Preamble
The early years are critical for children’s optimal health and developmental outcomes. However, too many children are spending their early years in suboptimal environments, with negative implications for their development and lifetime opportunities. This is especially so for those who are most disadvantaged, including children living in informal settlement settings or marginalized communities. As more mothers join the workforce, one of the difficult choices they need to make is where to leave their children while they are at work. In informal settlements, lack of affordable quality child care often keeps women out of the workforce or from re-entering the workforce after childbirth. For mothers who live in communities where paid work is less common and where there is less demand for childcare, there remains a lack of information to support parents and communities in the principles of nurturing care in many African settings.

The Early Childhood Development (ECD) research sub-unit under the Maternal and Child Wellbeing Research Unit at the African Population and Health Research Center (APHRC) seeks to optimize the health and wellbeing of children under the age of three while increasing opportunities for early learning. The Caring Practices and Support for Early Childhood Development (CAPS - ECD), Community of Practice (CoP) and the Nairobi Early Childcare in Slums (NECS) projects, all funded by the British Academy, sought to evaluate the state of paid and unpaid childcare provision among semi-nomadic communities of Kajiado County and urban informal settlements in Nairobi. The three studies were conducted in collaboration with Loughborough University, the University of York and the London School of Hygiene and Tropical Medicine.

STUDY 1: IMPROVING THE QUALITY OF CHILDCARE CENTERS THROUGH SUPPORTIVE ASSESSMENT AND COMMUNITIES OF PRACTICE IN INFORMAL SETTLEMENTS IN NAIROBI

Background
Informal childcare centers have sprung up to meet the growing demand for child care in urban informal settlements. This has resulted from the significant increase in the number of women engaging in paid employment outside the home. However, childcare providers running these centers have little or no training and the facilities are below standard. This situation puts the children under the paid care facilities at risk for poor health and development outcomes. Community health teams which consist of Community Health Assistants (CHAs) and Community Health Volunteers (CHVs), are a considerable asset within urban areas in Kenya. These teams that are facilitated under the management of the local county governments, attend to the health and wellness of the communities. Our study aimed to co-design and test the feasibility of a system for supportive assessment and skill-building of childcare providers with the support of CHVs. The long-term vision of the project is to improve the quality of paid childcare for children in poor urban settings.
Specifically, we aimed to do the following:

1. To map and profile the quality of care offered in childcare centers in two informal settlements i.e. Korogocho and Viwandani;

2. To co-design a supportive supervision and skill-building intervention, using ‘Community of Practice’ (CoP) principles, that can be sustainably delivered within government systems;

3. To assess how, in what ways and at what cost, the CoP intervention can improve the skills of childcare staff to provide quality services;

4. To identify facilitators and barriers facing childcare providers to make improvements following the CoP intervention and explore appropriateness and potential for scale-up.

**Key Findings**

Mapping and profiling data yielded 129 centers across the two informal settlements (52 in Korogocho, 77 in Viwandani). Thirty-five percent (N = 45) of these centers were home-based, 11% (N = 14) center-based, 7% (N = 9) faith-based and 41% (N = 61) school-based. These childcare facilities had variable characteristics that contributed to the general standard of care offered by the establishments. The findings showed that the centers had caregiver-to-child ratios ranging between 1:8 to 1:32. Nearly half of the centers had been in operation for a period of 1-5 years. On average, centers charged KSh. 50. per child. The majority of center-based, school-based and faith-based caregivers had received ECD training. On the other hand, only nine (20%) of the home-based providers had received any training and only 9% had received any kind of support from any organization.

<table>
<thead>
<tr>
<th></th>
<th>Home-based: 1 or 2 rooms in provider's home</th>
<th>Center-based: &gt;30 children, often rented hall/center</th>
<th>Faith-based: attached to a religious institution</th>
<th>School-based: attached to a school</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korogocho</td>
<td>5 (10%)</td>
<td>5 (10%)</td>
<td>4 (8%)</td>
<td>38 (73%)</td>
<td>52</td>
</tr>
<tr>
<td>Viwandani</td>
<td>40 (52%)</td>
<td>9 (12%)</td>
<td>5 (6%)</td>
<td>23 (30%)</td>
<td>77</td>
</tr>
<tr>
<td>Total N (% across sites)</td>
<td>45 (35%)</td>
<td>14 (11%)</td>
<td>9 (7%)</td>
<td>61 (40%)</td>
<td>129</td>
</tr>
<tr>
<td>Centers receiving any support</td>
<td>4 (9%)</td>
<td>2 (14%)</td>
<td>2 (22%)</td>
<td>17 (28%)</td>
<td>25</td>
</tr>
<tr>
<td>Provider trained on ECD</td>
<td>9 (20%)</td>
<td>10 (71%)</td>
<td>8 (89%)</td>
<td>53 (87%)</td>
<td>80</td>
</tr>
</tbody>
</table>

Assessment of the quality of childcare services offered at the centers before the intervention revealed generally low scores. While deficiencies were found among all providers, home-based centers were least likely to have early learning resources, facilities for handwashing and report best practices in business administration.
Table 2: Summary of key elements of the quality assessment of 64 intervention centers

<table>
<thead>
<tr>
<th></th>
<th>Home-based (n=45)</th>
<th>Center-based (n=12)</th>
<th>Faith-based (n=7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children have something to play with</td>
<td>7 (16%)</td>
<td>5 (42%)</td>
<td>0</td>
</tr>
<tr>
<td>Center has a first aid kit</td>
<td>1 (2%)</td>
<td>4 (33%)</td>
<td>0</td>
</tr>
<tr>
<td>Center provider knows immunization status of children</td>
<td>27 (60%)</td>
<td>9 (75%)</td>
<td>2 (29%)</td>
</tr>
<tr>
<td>Handwashing station with water and soap available</td>
<td>30 (67%)</td>
<td>12 (100%)</td>
<td>7 (100%)</td>
</tr>
<tr>
<td>Children receive lunch</td>
<td>43 (96%)</td>
<td>11 (92%)</td>
<td>7 (100%)</td>
</tr>
<tr>
<td>At least one potty for every 5 children</td>
<td>39 (87%)</td>
<td>9 (75%)</td>
<td>4 (57%)</td>
</tr>
<tr>
<td>Center provider tracks finances with records</td>
<td>13 (29%)</td>
<td>9 (75%)</td>
<td>6 (86%)</td>
</tr>
</tbody>
</table>

Qualitative interviews administered to 44 parents and 45 center providers in the two settlements also highlighted the low standard of childcare centers. Parents were concerned about their children’s safety, health and nutrition at the centers, with many identifying the lack of amenities as a key challenge.

“Toys... because even if you feed a child and you don’t get to spend time with her, play with her... toys, mattresses, carpets...those are some of the things that are needed in a day-care center.”

— Childcare center provider

“If we could be trained so that we can add experience and offer better services. ... Do you see these people called doctors or the CHVs? They should be visiting us from time to time to help us check these children on the nutrition side and their health. They should not think that we don’t want to be responsible, we try to work with them and the parents so we can help these children.”

— Home-based childcare center provider
Of the 68 centers and center providers found to be eligible for the intervention (based on the baseline profiling, 64 (94%) accepted to participate in the CoP group sessions and completed the four modules. All the 20 CHVs recruited from the two locations (Korogocho and Viwandani) were trained, all the planned (i.e. 52) CoP sessions were delivered to the center providers by CHVs, and a total of 136 supportive visits were made by CHVs to the childcare centers. The information collected from the participating center providers and CHVs during and after the delivery of the CoP model from the 64 centers, center providers and CHVs who participated, showed that the intervention was feasible to deliver within the routine work of the CHVs.

While our study was not designed to assess effectiveness, our exploratory analysis of changes between baseline and endline showed significant improvements in center provider knowledge and practice scores and the quality of the childcare center environment. The mean center providers’ scores post-intervention were 0.40 standard deviations higher than pre-intervention scores. This shows that there was improvement in the knowledge and practices of center providers as a result of the CoP training. It also implies that the intervention has potential to improve the capabilities of center providers to offer better quality of care to children in their centers.

Similarly, the mean childcare center quality scores post-intervention were 0.56 standard deviations higher than at pre-intervention. Both results indicate potential success for the intervention. CHVs’ knowledge scores did not show significant changes probably because of the fact that they started off with high scores (ceiling effects) at baseline. The main aim of the training of CHVs was for them to understand how to share their knowledge with childcare centers. These positive changes therefore indicate a potential impact of the intervention on the center providers and the quality of the childcare center environment which could potentially contribute to improvements in child health and development.

The experiences shared by CHVs, center providers and parents implied that the content and delivery of the CoP intervention were acceptable and feasible, and were perceived to have positive effects as represented in the quotes that follow.

“Learning through play has shown a lot of change now if you go to these child-care centers, you will find they have organized activities in terms of time, there is time to eat, time to play, there are ropes, they have made playing items. Initially, they saw this as a waste of time or these things were making the house dirty but if you go there now, you will find they have hanged them and the children are playing.”

— Community Health Volunteer

“It makes the teacher become active and knowledgeable, those things that she has been taught she implements and where she had forgotten they come and remind her and she knows that the teachers will come to check on her, so it’s very important in that way.”

— Childcare center provider
Conclusions

Overall, the CoP intervention development process was successful. The evaluation results show that it is feasible and can be delivered by CHVs and has the potential to improve the knowledge and practices of center providers, as well as the quality of childcare services. We are currently in the process of engaging with different stakeholders (National, Nairobi Metropolitan Services [NMS], County, sub-County, and local communities) to share these findings and jointly generate ideas on how the intervention can be integrated into the existing community health strategy and scaled up. Discussions have also included regulation and licensing of childcare facilities which can be streamlined as a means to improving quality in this growing sector, as well as the pending CHV stipend that is likely to motivate them to continue to support community health services including this intervention. A collaborative way forward on these issues is likely to yield viable steps towards integration, scaling up and sustainability of the CoP model beyond the project life to support ECD in our communities.

QUOTE: I feel good because when I go to work, I come and get my child is healthy and clean. I feel good because when you support the daycare provider it is like you have supported the whole community. I know my child is in safe hands.

Parent using one of the childcare centers

STUDY 2: USERS’ PERCEPTIONS AND FACTORS THAT INFORM CHOICE OF CHILDCARE SERVICE UTILIZATION: THE NAIROBI EARLY CHILDCARE IN SLUMS (NECS) STUDY

Background

The limited evidence on the use and quality of paid childcare in low and middle-income settings as well as support for nurturing care parenting programs implies a lack of consideration of who cares for young children, and where nurturing care is provided. Lack of affordable childcare in informal settlements often keeps women out of the workforce or from re-entering the workforce after childbirth and hampers efforts to improve women’s labor productivity. In addition, children face significant challenges to healthy development, particularly when their families cannot care for them during the day. Informal, private childcare services have developed in response to these two related needs. For instance, a past study has demonstrated the widespread use of paid childcare as the primary care strategy for children under three years. However, untrained caregivers and poor quality of care cause concern1.

Parents or caregivers who use childcare services are considered passive consumers of services. Although they are the primary decision makers in choices made about early care, their opinions, perceptions and belief systems are rarely reflected in research studies, as documented perceptions of choice, use and quality tend to draw heavily on expert views. The objectives of the Nairobi Early Childcare in Slums (NECS) project were therefore to understand: the use of paid childcare and the characteristics associated with these choices; the size of provision of paid childcare; and carer and provider decision-making and behavior around childcare. Additionally, the impact of the Covid-19 pandemic on the families and day-to-day care of their children was explored.

Methods
The NECS study used a mixed-method program of research including a household survey, childcare provider mapping and qualitative research with parents/carers and childcare providers. In response to the emergence of the Covid-19 pandemic, a series of six telephone ‘tracker surveys’ were also conducted to understand how the pandemic, and the associated control measures affected early childhood care.

Participants in the qualitative interviews (primary caregivers who included parents and non-parents such as grandparents or other relatives, N = 21) who were interviewed were spread across three informal settlements in Nairobi. In-depth interviews were conducted via telephone using a telephone consent script and interview guide until saturation on key emerging themes was achieved. The study included both users and non-users of paid childcare. The main themes considered were demand and decision-making around childcare; what quality care looks like to users; how well current providers met their needs; what alternative approaches were available and their advantages and disadvantages; and, the impact of the Covid-19 pandemic.

Key findings

1. Characteristics of childcare facilities in the slums
Through the mapping exercise that was carried out in January 2022, 554 childcare facilities were mapped, with more than half (57%) in Mukuru kwa Reuben and Mukuru Kayaba. The majority (76.9%) of childcare facilities were privately-owned. On average, 96% of the centers operated during weekdays, for five days a week while less than 10% operated on Sunday. The median number of children in the facilities was five (IQR = 3.00 – 12.00) suggesting that many of the facilities were small. A large proportion (88%, N = 488) provided childcare services only (excluding provision of food and nappies) with charges averaging Kshs. 50 per day.

2. What informs choice of childcare services
Overall, all the participants who were interviewed showed an awareness of factors that influenced their choices and use/non-use of childcare services. Those who used childcare services noted different priorities with regards to choice and quality. The physical caregiving environment came out as a strong consideration that influenced enrollment. The general outlook and hygiene measures in a childcare facility were mentioned as an important pull factor.

3. The center caregiver matters
Another consideration that influenced choice was caregiver attributes or skills such as warmth and patience towards the child. For some users, this factor was their most important consideration as they valued the way their young children were handled during the daily interactions. It was worthwhile to note that very few users were concerned about the educational attainment of the center caregivers or the educational opportunities for their children. Play was highlighted as being critical, and a shared responsibility that should be extended to the home environment for the optimal growth and development of children.
4. Childcare needs in the slum remain eminent

All users reported the lack of an alternative stable care arrangement, and the childcare center presented the most viable and affordable option. On the other hand, non-users expressed reservations on the use of childcare services resulting from perceived, reported or observed gaps/ inadequacies. The Covid-19 pandemic seemed to have constrained the provision and use of childcare services mainly due to loss of/diminished incomes.

**Implications**

Childcare service provision and support for nurturing care offers a platform to reach some of the most vulnerable children growing up, at the most critical period of their lives. The findings have important implications for the inclusion of the voices of primary decision makers when planning for interventions to improve childcare service provision. Understanding the current situation offers considerable potential to both inform existing intervention programs, and to support the development of new ones, particularly through an implementation model that is feasible to deliver among highly mobile population groups such as migrants and residents of urban informal settlements.

STUDY 3: SUPPORTING CARE PRACTICES AND EARLY CHILDHOOD DEVELOPMENT AND LEARNING AMONG NOMADIC PASTORALISTS IN KENYA, A CASE OF KAJIADO COUNTY

**Background**

Poor development and learning in the early years affects over 66% of children in sub-Saharan Africa. This is due to lack of responsive care practices, stunting and poverty which has an impact on young children’s emotional, social, physical and cognitive development. Many of the ECD programs in rural and urban poor areas aim to address some of these challenges. However, mobile populations such as nomadic pastoralists face these and more unique challenges resulting from their unstable environment. Exposure to seasonal extreme weather, over-reliance on livestock for sustenance and economic needs and the lack of early child care and learning programs designed for such mobile populations exposes this community to poor ECD outcomes.

**Methods**

The study was undertaken in Kajiado West sub-County of Kajiado County through collection of both quantitative and qualitative data. We targeted caregivers of children aged between 0 and 36 months in this community. We sampled about 650 households to understand their child care practices, support for early learning and assessed developmental performance of the children using the Ages and Stages Questionnaire - Third Edition (ASQ-3). We also carried out interviews with male and female caregivers to understand further what care and early learning meant to them and how they involved themselves in play activities with their children.

**Key findings**

1. Nutritional status of young children

Children between 12 and 23 months were more likely to be stunted while a larger age range, between 6 and 24 months, were more likely to be wasted. In both cases, boys were more susceptible than girls. These rates are above those seen in previous surveys at county and country levels. Moreover 15% of the children (10% in girls, 19% in boys) experienced severe malnutrition (wasting).
2. Dietary diversity

Only 7% of the children aged between 6 and 24 months had received the Minimum Acceptable Diet (MAD) compared to the national average of 22% (KHDS, 2015). MAD includes the proportion of children who received at least five recommended food groups in the previous day (minimum diversified diet - MDD) and at the minimum number of times (minimum meal frequency - MMF).

3. Responsive caregiving

We found that as children grew older, they were more likely to be left alone with no one to care for them (73%) and more likely to be left under the care of another person other than the mother or father. We found that the mother was more likely to be the primary caregiver while grandmothers commonly provided alternative care and support to the mother. There was minimal support from fathers in the care of children in this community which was attributed to community beliefs, attitudes and lack of awareness.
4. Opportunities for early learning

Caregivers mentioned various things that they did with their children as interactions that they considered helpful in the development of the child. Counting objects in the environment, playing games with the child, singing for and with the child, and engaging in reading and writing with the child were some of the activities that were mentioned. Caregivers were aware that being in the company of older children provided opportunities for stimulation for young children. Caregivers recognized items that children used for play, some locally sourced and others intentionally bought for the child. However, we noted that 10% and less had the recommended age-appropriate children books. About half of the children across the age groups used a mobile phone, mostly to watch video and look at pictures.

Further, an assessment of the children’s progression showed that they were most developmentally delayed in gross and fine motor skills. Poverty, food insecurity and low levels of education were associated with poor developmental outcomes among the children.

5. Challenges of caregiving in this community

Mothers reported that competing domestic responsibilities made it difficult for them to be fully engaged in the care of their children. The lack of water and fuel in the homestead and the long distances to amenities deprived mothers of caregiving time for their young children.

“You will find a mother carrying her child on her back going to fetch water in a very far place, and the child suffers from heat exposure.”

In response to a question on what might hinder them from playing with their children, one caregiver indicated as follows:

“I don’t have much time because I have to go to work.”

“During the dry season, mothers have to go to the shopping center to buy food items because there is no milk. The center is very far from where we leave and that presents another challenge.”

“As you can see, my child is disabled, raising him presents certain challenges. Sometimes I don’t have someone to leave him with when I want to go find casual jobs. He can’t walk, he can’t feed himself, those are the challenges I’m going through and so I can’t help it”
Women’s autonomy and ability to make decisions affected their caregiving practices as they depended on getting permission from their husbands to carry out certain activities with the child. They also had limited opportunities to make many money-related decisions concerning their children.

Poverty status, food insecurity, low education and poor autonomy were associated with poor development outcomes in young children.

<table>
<thead>
<tr>
<th>Category</th>
<th>Lowest 20%</th>
<th>Highest 20%</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealth</td>
<td>Poorest</td>
<td>39.4</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>Richest</td>
<td>7.9</td>
<td>22.52</td>
</tr>
<tr>
<td>Food Security</td>
<td>Secure</td>
<td>17.5</td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td>Insecure</td>
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<td>69.4</td>
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<tr>
<td></td>
<td>Mean</td>
<td>3.7/5</td>
<td>2.7/5</td>
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<tr>
<td>Education</td>
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<td>72.44</td>
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<td></td>
<td>&lt;=Primary</td>
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<td></td>
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<td>11.81</td>
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<tr>
<td>Autonomy</td>
<td>Mean</td>
<td>4.2</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Factors associated with children’s developmental outcomes

Conclusions and Recommendations

1. The care of young children in nomadic communities is largely the responsibility of the mother. There is a need to understand the limitations that male caregivers face in participating in childcare activities.

2. In this community, communal living is important in the care of young children and provision of opportunities for developmental stimulation as illustrated through the key roles that grandmothers and older children played. Models of childcare for this community should consider these enabling elements of communal living.

3. Interactions with other children and siblings and with elements within the environment is the common understanding of play by caregivers.

4. Parental involvement in play activities with their children was not common. There is a need to enhance the knowledge of caregivers in this community so that they begin to appreciate the learning opportunities in their environment.

5. Learning through digital means and printed material is low in this community.

6. Food insecurity, low levels of education and poverty were related to the poor developmental outcomes of children in this community. Efforts towards improving care practices in this community should go hand-in-hand with ensuring that basic needs for sustained food provision are met, women’s economic empowerment is considered and knowledge is improved.
List of Contributors:

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