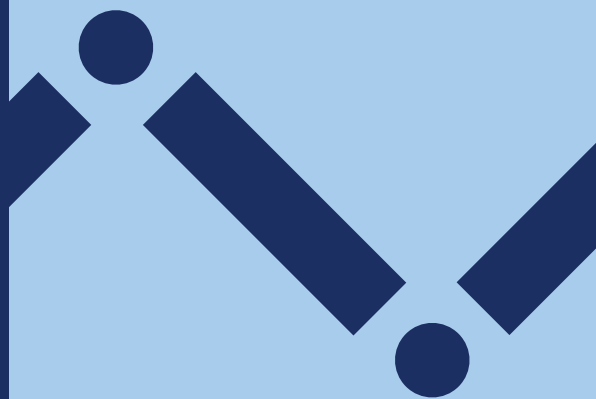


Access to Health Services

Kilifi County Case Study

This brief is based on a survey conducted in Kilifi County to assess Vitamin A Supplementation Coverage conducted by IDinsight on behalf of Helen Keller International.

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Access to health services: Kilifi county case study

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About IDinsight

IDinsight uses data and evidence to help leaders combat poverty worldwide. Our collaborations deploy a large analytical toolkit to help clients design better policies, rigorously test what works, and use evidence to implement effectively at scale. We place special emphasis on using the right tool for the right question, and tailor our rigorous methods to the real-world constraints of decision-makers.

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Background of the study

Vitamin A Deficiency (VAD) and Soil-Transmitted Helminth Infections (parasitic worms) continue to pose significant health challenges globally, with an estimated 1.5 billion people infected.¹ An estimated 5 million children in Kenya are at risk of soil-transmitted helminthiasis.² In collaboration with the Ministry of Health, Helen Keller International conducts Vitamin A supplementation (VAS) and deworming events to combat VAD. As part of their program implementation, Helen Keller International routinely conducts post-intervention coverage surveys with additional survey modules to monitor the overall healthcare for caregivers and children. External surveys done by UNICEF - the SMART survey - estimate the overall VAS coverage in Kilifi to be 53%, lower than the Sub-Saharan Africa average of 59.4%.³ In July 2023, IDinsight's DataDelta team conducted a representative study in Kilifi County, Kenya, to assess the coverage of Helen Keller's VAS and deworming programmes and to assess caregiver knowledge and practices, access to healthcare services, and satisfaction with maternal and child healthcare services.

This brief provides insights into important healthcare access elements in Kilifi County. In the brief, we highlight findings and recommendations from a cross-sectional household caregiver survey focusing on access to health services and caregiver knowledge. We also share findings and recommendations from exploratory, non-representative quantitative interviews with healthcare extension workers and community health promoters (CHPs) involved in VAS activities.

5 Key Findings

- **Finding 1: The primary healthcare facilities accessed by caregivers were predominantly government dispensaries.**
- **Finding 2: Overall, there is good utilization of antenatal care (ANC) services among pregnant women.**
- **Finding 3: There is a gap between the recommended practice of continuous breastfeeding for children under two years and the actual breastfeeding rates among mothers.**
- **Finding 4: Expanding child anthropometric outreach is essential, as most children's growth was not measured because they were not taken to facilities.**
- **Finding 5: CHPs and health workers require more training and information on the essential services they provide.**
- **Finding 6: Health workers (59%) and CHPs (41%) played crucial roles as sources of knowledge among caregivers, emphasizing their importance in health education and promotion efforts**

1 [Soil-Transmitted Helminth Infections - WHO](#)

2 [Prevalence, intensity and associated risk factors of soil-transmitted helminth and schistosome infections in Kenya: Impact assessment after five rounds of mass drug administration in Kenya](#)

3 [Coverage and factors associated with vitamin A supplementation among children aged 6–59 months in twenty-three sub-Saharan African countries](#)

Kilifi County context

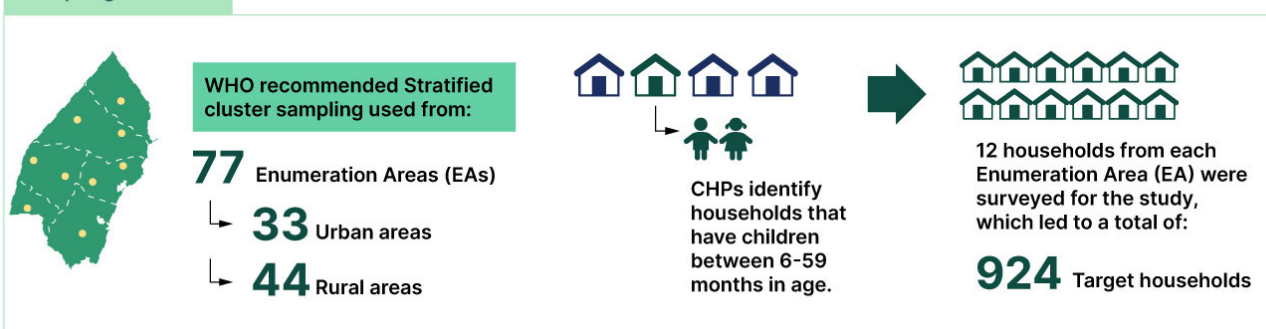
Kilifi County is one of the six counties in the Coast region of Kenya. Based on the last Kenya Census data, the county has a population of 1,453,787. The county comprises seven sub-counties: Ganze, Kaloleni, Kilifi South, Kilifi North, Magarini, Malindi, and Rabai. In May 2023, the Ministry of Health reported Kilifi to have the highest number of stunted children in the country, with one in every three children affected. Similarly, the 2022 the Kenya Demographic and Health Survey (KDHS) showed that Kilifi had the highest stunting levels at 37%. Stunting is a symptom of severe malnutrition, and Vitamin A supplementation is among the essential interventions to address this challenge.

Survey Overview

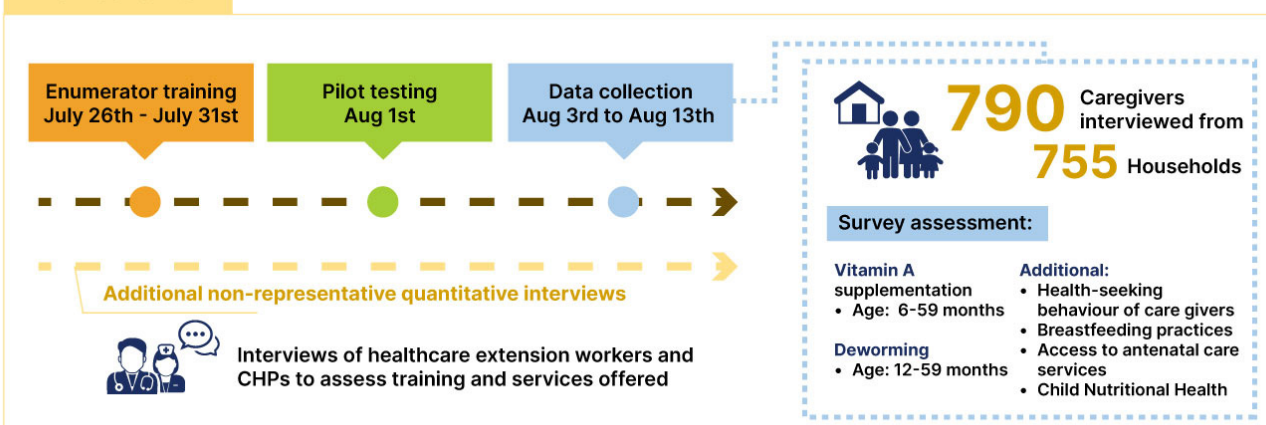
IDinsight conducted a representative quantitative cross-sectional household study to assess post-intervention coverage of vitamin A supplementation and deworming children 6-59 months old and 12-59 months old, respectively, by interviewing their mothers/caregivers. Additionally, the survey assessed the health-seeking behaviour of caregivers, breastfeeding practices, access to antenatal care services and child nutritional health. An exploratory, non-representative quantitative study consisting of individual interviews with actors implementing VAS activities in the field (healthcare extension workers and CHPs) in parallel with the above-mentioned main household study. We designed the parallel survey to complement the cross-sectional household study to determine the training and services offered by CHPs and health workers. We used a convenience sample for this study based on the health workers and CHPs available to support the study during data collection.

Assessing post intervention coverage of vitamin A supplementation and deworming

Sampling overview



Timeline overview

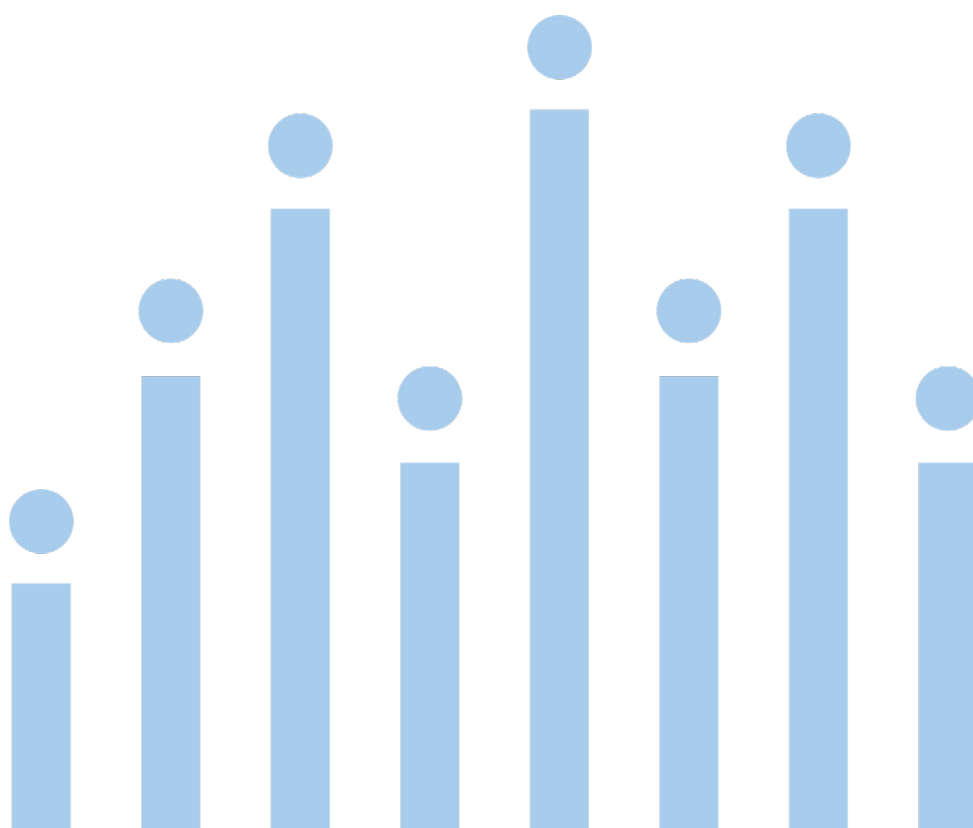


For the sample, Helen Keller used stratified cluster sampling as recommended by the World Health Organization (WHO) for conducting vaccination coverage cluster surveys. The Kenya National Bureau of Statistics (KNBS) sampled 77 enumeration areas (EAs) to be part of the main study, of which 33 are in urban areas and 44 are in rural areas. KNBS sampled EAs with probability proportional to size (PPS), where each EA's probability of selection for the study was proportional to its population size as measured in the 2019 Kenya national census. Within each sampled EA, CHPs were instructed to list all households residing in the EA and indicate in which households there are children between 6-59 months. Finally, IDinsight randomly selected 12 households from each EA to be surveyed for the study. IDinsight selected 924 target households for the survey; this includes an oversample of 20% to ensure representativeness in case of attrition or non-response.

IDinsight interviewed 790 caregivers from 755 households. Overall, the non-response rate was 18%; our estimates are still precise and below the targeted margin of error of 5 percentage points.

Table 1: Number of surveyed respondents in urban and rural areas in Kilifi County

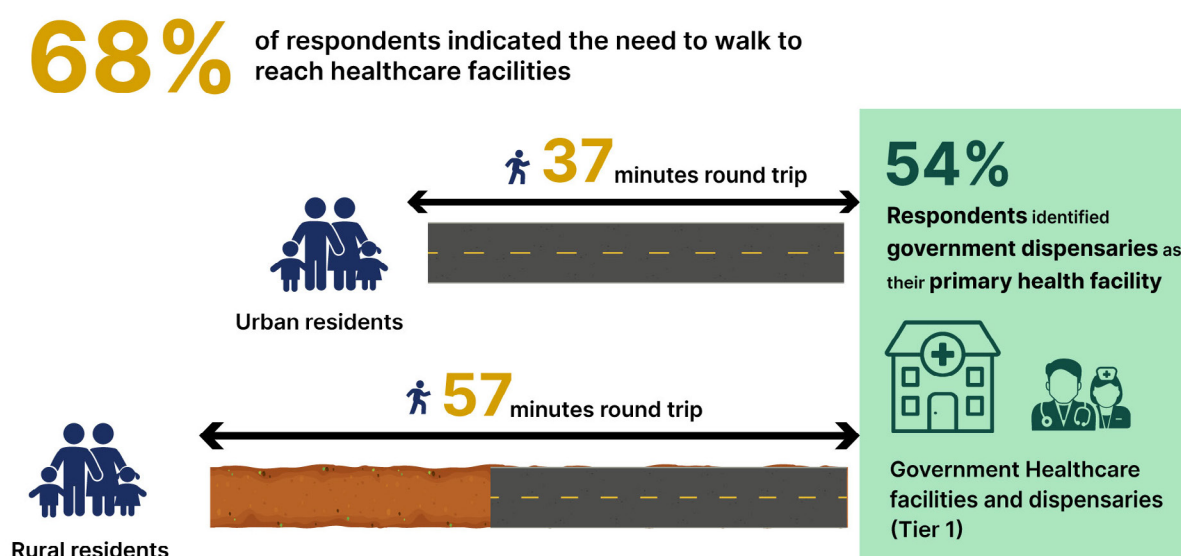
Description	Overall	Urban	Rural
Number of households targeted	924	528 (57%)	396 (43%)
Number of households interviewed	755	304 (40%)	451 (60%)
Number of caregivers	790	315 (40%)	475 (60%)
Average number of children (6 to 59 months) in household	1.47	1.44	1.49
Number of Community Health Promoters interviewed	71	30 (42%)	41 (58%)
Number of Health workers interviewed	40	13 (33%)	27 (68%)



Results

1. The primary healthcare facilities accessed by caregivers were predominantly government dispensaries.

The WHO recommends the presence of a primary health facility within 5 km of any settlement areas⁴. On average, respondents reported a 3.62 km (winsorized) distance to the nearest health facility, with an average travel time of 47 minutes for a round trip. Urban residents experienced comparatively shorter travel times, averaging 37 minutes for a similar distance, while rural residents covered longer distances (4 km) in 57 minutes. Most respondents (68%) indicated the need to walk to reach healthcare facilities. Only 19% of respondents reported distances longer than 5 km to the nearest health facility. Ensuring access to all essential healthcare services at government facilities, which serve as the main primary care facilities for most residents of Kilifi county, could significantly improve health outcomes.

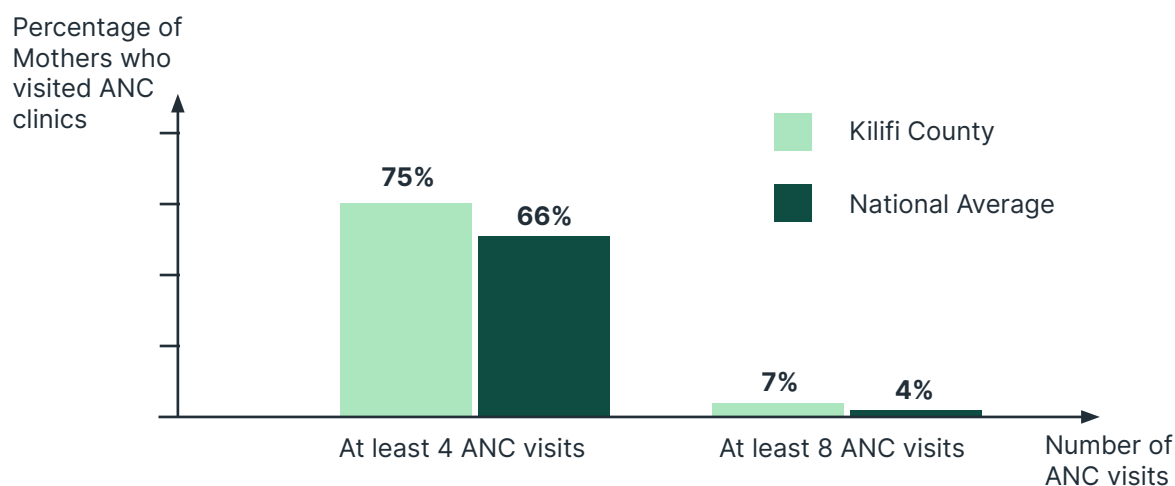


2. Overall, there is good utilization of antenatal care (ANC) services among pregnant women.

ANC utilization among pregnant women demonstrated positive trends, with 96% of mothers reporting using iron supplements during pregnancy. Caregivers reported using iron supplements daily during their pregnancy. A majority (66%) of adherent caregivers took iron and folic acid supplements. While this indicates a high level of adherence to guidelines, there were notable areas for improvement, particularly regarding the timing of the first ANC visit and the quality of ANC interventions.

Utilization of ANC:

A significant 96% of mothers consistently used iron supplements, showcasing a commendable level of commitment. However, the study highlighted a concerning trend in the timing of the first ANC visit. On average, expectant mothers initiated care at 18 weeks into pregnancy, reflecting a delay of 5-9 weeks. Despite this, 75% of mothers eventually met the WHO recommendation of at least four ANC visits, surpassing the national average of 66%. Conversely, only 7% reached the new WHO target of at least eight visits, which still exceeded the national average of 4%.



Implications:

While there is positive momentum in ANC utilization, the delayed initiation of care poses risks, especially given the critical first trimester. Only 17% of pregnant women made their first ANC visit during this period, presenting a 12% deficit compared to the national average of 29%. Timely ANC initiation in the first trimester is crucial for preventing miscarriages, and addressing this gap should be a priority for county health officials to ensure optimal maternal and child health outcomes.

3. There is a gap between the recommended practice of continuous breastfeeding for children under two years and the actual breastfeeding rates among mothers.

Examining breastfeeding rates among mothers with children under two years old revealed that only 41% reported currently breastfeeding. The average rate is still lower than UNICEF's Global Breastfeeding Collective's target of having 60% of children breastfed up to two years old.⁵ Interestingly, breastfeeding rates were higher in rural areas compared to urban areas. Of the breastfeeding caregivers in urban areas, 59% reported having breastfed the day prior—considerably lower than the 84% reported in rural areas. Overall, 69% of caregivers initiated breastfeeding within one hour of giving birth. Decision-makers should prioritize enhancing messaging around breastfeeding and the importance of micronutrient supplementation to address the maternal and child health education gap. These efforts are critical components of child nutrition and can significantly improve maternal and child health outcomes.

Breastfeeding Rate:

While the overall breastfeeding rate indicates room for improvement, the urban-rural disparity suggests potential factors at play. Despite the difference in daily breastfeeding rates between these areas, the lack of statistical significance emphasizes the need for a nuanced understanding of local contexts. Decision-makers should consider tailored interventions to promote breastfeeding, acknowledging the varied needs and challenges in urban and rural settings. Additionally, findings indicated that slightly more than half of caregivers (54%) did not receive counselling about calcium supplementation from healthcare providers, signalling an area for improvement in maternal and child health education and support.

4. Expanding child anthropometric outreach is essential, as most children's growth was not measured because they were not taken to facilities.

Child growth monitoring practices among respondents revealed notable gaps, with only 67% reporting their child's weight being measured. Moreover, only 61% of respondents reported measuring child length, while just 59% reported measuring Mid-Upper Arm Circumference

⁵ [Rates Of Breastfeeding Increase Around The World Through Improved Protection And Support](#)

(MUAC). Even lower proportions of respondents were made aware of the results. To enhance growth monitoring for children, we recommend expanding the availability of child growth monitoring beyond healthcare facilities.

Factors Influencing Low Growth Monitoring:

Nearly 60% of respondents whose children's anthropometric measurements were not taken cited that the child had not been taken to the health facility in the last three months. About 24% mentioned not being informed about the measurements. Only 10% of measurements occurred at home, with the majority, 85% at health facilities. Contrarily, Community Health Practitioners (CHPs) reported high MUAC measurements, with 95% measuring it at least every three months (72% monthly, 23% quarterly). Only 5% measured it once every six months. Additionally, 99% of CHPs provided counselling services to caregivers on the significance of growth monitoring.

5. CHPs and health workers require more training and information on the essential services they provide.

Currently, counties rely heavily on CHPs and HWs to implement VAS and deworming programs. Therefore, the skill and equipment availability level for these individuals is an important component of the program's success. However, they have inadequate access to both informational material and training. We recommend improving the provision of Information, Education, and Communication (IEC) Materials to CHPs as well as additional technical training.

Availability of IEC materials:

Overall, 54% of CHPs reported having access to any IEC material that discusses Vitamin A supplementation. Among urban CHPs, a majority (63%) reported having access to such materials. In contrast, rural CHPs faced a lower availability of these materials, with 46% reporting access. The majority of CHPs had received basic training (87%).

Training:

A majority (87%) of the CHPs received training on the basic modules. However, only 59% reported getting training on the technical modules. Additional training for CHPs is key to unlocking multiple community health improvements and efficiency in health service delivery. This is especially important to the latest government initiatives to enhance the utilization of CHPs.

6. Health workers (59%) and CHPs (41%) played crucial roles as sources of knowledge among caregivers, emphasizing their importance in health education and promotion efforts.

There was a statistically significant difference in how rural and urban residents received vitamin A knowledge from the two main sources - health workers and CHPs. Decision-makers could leverage health workers as primary sources of outreach and education in urban areas and CHPs for outreach and education in rural areas.

Source of Vitamin A Knowledge:

Health workers are a more prevalent source of vitamin A knowledge in urban areas (66%) than in rural areas (55%). However, CHPs were a more prominent source of vitamin A knowledge for rural residents (45%) than for urban residents (36%). This variation in knowledge sources is aligned with the differences in types of facilities that rural and urban residents reported, with public health centres - where health workers are more prominent - reported as the primary health facility type for urban residents and dispensaries as the primary facility type for rural residents.

Recommendations



To **enhance the timely initiation of ANC**, the Ministry of Health (MOH) could encourage expectant mothers to schedule their first ANC visit earlier in their pregnancies, ideally within the first trimester. Emphasizing the significance of early ANC initiation becomes crucial, as it plays a pivotal role in minimizing the risk of miscarriages, particularly during the critical first trimester.



To improve community health, the MOH should **expand child health consultation services**, particularly in government dispensaries. This expansion could prioritize addressing the low availability of certain healthcare services, such as in-patient and healthy child consultation, at primary health facilities. By doing so, the overall accessibility and quality of healthcare can be significantly enhanced.



Another essential aspect is the **improvement of breastfeeding education and support**. This involves the County Health Management Team (CHMT) enhancing messaging around breastfeeding, underscoring its importance for child nutrition. Additionally, there is a need for increased maternal and child health education, including counselling about calcium supplementation, to bridge the gap in breastfeeding rates.



The county and MOH could expand **child anthropometric outreach beyond healthcare facilities to monitor child growth more effectively**. This can be achieved by increasing efforts to measure and monitor child growth and promoting awareness among caregivers about the significance of child growth monitoring. Ensuring caregivers receive information about their child's measurements is crucial for fostering a proactive approach to child health.



Moreover, CHPs play a vital role, particularly in rural areas. Therefore, the county should provide **additional training and informational materials to CHPs** in these settings to enhance their skills and knowledge. Focusing on improving access to Information, Education, and Communication (IEC) materials, especially those related to Vitamin A supplementation, is crucial for comprehensive community health.



In different settings, leveraging health workers becomes pivotal. Health workers can serve as primary sources of outreach and education in urban areas due to their higher prevalence. Simultaneously, in rural areas, acknowledging the crucial role of CHPs for outreach and education is necessary, recognizing their importance in these specific settings. By implementing these strategies, a comprehensive and effective approach to maternal and child healthcare can be established, addressing various aspects of antenatal care, child health consultation, breastfeeding support, anthropometric outreach, and the education of community health providers.



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