Optimising The Use Of Primary Health Care For Skilled Maternal Health Care: Policy Implications Of An Intervention Research In Rural Nigeria

WHARC POLICY BRIEF

Background

It is now well known that more women die during childbirth in Nigeria as compared to other parts of the world. It's also a known fact that women who die from pregnancy complications in Nigeria tend to be poor, illiterate, and rural residents. To date, research has shown that the major reason that women in rural communities are at higher risk of dying during childbirth is because of lack of health facilities in many rural areas.

As such women in rural communities tend not to receive skilled pregnancy care (antenatal and delivery care) in health facilities. By contrast, they tend to receive antenatal and delivery care either in their homes or in the homes of unskilled traditional birth attendants (TBAs). This means that when they experience complications such as bleeding or hypertension during pregnancy or childbirth, they will not be appropriately treated thereby increasing their risks of death from such complications. Due to their not being treated by skilled personnel in health facilities, they expose themselves and their new-born babies to severe disease or death, a situation which is largely preventable.

The Federal Ministry of Health and many States in Nigeria have adopted the use of Primary Health Centres (PHCs) as entry points to the health care system, where women can receive professional care during pregnancy. PHCs are present in almost all Local Government Areas of Nigeria and are the first port of call where women can receive professional care when they are pregnant. PHC personnel can manage routine antenatal and delivery care and take care of women and their babies after delivery, including immunization. They can also make early recognition of more severe complications of pregnancy, labour and in the postpartum period, and can refer such women to General Hospitals and Teaching Hospitals for more sophisticated care. If this format is followed i.e. all pregnant women in rural communities attend PHCs for routine antenatal and delivery care, the likelihood that women would die from pregnancy complications will be reduced.

The problem/challenge

Nigeria has 774 Local Government Areas in 36 federating States. Each LGA has at least 10-12 administrative wards, with each ward consisting of not less than 5000 persons. To ensure easy access to health care for all its citizens, the Federal Government has arranged for one PHC to be in each administrative ward. To date, there are over 30,000 PHCs dotted across the length and breadth of Nigeria, with nearly 70% of them fully functional. The National Primary Health Care Development Agency (NPHCDA) oversees the PHCs nationally, under the direct supervision of the LGAs. The LGAs are in turn supervised by State Governments.

With its recent introduction of the concept of Primary Health Care Under One Roof (PHCUOR), each State now has a State Primary Health Care Development Agency (SPHCDA) with specific boards, staff and functions to oversee the management of specific PHCs in each State.

However, research evidence from many parts of the country have shown that many women often do not use the PHCs for care when they are pregnant. Rather than use PHCs, they either do not receive care at all or receive care with unskilled birth attendants. The use of unskilled TBAs has been flagged by the World Health Organization as one major reason that women in developing countries die during childbirth and is one challenge that has been identified in the Sustainable Development Goal 3 that needs to be overcome.

We hypothesized that for women in rural areas who have no other means of skilled pregnancy care other than PHCs, getting ALL pregnant women to use PHCs when they are pregnant can significantly reduce the risk of death during pregnancy for Nigerian women.

WHARC – working for change

In November 2015, the Women's Health and Action Research Centre (WHARC), one of Nigeria's leading NGOs, received a grant from the International Development Research Centre (IDRC) of Canada in partnership with Global Affairs Canada (GAC), and the Canadian Institute for Health Research (CIHR), as part of the implementation of IMCHA (Innovating for Maternal and Child Health in Africa).

The objectives of the grant were two-fold:

1) To explore the reasons that pregnant women in rural Nigeria do not use PHCs for skilled pregnancy care; and

2) To identify appropriate interventions for increasing women's use of skilled pregnancy care offered in PHCs.

We began by conducting a needs assessment study in 20 communities in Esan South East and Etsako East, two predominantly Local Government Areas (LGAs) of Edo State

in South-South Nigeria (Figure 1). The results of the needs assessment which consists of a household survey of women in the two LGAs, showed that only 40.8% of pregnant women had received antenatal care and 31.8% delivery care in the community PHCs in the immediate deliveries preceding the survey. Some of the barriers and challenges that prevented women from using PHCs included difficulties with transportation, perceptions relating to poor quality services at PHCs, high cost of services, gender and cultural issues, and the perception that PHCs may not be the appropriate place for pregnancy and delivery care.

To rectify the situation, we worked with community leaders, 4 PHCs, health providers, LGA officials, the Edo State PHC Develop Agency, and the Federal Ministry of Health in collaboration with the West African Health Organization (WAHO) and the University of Ottawa, Canada to develop a series of interventions that address the barriers and enhance women's use of PHCs. We designed the interventions to be community-led, and community-driven to ensure its wide coverage and sustainability over time.

The interventions included:

- The constitution of Ward Development Committees (WDAs) with members identified by the Kings (Enogies) in the communities. Members of the WDAs implemented the project activities with support from WHARC,
- The training of WDAs members to provide house-to-house information on the need for skilled pregnancy care and delivery in PHCs,
- The renovation and provision of basic materials in the PHCs,
- The training and re-training of PHC staff on maternal and child health care,
- Advocacy activities to government officials for increased staffing and funding of the PHCs,
- Development of community health insurance, and fund-raising activities,
- The provision of drug revolving funds,
- The development of a rapid short messaging system on mobile phones (Text4Life) linked to registered Taxi Drivers who rapidly brought women experiencing pregnancy complications to PHCs.

WHARC subsequently undertook another household survey of women after two years of implementing the project activities to determine how this composite (multi-faceted) intervention has helped in improving women's use of skilled pregnancy care in PHCs.

Figure 1: Project communities

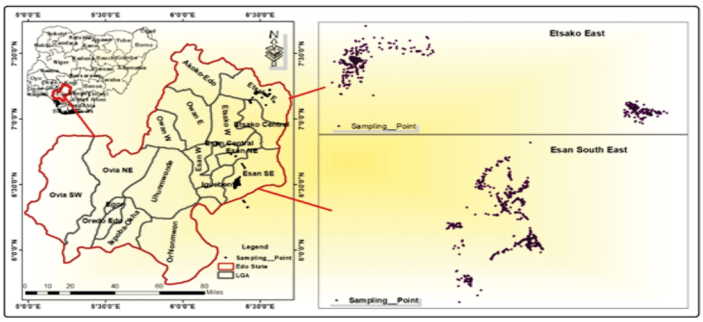
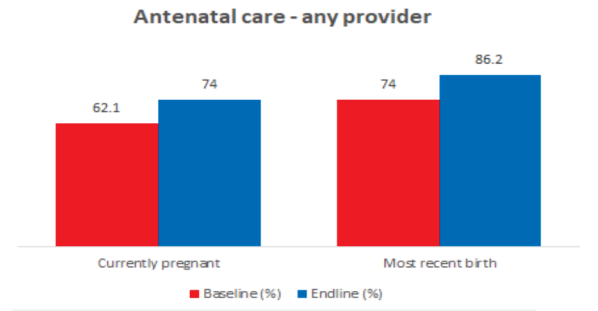


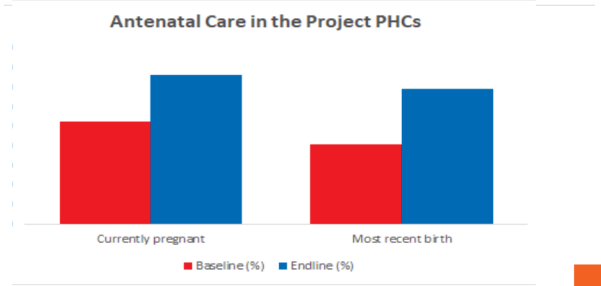
Figure 2: Some Project Photos

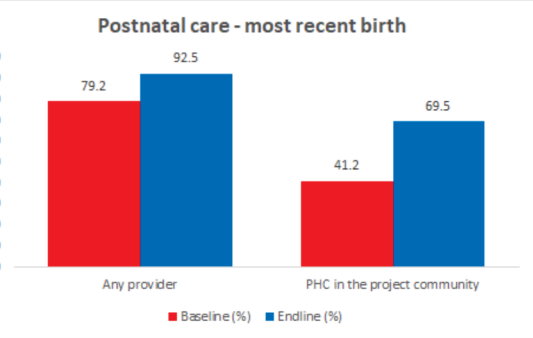


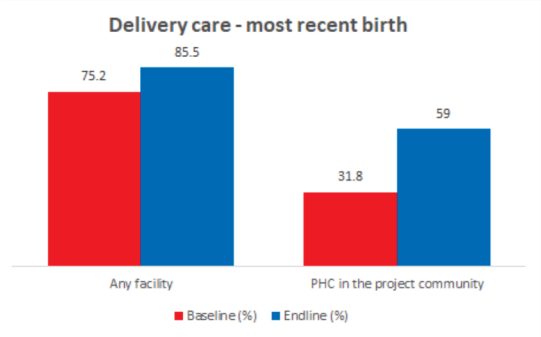

Intervention results

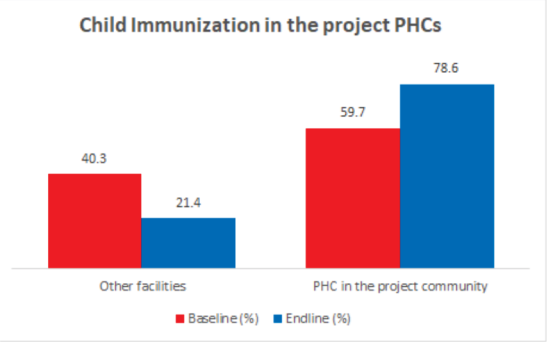
The results showed that 76.6% of currently pregnant women now use the project PHCs for antenatal care as compared to 52.6 % at baseline (an increase of 24%). Also, antenatal care in the project PHCs for the most recent births increased from 40.8% at baseline to 69.5% after the intervention (an increase of 28.7%). The proportion of women reporting that they used PHCs for delivery in the end-survey was 59%, compared to 31.8% at the beginning (an increase of 27.2%,) while the use of postnatal care in PHCs increased from 41.2% to 69.5% (an increase of 28.3%). Immunization of children increased from 59.7% to 78.6% after the intervention (an increase of 18.9%). All the increases were confirmed to be positive, strong, and statistically significant in multivariable logistic regression analyses that accounted for possible confounding variables.











These results show that an intervention designed to correct the factors identified by women and stakeholders as responsible for non-use of PHCs can be effective in improving the use of PHCs for skilled pregnancy care by women in rural communities. Some of the factors that accounted for the success of this intervention include:

1) The fact that the barriers were identified at the onset through a needs assessment research and inquiry conducted with community stakeholders,

2) The engagement of community stakeholders in the conduct of the research and development of the interventions,

3) The fact that the interventions were led and driven by community stakeholders, especially members of the WDC, and

4) The involvement of policymakers, PHC officials and government officials.

Policy Implications

We believe that this approach will be useful in scaling up the use and adoption of PHCs for skilled pregnancy care, especially in rural and sub-urban parts of the country. The policy implications include the following:

- The provision of PHC is enough. For impact on utilization, governments must ensure that the PHCs are well staffed and well equipped, so that women will have confidence in using them for pregnancy care.
- Governments should link the PHCs to communities where they are situated. A community committee whose members are identified by the community leaders would be useful to connect the PHCs with community contact persons, stakeholders, and the clients.
- The WDC used in this project is similar to CHIPS (Community Health Influencers, Promoters, and Services Programme) that was introduced into the country by the NPHCDA in 2018. Our study started in 2015 before the commencement of CHIPS. The results of this study suggest that CHIPS would be highly effective if carried out in rural communities. We recommend the scaling up of CHIPS not only in Edo State, but throughout the country.
- Even with community health insurance and fund-raising, the cost of PHC services was still pointed out by women as a barrier to utilization. This can be linked to the high level of poverty in the country, especially in rural areas. We therefore recommend a policy of free antenatal, delivery, postpartum and childcare services in PHCs to promote the availability of this service to all women on an equitable and social justice basis.
- The elimination of the costs for PHC services to enable increased access for women, is a major contribution that governments can make towards the attainment of universal health coverage (UHC), and the reduction of rates of maternal and child deaths in Nigeria

The links to the publications and narratives relating to the project are provided below for your reading and viewing pleasure.

1) Okonofua FE, Ntoimo L, Ogungbangbe J, Anjorin S, Imongan W, Yaya S. Predictors of women's utilization of primary health care for skilled pregnancy care in rural nigeria. BMC Pregnancy Childbirth 2018 April 18; 18(1). https://doi.org/10.1186/s12884-018-1730-4

2) Okonofua, FE., Ntoimo LFC., Yaya, S., Ogungbangbe J., Imongan W., Ermel J., (2018). Assessing community-led interventions for creating demand for skilled pregnancy care in rural Nigeria: Short-term results from a quasi-experimental research design. https://www.researchgate.net/publication/330521287_Assessing_community-led_interventions_for_creating_demand_for_skilled_pregnancy_care_in_rural_Nigeria_Short-term_results_from_a_quasi-

experimental_research_design

3) Ntoimo L, Okonofua FE, Igboin B, Ekwo C, Imongan W, Yaya S. Why rural Women do not use primary health centres for pregnancy care: Evidence from a qualitative study in Nigeria. BMC Pregnancy and Childbirth 2019 (August), 19: 277. https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-019-2433-1

4) Yaya Sanni, Okonofua Friday, Ntoimo Lorretta, Idenigwe O, Bishwajit G. Men's perceptions of barriers to women's use and access to skilled pregnancy care in rural Nigeria: a qualitative study. Reproductive Health 2019; 16: 86. https://doi.org/10.1186/s12978-019-0752-3.

5) Fantaye, A. W., Okonofua, F., Ntoimo, L., & Yaya, S. (2019). A qualitative study of community elders' perceptions about the underutilization of formal maternal care and maternal death in rural Nigeria. *Reproductive Health*, *16*(1), 164. https://doi.org/10.1186/s12978-019-0831-5

6) Chigozie Jesse Uneke, Issiaka Sombie, Henry Uro-Chukwu, Ermel Johnson, Friday Okonofua. Using equitable impact sensitive tool (EQUIST) and knowledge translation to promote evidence to policy link in maternal and child health: a report of the first EQUIST training workshop in Nigeria. Pan African Medical Journal 2017; 28:37. doi:10.11604/pamj.2017.28.37.13289. https://www.panafrican-med-journal.com/content/article/28/37/full/

7) Yaya S. Okonofua FE, Ntoimo LF, Udenige O, Bishwajit G. Gender Inequality as Barrier to Women's Access to Skilled Pregnancy care in Rural Nigeria: A Qualitative Study. International Journal, April 27, 2019. https://pubmed.ncbi.nlm.nih.gov/31028382/

Papers in press (can be obtained before publication from WHARC Office)

8) Okonofua FE, Ntoimo LFC, Yaya S et al. Effects of community engagement interventions on utilization of primary health care for skilled pregnancy care in rural Nigeria. BMJ (Global Health) October 2020.

9) Ntoimo L, Okonofua F, Aikpanti J, Yaya S, Johnson E, Isiaka S, Aina B. Influence of women's empowerment indices on utilization of skilled maternity care: Evidence from rural Nigeria. Journal of Biosocial Science October 2020.

10) Ntoimo LFC, Ogungbangbe J et al., Assessment of adequacy of facilities and personnel for maternity care in primary health care in rural Nigeria: Implications for service improvement. Pan African Medical Journal

Imongan W, Igboin, B & Yaya S. Perspectives of policymakers and health providers on barriers and facilitators to skilled pregnancy care: Findings from a qualitative study in rural Nigeria. BMC Pregnancy and Childbirth

12) Ntoimo LFC, Okonofua FE, Ekwo C et al. Why women utilize traditional rather than skilled birth attendants for maternity care in rural Nigeria: Implications for policies and programs. Midwifery

13) Ogochukwu Udenigwe; Friday E Okonofua; Lorretta FC Ntoimo; Wilson Imongan; Brian Igboin; Sanni Yaya. We have either obsolete knowledge, obsolete equipment or obsolete skills: Policymakers and health care providers' views on maternal health delivery in rural Nigeria. BMC Pregnancy and Childbirth

14) Friday E. Okonofua, Lorretta F. C. Ntoimo, Oludamilola Adejumo, Wilson Imongan, Rosemary Ogu, Seun Anjorin. Assessment of interventions in primary health care for improved maternal, new-born and child health in sub-Saharan Africa: A systematic review. Sage Open.

Royal Highnesses and WDC Testimonials on the use of PHC for skilled pregnancy care in rural Nigeria
https://youtu.be/MBkXAa_SLCs
Women and Healthcare attendance testimonials on the use of PHC for skilled pregnancy care in rural Nigeria
https://youtu.be/gBXDzhNldsE

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