# IMPLEMENTATION CHALLENGES OF UNDER-FIVE HEALTH CARE INTERVENTIONS IN WESTERN KENYA

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#### **ABSTRACT**

**Introduction:** Kisumu East sub-County in western Kenya has high under-five mortality rates. In the year 2008 the under-five mortality rate was 220 per 1,000 live births which was almost three times the national figure. The Government of Kenya has initiated interventions targeting the under-fives including immunization, integrated management care for the sick, oral rehydration therapy and care for the HIV positive. The under-five mortality rate in this region has remained high despite the above interventions. This study therefore sought to determine the challenges of implementing under-five health care interventions which could be contributing to poor uptake of health care services among this group in Kisumu East sub-County.

**Methods:** The study applied qualitative methods both in data collection and analysis. Ten health facilities operating in Tier 1 and 2 were sampled to participate in the study. Data was collected through Key Informant Interviews and Focus Group Discussions and theoretical thematic analysis was used in data analysis.

**Results:** The identified implementation challenges of under-five health care interventions were grouped into three main categories namely; factors in the broader environment including institutional policies, household and community practices and health facility factors such as under-staffing.

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**Discussion:** Though the government has put in place policies and interventions targeting the under-fives, several challenges prevent the effective implementation of these programmes. The understanding of these challenges may provide direction in designing programmes that address them and thus increase uptake of the interventions targeting this age group.

**Key words:** under-five care, mortality, challenges, health interventions

#### INTRODUCTION

The total population of Kenya is 38.9 million and the under-five child population comprises 16.1% (MOPHS, 2010a). The overall under-five mortality rate in Kenya has decreased from 115 per 1,000 live births in the year 2003 to 74 per 1,000 live births in 2008-2009. The under-five mortality rates indicate a decrease though this is still way below the MDG 4 target of reducing the under-five mortality by two-thirds to 32 per 1,000 live births (KNBS & ICFMacro, 2010). The Kenya Demographic Health survey done in 2008-2009 indicated that under-five mortality has declined due to the numerous efforts put in place by the Government of Kenya to improve child health including free under-five health care, immunization campaigns, growth monitoring and campaigns on exclusive breastfeeding. Despite these interventions, the former Nyanza Province was indicated to have the highest levels of under-five mortality rates at 149 deaths per 1,000 live births though these figures have been on a decline from 206 per 1,000 live births since the 2003 KDHS (KNBS & ICFMacro, 2010). The overall decline in under-five mortality rate both nationally and in the former Nyanza Province has been attributed to initiatives such as programmes on malaria, immunization and HIV/AIDS with particular reference to prevention of mother to child transmission (Maoulidi, 2011).

The under-five mortality rate in Nyanza as a region including Kisumu East sub-County has been high. In comparison with the national urban rates, Kisumu East sub-County has high under-five mortality rates. In the year 2008 the under-five mortality rate in Kisumu was 220 per 1,000 live births which is almost 3 times the national figure (GOK, 2009b; KNBS & ICFMacro, 2010). The regional rates indicate that Nyanza region has the highest under-five mortality rate at 149 per 1000 live births compared to central region which has the lowest at 51 per 1000 live births (KNBS & ICFMacro, 2010).



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Nationally, the main causes of under-five morbidity and mortality have been linked to acute respiratory infections and pneumonia, diarrhoea, malaria, anemia and high levels of malnutrition (MOPHS, 2008-2015; NCPD, 2012). According to a report from the Ministry of Public Health and Sanitation (2010a), these illnesses have been attributed to cause morbidity in under-fives as follows: Malaria contributes 33%, diseases of respiratory system 29%, diarrhoea 7% while pneumonia is 5%.

However despite the health care interventions put in place by the government to provide essential health care services to the under-five child, the mortality rates among this group in Kisumu East sub-County has remained high. This study therefore sought to determine the implementation challenges of under-five health care in Kisumu East sub-County. The findings of this study will provide insight on challenges on health care provision for the under-fives and thus inform strategies and policies that will improve implementation and uptake of these interventions among the under-fives.

#### **MATERIALS AND METHODS**

The study sites included health facilities operating at Tier 1 and 2 in Kisumu east sub-County. The Kenya health care delivery system is divided into four tiers of operation and is structured in a pyramid form. At the base of the pyramid is Tier 1 which is the first level of care and includes community based health care services. Tier 2 includes dispensaries and health centers which provide primary health care services. Tier 3 includes sub-County and county health facilities which act as County referral points and finally Tier 4 are the provincial and national health facilities which act as the National teaching and referral hospitals. A total of 10 health facilities functioning in Tiers 1 and 2 were selected to participate in the study as they usually serve as the first point of contact with health care services for a sick under-five child before appropriate referral is done.

Cross-sectional research design was used in this study. Ethical approval was granted by Jaramogi Oginga Odinga Teaching and Referral Hospital, Research and Ethical Review Board. Written informed consent was sought from the participants. Qualitative data was collected, analysed and integrated in order to answer the research questions in the study (Hesse-Biber, 2010). The study



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participants included Community Health Workers (CHWs) and health care workers (doctors, nurses and clinical officers) who directly provide care to the under-fives. Focused Group Discussions (FGDs) were conducted with the CHWs while Key Informant Interviews (KIIs) were done with the health care workers. Pretesting of the tools was done to ensure clarity of the questions. Theoretical thematic analysis approach was used to analyse qualitative data from the Key Informant Interviews and the FGDs. This approach involved identifying, analyzing and reporting patterns within data guided by the specific research questions (Braun & Clarke, 2006).

#### **RESULTS AND DISCUSSION**

The findings were thematically grouped into three main categories guided by Innovations conceptual framework which was used to guide the conduct of this study. This framework provides a platform for identifying and categorizing factors that support quality coverage of effective under-five child health interventions and helps in outlining the challenges of implementing the programmes. The framework further helps in classifying the various factors that influence the coverage of under-five health care interventions (ConcernWorlwide & UNICEF, 2011). The categories included factors in the broader environment, household and community practices and health facility challenges.

#### **Challenges in the Broader Environment**

The results showed that affordability, accessibility and institutional policies posed as a challenge in the provision of under-five care. Although the policy on under-five care by the government of Kenya is free, that is, under-fives are not required to pay for services sought from the government health facilities, the findings revealed that in case of stock outs the care giver is required to buy the medication and even seek for investigations where they are required to pay. As cited by one of the respondent the ability to afford care was noted to influence whether the under-five child will be able to access care or not.

"...others who can't afford when you advise them for admission for better management of the child they tell you that they are not ready for admission because they do not have money."



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Financial factors which include issues related to user fees, penalty fees and high cost of prescription have been shown to act as barriers to accessing care by the under-fives (Halwindi, Siziya, Magnussen, & A.Olsen, 2013). Further, family income and socio-economic status of the household directly influence the health seeking behavior of the under-five care-giver and will determine the decision on where to seek the service (Rehma, Shaikh, & Ronis, 2014).

The ability of the under-five to access the health facility is also determined by the distance from the facility and the infrastructure of the area. The interviews also revealed that one of the facilities involved in the study was in an area prone to floods and this was cited to be an impediment to bringing the child to the health facility when it rained. Similarly infrastructure, rains and floods were cited in study done in Zambia that showed that these factors would lead to inaccessibility of health facilities by families due to over-flow of some streams and impassable roads (Halwindi et al., 2013). Distance traveled to health facility influences the rate of utilization of child health services, the more the distance the lower the utilization of the services (E. D. Adinma, Adinma, Obionu, & Asuzu, 2011).

Further findings indicated that facilities and community units with big catchment areas cannot be reached easily by the community members. As noted below some areas can only be reached during active case finding and the care-givers would bring the child to the facility once identified and not come back due to the distance. Inaccessibility to care due to the infrastructure and distance is even made worse by the fact that none of the health facilities that participated in the study had an ambulance which could be used during an emergency.

'Here in this facility we have a big catchment area so there are some areas we only reach after active case finding. So the mother comes and then disappears. So when we go back on the ground and you find the mother when you ask, the reason they give is the distance to the health facility.'

The findings are consistent with related studies that indicate that distance prevents care-takers from accessing health care services for under-fives (Halwindi et al., 2013). To improve uptake of under-five services in such a setting the County government should come up with programmes that take the health care services to the community such as mobile and outreach services and active use of Community Health Volunteers.



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Some health care institutions in the study had in place policies and protocols that did not allow provision of some services which could be considered to be an impediment towards achieving effective implementation of under-five health care programmes. Findings revealed that some of the faith based health facilities that participated in the study did not provide family planning services but refer. It was noted that some clients would not go to seek the service where they have been referred and this could contribute to unplanned families which may lead to reduced uptake of health care services among the under-fives who have more than one sibling within the same age group (Halwindi et al., 2013).

#### **Household and Community Challenges**

Challenges under this category include awareness level, cultural beliefs and practices, compliance to treatment and feeding advice, health seeking behavior and malnutrition. Lack of awareness on the need to take the child to the health facility and the type of health services available was shown to be a challenge in the implementation of under-five health care services in the study area. This contributed to lack of co-operation with some care-givers when the under-five child was referred to a different health facility to seek services that were not available in the facility of their choice. Similar studies indicate that lack of awareness on the importance of vitamin A, de-worming and growth monitoring especially after completion of immunization is one of the barriers to accessing under-five health care services (Halwindi et al., 2013). Health education is one of the strategies that can be used to increase the level of awareness among caregivers and thus improve practice of household and community interventions targeted at reducing morbidity and mortality among the under-fives (Ashikeni, Envuladu, & Zoakah, 2013).

Cultural beliefs and traditional practices were cited to delay and prevent the under-fives from accessing health care interventions. In related studies majority of the participants perceived that childhood illnesses were caused by witchcraft, ancestral spirits and breach of taboos and not infection while other participants linked child illness to child development and that it is a normal part of growth (Ugwueje, 2012). A study in Nigeria supports the above findings; the study participants indicated that there are some traditional ways which they used that could heal childhood illnesses as opposed to taking the sick child to the health care facility (Ekure et al., 2013).



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Compliance to treatment and feeding advice among care-givers of HIV exposed infants faces a major challenge. The KIIs revealed that when given the Niverapine the care-givers do not give the child or at times they give but not consistently especially when the partner is not aware of their HIV status. Stigma in the community was also noted to prevent the HIV positive mother from exclusive breastfeeding and they start on complementary feeding as early as 3-4 months. Similar studies show that fear and stigma delays access to diagnostic services for HIV exposed under-fives and thus delays commencement of care (Railton & Mash, 2012). Adherence to advice and treatment has been shown to contribute tremendously towards the well being of the under-fives. In Tanzania adherence to treatment was found to be dependent on the health status of the child such that care-givers whose children did not improve were more likely to adhere to treatment than those whose children showed improvement (Kassile, 2012). Lack of adherence or loss of follow-up to treatment among HIV exposed under-fives has been attributed to poor socio-economic conditions, lack of transport, distance from the health facility, competing health needs, fear of results and poor record keeping (Ong'ech et al., 2012).

The KIIs and FGDs confirmed that the care-givers took up to 2-3 days before taking the sick under-five to the health facility and this has been attributed to use of herbal medications and over the counter drugs. Similar studies in Tanzania indicate that sick under-fives would not be taken to the health facility immediately but the care-givers would first try traditional care or self treatment and only take the child to the health facility when there is no improvement (Kassile, 2012). A study in Bangladesh shows that 80% of care-givers sought care for the sick under-five outside the home within 2 days but 47% of them took the children to untrained service providers. Prompt health seeking behavior should be coupled by right choice of where to seek care for the sick under-five to be able to achieve reduction in mortality among this group (Najnin, Bennett, & Luby', 2011).

Further the FGDs revealed that the under-fives are fed on one type of food and this was due to food unavailability in the study area. As cited below in relation to this finding it was noted that the malnourished children were hidden by the parents and could easily be missed out and not be assisted. Malnutrition results due to deficiency or excess of one or more essential nutrients (Ozor, Iyamu, & Osifo, 2014).



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'You may go to the field and find very malnourished children and the parents hide them and if you are not very keen you may not know that there is a child who needs care who has been hidden in the house. The mother insists on talking to you at the door, yet the child is hidden in the bedroom.'

In Nigeria findings from a similar study showed that majority (45.2%) of the under-fives were mainly fed on carbohydrate food sources such as rice, yam flour and corn products, protective food sources were least offered at 8.2% and this was attributed to household food insecurity (Ajao, Ojofeitimi, Adebayo, Fatusi, & Afolabi, 2010).

#### **Health Facility Challenges**

The study findings revealed that challenges in the health facility include lack of drugs and supplies, poor referral system, staffing and attitude of health care workers.

Lack of drugs and medical supplies was cited by some of the health workers to be a barrier to the provision of some of the under-five health care interventions. The care-givers bring the children to the facility and since there are no drugs, when they are given the prescriptions they do not buy the drugs. Nutrition was noted to be among the health care programmes most affected by stock outs leading to a lot of interruptions in the provision of care for the under-fives enrolled in this programme. Diagnostic services for malaria are also affected by stock outs. Facilities that do not have laboratories use Rapid Diagnostic Test (RDT) kits whose supply is not consistent.

'...like now that we don't have enough drugs when you prescribe you send them to buy, they don't buy so they do come to the hospital but they are not buying the drugs.'

Further findings indicate that stock outs were noted to not only affect drugs and health commodities, but also vaccines in some facilities. A similar study in Zambia revealed that non-availability of medications at the health centre was one of the barriers to accessing health care among the under-fives. Similarly, lack of the medications was voiced by both the health workers and the care-givers, the drugs were sometimes supplied erratically resulting in inconsistent availability to the patients (Halwindi et al., 2013). Findings also reveal that in case of emergencies the child is just stabilised and then referred to a higher tier for specialised care. Poor referral system in the health facilities and lack of transport were cited as a challenge in the implementation of under-five health care interventions. Referrals from community to health



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facilities by CHWs through case finding is also important and was noted to be facing challenges especially when care-giver cannot afford transport or when the facilities have no drugs. Other related studies show that referral is an important component in increasing access to care and that there is increase in complying with referral advice when dealing with children who are severely ill and when clear referral instructions are provided to the care-giver (Paintain et al., 2012).

The study findings indicate that under-staffing has lead to provision of disintegrated care for the under-fives in some of the facilities and this results to care-givers being forced to queue for long and at different points for services. These findings are consistent with related studies which confirm that under-five health care interventions were fragmented in some partnership sites and that addressing under-five mortality required multiple integrated interventions and approaches (Oindo et al., 2009). Understaffing contributes to poor performance of health facilities and this jeopardizes the quality of care, lack of outreaches has also been shown to reduce the number of under-fives brought to health facilities due to lack of flow of information between the facilities and the communities (Halwindi et al., 2013).

The findings further show that the attitude of health workers could act as an impediment to seeking care for under-fives by the care-givers. The care-givers had the clinic book thrown at them and were at times even quarrelled as reported by one of the respondents in the KII. Similar findings were noted in a study that sought to determine the barriers to under-five care in Zambia where it was noted that the care-takers who had lost under-five cards were reluctant to go to the health facility for fear of being scolded by the health workers (Halwindi et al., 2013). Negative attitude of health workers was identified as one of the barriers to accessing care by the under-fives in Nigeria (Ekure et al., 2013). A study in South Africa showed that some care-givers reported that the nurses were rude, angry and unapproachable and this prevented care-givers from seeking care at the health facility (Railton & Mash, 2012).

In conclusion the findings revealed that though the government had put in place strategies to address under-five mortality in Kisumu East sub-County several challenges impede effective implementation and uptake of these services by the under-fives. The study findings show that the challenges affecting the implementation of under-five health care interventions include the broader environment such as accessibility and policy, household and community practices and



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challenges within the health facility. It is therefore important to design policies and come up with strategies that address all the three categories to enhance effective implementation of the interventions and thus increase uptake of the services targeting the under-fives which would result to reduction in morbidity and mortality among this age group.

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