

Commentary: Assessing the functionality of an emergency obstetric referral system and continuum of care among public healthcare facilities in a low resource setting: an application of process mapping approach

Bernice Ofofu¹, Dan Ofori², Michael Ntummy^{1,3}, Kwaku Asah-Opoku^{1,3}, Theodore Boafor^{1,3*}

¹Department of Obstetrics & Gynaecology, Korle-Bu Teaching Hospital, Korle-Bu, Accra, Ghana

²University of Ghana Business School, Legon, Ghana

³University of Ghana Medical School, Korle-Bu, Accra, Ghana

Article Info

Article Notes

Received: July 19, 2021

Accepted: August 18, 2021

*Correspondence:

*Dr. Theodore Boafor, Department of Obstetrics & Gynaecology, Korle-Bu Teaching Hospital, Korle-Bu, Accra, Ghana; Email: tboafor@ug.edu.gh

©2021 Boafor T. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License.

Universal Health Coverage is one of the key considerations in the health arena globally with a lot of effort, energy and drive to ensure that all and sundry have access to decent health care. However, beyond equitable healthcare is the issue of quality of healthcare, especially in lower-middle-income countries. This is even more important in the area of maternal health. It is therefore not surprising that the World Health Organization is harping on an important subject, “The positive pregnancy experience and respectful maternity care”^{1,2}. This should involve a seamless flow of emergency referral systems in a way that will not be frustrating to the pregnant woman, her family and caregivers and should also occur in an efficient manner so as not to cause an increased risk of morbidity or mortality to the mother, fetus or both.

In a recent publication in the BMC, Health Services Research on “Assessing the functionality of an emergency obstetric referral system and continuum of care among public healthcare facilities in a low resource setting: an application of process mapping approach”³, the authors highlighted bottlenecks to an efficient emergency obstetric referral system as narrated by frontline health workers and how to navigate them. This is a very important area for discussions and deliberations since in developing countries, close to 15% of pregnant or postpartum women are likely to develop a form of complication⁴. It is even more important in the Ghanaian context, where a third of pregnant women stay beyond the two-hour threshold required to reach a facility that offers emergency obstetric care services⁵.

Emergency referral system is not a one-time process but involves a series of well-knit steps that ought to flow effortlessly from one level to the next level of care. Various authors have examined the emergency obstetric systems in lower-middle-income countries⁶⁻⁸. The article under consideration, however employed a unique style and focus engaging the use of process mapping to examine the emergency obstetric referral system. A process map is a planning and management tool that visually describes the flow of work. It is essentially a flowchart. This tool has been extensively used in the area of organizational management in business and some areas in health, but this is one of the few times it has been extended to cover the area of emergency obstetric referrals^{9,10}.

Through a meticulously arranged process map, the authors

vividly capture the start point of the emergency referral system all the way through the end, elaborating on steps that take place at the referral facilities and those that occur at the receiving facilities. In this detailed web, important steps in the referral process are captured. Colour coding of various steps in the process map helps one to visually appreciate at a glance, various aspects that need attention the most. These various steps and processes are firmly and aptly supported by quotations from actors in the emergency obstetric referral pathway including doctors and midwives.

The study captures the fact that the emergency obstetric referral system from an urban district hospital to a typical tertiary referral facility in Ghana was operating below what was considered optimum and collates the inputs of various doctors and midwives to be able to improve upon the structural and process issues of the system. For instance, 70 percent of the 34 main steps in the process map, had significant problems. These included transport system, communication, human and material resource, adherence to referral policy, healthcare provider knowledge and attitude. To enhance emergency obstetric referral systems strengthening, one key actor, who is the client around whom all these steps revolve, needs to have her voice heard and it would be interesting to see how their perspectives help to shape this emergency obstetric referral process map. This was, however, not considered in the study.

Drawing from the findings of this study, health facilities, districts and regions in low resource settings as well as in developed countries can employ the use of process mapping which when enhanced with technology, can greatly help in monitoring the emergency obstetric referral process. In addition, it can also be used for auditing purposes to improve the system and enable pregnant women to

experience obstetric referrals in a more positive way and get the critical care needed to improve care outcomes.

References

1. World Health Organization. WHO recommendations on antenatal care for a positive pregnancy experience. World Health Organization; 2016.
2. Bohren MA, Tunçalp Ö, Miller S. Transforming intrapartum care: respectful maternity care. *Best Practice & Research Clinical Obstetrics & Gynaecology*. 2020; 67: 113-126.
3. Ofosu B, Ofori D, Ntumy M, et al. Assessing the functionality of an emergency obstetric referral system and continuum of care among public healthcare facilities in a low resource setting: an application of process mapping approach. *BMC health services research*. 2021; 21(1): 1-4.
4. Group WB. Trends in maternal mortality: 1990 to 2015. 2015.
5. Gething PW, Johnson FA, Frempong-anguah F, et al. Geographical access to care at birth in Ghana: a barrier to safe motherhood. *BMC Public Health*. 2012; 12: 991.
6. Daniels AA, Abuosi A. Improving emergency obstetric referral systems in low- and middle-income countries: a qualitative study in a tertiary health facility in Ghana. *BMC health services research*. 2020; 20(1): 32.
7. Nwameme AU, Phillips JF, Adongo PB. Compliance with emergency obstetric care referrals among pregnant women in an urban informal settlement of Accra, Ghana. *Maternal and child health journal*. 2014; 18(6): 1403-12.
8. Austin A, Gulema H, Belizan M, et al. Barriers to providing quality emergency obstetric care in Addis Ababa, Ethiopia: healthcare providers' perspectives on training, referrals and supervision, a mixed methods study. *BMC pregnancy and childbirth*. 2015; 15: 74.
9. Chung Y, Salvador-Carulla L, Salinas-Pérez JA, et al. Use of the self-organising map network (SOMNet) as a decision support system for regional mental health planning. *Health research policy and systems*. 2018; 16(1): 35.
10. Piggott KL, Mehta N, Wong CL, et al. Using a clinical process map to identify prescribing cascades in your patient. *BMJ*. 2020; 368: m261.