



## COMMUNITY-BASED MATERNAL, NEWBORN AND CHILD CARE: A WINING STRATEGY FOR IMPROVING MATERNAL AND CHILD HEALTH IN DEVELOPING COUNTRIES

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**ABSTRACT:** *The high prevalence and incidence of maternal, newborn and child morbidity and mortality that occurs in rural and resource-deprived communities of the developing countries such as Nigeria can be attributed mostly to the lack of access to adequate healthcare or the absence of skilled health care workers such as midwives, doctors or trained nurses that would have provided the required skilled-care during the crucial period of pregnancy, childbirth and after child birth. To improve maternal, newborn, and child health outcomes thereby halting its undesirable antithesis in maternal, newborn, and child morbidity and mortality, an integrated strategy, that has as one of its major components as community-based care is seriously needed. Community-based maternal, newborn, and child care functions as an important strategy or machinery for providing a continuum of care in rural and resource-deprived communities of the developing countries aimed at the protection, maintenance and improvement of maternal, newborn and child health.*

**KEYWORDS:** Community-Based Maternal, Newborn, Child Care, Child Health, Nigeria

### INTRODUCTION

Maternal health, defined as a complete state of physical, mental, and social wellbeing of women during pregnancy, labour and delivery or childbirth, and the postnatal period, covers the reproductive health aspects of family planning, preconception, antenatal care as well as postnatal care, is aimed at protecting and improving the health and wellbeing of women thereby reducing the incidence of maternal morbidity and mortality (WHO, 2019). A study carried out by Lassi, Kumar and Bhutta (2016), showed that the health and wellbeing of women, the health and wellbeing of newborns, and the health and wellbeing of children are inherently linked.

Various current reports on maternal, newborn, and child health are indicating that significant progress is been made in the efforts to reduce maternal mortality through the improvement of maternal, newborn and child health. For example, Liu et al., (2016), reported a drop down in the worldwide mortality rate of children from 90.6 deaths per 1,000 live births in 1990 to 42.5 deaths per 1,000 live births in 2015, translating to 53 percent drop rate. Similarly, within the same period, the global maternal mortality dropped by 44% (WHO, 2018). Despite the reported significant progress, the rates of maternal and child mortality are still alarmingly high. According to information on maternal mortality by WHO (2018), about 830 women die daily from preventable pregnancy- and child birth-related causes globally. Almost all (99%) of maternal mortalities are reported to happen in rural and poor communities of developing



countries. In 2015 alone, approximately 303, 000 women died following the events of pregnancy, labour and delivery took place in these settings (Khan, Lassi&Bhutta, 2018).

Nigeria contributes about 20% of all global maternal deaths (WHO, 2019). According to a WHO report (2019), more than 600, 000 maternal mortalities and about 900 000 maternal near-miss cases took place in Nigeria between 2005 and 2015. The risk of dying during pregnancy, labour and delivery, or postnatal period by a woman in Nigeria is estimated to be 1 in 22, whereas the life time risk for dying due the same causes by women living in developed countries is estimated to be 1 in 4,900 (WHO, 2018; Olanade, Olawande, Alabi, &Imhophi, 2019).

The high prevalence and incidence of maternal and child morbidity and mortality that occurs in rural and resource-deprived communities of the developing countries such as Nigeria can be attributed mostly to the lack of access to adequate healthcare or the absence of skilled health care workers such as midwives, doctors or trained nurses that would have provided the required skilled-care during the crucial period of pregnancy, childbirth and after child birth (Alkema, Chou, Zhang, Genmil, Boerma, Mathers et al., 2016). Even though most of the maternal deaths have been determined to be as a result of medical conditions including haemorrhage, sepsis, preeclampsia, and eclampsia (WHO, 2019;Sageer, Kongnyuy, Adebimpe, Omosehin, Ogunsola&Sanni, 2019), a considerable proportion of maternal morbidities and mortalities can be attributed to structural causes including lack of or limited access to skilled and proper adequate care during labour, delivery, and after delivery as well as poor access and motivation to utilize family planning services and other reproductive healthcare services (WHO, 2019).Efforts to protect maintain or improve maternal, newborn, and child health, should, therefore include the provision of adequate access to quality health care services that span or cover the periods of preconception, conception, pregnancy, childbirth, postnatal period and childhood (Khan, Lassi&Bhutta, 2018). The success of these efforts, will not only lead to an improved or stable maternal, newborn, and child health and wellbeing, it will also bring about the improvement of the outcomes of subsequent pregnancies, the health of the women and also the health of the newborns and children (Haruna, Dandeebo&Galaa, 2019).

As the United States Joint Commission on Accreditation of Health Care Organizations puts it, maternal mortality is a “Sentinel event” which can be used as an indicator of a country’s population health, healthcare system development, as well as its social and economic development. It can serve as basis for determining the quality of a country’s health care system (WHO, 2014; Girum&Wasie, 2017).Since structural, social, cultural and economic factors such as distance to the health care facilities, culturalbeliefs and practices, lack of information and motivation, poverty, and healthcare system-related factors such as inadequate numbers and distribution of trained and skilled health workers, poor quality services have been identified and implicated in the poor availability and accessibility of maternal neonatal health services especially in the rural and resource-limited communities of the developing countries (Say et al., 2014; UNFPA, 2012), community-base care or intervention can serve as a veritable tool and valuable programme that will ensure the availability and accessibility of maternal, newborn and child health care, most especially in the rural and resource-deprived communities of developing countries (Guta,Patrone, Risenga, Moleki&Alemu, 2018). To improve maternal, newborn, and child health outcomes thereby halting its undesirable antithesis in maternal, newborn, and child morbidity and mortality, an integrated strategy, that has as one of its major components as community-based care is



recommended (Lassi, Kumar & Bhutta, 2016). Any progress that will be recorded here will be critical in achieving the sustainable Development Goals (SDGs)'s targets 3.1 and 3.2, aimed at reducing the global maternal and child mortalities ratio to less than 70 in every 100,000 live births as well as preventing preventable newborn and under-5 mortalities by 2030 (Khan et al., 2018).

### **The Concept of Community-Based Care**

According to the Stedman's medical dictionary for the health professions and nursing (2012), community-based care is the provision of skilled therapy services within a client's own home or community, with the requirement that the practitioner take into consideration the lifestyle of the client and the cultural and social characteristics of the client's setting. It can as well be described as interventions delivered in community settings or any healthcare activities that takes place outside health facilities (Perry, Becerra, & Becerri, 2015). Community-based care functions as an important component for providing a continuum of care in rural and resource-deprived communities of the developing countries aimed at the protection, maintenance and improvement of maternal, newborn and child health. Community-based care is usually provided by community health workers (CHWs), either in a volunteering or in a non-volunteering capacity. However, this set of services can as well be provided by formally trained healthcare professionals including midwives, nurses, doctors, and family health functionaries, among others, with a focus on public and community health (WHO & World Bank, 2015). Community-based maternal, newborn and child health interventions are usually define by functional attributes such as mobilizing community resources to provide maternal, newborn and child care interventions promptly and at the doorsteps of the communities to significantly improve and safe lives (Guta, Risenga, Moleki & Alemu, 2018), providing home- / or community-level skilled care for communities through Community Health Workers (CHWs), making referrals and establishing linkages to health facilities to remove all forms of delay in other to take care of unpreventable and untreatable obstetric and neonatal complications that may occur at home (Khan, Lassi & Bhutta, 2018; Guta, Risenga, Moleki & Alemu, 2018), facilitating community mobilization and participation thereby enabling individuals and communities to self-diagnosed or assess their own health issues , proffer solutions that are culturally appropriate as well as help in identifying Skilled-Birth Attendants in their communities that will provide partum and postpartum care (Guta, Risenga, Moleki & Alemu, 2018).

### **Community-Based Healthcare Services for Reproductive, Maternal, Newborn and Child Health**

Community-based healthcare services are services delivered outside a health facility at the individual, family or community level (WHO, 2016). These services are provided by a variety of healthcare workers and volunteer health workers, most especially the community health workers (CHWs). According to the Alma Ata definition of community health workers, "a community health worker should be a member of the community where the services are provided, should be chosen or selected by the community, should be accountable to community for their work, should receive support from health systems..., and should have some training" (WHO, 2016). Some of the community-based interventions or services for maternal, newborn and child health tetanus immunization for pregnant women, promotion of HIV testing in pregnant women, prevention from mother-to-child (PMTCT) of HIV infection, promotion and provision of antenatal care, care during labour and delivery, postpartum care



and care of the child, preventive treatment of malaria during pregnancy, diagnosis and treatment of newborn sepsis, promotion and provision of oral rehydration therapy (ORT), including zinc supplementation for the treatment of children with diarrhea, promotion and treatment of childhood pneumonia, promotion of exclusive breastfeeding, promotion and provision of supplies for the disinfection and hygiene of the newborn's cut umbilical cord, preventive treatment of malaria during infancy, promotion of the use of insecticide treated mosquito nets, promotion and provision of immunization against preventable childhood diseases such as polio, measles, diphtheria, pneumonia, etc., promotion and provision of vitamin A supplement to children of between 6 to 59 months of age, promotion of healthy complementary feeding etc. (Perry, Ricca, LeBan, & Morrow, 2014).

### **Community-Based Maternal, Newborn and Child Care Strategies**

Home visits and outreach services, especially mobile clinics, are the two most recognized approaches for the provision of community-based maternal, newborn and child care (Lassi, Das, Salam & Bhutta, 2014). There is substantial evidence in support of the contribution home visit strategy to protection, maintenance, and improvement of maternal, newborn and child health (WHO, 2016; Olds, Robinson, Pettitt, Luckey, Holmberg et al., 2004; Bhutta, Memon, Soofi, Salat, Cousens et al., 2008; Khan, Lassi & Bhutta, 2018; Aboubaker, Qazi, Wolfheim, Oyegoke & Bahl, 2014). Home visits are carried by community health workers and, sometimes, other trained professional care givers such as nurses and midwives to deliver care such as the provision of counseling and health education during pregnancy, provide maternal and newborn care, and promotion and facilitation of prompt or timely referral following detection of complications and skilled birth attendance, psychological support for mothers, collection of demographic data etc. Available data suggests that home visits during the antenatal and post natal period always lead to the recognition of early signs of maternal and newborn illness, early detection of complications, facilitate the early initiation of exclusive breastfeeding, ensure healthy practices such as skin to- to- skin contact between the mother and newborn, hygiene practices such as clean umbilical cord care and proper hand washing, proper management of infections such as sepsis, promotion and facilitation of vaccination (Lassi, Kumar & Bhutta, 2016). Outreach services are usually provided through mobile clinics. They include healthcare services that are provided to individuals, families and communities outside or away from healthcare facilities (De Roodenbeke, Lucas, Rouzaut & Bana, 2011). Mobile clinics ensure the provision of maternal, newborn and child care to populations in rural and remote communities where healthcare facilities are absent. It brings trained healthcare providers to the doorstep of the pregnant mothers, newborns and children thereby providing temporary access to trained healthcare workers.

### **Evidence on the Potential of Community-Based Maternal, Newborn and Child Care**

The various system reviews and the revealed data are indicating that community-based maternal, newborn and child care has the substantial potential to improve maternal, newborn and child health and to reduce maternal, neonatal and child morbidities and mortalities (Lassi, 2015). A systematic review that included a twenty-six cluster-randomized trials that covers an extensive range of community-based maternal, newborn and child intervention packages revealed the impact of community-based intervention by bringing a 5% increased in the uptake of tetanus immunization, 82% increased in the use of clean delivery kits, 20% increase in institutional deliveries, 42% increase in health seeking for neonatal morbidities, 93% increase in the rate of early breastfeeding, an increase in folic acid and iron supplementation



during pregnancy. The review also showed the consequences of the implementation of community-based maternal, newborn, and child interventions to include a significant reduction in maternal morbidity and mortality, neonatal mortality as well as a reduction in stillbirths (Lassi, 2015). The result obtained from another systematic review revealed that implementation of community-based maternal, neonatal and child interventions brought about a 25% reduction in neonatal mortality, 40% increase in referrals to health facilities due to pregnancy-associated complications, 45% increase in healthcare seeking for neonatal morbidities, 94% increase in early breastfeeding rate bringing about a significant decrease in maternal, neonatal and child morbidity and mortality (Lassi, Kumar & Bhutta, 2016). Another systematic review carried out by Salam, Das, Lassi, and Bhutta (2014), reports a 116% and 77% increase in ownership and use of insecticide treated mosquito nets respectively, leading to a 25% cut down in the risk of delivering a low birth weight newborn.

## CONCLUSION

Sub-Saharan Africa continues to bear the highest burden of maternal, newborn and under-five mortalities. The deaths that occur in the rural and poor communities in Sub-Saharan Africa are attributable to structural causes such as unattended births, lack of antenatal, partum and postpartum care, poor access and motivation to utilize family planning and other reproductive health services. Scaling up community-based maternal, newborn, child care interventions through community health workers, home visits and outreach services to promote and provide various essential services during the critical periods of antenatal, partum and postpartum is critical in adding energy to efforts that are directed towards impacting maternal, newborn and child health outcomes in these settings. Achieving SDGs' targets 3.1 and 3.2 of reducing and ending maternal, newborn and under-five mortalities by 2030, maternal, newborn and child care services should be brought to communities through community-based maternal, newborn and child care interventions.

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