



Health KPC Endline Assessment SUMMARY for South Kordofan

Introduction

Medicines for Humanity (MFH) has partnered with the Mother of Mercy Hospital (MMH) and the Diocese of El Obeid (DoE) for nearly 6 years to strengthen and expand community and clinic healthcare systems in the Nuba Mountains region of South Kordofan, Sudan. Together, we reopened 6 clinics that were closed due to fighting and established an outreach system of community health volunteers (CHVs) to address the health needs of women and children in the area. Today, this system addresses the primary care needs of approximately 90,000 people, with the clinics treating 3 times the number of patients than was initially projected.

At the beginning of the initiative in April, 2014, MFH, the Hospital, and the Diocese carried out a baseline assessment in target communities – a Knowledge, Attitudes and Practice (KAP) survey – to understand the status of health conditions, the prevalence of 3 major diseases (malaria, pneumonia, and diarrhea) that affect children under 5, access to healthcare, and community knowledge of health issues. The results formed the baseline of the indicators monitored and reported on throughout project implementation. In order to evaluate the outcome and impact of the project, the KAP survey was repeated in May 2019 as a complementary endline assessment of the five year project.

Background

Since 2008, the DoE has supported the Secretariat of Health (SoH) in the delivery of health services by providing primary and secondary healthcare through the MMH in Gidel, South Kordofan. When war broke out in the Nuba Mountains in 2011, most other health partners departed the area, leaving the SoH struggling to maintain a minimum level of care without sufficient resources. To address the gaps in service, the MMH initiated its *Outreach Project* (ORP) in 2014 in partnership with MFH. This project (also known as *Providing Clinic and Community Health Services to Save Lives in South Kordofan State* but hereafter referred to as ORP) has aimed to increase access to primary healthcare services in remote locations through the provision of medicines, supplies and technical support to the 6 clinics, while also increasing awareness and knowledge through health, nutrition, and hygiene promotion within the communities by trained CHVs.

Objectives of the KPC Assessment

The overall objective of this assessment was to measure change over time in levels of knowledge, practices, and coverage of health interventions. The specific objective was to gather endline data after 5 years of implementation regarding:

- 2-week period prevalence of 3 major illnesses that affect children under 5
- Vaccination coverage among children 12-23 months
- nths
- Utilization of maternal healthcare services
- Practices of the target community in relation to prevention of diseases and malnutrition and the presence of and reported use of mosquito nets
- Access to health information
- Knowledge of HIV/AIDS
- Nutrition status of children under 5

Methodology

A cross-sectional survey using 2-stage cluster random sampling methodology surveyed a total of 300 households using a 30 cluster by 10 household design. Quantitative data on health conditions, knowledge, and practices were collected through a structured questionnaire that captured health-seeking behavior, child morbidity, immunization, maternal health, and health education. All respondents were women of reproductive age (15-49) and/or mothers of children under 2 years old. The collected data was analyzed with Microsoft Excel.

Results and Conclusions

Results of the survey identified overall improvement in many areas of health services and practices affecting MCH compared to the initial data from 2014. Since the start of the ORP, there has been an increase in the uptake of MCH services and an increase in exposure to positive health practices. This has contributed to a high coverage of vaccination and a mild reduction in child morbidity.

The impact of refugee returnees on the assessment results must be noted. The decrease in hostilities during 2018/2019 led to the return of many people who previously fled the area because of the insecurity. While exact numbers are not available, some of the surrounding communities of the 6 clinics have seen an increase of 20% in population numbers in the last few months. Returnees received limited services for a reduced time period, which has negatively impacted some endline data (for example, malnutrition numbers).

The following table summarizes key results of the assessment and the ensuing report sections discuss and expand on those results as they relate to the ORP's specific objectives.

Key Results of the Assessment

Indicators	2014	2019	Change	
Morbidity among children under 2 years in past 2 weeks	81%	75.0%	-6%	▼
Children who had a fever	61.7%	58.3%	-3.4%	▼
Children who had diarrhea	46.3%	41.6%	-4.7%	▼
Children who had a cough with difficulty breathing	46.0%	24.0%	-22%	▼▼
Children with fever receiving anti-malaria treatment	4.9%	14.9%	+10%	▲
Children with diarrhea receiving oral rehydration fluids	36.7%	45.2%	+8.5%	▲

Children with cough and difficulty breathing were brought to a skilled health worker	37.7%	62.0%	+24.3%	▲▲
Children 6-23 months who were ever vaccinated	9.5%	79.4%	+69.9%	▲▲▲
ANC 1 st visit	52.7%	84.6%	+31.9%	▲▲
ANC 4 or more visits	15.7%	49.5%	+33.8%	▲▲
Deliveries protected against tetanus	25.3%	70.8%	+45.5%	▲▲▲
Deliveries attended by a skilled birth attendant	16%	44.5%	+28.5%	▲▲
Households with a mosquito net	22.7%	40.0%	+17.3%	▲▲
Infants exclusively breastfed until 6 months	43.8%	50.7%	+6.9%	▲
Respondents washed their hands with soap/ash at least 3 of the 5 critical times	20.7%	54.2%	+33.5%	▲▲
Respondents received any health education in past 3 months	11.1%	56.8%	+45.7%	▲▲▲
Respondents had heard of HIV	81%	90.3%	+9.3%	▲
Respondents could name at least one way to prevent HIV	61.3%	89.0%	+27.7%	▲
Children with severe acute malnutrition	0.4%	0.9%	+0.5%	▲
Children with moderate acute malnutrition	4.3%	5.5%	+1.2%	▲

Disease prevalence

Prevalence of disease symptoms during the 2 weeks prior to the survey among children under 2 years of age reduced by 6%. Suspected pneumonia (cough and difficulty breathing) showed the greatest reduction (found in 24% of children in 2019 as compared to 46% in 2014) while the prevalence of fever showed the least reduction (found in 62% of children in 2019 as compared to 58% in 2014). The reduction in disease symptoms indicates an improvement in child health, which may be related to increased access to clinical and preventive care and increased awareness resulting from health promotion provided by the ORP.

Immunization coverage

High vaccination coverage contributes to reduced morbidity among children under 5. Immunization coverage greatly increased – by nearly 70% -- in the target communities during the ORP. Children benefitted from routine healthcare services, receiving multiple vaccines in line with EPI standards. Challenges remain such as a lower coverage of follow-up doses and measles vaccines. This may be related to distance and irregularity of non-static services, or simply forgetting to come back when the child reaches 9 months old for its measles vaccine. A recent assessment conducted on the vaccination program cited mothers who came for follow-up on specified dates only to find that the vaccination team did not arrive or that the vaccinator told them they must wait until enough children presented before s/he would open and mix the multi-dose vial (BCG and measles vaccines), as any unused doses of the mixture had to be discarded at the end of the day. Support for vaccination programming in South Kordofan since 2015 has been significant. Vaccination has expanded beyond the ORP-supported facilities to more locations through other implementing partners. Tellingly, no outbreaks of these vaccine-preventable diseases have occurred within the central region of the Nuba Mountains since 2015.

Maternal health

Maternal healthcare indicators showed increased utilization of services. There was an increase of 28.5% in the percentage of respondents reporting to being cared for by a skilled birth attendant (SBA) during delivery. Although not measured by this survey, maternal mortality can be expected to have reduced in part because of this. However, ORP health facility data show 208 facility deliveries in 2018 as compared to 376 facility deliveries the year before. Gains had been made through the increased availability of supplies and trained staff as well as due to messaging on the importance of safe delivery. Unfortunately, limited access to funds and transport to resupply in 2018 may have affected the quality of work at the facilities and disincentivized pregnant women from coming for delivery. Additionally, in-kind incentives such as baby blankets, LLINs, and soap that used to be provided for follow-up visits at ANC and for facility deliveries were discontinued as funding decreased.

Tetanus (TT) vaccination is one of the evidence-based interventions that improve child survival by protecting both mothers and newborn babies from tetanus. Approximately 71% of all deliveries were protected against tetanus, a 25% improvement from 2014 related to the increased availability of vaccines in the area. In 2018, the program reached 7,805 pregnant women and 18,725 women of child-bearing age with TT vaccination. In malaria endemic areas, the WHO recommends intermittent preventive treatment for malaria using Sulphadoxine-Pyrimethamine (SP) at least twice during pregnancy. Three-quarters of the respondents received at least one dose of SP.

Community practices and access to knowledge

Access to health, nutrition, and hygiene information has greatly increased (by nearly 46%) compared to 2014. This may have contributed to the increased uptake of services and handwashing practices at critical times and HIV awareness. Positive changes were seen across most community practice indicators likely as a result of the combined activities of the integrated health program that simultaneously increased availability of services at the facilities and awareness of health, nutrition and hygiene at the community level. Contextual changes may also have contributed to the changes observed, especially the ceasefire agreement that has been in place since 2016. As the aerial bombing stopped, people were freer to access services.

While 40% of women reported having mosquito nets, just 25% reported that their last-born child slept under the net the night prior to the survey and 2% reported that another person had slept under the net. The proportion of households with a mosquito net has nearly doubled (from 22.7% in 2014), but their use has reduced from 47.1% to just 26.7%. One reason for this may be that the data in 2019 was collected at the end of the dry season, with low prevalence of malaria.

HIV and AIDs

HIV/AIDS awareness has increased from 61.3% to 89.0% of respondents knowing at least one way of preventing the infection. HIV awareness activities were conducted by the CHVs and clinic staff as well as a mobile team from the MMH. Voluntary counselling and testing (VCT) services were available at each of the clinics while the MMH mobile team conducted awareness sessions followed by VCT for those who wanted to know their status. These activities have contributed to a prevalence of HIV in the Nuba Mountains that appears to remain below 1%, though data collectors reported facing the same cultural barrier as in the baseline survey that concluded that respondents may have felt unable to express themselves freely regarding HIV/AIDs.

Nutrition status

The global acute malnutrition (GAM) rate measured by MUAC was 6.4%. Though slightly higher than in 2014 (4.7%), it remained below the internationally recognized threshold. Although this is still indicative of the need to establish nutrition interventions. The endline survey was conducted in the post-harvest season and for many people the harvest has been good. The increase compared to 2014 may be related to the influx of returnees in the past months. While more than 1,000 families have been registered, many others may have been missed. Returnees settle with extended family or friends, sharing the same food. Families who were able to cater for their own subsistence in the past, now have additional mouths to feed over extended periods of time and that can result in less nutrient value to children.

Recommendations

- Ensure regular and sustained support to the program through (timely) allocated resources, including transport, to retain the confidence of the clinic staff, CHVs and the community at large.
- Strengthen the community health program with a supervision mechanism to support CHVs in their community activities. Establish mother-to-mother support groups by using positive deviants for peer education and participatory learning and action approaches in health, nutrition and hygiene.
- Provide continuous medical education for the facility staff on common childhood illnesses and maternal healthcare, including safe deliveries and management of common complications during delivery (basic emergency obstetric and neonatal care). Strengthen counselling on danger signs during pregnancy and in children for early care seeking.
- Expand the program to new locations to increase coverage of integrated health services in the area.
- Establish integrated community case management of fever, diarrhea and cough and dyspnea in children under 5 living in remote areas far removed from supported health facilities.
- Provide in-kind incentives such as soap or baby blankets for those who deliver at the health facility, for PNC to encourage uptake of services, and for EPI follow-up doses to reduce defaulters. Although unsustainable in the long run, this may still be effective to introduce women and children to the services where uptake has been very low. The community activities and strengthening the quality of the services will contribute to longer lasting changes.
- Maintain EPI services through static facilities and strengthen outreach from static facilities to reach underserved areas. Plan EPI days for areas not easily reached by other means. Introduce immunity charm bracelets to retain information on vaccinations and alert both mothers and health workers on the remaining vaccines required.
- Monitor nutrition status of children through MUAC screening for early detection of malnutrition in communities and refer for treatment services as needed.