Lessons from an Implementation Study of Integration of Early Childhood Development (ECD) Information and Guidance into Well-Child Visits in Primary Healthcare Centers run by Jordan's Ministry of Health

This study, led by Global TIES for Children at New York University in collaboration with the International Rescue Committee (IRC) research team, is an implementation study of a new intervention co-designed by the Ministry of Health (MoH) in Jordan, the IRC, and Sesame Workshop. This intervention seeks to increase families' access to early childhood development (ECD) information and activities through the expansion of MoH midwife training beyond physical health and nutrition to other aspects of ECD, such as managing child behavioral challenges and supporting early learning, and the incorporation of such additional content into well-child visits for children ages 0 to 5 years old. Visits are conducted primarily by midwives through the Jordanian national health system. In this program, launched summer 2022 and running in over 100 primary health centers in Jordan as of August 2023, the IRC and MoH trained midwives (and occasionally nurses) on the new ECD topics (hereafter referred to as ECD tips) and offered them tools to use in sharing ECD tips and answering questions for caregivers well-child visits.

In order to both better understand and improve the early implementation of this program, we conducted surveys and semi-structured interviews with caregivers and midwives; surveys with center staff; and well-child visit observations at 19 participating health centers in the months following the launch of the program. In 10 of the health centers, the MoH and IRC had also piloted training midwives on how to refer caregivers to a WhatsApp based ECD automated messaging service providing play-based activities that caregivers can do at home with children ages 0 to 5 years to support development. This intervention and study are part of the Ahlan Simsim initiative, a partnership between the IRC and Sesame Workshop that aims to improve ECD services and outcomes for children affected by conflict and crisis in the Middle East region.

Key Takeaways

- Our data suggest that uptake and implementation of ECD tips (and of the supplementary Whatsapp automated messaging service) was generally low, though it is hard at times to tell when ECD tips being used (especially around topics such as nutrition, which are covered in this program and were likely already part of many well-child visits)
- Midwives found value in the ECD tips intervention, but struggled to find time to use them during short visits with caregivers and children especially given competing priorities
- Midwives reported being satisfied with their jobs overall but also being overworked and stressed
- Caregivers reported being satisfied with services provided by midwives, but midwives reported that they often struggle to convince caregivers to adopt ECD practices, and to cultivate caregiver trust more generally, especially if their advice conflicted with advice from family members. Reported caregiver satisfaction with health services delivered by midwives did not seem to be related to or driven by ECD tips.

Overall, we believe that the health system has great potential to reach children and caregivers with information to support responsive caregiving and child social emotional development as a complement to existing support of children's physical health and nutrition. Doing so, however, will likely require further modifications to program materials, training, and support in order to facilitate widespread use of the new ECD resources by midwives and other frontline health staff, and in order to most effectively translate to changes in caregiver knowledge and behavior. The data suggest that current barriers to implementing this program include both structural factors (i.e., limited midwife time and high midwife workload) and cultural factors (i.e., trust issues between caregivers and midwives, caregivers needing husband and/or mother-in-law buy-in, and misinformation). This suggests that improving implementation will involve both structural and cultural adaptations to the programming and related training. Ideas for improvement include more training and supportive supervision for midwives on ECD tips topics as well as on rapport-building with caregivers; including ECD tips materials as part of the well-child visit checklists completed in each visit by midwives (to both formalize them as a key part of each visit and remind midwives to use them); and increasing broader community outreach and engagement to share ECD tips information with additional family members.

Background

Ministry of Health primary health centers in Jordan offer access to services such as well-child visits, child growth monitoring, child curative services, and vaccinations in addition to pre and postnatal care and family planning services. These centers have become key sites for ensuring the health and well-being of the majority of the nation's youngest children and for providing free vaccination services to all children, regardless of nationality or refugee status[1]. The Ministry of Health recommends well-child visits every two months in a child's first year and once per year after that (for children ages 1 year and above). Government primary healthcare centers also provide preventive maternal and child health services and child feeding services free of charge to Jordanians and to anyone registered as a refugee or asylum seeker, though these services are not free of charge for non-Jordanians who are not registered as refugees or asylum seekers[2].

Early well-child visits are prioritized and attended by most families during the first year of a child's life when many key vaccines are delivered. This presents a unique opportunity to leverage visits to these clinics as a way to offer families additional information and services related to parenting, children's cognitive growth, behavior, and social-emotional wellbeing with the aim of further improving child development outcomes[3].

A recent meta analysis of parenting interventions reveals that parenting interventions improve a wide range of early childhood outcomes as well as parenting knowledge, practices, and parent-child interactions with greater effects in LMICS[4]. The introduction of ECD-related information during routine primary care visits in particular has been shown to improve child development outcomes such as communication, motor, and social development[5] [6] [7].

Jordan boasts a high rate of vaccine coverage (95%), which has contributed to a decline in vaccine preventable diseases and deaths overall[8]. Even families who use private clinics for other healthcare needs often receive their vaccines at public clinics within the national health system due to both the greater affordability and supply of vaccines.

Intervention

The IRC began engaging with the Woman and Child Health Directorate of the Ministry of Health (MoH) in Jordan in 2020 to understand ECD-related needs in the Jordanian health system and explore opportunities for supporting or strengthening the MoH's existing ECD resources. During initial meetings, midwives reported that while they are well-trained to answer caregiver questions about child physical health and nutrition, they feel less equipped to answer caregiver questions, about ECD topics such as managing child behavior. To address this issue, the IRC and MoH created a training and tools for midwives on child social emotional development that they could use during well-child visits. During training, midwives learn about ECD and receive two tools: 1) Resource guide for midwives containing ECD information, 2) Calendar/ flipbook containing ECD tips grouped by topic in a format intended to be easy to read for midwives (ECD dialogue tool) to display in the health centers and use (if desired) in sharing ECD information with caregivers during well-child visits. In designing these tools, the IRC gathered feedback from midwives, nurses, and caregivers on what tools would be useful to them and how to make these tools as user-friendly as possible.

This intervention aims to ensure that midwives (and some nurses) have the information they need to answer caregiver questions and advise caregivers on holistic ECD during well-child visits. Through these main points of contact, the ultimate goal is to improve caregiver ECD knowledge and practices, child development outcomes, as well as to increase use of well-child visits for children between 18 months and 5 years of age (when there are fewer required vaccines). The intervention is not meant to increase the time of well-child visits but rather to change the information that midwives might use during their conversations with caregivers.

The curriculum for the midwives' training, resource guide, and ECD dialogue tool focus largely on aspects of responsive caregiving and child learning and social emotional development, more specifically the following topics: nurturing care and strengthening relationships, positive discipline, psychosocial support, early childhood education, and safety and protection (i.e., supportive physical environment, body privacy, child protection, cleanliness). The IRC trained 40 MoH midwife supervisors in the summer of 2022 who have gone on to train 246 midwives in 2022 and 2023, with training ongoing.

As of July 2023, midwives at 103 health centers, roughly 20% of all MoH centers in Jordan, are trained and have started integrating the ECD tips and guidance into well-child visits. Work is ongoing to both refine (based in part on this study) and expand this program.

Shortly after this program began, in the fall of 2022, we launched an implementation study at 19 participating centers in central and northern Jordan.

This study focused on caregivers of children 0-12 months old and on questions related to how the program was implemented and what its implementation suggests about the possibility of such a program to influence caregiver knowledge, beliefs, and practices.

In 10 of the 19 centers, the IRC and MoH piloted training midwives and nurses on how to refer families to an Ahlan Simsim Automated Messaging Services (ECD chatbot) that provides targeted information and activities by child age delivered to caregivers via WhatsApp. This training was provided via a shared video, not an interactive training session. Since midwives and nurses only have a few minutes to discuss ECD in well-child visits, the team hoped that this chatbot might help to deepen and reinforce the ECD messages in between well-child visits.

Participants and Data Collection

Nineteen health care centers; 302 caregivers (16-19 per health center); and 36 health care providers (34 midwives and 2 nurses) participated in this study.

Caregiver Surveys

Caregivers were surveyed twice: first between October and December 2022 (n =302) and again between February and March 2023 (n = 209). Initial surveys were conducted in person at participating health centers immediately following a well-child visit. The second survey was conducted over the phone. Caregiver surveys focused on caregiver knowledge and beliefs relative to ECD and the value and purpose of well-child visits; accessibility to health services; family demographics; and (in the second survey only) satisfaction with and experiences at the health center and their most recent visit as well as (at the 10 participating centers) whether or not they were referred to or heard about the chatbot at their most recent visit and, if yes, experiences with that service.

Participating caregivers (87% female; 14-55 years old with an average of 29; 99% married; 89.5% Jordanian and 8% Syrian) reported fairly stable living situations (e.g., 75% have not moved residences in the past 3 years, 79% feel stable in current housing), though 40% said they rely on non-permanent sources of income. Household size was on average just over 5 people. Most (67%) reported owning no children's books and only 8% reported owning more than two. Educational background and perceived socioeconomic status were mixed (from basic to graduate and from below average to very good) though caregivers were much more likely to report their current financial status as below average and average (and less likely to say very good) as compared with self-reports of their financial statuses pre-COVID and ten years ago. Twelve percent of caregivers reported having suffered a serious illness or injury in the past year.

Participating children were 5 months old on average when first surveyed with almost all (96%) reported as being in good health.

Midwife/Nurse Surveys

Midwives and nurses were surveyed once between January and February 2023.

The midwife/nurse survey focused on midwives' demographics, professional backgrounds and knowledge, attitudes, and practice related to ECD. Midwives/nurses (all Jordanian, all female) ranged from 27 to 49 years old (with a mean of 38). Nearly all (92%) were married and 83% were mothers themselves. 28% reported some amount of food insecurity and only half reported their own health as good (with the rest saying fair or poor). Work experience as midwives/nurses varied from less than a year to 30 years in the field, with an average of 15. One reported having preparatory education, 28 a diploma, 6 a bachelor's degree, and 1 a high diploma (one year of post-bachelor's study).

Health Center Surveys

To better understand the context of this intervention, we also surveyed the head of each of the 19 health centers on their staffing, facilities, and services. The 19 centers were distributed throughout Jordan with two per governorate in central/north Jordan (i.e., Ajloun, Balqa, Irbid, Jarash, Madaba, Mafraq, and Zarqa, as well as two in Ramtha, which is part of Irbid) and three in Amman. Eleven were in urban areas and 8 rural. 12 reported having at least one private room for visits; 5 said they have a space with auditory and visual privacy, 1 said they have a space with visual only privacy (no auditory privacy), and 1 reported having no privacy in any of their spaces. Centers reported having 1-8 midwives (with a mean of 3) and 1-33 nurses, with a mean of 8. Well child visits, and thus participation in this intervention, are largely conducted by midwives. All 19 centers reported holding routine meetings with center staff and community members (though the frequency of these varied) and 17 reported having systems in place for collecting patient feedback and suggestions.

Well-Child Visit Observations

To understand the context and quality of well-child visits and try to assess use of the ECD tips during these visits, we conducted 148 observations of well-child visit (6-13 per center). These were not necessarily with midwives and caregivers who also participated in the above data collection but all midwives/nurses at each participating center who were trained on the ECD Tips program. 133 of these were visits with a midwife, 13 were with a nurse, and 2 were with an auxiliary nurse. Children at the visit were on average 6.7 months old and a roughly equal mix of male and female children. For 38% of observed visits, it was the child's first visit to that health center. Visits were live coded by 19 trained enumerators (one per center: all 19 passed inter-rater reliability tests to assess consistency in scoring).

Qualitative Interviews with Midwives and Caregivers

Along with the above quantitative data, 15 midwives and 37 caregivers participated in more extensive qualitative, in-depth, semi-structured interviews. These were conducted in person with midwives and over the phone with caregivers. Midwife interviews covered the following set of topics: 1) beliefs and behaviors - including professional success and challenges, support for caregivers in new practices, how disagreements with caregivers handled, and experiences with new IRC content on ECD tips; 2) midwife/nurse perceptions of ECD tips training, use of tips during visits, and adaptations; and 3) collaborative practices of midwives/nurses. The 15 midwives (from 15 of the 19 total centers), were randomly selected from the 36 participating in the surveys after considering the distribution of urban and rural centers and years of midwife experience. This sample included both nurses and 13 midwives. All were interviewed in late January/early February 2023. Eight lived in urban locations and 7 lived in rural areas.

We also conducted caregiver interviews with a sample of 37 caregivers who had worked with the 15 midwives/nurses who participated in qualitative interviews. Caregiver interviews covered the following set of topics on their beliefs and behaviors related to health and well-child visits: 1) the successes/challenges in their child's development and/or in interactions with midwife; 2) their level of comfort implementing new practices; 3) the amount and type of support received from midwife in implementing new practices; and 4) how disagreements between caregiver and midwives were handled.We created a random nested sample of two caregivers per midwife: one caregiver with a child from 0-6 months and another from 7-12 months of age. Caregivers were interviewed in late January/early February 2023. The sample consisted of 35 females and 2 males.

The interview transcripts were analyzed iteratively by a team of researchers, first in the original Arabic and then through English language translations as well. Codebooks for the respective data sets were created based on an initial set of themes and underwent revisions through multiple rounds of analysis.

Findings

Uptake and implementation of Ahlan Simsim ECD Tips (and of the supplementary Whatsapp Automated Messaging Service) was generally low

Caregivers reported very few instances of receiving any information on topics covered in the ECD tips during their most recent well-child visits. The vast majority of most recent visits (94%) were reported to include vaccines and/or growth and development checks. Only 37 (18%) caregivers reported that their nurse/midwife gave them any information on ECD topics covered by the ECD tips intervention during their last visit. Of the 37, all said they found the ECD tips materials helpful, but when further probed on how so, it appears that some were actually referencing materials related to child health, and not necessarily ECD tips topics. For example, in answering - as an open-ended question in the quantitative survey - why or why not these materials were helpful some caregivers talked about them being helpful for knowing how to handle post-vaccine symptoms or helpful for family planning (topics not covered in ECD tips) and others about stages of child growth, child's health generally, and methods of feeding (topics covered in ECD tips but also likely part of many well-child visits before ECD tips). In general there is ambiguity in interpreting the data when it comes to topics hat are covered both in pre-existing MoH materials as well as the ECD tips.

The majority of caregivers (71%) also reported that their midwife did not share any activities, instructions, or materials related to the ECD tips (an additional 7% responded "don't know" to this question). Qualitatively,

only 7 of 37 caregivers interviewed mentioned any sort of non-physical development among their child development successes. This is aligned with a previous study that found Jordanian mothers to be more knowledgeable in how they can support their children's physical development and safety and less knowledgeable in supporting cognitive and emotional development and in regards to parent-child interactions[9]. This knowledge and confidence in how to support children's physical development was evident in some of the qualitative interviews though it was unclear when it should or could be attributed to the ECD tips intervention.

> "I taught him how to move his hands, when I talk to him he interacts with me. He is still 2.5 months old. He interacts with me, I mean he moves his hands, he hears my voice, he distinguishes my voice."
>
> –Caregiver

> "Some days, I used to crawl in front of him; some days I used to put games or toys in front of him and tell him to come take them, and he would crawl towards me."
>
> -Caregiver

These reports were supported by the well-child visit observations, in which there were high rates of observing midwives looking at or filling out the child's health card (96%), asking about or giving vaccines (89%), discussing the next visit (85%), and discussing child height and weight (80%) but low rates of observing inquiries about child behavior (28%) or clear use of ECD tips (7%). Asking about feeding habits (56%) and providing information about feeding (50%) were more common but also likely to have taken place in many visits prior to ECD tips.

Looking at the 10 centers where midwives were trained to encourage caregivers to sign up for the Automated Messaging Service suggest slightly higher use of the service compared to delivery of ECD tips by midwives, but sample sizes are small so we cannot draw strong conclusions from this. 37 of the surveyed caregivers (34% of endline caregivers from these 10 centers) said their midwife encouraged them to sign up for the Automated Messaging Service. Among those who reported they were told, just over half (20 caregivers; 19% of the total endline sample from these centers) said they signed up. Of the 20 who signed up, 12 were able to recall any specific activities and 13 said they used at least one activity.

Midwives report being satisfied with their jobs overall but also being overworked and stressed

Midwives self-reported seeing an average of 31 families per day, and more than half the midwives (61%) reported working more than 50 hours per week. They reported occasionally to frequently being overwhelmed by daily tasks, irritable, out of energy, and out of patience and mid- to high-levels of work related emotional exhaustion. Reports of depression and anxiety were much lower, suggesting that this is likely not reflecting poor mental well-being but rather the result of too many daily demands on their time.

> "We also tend to focus on handling one case among many other cases. We find it challenging to give more than 15 to 30 minutes to follow up on a child's case."
>
> -Midwife

Yet in spite of heavy caseloads and long working hours, midwives remain exceedingly positive about their profession.

> "I have to be devoted, sincere, and passionate about what I do. I enjoy doing my job, and that is the most important thing."
>
> -Midwife

> "After I started working as a midwife, my whole life has drastically changed. In the beginning, I had little to zero knowledge. Thanks to this job, I had to deal with pregnant women and young children and went through so many experiences… As I have reflected on my experience in my life and society, I became more aware of my community-related issues. Besides this, work life is entirely different from studying as you get through many experiences. I love this occupation tremendously."
>
> -Midwife

Midwives who reported the highest levels of burnout were more likely to be at centers with higher average quality ratings from the well-child observations. It could be that midwives who are the most stressed are so because of how much they care about the work and how much they are making sure to do in each visit (which would also present in higher observed quality). Qualitative data supports this idea as midwives clearly express a sense of responsibility about their work that extends beyond simple service provision (e.g. vaccinations, monitoring child growth and development). They identified building trust, educating, and building skills and competencies of caregivers as part of their jobs.

> "The first thing….if the woman comes to you for the first time, is to build a high line of trust between you and her. If you build this rope of trust between you and her, then the communication between you and her, and providing advice and care, will be better and more successful, meaning that it will be easier for her to accept information… And we strengthen her confidence that she has the ability to provide the best services for her son."
>
> -Midwife

> "I continue encouraging her by either engaging her in different activities or by providing her with awareness-raising flyers. I might even schedule more than one session to help her. …Like I said. I would sit and try to help her more. I am expected to make her trust herself more."
>
> -Midwife

"The midwife's role is to educate mothers on health. We also offer IUD insertion, breast self-examination, and breast exams as part of our family planning services... As you know, we are members of the society's health committee. We have conducted several awareness-raising lectures and distributed brochures on the importance of examinations, anemia screening, and the risks associated with it."

-Midwife

Midwives who reported seeing more families per day, however, were more likely to be at a center with lower average quality ratings at observed well-child visits, which reinforces the potential - and very tangible - costs of being overworked.

Midwives also reported high levels of support from both peers and supervisors, but this does not seem to be sufficient to prevent continuing symptoms of burnout.

Midwives found value in the Ahlan Simsim ECD tips, but struggle to find time to use them during short visits with caregivers and children especially given competing priorities

Midwives found the ECD tips training informative and useful, especially the role-play activities and information about managing child behavior and dealings with 'stubborn' children.

"I learned many things about infants' health when they are still in their mother's womb, and how talking with your child helps improve his vocabulary. Besides this, the more you play with your child, the better the mother-child relationship will improve. I greatly enjoyed this four-day course."

-Midwife

"I was surprised when I learned throughout the training that pregnant mothers tend to talk to their babies while in the womb, who can also hear their words. This was quite new to me.

-Midwife

"The last training I had at Ahlan Simsim was focused on child-related aspects. I learned how to deal with stubborn children or those who demonstrate screaming behavior. Being a mother to several children, I suffer from these issues as well. For each age group, a certain kind of intervention should be made. I also learned how to differentiate between normal and abnormal reactions in children and how to deal with such."

-Midwife

"We learned how to deal with stubborn or angry children. Besides this, the Early Education Guidebook helped us greatly teach families how to deal with such cases... I made sure that mothers read the necessary information shown on flipcharts[10] addressing topics like early education, how to deal with stubborn children and mental health."

-Midwife

When asked in qualitative interviews about how they used the training and materials, answers ranged from directing caregivers to the brochures (which may or may not have been about the ECD tips, for which there were no official brochures, though some midwives did report creating paper ECD tips handouts) to memorizing the information (it was clear in interviews that some of those being interviewed were trained before the accompanying printed ECD Dialogue tool was distributed) to consulting printed materials for how to present messages to caregivers. Some of the answers were clearly about other materials (not Ahlan Simsim ECD materials or information) such as lactation/breastfeeding, anemia, or family planning, and some were unclear as to what materials they were discussing. Many midwives talked about overcrowding and understaffing when asked about use of materials, identifying both as significant barriers to implementation of this program.

"Because we do not have enough staff to provide guidance to a certain mother when she is referred to us, the procedure takes more time...However, the right guidance and information require more time, adding more pressure, and due to the increasing number of cases, it has become difficult for us to give our patients the ideal time.

- Midwife

"We also tend to focus on handling one case among many other cases. We find it challenging to give more than 15 to 30 minutes to follow up on a child's case."

-Midwife

The shortage of midwives in Jordan has been noted in previous studies on the sector,[11] with the most recent statistics citing approximately 3.3 midwives per 1000 population[12]. According to midwives' own reports of their work week, they see an average of 31 families per day, and most midwives (22) reported working more than 50 hours per week. According to the MoH, midwives are not technically supposed to log more than 35 hours per week, but even if their perceptions reflect more hours than

formally worked they still give insight into how overburdened they feel. These same perceptions of being overworked were consistent in the qualitative data and, as we saw above, are likely to be related to both ECD tips implementation and overall well-child visit quality.

"I can say it is the staff shortage and heavy workload... There is an imbalance between the number of vaccinations and the number of children, especially from Syrian families, leading to an extra workload."
-Midwife

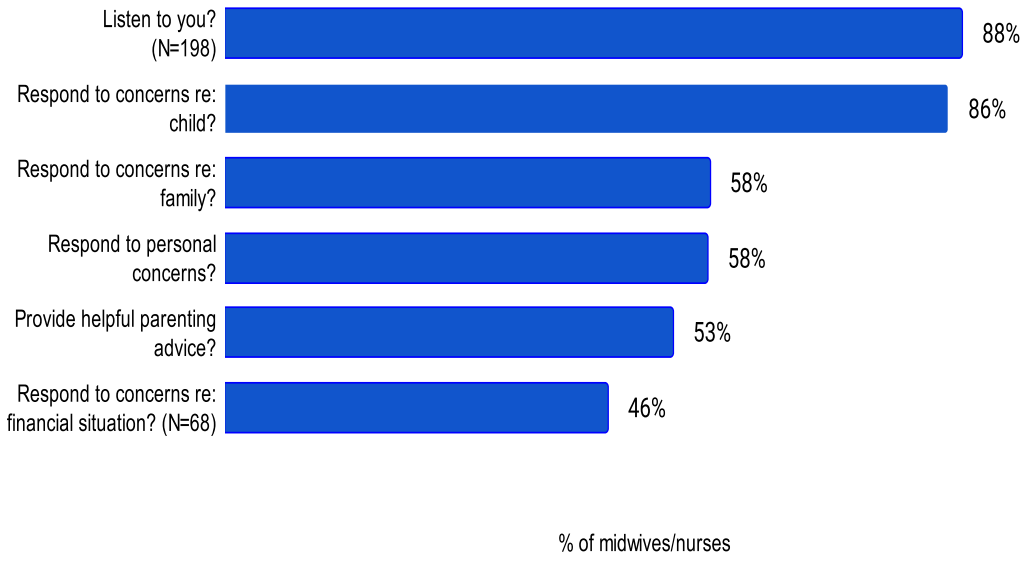

FIGURE 1: Midwives/nurses listened well, responded to concerns about child; just over half provided helpful parenting advice

Caregivers report being satisfied with services provided by midwives, but midwives often struggle to convince caregivers to adopt ECD practices especially if their advice conflicts with advice from family members (and, indeed, reported satisfaction appears largely unrelated to ECD tips thus far)

At both baseline and endline 95% of caregivers reported being either more or less or very satisfied with the health services they received (and endorsements of various problems was likewise very low). Similarly, most (96% and 93% at baseline and endline) said that they would recommend their current health facility. In particular, caregivers gave positive feedback about their midwives, saying that they listened well, responded to concerns about the child, and in many instances (just over 50%) provided helpful parenting advice.

These findings are also clearly supported by the qualitative data from caregiver interviews, which were overwhelmingly positive with regard to midwife interactions.

"She was very cooperative, I mean, the psychological comfort was enough. You see the midwife playing with the child in one day, and this gives the mother psychological comfort. I loved her so much, I loved how my baby was in safe hands."
-Caregiver

"Because I see that there is attention and care, even their questions about whether the child has complications or if we have any inquiries, they told me that I can come back and visit them anytime I want. They told me I can even visit them and ask about the nature of the food and what to feed my child."
-Caregiver

This love of their midwives does not necessarily, however, translate into midwives being who they most trust or listen to in making decisions pertaining to their children. A recent report by Plan International (Jordan) cited that of a sample of almost 700 males, only 25% reported engagement in health activities for their children[13]. Yet when asked, "Whom do you trust or listen to for advice related to your child's health and well-being?", our qualitative sample cited husbands as one of the most trusted individuals – only second to mothers and doctors. Nurses and midwives were among the least mentioned individuals.

"We communicate with her (caregiver) husband, for example, he and his wife come and we talk to them as mostly the husband influences his wife... And her mother-in-law comes with her, so we give her advice. We also communicate with her by phone calls and WhatsApp."

-Midwife

"We had a case where a pregnant woman with high blood pressure and her husband were not convinced by my suggestion. I had to refer both of them to a doctor so as to persuade her that she could suffer from preeclampsia."

- Midwife

"If a mother was not convinced enough by what I said, I directly refer her to a doctor... For example, mothers usually trust doctors more than midwives due to their extensive knowledge."

-Midwife

"... I advised her to opt for birth spacing. However, she and her husband refused to follow our suggestion...The husband, nonetheless, rejected our advice, claiming that his wife was in good health and can undergo the surgery. After an all-out effort, the mother seemed convinced for the sake of her health, unlike the husband."

-Midwife

Struggles with trust and having sufficient influence also showed up in midwife reports of difficulty in correcting misinformation caregivers had heard from other sources.

"I had a parent who did not want his child to take a certain vaccine. Back then, I made him sign a service rejection form. Most parents were concerned that the new vaccine (R) could cause autism."

-Midwife

"A few days ago, I came across a woman who wanted to replace her current IUD with a new one. She said that her neighbors or sisters-in-law advised her to have the IUDs removed and replaced. This is undoubtedly wrong. We explained to her that if she does not experience any particular symptoms caused by the IUDs, such as bleeding, pain, stopping or continuation of the menstrual cycle, or pregnancy, nothing requires her to remove the IUDs given that a predetermined period must be completed."

- Midwife

Some midwives talked about 'seeing is believing' and the need to be proven right in order to build up trust with caregivers.

"If the mother witnesses an actual improvement in her health condition or that of her child, she will realize that you only strive to assist her. This help facilitates our next appointments and thus establishes trust with the mother to guarantee effective service delivery."

-Midwife

Taken together, these findings suggest that while caregivers think very highly of their midwives, there are a lot more steps needed in order to change caregiver knowledge and behavior than the midwife merely passing along information, activities, or other suggestions.

Conclusions

Leveraging existing healthcare infrastructure and resources by integrating ECD programs into the primary healthcare system is an exciting, and potentially cost effective, idea for promoting nurturing care during children's early years. Such a change, however, requires time. Findings from this implementation study point to a need for more midwife time with each caregiver/family in order to fully incorporate the new material. They point to a need for more time to build-up trust and establish relationships in which caregivers and families are more likely to see midwives as a useful source of information for questions around early childhood, more likely to ask for guidance on these topics from midwives, and more likely to act on midwife suggestions. Finally, the findings reinforce that behavior change is always a process and may require more intensive support than a single training and ECD tips guide.

Since the data suggests that barriers to implementing this program are both structural (i.e., limited midwife time and high midwife burden) and cultural (i.e., trust issues between caregivers and midwives, caregivers needing husband and/or mother-in-law buy-in, and misinformation), improving implementation will likely need to involve both structural and cultural adaptations to the programming. Ideas include more supportive supervision and capacity building activities (such as follow-up or additional trainings) for midwives around ECD tips; including ECD tips materials as part of the well-child visit checklists completed each visit by midwives (to both formalize them as a key part of each visit and remind midwives to use them); and increasing broader community outreach and engagement with additional family members (especially in cultures with communal/broader family approaches to decision-making). Husbands, mothers, and mother-in-laws may be of particular importance in this outreach.

Discussions and continued collaborations are ongoing to address the identified barriers to widespread, high level implementation of this program with an aim of realizing the greatest possible potential of this collaboration between the national health system and ECD programming.

References

[1] A recent study by UNHCR found that over half of refugees who accessed any type of health services (not only well-child visits) in the first quarter of 2023 used the public health system: https://data.unhcr.org/en/documents/details/101717

[2] UNHCR Jordan

[3] Shah, R., Kennedy, S., Clark, M. D., Bauer, S. C., & Schwartz, A. (2016). Primary care-based interventions to promote positive parenting behaviors: A meta-analysis. Pediatrics, 137(5), e20153393. https://doi.org/10.1542/peds.2015-3393.

[4] Jeong, J., Franchett, E. E., Ramos de Oliveira, C. V., Rehmani, K., & Yousafzai, A. K. (2021). Parenting interventions to promote early child development in the first three years of life: A global systematic review and meta-analysis. PLoS medicine, 18(5), e1003602.

[5] Mehrin, S. F. (2022). The Process of Scaling an Early Childhood Development Parenting Programme by Integrating into Primary Health Care Services in Bangladesh. Bangor University (United Kingdom).

[6] Ndayizigiye, M., McBain, R., Whelley, C., Lerotholi, R., Mabathoana, J., Carmona, M., ... & Nelson, A. K. (2022). Integrating an early child development intervention into an existing primary healthcare platform in rural Lesotho: a prospective case–control study. BMJ open, 12(2), e051781.

[7] Shi, H., Li, X., Fang, H. et al. The Effectiveness and Cost-effectiveness of a Parenting Intervention Integrated with Primary Health Care on Early Childhood Development: a Cluster-Randomized Controlled Trial. Prev Sci 21, 661–671 (2020). https://doi.org/10.1007/s11121-020-01126-2

[8] https://jordan.un.org/en/188044-routine-childhood-immunizations-how-protect-your-child-diseases

[9] Safadi, R. R., Ahmad, M., Nassar, O. S., Alashhab, S. A., AbdelKader, R., & Amre, H. M. (2016). Jordanian mothers' knowledge of infants' childrearing and developmental milestones. International nursing review, 63(1), 50-59.

[10] This likely refers to the ECD Dialogue Tool containing ECD tips

[11] Alnuaimi, K. (2021). Understanding Jordanian Midwives' Experiences of Providing Care during the COVID-19 Pandemic Crisis: A Phenomenological Study. International Journal of Community Based Nursing and Midwifery, 9(3), 238. Alnuaimi, K., Ali, R., & AlYounis, N. (2020). Job satisfaction, work environment and intent to stay of Jordanian midwives. International Nursing Review, 67(3), 403-410.

[12] https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=JO

[13] Plan International Jordan (n.d.) Situation Analysis: Male engagement in early childhood.

SESAME WORKSHOP · INTERNATIONAL RESCUE COMMITTEE · NYU Global TIES for Children · GENEROUS SUPPORT FROM MacArthur Foundation · The LEGO Foundation