EARLY CHILDHOOD DEVELOPMENT SERVICES

Who does it better?

A comparative analysis of early childhood development services by facility and community providers in Kenya

Background

Research shows that household visits that include demonstration and practice of responsive play and communication can positively affect child development in both the short and long term.[1] Therefore, it is easy to assume that capacitating community health workers (CHWs) to integrate these interventions into household visits will lead to positive early childhood development (ECD) outcomes. The assumptions are seemingly sound. After all, by virtue of living in the community, CHWs are thought to understand local circumstances and the needs of individual families. They are expected to have more frequent contact with the families and enjoy greater trust from the community as compared to facility-based service providers.[2]

However, results from controlled research studies involving intensive household visits focused primarily on play and communication and backed up by frequent supervision may not always be extrapolated to real-world settings. CHWs struggle with heavy workloads and are often unable to devote time to intensive counseling during household visits. At the same time, there are systemic weaknesses with community health systems—for example, too few CHWs covering large geographic areas, lengthy distances between homes (which they usually cover on foot), insufficient remuneration, and irregular and inadequate supervision.[3] CHWs are often expected to incorporate additional services in response to new priorities adopted by government or nongovernmental partners. The resulting overload may cause CHWs to struggle to select and prioritize tasks and activities during household visits.[4]

On the other hand, facility-based service providers tend to usually receive more structured training and have a higher level of technical competency compared to CHWs. While workload is an issue for them as well, they are remunerated (even if not adequately), and they do not have to cover lengthy distances on foot to provide services.

Additionally, facility-based service providers may have more frequent contact with young children and their caregivers—at least in the first year after birth—largely due to the mandated schedule for essential vaccines. In Kenya, for example, most children are brought to the health facility for the six immunization and well-baby visits mandated by the Ministry of Health (MOH),[5] which correspond to the six visits in the first year recommended by the World Health Organization.[6]

Between 2014 and 2021, PATH supported the capacity-building of all facility-based service providers and CHWs in Siaya County, Kenya, and Maputo Province, Mozambique, to deliver developmental counseling and monitoring as part of their routine services. In Kenya, CHWs (known as community health promoters [CHPs]) were also trained to facilitate play sessions in health facility waiting areas to make them child friendly and to counsel caregivers on how to play with their children.

PATH is a global nonprofit dedicated to achieving health equity. With more than 40 years of experience forging multisector partnerships, and with expertise in science, economics, technology, advocacy, and dozens of other specialties, PATH develops and scales up innovative solutions to the world's most pressing health challenges.

path.org

Address
2201 Westlake Avenue
Suite 200
Seattle, WA 98121 USA

Date
November 2024

A community health promoter discussing the contents of the Mother & Child Health Handbook with a caregiver during a household visit. Photo: PATH.

We successfully demonstrated the feasibility of delivering these services through primary health care at scale. However, assessments revealed concerns around quality and fidelity of services. From 2022 to 2023, we used human-centered design (HCD) to understand barriers and facilitators to delivering integrated ECD services through primary health care in Kenya and Mozambique. The results were used to co-create and test solutions designed to maximize the quality of ECD service delivery and uptake of ECD messages by caregivers (covered in other briefs). In Kenya, among the solutions were (1) the use of existing developmental monitoring and counseling content in the MOH Mother & Child Health Handbook guided by a standard operating procedure (SOP) for CHPs and facility-based service providers and (2) redesigned, easy-to-use job aids for CHPs to facilitate play sessions in health facility waiting areas, with a focus on demonstration, practice, and feedback to facilitate caregiver learning.

In addition to testing the extent to which these solutions help improve the quality of service delivery, we also sought to understand the difference in quality of ECD services provided by CHPs and facility-based providers. The analysis was carried out to understand what services CHPs are comparatively better at delivering and what services are best delivered by facility-based service providers.

Baseline and endline data were collected through semi structured interviews with 48 caregivers of young children exiting the child welfare clinic (CWC)—that is, the touchpoint providing immunizations, growth monitoring, and well-baby checks. Observational data were also collected from 62 and 48 CHP

household visits at baseline and endline, respectively, by research assistants posing as students learning about the CHPs' work (also known as the "mystery client" approach).

Results

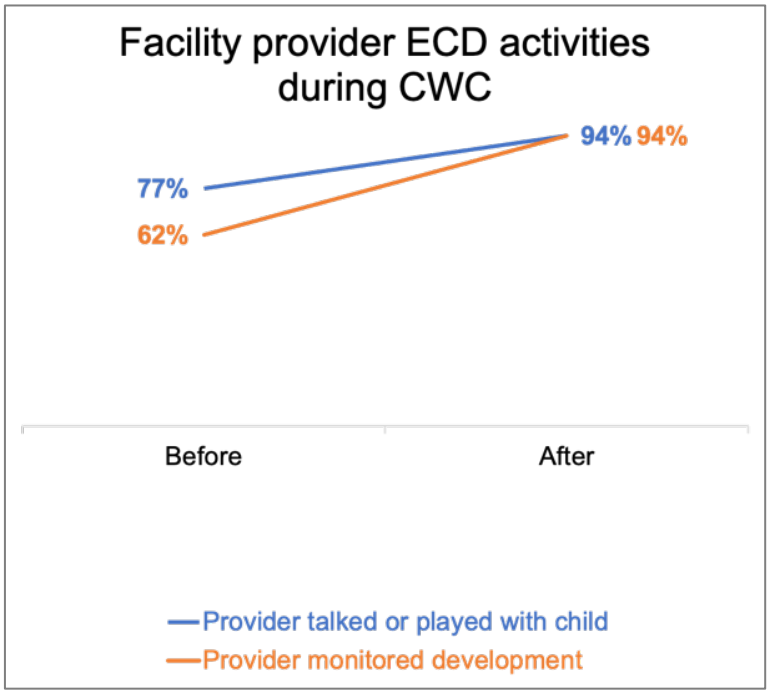
Facility-based service providers seem to have more contact with caregivers

Among caregivers of young children, 70 percent reported visiting a health facility in the month preceding the interview. In contrast, only 10 percent reported receiving a CHP household visit during the same period. Even after the implementation of the HCD solutions designed to increase the quality and frequency of ECD service delivery, there was no significant change in the percentage of caregivers of young children reporting a CHP household visit in the previous month. This is in spite of the Kenyan MOH recommending frequent CHP visits to households with children under one year of age.

Facility-based providers seem to implement developmental monitoring and counseling more consistently and with better quality

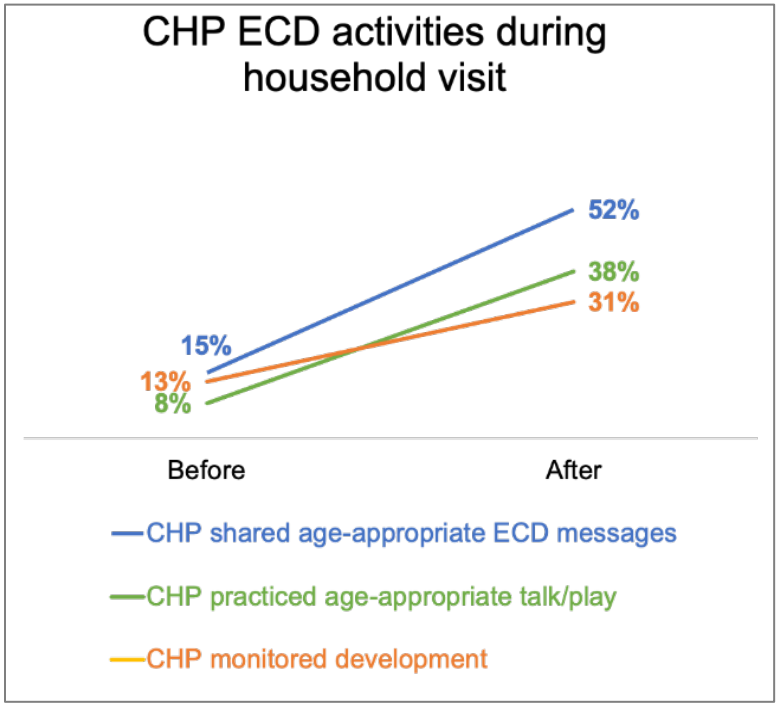
As shown in Figure 1, baseline data collected prior to the implementation of the HCD-refined solutions indicated that 62 percent of facility-based service providers at CWCs were monitoring children's developmental milestones, while 77 percent talked and played with the child to demonstrate responsive caregiving and age-appropriate play and communication practices. Training facility-based service providers on using the Mother & Child Health Handbook and associated SOP to guide developmental monitoring and counseling was associated with these figures rising to 94 percent in both cases.

Figure 1. Facility provider child welfare clinic (CWC) early childhood development (ECD) activities before and after implementation of the human-centered design (HCD)–refined solutions.



On the other hand, during the same period, when CHPs were capacitated similarly, the increase in developmental monitoring and counseling was much less pronounced (Figure 2). Even before they were trained in the use of the Mother & Child Health Handbook and SOP, only 13 percent of CHPs were offering developmental monitoring as part of household visits. The corresponding figures for sharing age-appropriate play and communication practices with caregivers and practicing these techniques with caregivers were 15 and 8 percent, respectively. After training, 52 percent of CHPs offered developmental monitoring, while 38 and 31 percent practiced and shared content on age-appropriate play and communication, respectively.

Figure 2. Community health promoter (CHP) early childhood development (ECD) activities during household visits before and after implementation of the human-centered design (HCD)–refined solutions.

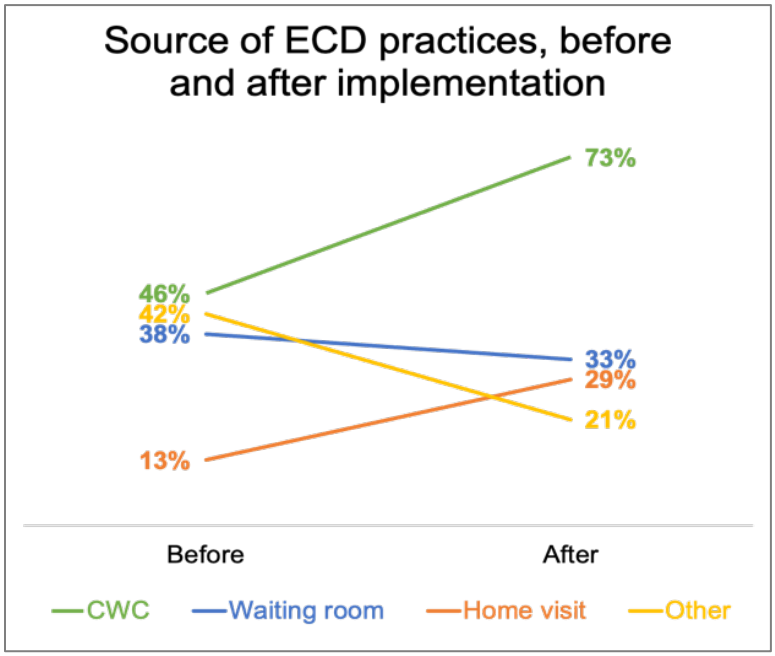


The results show that while developmental monitoring increased with training for both facility-based health service providers and CHPs, significantly fewer CHPs were found to provide it. Additionally, significantly fewer CHPs were found to demonstrate and share responsive caregiving and age-appropriate play and communication practices as compared to facility-based health service providers.

Facility-based service providers are more likely to be cited by caregivers as the primary source of learned ECD practices

The comparative analysis also suggests that while ECD services are delivered by both facility- and community-based providers, caregivers seem to learn more from the former versus the latter. Solution implementation was associated with an increase in caregivers learning about ECD practices through both CWC and CHP household visits (Figure 3). However, there was a 44-percentage point difference between them, with 73 percent of caregivers citing the CWC as a source of learning about these practices.

Figure 3. Source of early childhood development (ECD) practices, before and after implementation of human-centered design (HCD)–refined solutions.

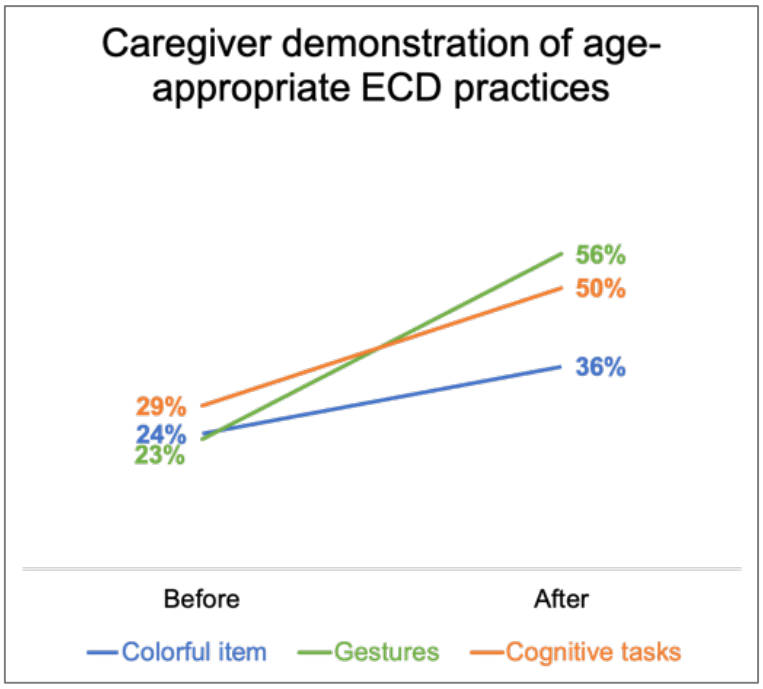


Before solution implementation, there was only an 8 percentage point difference between caregivers citing the CWC as a source of learning about ECD practices and play sessions in health facility waiting areas (46 versus 38 percent, respectively). However, solution implementation was associated with the gap widening to a 40-percentage point difference. This suggests that notwithstanding the desire to task-shift some developmental counseling from the CWC consultation room to CHP-led play sessions when caregivers are waiting to receive services, caregivers perceive facility-based service providers to be a more authoritative source of knowledge on ECD.

CHPs promote quality play in health facility waiting areas

At the same time, CHPs seem to positively contribute to improved caregiver learning of play and communication practices through play sessions in health facility waiting areas. The use of the redesigned job aids that emphasize demonstration, practice, and feedback was associated with an increase in caregivers able to demonstrate using a colorful item to stimulate a child under six months, to clap and sing with children 6 to 12 months, and to play games requiring complex cognitive skills with older children (Figure 4).

Figure 4. Caregiver demonstration of age-appropriate early childhood development (ECD) practices in waiting areas.



Conclusions

Overall, these findings suggest that while CHPs may be more trusted by caregivers and live in the communities that they serve, one must not automatically equate trust and community knowledge with higher quality of ECD service delivery—especially systematic developmental monitoring and counseling during household visits using the Mother & Child Health Handbook. Nonetheless, CHPs have an important role in facilitating play sessions in health facility waiting areas and practicing relevant activities with caregivers (which need to be verified during the CWC). We recommend that CHPs continue to facilitate play sessions in health facility waiting areas and be capacitated to implement similar, complementary activities at the community level, such as parenting support groups.

Some of the quality issues with CHP ECD service delivery are clearly a function of the inherent weakness of community health systems. To improve the intensity and quality of ECD services during household visits, we first suggest enforcing the MOH's recommendation to have the visits take place every month—especially for those households with children under one year of age. To facilitate CHP uptake of newly learned technical skills and content, we recommend increasing the use of practical exercises and tools, such as demonstration videos, during trainings. We also recommend the use of mobile phone applications that can remind CHPs to carry out the necessary activities during a household visit and help them select the correct milestones to monitor and the age-appropriate play and communication activities on which to counsel caregivers.[7]

A community health provider (CHP) counsels a father after a play session in a health facility waiting area. Photo: PATH.

References

1. Aboud FE, Yousafzai AK. Global health and development in early childhood. *Annual Review of Psychology.* 2015;66:433–457.

2. United Nations Children's Fund and World Health Organization. *Nurturing Care Practice Guide: Strengthening Nurturing Care Through Health and Nutrition Services*. United Nations Children's Fund and World Health Organization; 2022.

3. Kane SS, Gerretsen B, Scherpbier R, Dal Poz M, Dieleman M. A realist synthesis of randomised control trials involving use of community health workers for delivering child health interventions in low and middle income countries. *BMC Health Services Research*. 2010;10:1–7.

4. PATH. Applying HCD to understand caregivers and providers and identify challenges and opportunities for improving nurturing care for early childhood development practices in Siaya County, Kenya. PATH; 2023 [Unpublished article].

5. African Population and Health Research Center. *Evaluation of the Feasibility and Effectiveness of a Health Facility-Based Early Childhood Development (ECD) Intervention in Siaya County, Kenya – Summary Report*. December 2021.

6. United Nations Children's Fund and World Health Organization. Improving the Health and Wellbeing of Children and Adolescents: Guidance on Scheduled Child and Adolescent Well-Care Visits. World Health Organization and the United Nations Children's Fund; 2023. License: CC BY-NC-SA 3.0 IGO.

7. Ferla JP, Gill MM, Komba T, et al. Improvement of community health worker counseling skills through early childhood development (ECD) videos, supervision and mentorship: a mixed methods pre-post evaluation from Tanzania. *PLOS Global Public Health.* 2023;3(6):e0001152.