufficient communication to ensure fathers knew their involvement in visits or groups was both important and welcome. Changes in men's support for maternal health and parenting, and in gender relations, also varied between households, with continued gaps in support and limited female role in decisions in some households.

Effects on mental health and social networks

A range of **personal and household issues caused stress for some caregivers**, such as the health risks of pregnancy and delivery, economic difficulties and unsupportive household relationships. KK activities sometimes eased stress: for example, through advice from CHWs about managing stress, the social benefits of groups, and the enjoyment of playing with children. There were some **unintended effects for caregivers**, such as anxiety about being able to afford the ingredients used in cooking demonstration or clothes for the child. The issues discussed by caregivers highlight the challenging circumstances faced by some families in Tanzania, including poverty, gender-based violence, and out-of-pocket payments for essential health services. KK was able to alleviate some aspects of stress, but addressing these underlying challenges requires wider interventions.

Some mothers gained new friendships through the KK groups and there was some support for parenting through these networks, but the influence on social networks and their contribution to parenting and social norms was not widely emphasised. Assessing changes in these networks would need further research.

Influence on parenting practices

Stakeholders saw KK as contributing to improved maternal health and parenting practice. Many caregivers, CHWs and others pointed to increased stimulation for children and improvements in other areas of nurturing care. KK acted alongside **other interventions and wider contextual changes** that also supported caregivers' knowledge, motivation and opportunities for nurturing care: for example, routine services, other projects, improved health service quality, and fines for giving birth at home. KK added to existing services and provided additional support for maternal health and parenting.

New knowledge supported by KK was clearest in relation to stimulation, including learning about play, making toys, and talking with the child before and after birth. Caregivers also gained new knowledge or more understanding on other areas of maternal care and parenting, with specific areas of learning varying between individuals. Information about how to implement different practices effectively helped caregivers to act on guidance they had already received through other channels: for example, taking FeFo pills in ways that reduced side effects, distracting children as a way to reduce the danger from sharp objects, or using alternative ingredients that were more easily available or more affordable. Knowledge and understanding were supported by adequate time for questions and explanations during household visits, and by frequent, repeated information from CHWs. Practical guidance from CHWs also improved skills, for example on breastfeeding or making toys. Learning from other caregivers during group sessions further supported knowledge and skills. These features of KK added value over routine health promotion activities, helping to build more understanding and strengthening caregivers' capabilities.

KK also improved caregivers' motivation to implement new or existing knowledge, partly by providing frequent reminders and more explanation of the importance of different practices. Regular monitoring and fear of embarrassment if parents did not implement practices also motivated change. Watching demonstrations and then implementing new practices themselves reinforced motivation as parents realised activities were possible and experienced their

benefits: in particular, seeing their children develop and enjoy the activities, and becoming closer to their child. Finding that new practices made parenting easier was also motivating: for example, toys kept children occupied while mothers did other chores, and children cried less due to improved breastfeeding and nutrition. Trust in the CHWs supported parents' engagement with the advice, and experience of the advice being useful reinforced this trust.

In relation to **opportunities** to implement advice, involving other relatives and husbands helped to create a more supportive environment: this improved access to the resources needed (such as food), and facilitated permission for changes such as reducing physical work. The UCT also provided households with resources to implement parenting advice, with the money often spent on household essentials and goods for the child, and potential contributions to longer-term security through savings and livelihood investments. Use of homemade toys and guidance on alternative ingredients helped to reduce the costs of different parenting practices, although cost remained a barrier to adoption for some households.

The **extent of change varied between households and practices**. Sometimes recommended practices were implemented before KK, and improvements were sometimes limited: for example, some parents made little time for play or continued using corporal punishment. **Individual, household, community and health system contexts** influenced KK's effects on parenting and caregivers' capabilities, motivation and opportunities to implement advice. For example, some households could not consistently afford or access more nutritious food, and gender relations or cultural norms sometimes restricted change. Household livelihoods affected available resources and time for parenting, with the pressure to secure income sometimes taking priority over caring for and playing with children. Previous parenting experience affected motivation to change practices: for example, earlier injuries or health problems encouraged caregivers to act on the CHW's advice, while perceptions that previous children had developed well reduced motivation to make changes. Previous exposure to health services also affected caregivers' existing knowledge and the added value of the guidance provided through KK.

Caregivers described CHWs as providing encouragement and patient, respectful advice. However, caregivers, CHWs and HCWs also pointed to the role of **enforcement or monitoring in creating motivation**. For example, parents were encouraged to attend child clinics by the CHWs checking clinic cards, and wider health system interventions such as fines for non-compliance also affected households' behaviour. Some CHWs attempted to enforce engagement when caregivers' intrinsic motivation was insufficient, for example through warning letters from local leaders. KK aimed to generate positive, intrinsic motivation for nurturing care, but behaviour change interventions often draw on more restrictive approaches or punishment (21). Wider literature examines the relative advantages and disadvantages of these different approaches. In the context of KK and CHW parenting education, these findings suggest a need to ensure that parents are not pushed into behaviours that do not fit their interests and capacities, and to consider the implications for sustained implementation where caregivers act primarily due to real or perceived external pressure.

5.4.3 Sustainability

Local government planning and budgets

Local governments' focus on sustaining or scaling up the parenting education varied between districts. Implementation of CHMTs' initial plans for sustainability was often limited, but some steps had been taken at regional and district levels, and there were some plans for further work to sustain and scale parenting advice.

Budget constraints were repeatedly highlighted as a barrier to scale-up, limiting the provision of formal training, CHW allowances and additional flipbooks. Reductions in partner support also reduced opportunities for CHMTs to secure additional funding. However, some CHMTs were hoping to include some associated expenses in forthcoming budgets.

Planning for sustainability with the RHMT and CHMTs began largely in the final year of KK. More intensive engagement and joint planning for sustainability during project design and from the start of implementation might have facilitated the transition to government resourcing. For example, earlier discussions might allow more time to jointly identify lower-cost delivery options and give CHMTs sufficient lead time to allocate resources (including through alignment with budget cycles). However, there were tensions with the need to ensure KK interventions were effective before wider rollout, and planning for sustainability before evidence on KK's results could have been premature.

Sustained implementation

At facility level, within KK communities, there was **some continued provision of parenting education by KK CHWs**. This education was delivered primarily through routine health promotion activities, particularly health education at clinics and VHNDs, rather than through household visits or the KK groups. The KK training content and flipbooks continued to be used by CHWs in these routine health promotion activities. Use of the KK app was not expected to continue in its current form because the underlying server support and the need for data had ended, but the UCS system may provide some of the same functions for guiding CHW ECD counselling and supporting supervision.

Continued delivery by KK CHWs was affected by the end of the KK allowance, and by issues such as reduced monitoring by the KK project team, the end of the KK data system, and uncertainty about expected activities given completion of the KK curricula when children reached 2 years. Active HCW supervision and CHWs' inherent motivation sometimes supported continuation, but the opportunity costs of working without an allowance were too high for some CHWs.

The government's **new Integrated and Coordinated CHWs programme** was supporting continued provision of parenting advice in some communities, by providing CHW allowances and requiring CHWs to conduct household visits. The programme's effects on delivery of KK content depended in part on whether KK CHWs were selected for the government positions, and on the effective management of relationships between earlier and new CHWs (including support for CHWs who were not in the government programme but brought valuable experience). Unexpected cuts to development partner funding in 2025 curtailed plans for rollout of the new CHW programme, reducing opportunities for more widespread support to CHWs.

Using the routine group health promotion activities as a forum to provide parenting advice extends reach, and makes continued provision more feasible within current health facility budgets. This approach shows how the KK training content and tools can be adapted to delivery through alternative channels. However, stakeholders saw KK as having more impact than routine facility clinics and health promotion activities due to the regular follow-up and one-to-one counselling offered by household visits. Key mechanisms through which KK brought about positive effects relied on frequent, individual contact: for example, practical guidance, more detailed explanations, and knowledge that practices would be followed up and asked about. Support from husbands and other relatives was also increased when they could attend the CHW's visits. These findings suggest that the effects on parenting may be reduced if education is delivered only through routine group sessions such as clinics and VHNDs. Health managers may need to identify complementary options for more tailored support to mothers and for reach to other household members. Understanding whether and how integration of ECD content in routine health activities influences parenting will be an important area for future monitoring and evaluation.

Scale-up

There had been some **spread of the KK training** to other CHWs or HCWs, primarily through informal peer sharing or observation of the KK CHWs. Delivery of newer KK content by other CHWs was relatively limited. Scale-up among KK facility CHWs was affected by relationships: in some cases, selection for KK or the government CHW programme, and associated status and allowances, brought tensions between CHWs that hindered the transfer of skills. Scale-up within and beyond KK health facilities was also affected by expectations that training required allowances, and by a lack of flipbooks for non-KK health facilities.

The CHW training curriculum delivered through the government's Integrated and Coordinated CHWs programme offered an opportunity for scale-up, and there was ongoing work by EGPAF, D-tree and wider ECD stakeholders to institutionalise KK components within this curriculum and other government systems, including the UCS.

5.5 Implications for the Kizazi Kijacho theory of change

The findings suggest the overall causal chains in the KK theory of change operated broadly as expected: KK training, tools, supervision and allowances supported CHW capability and motivation to conduct household visits and group sessions, and HCW capability and motivation to supervise CHWs. Household visits and group sessions, together with the UCT, supported caregivers' motivation, capability and opportunities to implement improved parenting practices.

The qualitative **findings help to refine the mechanisms and pathways** indicated in the theory of change, identifying additional processes through which KK generated effects, more detailed causal pathways, and feedback loops that were not explicit in the original theory of change diagram. For example, KK inputs

supported CHWs in additional ways, such as use of the phone for scheduling visits and improved skills for their routine, non-KK service delivery. In relation to causal pathways, the original theory of change referred to changes in parents' knowledge and beliefs due to improved counselling content, communication skills and frequency. The findings allow us to further articulate these processes: for example, parents' knowledge was supported by additional time for discussion and practical guidance, and motivation was supported by monitoring, encouragement, reminders and explanation of the benefits of new parenting practices. Examples of feedback loops include CHWs' motivation being reinforced by positive experience of delivering household visits and seeing benefits for parents. Similarly, caregivers' motivation was reinforced as new practices were tried and found to be feasible, and sometimes enjoyable, and as children's development improved or new practices made parenting easier.

The findings also indicate the **importance of the assumptions** set out in the theory of change for enabling implementation and improvements in parenting. Assumed conditions were sometimes in place: for example, manageable CHW workloads and an allowance sufficient to motivate CHW delivery. However, assumptions did not always hold (for example, regarding HCWs' availability), and additional conditions that were not explicit in the original assumptions also affected implementation and changes in parenting (such as conditions relating to HCW turnover, household incomes, physical access to households, and adequate phone networks). Conditions indicated in the findings could be incorporated in future theories of change and programme design to support feasibility and effectiveness. For example, programme designs and associated theories of change may need adapting to different geographical and livelihood contexts in order to accommodate distances, household availability and mobility.

Several other aspects of the theory of change could be revised, or additional components added, using the findings. For example, the findings could support articulation of additional causal pathways for institutionalisation and sustainability, and for spread of parenting advice to non-KK households. Using the findings to produce a revised theory of change is beyond the scope of this report, but would be a valuable next step to guide future programme design and evaluation.

5.6 Implications for future parenting programmes and research design

Stakeholders recommended several ways to strengthen KK activities, including by addressing logistical and motivational barriers to implementation, and by supporting caregivers' capabilities, opportunities and motivation to engage with the activities and to adopt the recommended parenting practices. This section builds on stakeholders' ideas and other findings to suggest considerations for future parenting programmes, including steps to support implementation, sustainability, equity and effectiveness.

5.6.1 Supporting CHW delivery and household coverage

Supporting postnatal care. Postnatal care visits were sometimes missed because the mother moved to another community for delivery or the CHW was not told the mother had delivered. Coordination across health facilities and between the CHW and the health facility could support continuity of care: for example, with women receiving postnatal care visits from CHWs in the community where they are temporarily based, and health facilities alerting CHWs when women deliver.

Accommodating household availability and migration. Temporary migration for farming and in pastoralist communities was common, and disrupted household visits and group attendance. The appropriate response is likely to depend in part on whether children are left with other caregivers, who can then be targeted for CHW support, or whether children move with parents. Mobile outreach clinics have been used to deliver other services in Tanzania, and could be a platform for parenting advice (22). Seasonal farming workloads and other income-generating activities also affected caregiver availability. CHWs worked with households to identify suitable times for visits and group sessions, but additional community engagement during project design might suggest further options to fit activities around household availability, considering both timing and location.

Adjusting to local languages. Swahili was not widely spoken in some areas, and it was sometimes hard to translate ECD terminology into local languages. Providing materials and guidance that enable delivery of content in local languages could make CHWs' work easier and support parents' understanding. The research provided only limited evidence on the influence of language, so further assessment would be needed to inform action.

App functionality and data requirements. CHWs found the app helpful to make their work easier. However, technical difficulties and limited phone networks affected the app's value and ease of use, and sometimes created additional work for CHWs (for example, additional travel to sync data). The new UCS will provide a future platform, but the research findings suggest general lessons for use of apps in CHW programmes: for example, allowing adequate time and budget to support and test functionality, and adapting data submission or other procedures if technical problems arise to minimise the impacts on frontline app users.

Support for transport. Visits were affected by long distances, which reduced reach to some households and participation in group sessions. Many stakeholders suggested that CHWs need support for transport, for example through additional allowances or providing bicycles. Transport requirements vary between CHWs depending on local geography, so additional tailored provision for these expenses could be considered.

CHW allowances. Financial remuneration for CHWs is recommended in international guidance, in line with decent work agendas and recognition of the rights of CHWs and their role as an essential part of the health system (23). International guidance also states that CHWs need support to cover essential working costs such as transport, in addition to remuneration for their work, so an allowance that only covers expenses is insufficient. Allowances were widely indicated by KK stakeholders as important to recognise CHWs' contribution, and

to support sustainability by motivating CHWs and reducing the economic opportunity costs of time spent on CHW activities.

Supervision workloads and turnover. HCW supervision was affected by facility workloads and turnover. When supervision requires additional activities beyond current work, the selection of supervisors needs to consider health facility responsibilities. Turnover also needs to be accounted for in design: for example, through a thorough induction process and ongoing training to ensure new supervisors have adequate knowledge, skills and understanding of their role.

Higher-level support. Supervision visits by the CHMTs or EGPAF provided motivation for HCWs and CHWs, and supported the credibility of CHW advice through endorsement by figures in authority. CHMTs could consider options to provide this support for CHWs through routine CHMT supervision: for example, by speaking at a community meeting during supervision visits to endorse the CHWs' work and to underline the importance of nurturing care.

Community engagement. Several stakeholders indicated the importance of engaging community leaders to support parents' acceptance and implementation of the CHWs' advice, and to support sustainability. Community leaders could raise awareness at the start of programme activities, act as role models, and support additional dissemination of parenting advice through community meetings.

Supporting other sources of parenting guidance. Information from parents, CHWs and HCWs on other sources of parenting advice indicates potential channels for spreading information on nurturing care. As well as health facility clinics and outreach sessions, parents mentioned receiving advice through the church, community meetings, activities implemented by other projects, and the media. Situation analysis to identify operational and credible channels in each community could indicate options for integrating parenting education within existing activities, to maximise reach and support efficiency.

Supporting core health systems and wider infrastructure. Effective provision of ECD services depends on wider health system functionality, including adequate health facility staffing and CHW remuneration, and supportive relationships within facility teams. Systems beyond health are also important, such as adequate phone networks and infrastructure for CHWs to reach households and for households to reach clinics. This underlines the importance of the government's ongoing work to strengthen primary health care and wider development, and the need to adequately fund primary and community health services.

5.6.2 Supporting caregivers

Guidance materials that caregivers can retain at home. Caregivers wanted copies of the KK flipbook so that they could read and remember the material between CHW visits. The revised government Child Health Booklet in Tanzania incorporates additional information on nurturing care. Findings from a forthcoming evaluation of the booklet (supported by EGPAF) could be used alongside evidence on other sources of direct information for caregivers (such as digital systems) to identify approaches that best meet parents' needs. Differences between households in their preferences and access to digital sources suggest a combination of formats may be required.

Continuing guidance as children develop. Many parents requested further information on games and early learning for children after the age of 2. There are other initiatives in Tanzania to support early learning among pre-school children. These other initiatives could be reviewed to identify existing guidance for this age group that could then be adapted and provided through CHWs, as materials for parents' own use, or through other channels. The government's work to expand high-quality ECD centres also offers an opportunity to support children aged 2–4.

Addressing harmful practices. Changes in parents' approach to discipline were reported, but physical punishment continued in some households. CHWs may need additional support to understand and communicate guidance around positive discipline and alternatives to corporal punishment. Guidance by CHWs may need supporting through additional strategies to promote positive community norms, such as involvement of local leaders or other forms of community engagement, drawing on wider evidence about norms change and violence against children (24).

Supporting equity: addressing economic constraints. Some parents lacked the economic resources or security to protect their own health and that of their children: for example, needing to work throughout pregnancy or being unable to consistently purchase a range of nutritious food. The UCT helped, which adds to existing evidence on the importance of social protection to support caregivers.

Strengthening male involvement. Clear and direct invitations to men requesting their attendance at household visits and group sessions may encourage fathers' involvement in programme activities. The importance of direct involvement is likely to vary between households, depending on the extent to which couples share information and gendered power relations. Some fathers may prefer groups that specifically target men. Strategies for supporting fathers' engagement should be tailored through community discussions to understand caregivers' preferences.

Addressing gender-based violence and safeguarding. Gender-based violence and controlling behaviour by male partners constrained some women's involvement in KK activities. CHWs need support to intervene and manage these situations, with systems to address safeguarding risks for women and children. Several other initiatives in Tanzania aim to address gender-based violence, and there may be opportunities for coordination and collaboration with these programmes.

5.6.3 Supporting sustainability

Early engagement of decision makers and planning for sustainability. Planning with CHMTs for sustainability from the early stages of project design could enable a gradual transition to government funding and delivery. This needs to be balanced with clear evidence of the project's effectiveness, to support decisions on investment.

5.6.4 Implications for research design

Balancing system integration, sustainability and effectiveness. KK worked within the existing health system, supporting existing CHWs and HCWs, largely following the home visit frequency indicated in government guidelines, and using government-recommended levels for CHW allowances. In practice, government

guidelines on household visits and the allowance were not always implemented prior to KK. Following the end of KK support, health facilities often selected to integrate KK content within routine health promotion activities, because this required fewer resources and enabled wider reach. This is a pragmatic approach, but its effectiveness has not been tested because KK used different delivery channels, and relying only on the routine sessions may have less impact given the added value of household visits. Similarly, any supervision of CHWs by HCWs or CHMTs will now be conducted as part of routine supervision visits, which may provide less intensive support.

Consulting local health managers on ways to integrate additional or improved parenting advice within current budgets might have led to the use of routine clinic and outreach sessions from the start. Research could then have tested the effectiveness of this integrated delivery model. However, there is a difficult tension between testing models with higher chances of sustainability within current resources, and testing models that may be more effective for ECD. Opting for a minimalist approach that accepts widespread underfunding of ECD and primary health care can be seen as a disservice to parents and children. Demonstrating the potential benefits of improved frontline support and resourcing through a project like KK may help to strengthen longer-term government and partner investment in ECD.

Detailed situation analysis and involvement of local stakeholders in research design. Detailed situation analysis to understand the implementation context might have provided clearer information on social networks and the proximity of villages, to inform UCT sampling. Discussion with health facilities and other local stakeholders familiar with the community context would support situation analysis, and could also provide information on potential unintended effects and difficulties. Ensuring local stakeholders have a full understanding of the research would also help them manage difficulties: for example, with CHWs having sufficient information on the UCT sampling rationale and procedures to answer parents' questions.

5.6.5 Further research

There are several areas where further evidence could strengthen understanding of KK's implementation and effectiveness. For example, the CHW training, app and household visits may have strengthened CHWs' identification of danger signs and referral, but the qualitative studies provided limited information on this process. Longer-term research could examine whether and why parents maintain new practices when CHW visits stop, as well as the further spread of practices within communities. Here, we focus on research areas related to sustainability and scale.

One priority is understanding the effects of strategies used by health facilities to continue the parenting education, specifically through routine clinics and outreach. As discussed above, this delivery approach lacks some of the mechanisms that drove change for KK households: KK added to existing routine health promotion advice partly by providing additional content, but also through more frequent education, reminders, explanation, monitoring and practical guidance during household visits and small group sessions. Further research would be needed to understand how these drivers of change can be supported

within routine health activities, particularly in contexts where home visits are either not conducted or infrequent.

As the government's new Integrated and Coordinated CHWs programme progresses, further research can examine the programme's implications for provision of parenting education and how the new CHWs support nurturing care. This could inform the identification of any additional measures needed to support CHWs in providing comprehensive nurturing care guidance. There is ongoing research by government and partners to support the new programme, and project monitoring by EGPAF and D-tree will also contribute important evidence on these issues.

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Annex A: Kizazi Kijacho theory of change

Figure 1 presents the original KK theory of change, developed through workshops with the KK team and a review of KK documents. Additional nested theories of change were developed to indicate processes linking inputs to outputs, and outputs to outcomes; examples are presented in Figure 2 and

Figure 3. The research findings suggest potential refinements to the theory of change, which will be discussed with the KK research and implementation team.

Figure 1: Overall Kizazi Kijacho theory of change

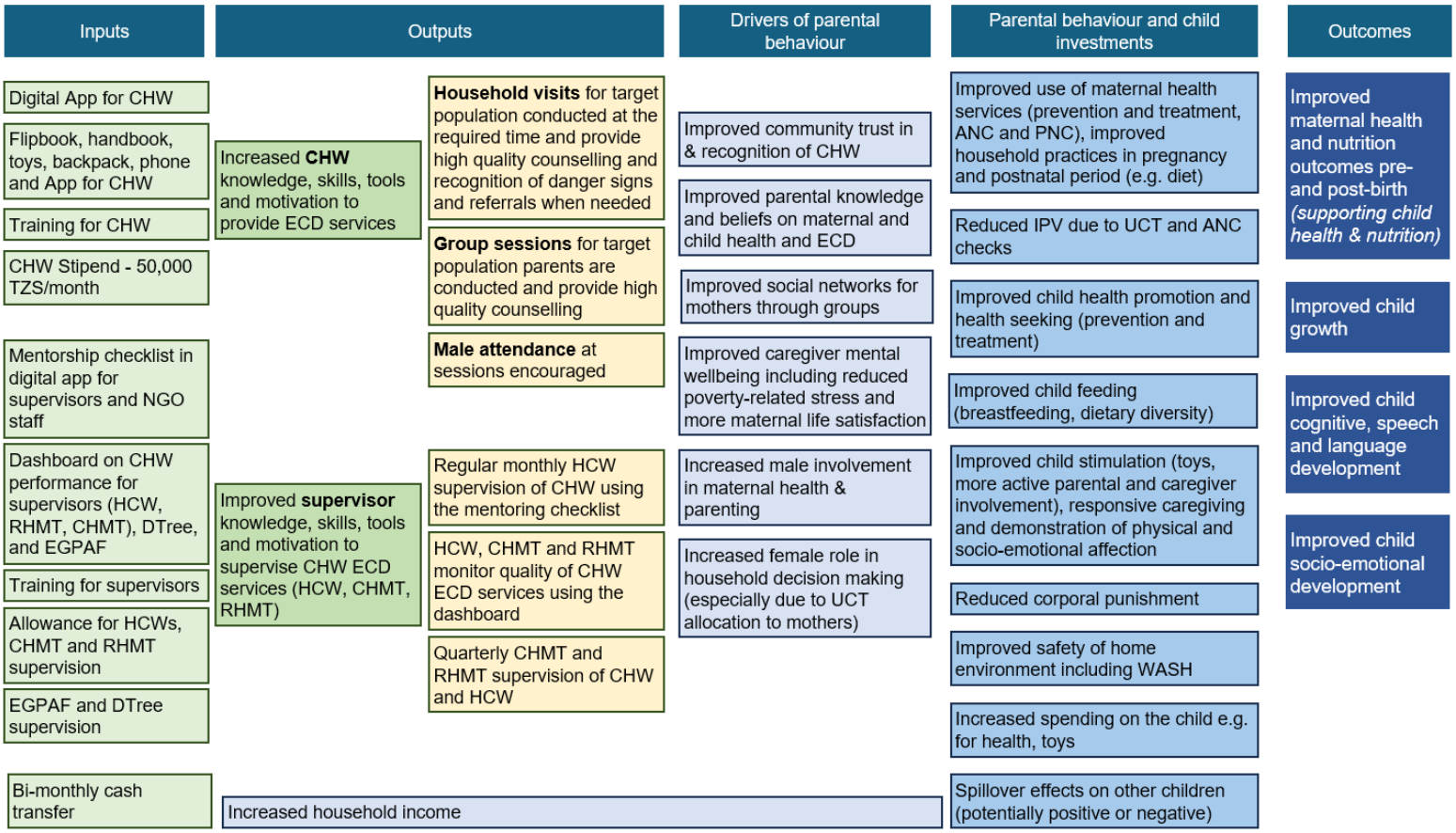


Figure 2: Inputs to outputs: CHW activities

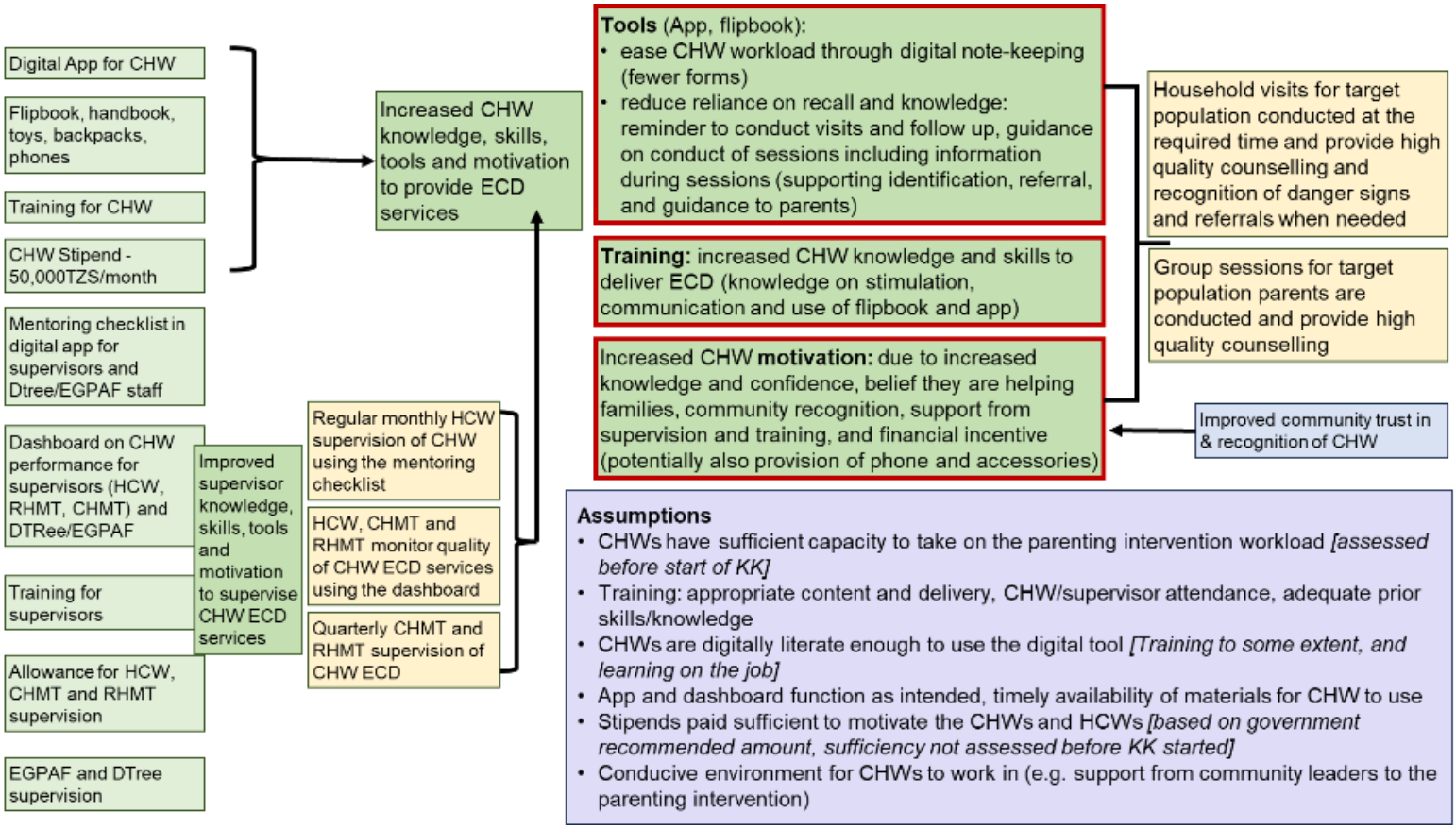
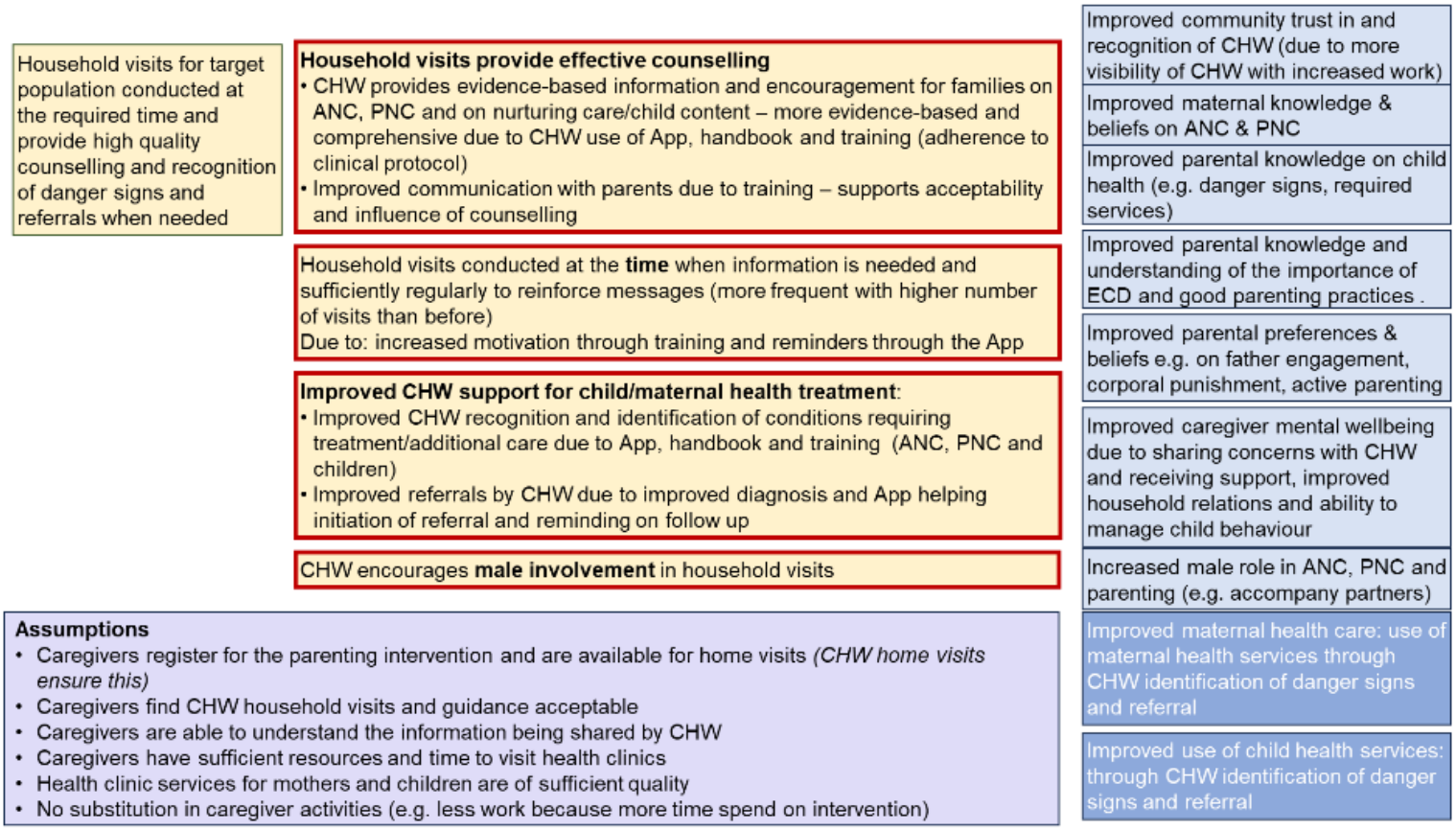


Figure 3: Outputs to outcomes: household visits and changes for caregivers



Annex B: Theoretical frameworks for the evaluations

Alongside the KK theory of change, the research drew on additional frameworks to guide design and analysis. Components from these frameworks were incorporated into the research questions and used to inform topic guides and analysis.

The **Medical Research Council** guidance for the evaluation of complex interventions provided an overarching evaluation framework (7). In line with this guidance, we examined quality (fidelity), quantity (dose) and reach of household visits, group sessions and supervision; acceptability to different stakeholders; contextual influences; and the mechanisms through which KK affected both delivery of parenting advice by CHWs and changes in parenting practices. The quantitative research for the process evaluation provided additional information on fidelity, dose, and reach of the household visits and group sessions. Similar dimensions for assessment are set out in the general guidelines for implementation research on nurturing care interventions (25).

We drew on a range of theoretical frameworks to identify processes and conditions that could affect implementation and changes in parenting practices. The **Capability, Opportunity and Motivation Framework for Behaviour Change** (COM-B) (21) helped to consider the requirements for HCWs and CHWs to implement the expected activities, and for households to participate in KK activities and to implement the recommended parenting practices. Capabilities include psychological and physical abilities, such as knowledge and skills. Motivation includes reflective, conscious decisions and habitual or emotional impulses. Opportunity relates to factors beyond the individual that constrain or enable behaviours, including social constraints such as norms, and the physical constraints of time and money. These drivers and behaviour interact, with positive and negative feedback loops. For example, motivation tends to be higher when individuals feel more capable and face fewer environmental constraints, and practising a behaviour can increase capability and increase or reduce motivation. This framework supported conceptualisation of the mechanisms through which KK inputs and activities affected delivery and parenting practices (i.e. by affecting capabilities, motivation and opportunities), and underlined the importance of context, particularly for opportunities. These elements were built into the research questions, topic guides, and analysis.

The **Consolidated Framework for Implementation Research** (CFIR) sets out five domains affecting the implementation and adoption of interventions: the

characteristics of the innovation (e.g. relative advantage over current practice, adaptability, trialability, complexity and cost); the outer setting (e.g. critical incidents, sociocultural values, economic, environmental, political, and technological conditions); the inner setting (e.g. information technology infrastructure, organisational and community relationships, incentive systems and resources); individuals (the needs, capabilities, opportunities, motivation and characteristics of those who lead and deliver the intervention); and the implementation process (activities and strategies used to implement the innovation, such as situation analysis and engagement) (26). The CFIR was used to suggest issues for topic guides (for example, perceived benefits of new tools and approaches), and during analysis, CFIR concepts helped to identify or conceptualise aspects of the KK intervention and context that affected the implementation of household visits, groups, and parenting practices.

The **socioecological model** describes interacting hierarchical layers of influence on behaviour. The specific description of different layers varies between researchers but broadly includes individual factors such as knowledge, skills and attitudes; interpersonal factors, such as relationships and social networks with family, friends and others; community, such as social norms or the physical environment; organisational factors, such as priority programme areas or working conditions; and the wider environment, which can include policies or wider contextual issues such as conflict (27–29). This model has been adapted for ECD and broader child development and wellbeing, highlighting the role of caregivers, communities, services, policies and wider socioeconomic and environmental contexts (27,28,30,31). In the context of KK, the model can be applied to consider the different layers of influence on caregiving practices: for example, considering a mother's income and livelihood activities, support from husbands or relatives, regular advice from health workers, and policies and systems that ensure the supply of essential health products. Similarly, the implementation of KK activities by CHWs and HCWs may have been affected by individual factors, such as motivation; interpersonal factors, such as positive feedback from caregivers or guidance from supervisors; organisational issues, such as workload pressures and health facility understaffing; and community geography. These different levels were built into topic guides and analysis.

More broadly, in considering context, we recognise that **contexts are dynamic and changing, and that subjective perceptions and interpretations of context can be as influential** as actual conditions (32). For example, perceived availability of funding may influence decisions on sustaining activities even if funding could in practice be identified, and ongoing health system changes could affect the contextual feasibility of ECD counselling.

To support thinking on **sustainability**, alongside the CFIR, we drew on frameworks and guidance that summarise factors affecting continuation. For example, the Program Sustainability Assessment Tool provides a succinct summary of issues such as leadership from programme champions, funding, community engagement, organisational capacity, and planning for sustainability (33); and resources from the World Health Organization ExpandNet programme synthesise similar dimensions (34,35). We also drew on frameworks indicating different types of scale-up, including horizontal expansion to additional populations or

locations, functional integration in routine activities or other services, and vertical institutionalisation through inclusion in policies, planning and budgets (35,36). These different areas were built into research questions, topic guides and analysis. The literature on sustainability and scale varies between a focus on maintaining fidelity to the original intervention, or considering sustainability and scale as a process of ongoing adaptation to different and changing contexts (37). Guidelines generally indicate a need to adapt the intervention while understanding essential core components, considering whether adaptations improve contextual fit or compromise effectiveness (7,35,37). We looked at ways KK was adapted by health managers to enable continuation, and considered whether changes in approach retained core components indicated in the findings as supporting improvements in parenting.

These frameworks, and the Nurturing Care Framework for ECD, align with a **systems approach** that recognises the role of different system components, intersectoral links, and interacting levels (38). In relation to the evaluation, a systems approach recognises that KK was introduced into existing communities, health systems and wider systems, each with different interacting parts and levels. KK's implementation and effects influenced and were influenced by these systems, and different system components – for example, health sector policies and governance, funding, human resources, information systems and service delivery structures – interacted and affected KK's outcomes.

Our understanding of **health systems** was informed by frameworks from the World Health Organization and others that indicate the different health system components of governance, financing, the health workforce, information systems, products, and service delivery, and interactions with diverse community systems. Health system frameworks also highlight the importance of system hardware (e.g. flipbooks, numbers of CHWs) but also software, including elements such as relationships, trust, norms and power (39,40). For KK, this understanding helped to identify different issues influencing implementation of the activities, changes in caregiver practices, and sustainability: for example, recognising the importance of hardware issues such as health facility funding and the availability of health workers, but also software issues such as relationships within health facility teams and between CHWs and communities.

Ideas from these frameworks were used flexibly, as sensitising concepts (41), rather than being applied rigidly to the research design or analysis. The frameworks suggested areas to explore during data collection and ways to consider and combine data during analysis, but data collection and analysis remained open to the issues raised by participants. Concepts from different frameworks were used selectively, where they added value.

Annex C: Activities planned by CHMTs to sustain KK activities

This table collates the plans to sustain KK activities presented by CHMTs at the regional steering committee meeting in February 2025. Wording comes from the original meeting report.

Table 3: Activities planned by CHMTs to sustain KK activities

Category	CHMT	Activity
Training for CHWs	Bahi District Council	To train a total of 92 CHWs (15 each quarter) To build the capacity of 41 CHWs (10 each quarter) from 52 health facilities To increase the number of CHWs who will be providing ECD services/education from 13 to 92 by the year 2027
	Chamwino District Council	CHWs and HCWs already trained on ECD to conduct training in 45 facilities where CHWs are not trained
	Dodoma City Council	Six new CHWs have been trained to carry out project activities, bringing the total number of CHWs to 24, up from the initial 18 Ongoing refresher training for the CHWs and their respective supervisors
	Kondoa District Council	To train an additional 48 CHWs so as to reach a total of 72 trained CHWs To train an additional 30 HCWs so as to reach a total of 40 trained HCWs
	Mpwapwa District Council	Five new CHWs have been trained on ECD
Supervision	Chamwino District Council	To conduct support supervision four times in facilities offering ECD services

	Dodoma City Council	To enhance the quality of ECD visits by being involved directly within supervision activities To conduct quarterly ECD supervision activities for the CHWs To continuously build capacity on supervisors' and CHMTs' dashboard usage
	Kongwa District Council	To integrate supportive supervision for CHWs providing ECD services with other supportive supervision conducted by other stakeholders
	Mpwapwa District Council	Ongoing CHW supervision support with an allocated council budget To incorporate the management of KK activities into council supervision schedules To continuously resolve the issues faced by CHWs in project implementation
Budgeting	Bahi District Council	A total budget of TZS 6 million has been allocated to support the continuity of ECD services, in close collaboration with the council's Social Welfare Department
	Chemba District Council	To put aside a budget across each sector so as to sustain the ECD activities
	Dodoma City Council	To include ECD services in the council's comprehensive budget plan
	Mpwapwa District Council	To instruct facilities involved in the project to allocate budgets for the operation of KK activities, including the printing of work tools
Meetings	Chamwino District Council	To conduct 12 ECD committee meetings
	Chemba District Council	To conduct quarterly meetings to review progress on the implementation of ECD activities
	Kondoa District Council	To conduct meetings to discuss ECD activities on a quarterly basis each year
	Kongwa District Council	To integrate quarterly meetings for the coordination of ECD services with other nutrition quarterly meetings that are already taking place
	Mpwapwa District Council	To hold quarterly meetings to discuss successes, challenges, solutions to challenges, and improvements
Expanding to other facilities	Bahi District Council	To develop an action plan to ensure that all 40 health facilities, beyond the current 13, are reached, with a focus on budget allocation and the implementation of ECD services

/ extending coverage	Chamwino District Council	To provide ECD education to 9,000 mothers who attend clinics in 15 facilities which are part of the project
	Chemba District Council	To invite caregivers/parents who were not registered in the KK project to take part in the group counselling
	Kondoa District Council	To reach pregnant women in specified areas so as to ensure they receive ECD education
	Mpwapwa District Council	To prepare a strategy to reach 33 wards, up from the 11 wards previously covered by the project 11 new caregivers and their children have been enrolled in the ECD activities
Tools	Bahi District Council	To purchase 92 Bango Kitita flipbooks (15 each quarter) for CHWs by June 2026
	Kondoa District Council	To print/purchase an additional 156 working/guiding tools (i.e. Bango Kitita) for the additional CHWs and HCWs who will be capacitated/trained
Using other platforms	Chamwino District Council	To plan and conduct four nutrition days per year in the community
	Chemba District Council	To continue providing ECD counselling/education in the villages that were not part of the project, on VHNDs
	Kondoa District Council	To provide ECD education through occasional meetings; in churches/mosques; in mobile clinics; and through political leaders such as council leaders
	Kondoa Town Council	Using reproductive and child health clinics to provide ECD services
	Kongwa District Council	To use the 'nutrition day' to educate the community on ECD: particularly pregnant women and mothers with children under 2 years
Other	Bahi District Council	To conduct advocacy for ECD to district, ward and village level leaders 10 CHW bicycles have been purchased with support from the District Secretary Office to aid the implementation of ECD activities
	Chemba District Council	CHWs continue to encourage the community to farm vegetables and engage in animal farming, and also to contribute to feeding programmes in schools
	Dodoma City Council	Working with partners to have a sign language expert

	Kongwa District Council	To build the capacity of mothers on how to make play materials using locally available materials: for example, bottle tops, water bottles, sticks, wood, and dry tyres
	Mpwapwa District Council	To provide project implementation reports to the council's main ECD committee To inform project implementation activities at the regional level

Thrive

Thrive is a multi-country research programme that aims to support countries to turn what we know about positive early childhood development into practical, scalable, low-cost programmes, able to transform societies over multiple generations. Working closely with policymakers and other stakeholders, Thrive aims to build understanding of early childhood development service delivery models and how they can be provided cost effectively and at scale, and how these systems can innovate, improve, and better serve children and communities in low- and middle-income countries.

Our five focus countries are Bangladesh, Ghana, Kiribati, Sierra Leone and Tanzania.

The Thrive programme is funded by the UK's Foreign, Commonwealth and Development Office through its Global Research and Technology Development portfolio and by New Zealand's Ministry of Foreign Affairs and Trade (MFAT). It is managed by Oxford Policy Management in collaboration with the Institute for Fiscal Studies.

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