Research Insight

How can community health workers support early childhood development?

Policy Brief: #024-017

Insight from a rapid literature review to inform the Kizazi Kijacho research programme

Introduction

The Kizazi Kijacho ('The Next Generation') research programme aims to inform early childhood development policy and practice in Tanzania. Part-funded by Thrive, Kizazi Kijacho focuses on the first 1,000 days of a child's life, from conception until age two – a critical period for development of health, learning, behaviour, and psychosocial wellbeing.

Kizazi Kijacho includes a randomised controlled trial (RCT) to test the effectiveness of three packages of interventions designed to support parenting and child development outcomes: a parenting programme delivered by community health workers; an unconditional cash transfer that provides financial support to households; and a combination of both interventions. The RCT examines the effects of these interventions on parenting practice and child development outcomes. It is being implemented in Dodoma Region and involves 3,588 pregnant mothers and their families living in 387 communities, served by 258 health dispensaries in eight districts.

The Kizazi Kijacho parenting programme

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

Support for parents is delivered by government community health workers through monthly home counselling visits, which start during pregnancy and continue until the child is approximately age two. Community health workers also organise community-based group sessions once children reach six months. Community health workers are trained in different aspects of early childhood development as part of the Kizazi Kijacho programme and are provided with a smartphone and digital app to guide their work. They receive further support from their supervisors, who are trained in early childhood development and supervision through the Kizazi Kijacho programme. The supervisors also receive a checklist and an online dashboard to guide supervision and monitor community health worker performance.

The process evaluation

We are conducting a process evaluation alongside the RCT to examine implementation of the parenting programme, to help explain RCT findings and to provide insights on whether and how the Kizazi Kijacho activities could be scaled up more widely.

Specifically, the process evaluation seeks to understand whether the home visits, group sessions and supervision activities are implemented as intended, and what affects this. It examines feasibility, including factors that help or hinder implementation, and acceptability of the home visits, group sessions and digital app among community health workers, supervisors and caregivers.

To understand these issues, the process evaluation uses qualitative research based on interviews and group discussions with male and female caregivers, community health workers, supervisors, regional and district government health managers, and community stakeholders.

Quantitative monitoring data produced as part of the Kizazi Kijacho programme is also being analysed to understand the levels and nature of implementation – for example, frequency of home visits and whether community health workers visit all expected participants.

Rapid literature review

To help design and inform the qualitative research, a rapid literature review was conducted to:

- identify issues that might affect feasibility and acceptability of the Kizazi Kijacho programme, based on findings from related research
- identify any additional gaps in the evidence base that Thrive could help to address through the process evaluation or other research.

The literature review collated evidence on: community health workers' use of apps; their motivation and performance; the quality of their supervision; and their experiences with providing advice on early child development and with engaging fathers in early childhood development.

The review focused on articles from Tanzania and key international evidence syntheses (including a guideline from WHO) – the full list is provided at the end of this paper. Articles were identified via online searches in PubMed and Google Scholar, and through research team knowledge of the literature for additional sources. Information was extracted using an Excel matrix structured around the key areas of interest above, with specific searching for information on areas such as effectiveness, feasibility and acceptability. The review was a time-limited exercise that aimed to identify some key insights to inform research, not a comprehensive assessment of the existing evidence.

The review drew on findings from 10 cross-country or global reports and 12 articles focused on Tanzania. Articles from Tanzania included qualitative, quantitative and mixed-methods research, and the majority reported evaluations of interventions related to early childhood development or other aspects of child health. The cross-country and global reports were primarily qualitative evidence syntheses, but also included one article using multi-country qualitative data and a global WHO guideline developed on the basis of a systematic review. All reports apart from the WHO guideline were peer-reviewed journal articles.

Key findings

Although this was a rapid review, it indicated a range of issues that could enable or hinder implementation and sustainability of the Kizazi Kijacho parenting activities. We provide selected examples of the findings here.

Community health workers can support nurturing care, but there are challenges

Existing research suggests that community health workers can support effective caregiving. Examples from other programmes in Tanzania suggest potential feasibility of working with community health workers to advise parents, and effectiveness in improving some child health and development outcomes (Antelman et al. 2023; Broadbent et al. 2022; Ferla et al. 2023; Sudfeld et al. 2021).

However, the existing research also shows potential challenges. In particular, community health workers may find it hard to advise parents on aspects of responsive care such as communication and how to play with children (Antelman et al. 2023; Ferla et al. 2023). They may also have difficulty engaging fathers. Other programmes found fathers appreciate early childhood development counselling sessions when they attend, but their engagement was sometimes limited by perceptions of child health and nutrition as women's responsibility, practical issues such as meetings clashing with work responsibilities, and by insufficient effort by community health workers to communicate with men and invite them to counselling sessions (Rothstein et al. 2022).

Community health workers need a range of support to provide services effectively

There is considerable evidence from programmes implemented in different countries and with different kinds of health services to show that community health workers need a range of support to provide services effectively (Colvin, Hodgins and Perry 2021; Kok et al. 2017, 2019, 2021; Mgawe and Maluka 2021; Ngilangwa and Mgomella 2018; Ormel 2019; Sarriot et al. 2021; Smith Lunsford et al. 2015; WHO 2018).

This includes adequate training, financial remuneration and other incentives, and good relationships and trust with other health workers and with the community. Community health worker performance also depends on factors such as workload, selection and recruitment processes, and the strength of other aspects of the health system, such as referral services and medical supplies (see Box 1).

Box 1: Factors that support community health worker motivation and performance

Existing research indicates multiple factors that can enhance community health worker motivation and performance, through ensuring technical competence to perform the work, feasibility of community health worker responsibilities, and moral support and encouragement. For example:

+ support from the family and spouse
+ community support and appreciation, which can be enhanced through strong community engagement, e.g. in community health worker selection and prioritisation of community health worker tasks
+ acceptance and respect from clinic staff and colleagues
+ training in technical and soft skills to support competence and confidence, and a career path
+ supportive, frequent supervision from skilled supervisors, to reinforce competencies, provide motivation and help problem solving
+ compensation, including standardised and reliable financial compensation, preferably not through performance-linked incentives, as well as non-financial incentives
+ clear roles and a formal title and position, set out in a contract or appointment letter
+ equipment, including symbolic and practical items such as a uniform or backpack
+ contextual factors such as community cultural and social norms and local geography, including distance to households
+ health system factors e.g. clear referral systems and available supplies
+ selection and recruitment procedures and criteria e.g. community role in selection, education level appropriate to required tasks
+ manageable workload, considering the size of the population served and number/type of tasks, level of support provided, and non-community health worker responsibilities (including domestic workloads)
+ intrinsic motivation, including a commitment to serving the community.

Supervision is particularly important for community health worker motivation and performance, and there are some indications that digital mobile health tools can support effective supervision (an approach being tested through the Kizazi Kijacho programme). Existing evidence also indicates common challenges to effective supervision, such as: insufficient understanding of community health worker roles; a lack of tools to guide supervision; time constraints or low prioritisation of supervision; high turnover among supervisors; and lack of transport to supervision sites (Westgate et al. 2021; WHO 2018).

Smartphones and mobile apps to help community health workers to provide services: opportunities and challenges

Existing research suggests that smartphone and other digital apps can help community health workers to provide services and that such technology is often appreciated by community health workers as well as community members. However, there can be difficulties – such as technical problems, negative effects on the quality of client interaction, and misunderstanding or concern among parents about the purpose of phone use and associated data collection (Feroz, Jabeen and Saleem 2020; Fulcher et al. 2020; Greuel et al. 2023; Hackett, Kazemi and Sellen 2018; Hackett et al. 2019; Westgate et al. 2021; WHO 2018) – see Box 2.

Research also shows that when programmes involve smartphone apps, a key benefit for community health workers can be the phone itself, rather than the app: the phone can help communication with clients and with other health workers, for example to arrange appointments and referrals (Hackett et al. 2019).

Box 2: Use of smartphone apps by community health workers

Benefits of apps identified in the research included:

+ motivating and enjoyable for CHWs
+ less bulky than previous job aids
+ reduced CHW workload, particularly for reporting, and improved data collection
+ helped to organise CHW tasks, reminded them of activities and improved productivity
+ increased CHWs' knowledge and confidence
+ improved the quality of advice from CHWs and helped understanding among parents, in turn improving CHWs' relationship with clients
+ clients saw the app as a source of expert, authoritative advice, so improving respect for – and trust in – the community health worker's advice.
+ phone allowed easier communication with other health workers and clients, including as a channel for private communication.

Challenges with apps identified in the research included:

– concern about theft of the technology
– seen as disrupting communication with clients
– difficulty using the technology, partly due to lack of familiarity and insufficient training or support
– technical difficulties with the devices and software
– insufficient internet connectivity
– mixed client views on data privacy, with some concerns on confidentiality
– misunderstanding among some clients about the function of the technology and any information being collected.
– limited sustainability of pilot projects.

Building on the literature review findings

We used the rapid literature review to finalise the qualitative process evaluation design. Many of the points raised in the literature were already being investigated through the Kizazi Kijacho process evaluation, but the review also identified additional questions to include in our data collection or to examine in more depth. For example, we adapted interview and focus group tools to include questions on whether community health workers use the phones to improve communication with parents (rather than just using the app), as this may affect the outcomes of the Kizazi Kijacho programme. Questions to help identify any misunderstandings about the purpose of the phones or concerns about data confidentiality among parents have also been added. The review also identified supervision of community health workers as an area where more evidence is needed, so we have included detailed discussion on supervision in interviews.

Our process evaluation is now complete, and we have seen many of the themes highlighted in existing literature – such as the importance of community support and trust, effective supervision, and the benefits and drawbacks of mobile health technologies.

The process evaluation will add to current evidence on the role of community health workers in early childhood development, including: community health workers' experience of engaging fathers, their confidence in advising on responsive caregiving, and their motivation and training; relationships between community health workers and communities; and wider community health worker performance. Findings will be published in later 2024.

Articles included in the literature review

Global and multi-country research and syntheses

Colvin, C.J., Hodgins, S. and Perry, H.B. (2021) 'Community health workers at the dawn of a new era: 8. Incentives and remuneration', *Health Research Policy and Systems* 19, 106. **https://doi.org/10.1186/s12961-021-00750-w**

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Westgate, C., Musoke, D., Crigler, L. and Perry, H.B. (2021) 'Community health workers at the dawn of a new era: 7. Recent advances in supervision', *Health Research Policy and Systems* 19, 114. **https://doi.org/10.1186/s12961-021-00754-6**

World Health Organization (2018) 'WHO guideline on health policy and system support to optimize community health worker programmes'. **https://www.who.int/publications-detail-redirect/9789241550369**.

Articles on Tanzania

Antelman, G., Ferla, Gill, M.M., Hoffman, H.J., Komba, T., Abubakar, A., Remes, P., Jahanpour, O., Mariki, M., Mang'enya, M.A. and van de Ven, R. (2023) 'Effectiveness of an integrated multilevel early child development intervention on caregiver knowledge and behavior: A quasi-experimental evaluation of the Malezi program in Tanzania', *BMC Public Health* 23, 19. **https://doi.org/10.1186/s12889-022-14956-2**

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Partners

About Thrive

Thrive is a large-scale, multi-country research programme which aims to build understanding of early childhood development (ECD) service delivery models, at scale, and how they can transform to significantly improve childhood health, nutrition, education and well-being in low- and middle-income countries. Thrive seeks comprehensive, practical answers about how ECD systems innovate, improve, and better serve children and communities. The programme is managed by Oxford Policy Management (OPM) in collaboration with the Institute for Fiscal Studies (IFS), and Yale University. It is implemented in five countries – Ghana, Sierra Leone, Tanzania, Bangladesh and Kiribati.

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