Maternal and Perinatal Database for Quality, Equity, Dignity Programme



1. Introduction

The Maternal and Perinatal Database for Quality, Equity and Dignity (MPD-4-QED) programme in Nigeria, which commenced on 1 September 2019, is in it's second year and has continued to collect maternal and perinatal data from 54 tertiary level public and private health facilities. We are pleased to report that from 1 September 2019 to 10 May 2021, a total 143,641 women and babies were enrolled under the programme's electronic platform. In the second year, we have enrolled 42,460 women who delivered in the participating health facilities, 2901 gynaecological admissions and 7419 babies born outside the health facilities and were subsequently admitted to the special care baby units. Death audits are being conducted for all maternal deaths, stillbirths and early neonatal deaths. To date, the data for 49 COVID positive Nigerian women have been captured.

In this edition we will be featuring the team from the Obafemi Awolowo University Teaching Hospital, Ile-Ife from the South West Region of Nigeria, who are recognized for their excellence. We will also hear from the Medical Record Officers (MROs) at the Irrua Specialist Teaching Hospital, Edo State, Southwest and from Federal Medical Centre, Makurdi, Northcentral, present recent data from the programme and report on the MPD-4-QED Quality of Care Improvement Strategy Meeting.

2. Success Story: Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Southwest

Dr Wole Ayegbusi (Hospital Coordinator)

In this edition we will be featuring the team from Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife, Southwest. This team is being highlighted as they have one of the highest number of enrollments of women and babies in the country. They also have a high maternal and perinatal death audit completion rate. We wish to share with you how they were able to achieve this success in the words of Dr Wole Ayegbusi, the Hospital Coordinator, on behalf of the MPD-4-QED OAUTHC team.

The OAUTHC team for the WHO MPD-4-QED comprises Dr Wole Ayegbusi as the Hospital Coordinator for Obstetrics & Gynaecology while Dr Bankole Kuti is the Hospital Coordinator for Neonatology and our MROs include Mr Idowu Adewunmi and Mrs Jumoke Audu.

Obafemi Awolowo University Teaching Hospitals Complex, lle-Ife comprises of six arms of hospital units but mainly two arms offer tertiary healthcare; the Ife Hospital Unit in Ile-Ife, and the Wesley Guild Hospital unit in Ilesha. Both of them are located in Osun State, South-West Nigeria. The teaching hospitals complex serves as a tertiary referral centre for primary and secondary level healthcare providers within the Ife-Ijesha Zone of Osun State, Ondo and Ekiti State of the country.

Since the inauguration of the WHO MPD-4-QED in 2019, our team has developed a more intimate working environment and relationship with other health workers in both Obstetrics

& Gynaecology and Neonatology departments, including nurses, midwives, other MROs, medical house officers, resident doctors and other consultants in the two departments of both hospital units. Focusing on building a good working relationship with other staff outside of the MPD-4-QED programme and introducing them to the aims and objectives of the programme has helped us to achieve the primary goal of this assignment and more. Overtime, commitment and dedication to patients' care with improved service delivery has increased, proper documentation on the part of resident doctors has equally improved, everyone has lauded the initiative and have all shown their commitment and support towards the overall goal of this national assignment.

Our team currently has the second highest enrollment in the Southwest, and tenth highest enrollment nationally with a remarkable completion rate for maternal and perinatal death audits, this is achieved by:

- 1. A well-coordinated relationship between the Medical Records Officer and the Hospital Coordinators
- 2. Directly noting the cases from the daily clinical morning review records
- 3. Active communication between the MROs and Hospital Coordinators, whereby cases are audited almost immediately the cases are registered
- 4. Direct report and registration of mortalities and morbidities by the resident doctors to the Hospital Coordinators as soon as they present
- 5. Improved and detailed documentation by nurses and resident doctors

All these are achieved by the cooperation of the hospital management, special thanks to the Chief Medical Director, Prof Victor Adetiloye, the head of departments of both units, all the consultants, residents, nurses and MROs for their cooperation.



Mrs Jumoke Audu (Medical Record Officer), Dr Wole Ayegbusi (Hospital Coordinator), Mr Idowu Adewunmi (Medical Record Officer) and Dr Bankole Kuti (Hospital Coordinator) at Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Southwest

The WHO MPD-4-QED programme is a novel electronic data entry process that has revolutionized our practice, documentation, data entry and total service delivery in the hospital. The creation of MPD-4-QED is the first single platform where the country's detailed data on maternal and perinatal morbidity and mortality is harmonized. This makes data driven analysis of the current status of maternal and perinatal health in the country possible and helps to project future directions. It answers the question of what is or are responsible for these morbidities and mortalities and invariably this will be useful in prevention and reduction of these mortalities by forming and implementing the right health policies.

It is therefore right to say, this is the first major step in the right direction.

3. Experience of MPD-4-QED at Irrua Specialist Teaching Hospital, Edo State, Southwest

Mrs Ighodalo-Okoebor Abosede & Mr. Aggrey Isaac Fidelis (Medical Record Officers)

Irrua Specialist Teaching Hospital, ISTH (formerly Otibhor Okhae Teaching Hospital), was established in 1993 to provide tertiary healthcare delivery services to the people of Edo State and beyond with a Board of Management statutorily responsible for formulation of the hospital's policy. Serving a generally rural population of mainly farmers, ISTH is however surrounded by towns with tertiary educational institutions including the Ambrose Alli University, Ekpoma, the Federal Polytechnic Auchi, the College of Education Igueben and recently the Samuel Adegboyega University, Ogwa.

The MPD-4-QED Programme has been a good intervention in ISTH as it has enabled our facility to have data available for monitoring, evaluating and decision making on how to improve quality of healthcare for pregnant women and newborns in the hospital. This was one of the things the hospital had been trying to achieve but had not been possible until the MPD-4-QED programme was established. Now we have data on the quality of care provided to pregnant women and their babies as well as the health outcomes of the mothers and babies. This data will serve as a tool for the doctors and also the midwives to understand what they need to do to improve the quality of care they give to their patients.

Another great impact of this programme is the way it has helped to address the structure and documentation of information while clerking patients, including the quality of handwriting of the doctors and nurses. Through this programme, we the MROs have been able to identify that some vital information needed in the data collection tools that are not routinely documented, as the validation rules do not allow us to progress without these vital information it drove improvement on the collection of such data. We reported the

challenges with such data to our Hospital Coordinators who drew it to the attention of other doctors in the department and this helped in achieving accuracy in data collection.

So far, we have successfully carried out our responsibilities and achieved a high number of enrolments and our Hospital Coordinators have been able to have near perfect death audit rates despite some challenges. Factors that have contributed to our success include that we enjoy the complete support of the Heads of the Medical Records Department and the Obstetrics and Gynaecology Department who were well briefed at the start and understand the objectives of the programme. Also helpful is the support and cooperation of other colleagues in the hospital, like other MROs and the nurses/midwives in the obstetric and gynaecology and neonatal intensive care unit wards. The proper training and continued technical support we receive from the MPD-4-QED coordination team as well as the ICT team of eHealth enabled us to understand the job very well, thus making it simple for us to input data.



Mrs Ighodalo-Okoebor Abosede and Mr Aggrey Isaac Fidelis (Medical Record Officers) at Irrua Specialist Teaching Hospital, Edo State, Southwest

In addition, the strong team work and easy access to the amiable hospital coordinators helped a lot. The coordinators were always ready and happy to hear from us at any given time. Their quick response to the cases for auditing we send them encourage us tremendously. Lastly, our commitment and zeal to contribute earnestly to the health sector, on our own part is another factor that helped us a lot. We love the

job; we also love the way it is contributing to progress in health improvement activities in the country.

As experienced in similar programmes, implementing the MPD-4-QED in ISTH has its own challenges which include being asked by other health workers what is their own benefit. For example, one health worker asked "We know you guys are heavily paid on the job but of what benefit is it to us that are seeing the patient and giving you vital information that is needed?". Others have asked "when will the programme managers provide the hospital with some good equipment to make the hospital feel their impact?"

Finally, getting the information involves daily visits to the gynecology ward, labour ward, neonatal ward and the intensive care unit which are quite a distance from our offices. It would be great to have the MPD-4-QED programme managers visit the hospital management regarding the programme; we feel it will make the management know that the programme is still on-going and also let them know how effective we have been and thus should be given all the necessary support.

In all, this programme is a good opportunity and should not end with the end of the project phase.

4. Experience of MPD-4-QED at Federal Medical Centre, Makurdi, Northcentral

Mr Terna Ashuku and Mrs Sarah Igbeba (Medical Record Officers)

A Medical Records Officer, commonly referred to as health information technician, is one who is trained on how to organize and manage health information data by ensuring that it maintains its quality, accuracy, accessibility, and security in both paper files and electronic systems. Although Medical Records Officers do not provide direct patient care, they however work regularly with doctors, nurses and other healthcare professionals. They often meet with these other health workers to clarify diagnoses or to get additional information to make sure that records are complete and accurate for capture and death audits.

In the MPD-4-QED programme, an MRO enters the patient's health information for women and their babies admitted for obstetric or gynecology reasons and out-born babies admissions within 7 days of delivery, into a web-based database using a tablet device. Information captured include biodemographics, clinical conditions at labour admission, labour interventions, modality of labour and birth, maternal and baby outcomes, and other information about healthcare services. Participating in the MPD-4-QED programme has enhanced the capacity of MROs from the initial trainings at the commencement of the programme, to the monthly teleconferences as well as the opportunity to ask questions and get prompt feedback from the programme coordinators and other collaborators on the various WhatsApp groups.

At commencement of the programme there was poor or scanty documentation by health personnel, as most of them would not write seemingly minor but often critical information like the time of admission or time certain decisions were taken. However, with the programme and increased interaction between MROs and other hospital staff, there is much improvement in documentation. Health personnel are now conscious of the fact that every piece of information is important and needs to be captured and so they are more careful and detailed in documentation.

Furthermore, the MPD-4-QED programme through the use of teleconferencing and WhatsApp groups has helped to create formidable relationships among participating facilities and individuals cutting across religious groups, ethnic sentiments, professional lines etc. The WhatsApp platform allows collaborators to find help with addressing challenges/problems through prompt responses and information dissemination/sharing, and to join in celebrations of individual life events such as birthdays, promotions, weddings, birth of a baby and even to reach out in condolence in the case of the loss of a loved one.

Teleconferencing has been found to be very useful in continuing medical education, despite having some pitfalls in its implementation and is now being seen as an important platform to facilitate learning and meetings especially with social distancing and restrictions to public functions because of COVID-19. We developed a strong connection with one another during the physical training, but we were slowly becoming disconnected from one another but teleconferencing replaced our face-to-face meetings and brought back the connection.

The use of virtual meetings by MPD-4-QED Programme has additional benefits which includes learning from one another's challenges and improving on our work from the best practices and success stories of others. The real-time interaction between participants and coordinators allows

us to get immediate responses to problems that would have delayed data capture and facilitates timely intervention to maintain data quality. However, there are challenges to this mode of interaction and chief amongst them is the challenges with internet connectivity as we rarely have every one able to connect to the meetings at the same time due to poor network strength in some sites. Also is the problems associated with the technical know-how by some such as challenges with audio and not being able to share screen sometimes.



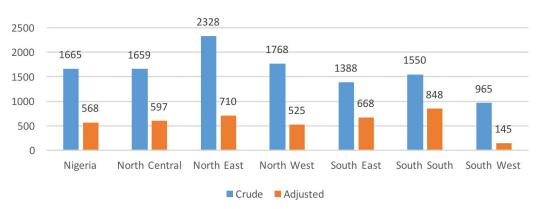
Dr Hillary Emokpere (Chief Resident Obstetrics and Gynaecology), Mr Tern Ashuku (Medical Record Officer), Mrs Sarah Igbeba (Medical Record Officer), Dr Egwu Agada (Hospital Coordinator) at Federal Medical Centre Makurdi, Northcentral

Participating in the MPD-4-QED programme has increased our adaptation to and use of electronic medical records. We have learned to organize and maintain an electronic database and register, and effectively track patients' outcomes for quality of care assessment, even though the hospital's medical record system is still paper-based. In conclusion, the MPD-4-QED programme has in no small measure enhanced the spirit of team work in our health facility and across different sociocultural settings and we have made friends across many states in the Northcentral region and beyond.

5. National and regional QED indicators on the MPD-4-QED programme

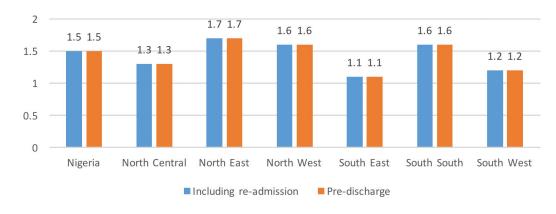
(1 January 2021 to 30 March 2021)

Maternal mortality ratio (deaths per 100,000 livebirths)



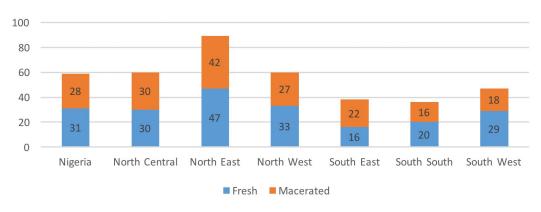
The case fatality rates for QED causes of death (% deaths of all pregnant women with the condition) across Nigeria were 11.9% for puerperal sepsis, 2.5% obstetric haemorrhage, 5.6% hypertensive disorders and 1.1% labour complications.

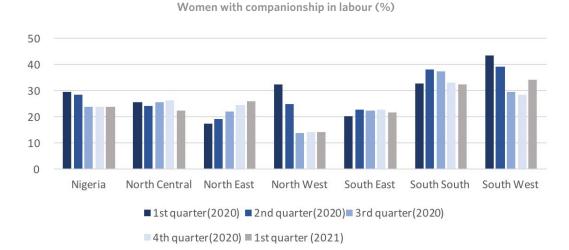
Early neonatal deaths (% of all live births)



The QED causes of neonatal death (expressed as % of all neonatal deaths) across Nigeria were birth asphyxia (36.6%), prematurity (8.6%), congenital anomaly (7.0%) and birth trauma (1.1%).

Institutional stillbirth rate (stillbirths per 1,000 live births)





6. MPD-4-QED Quality of Care Improvement Strategy Meeting, 7-8 April 2021

Globally, there is increased effort for more women to deliver in health facilities in a bid to reduce maternal and newborn mortality. To achieve accelerated reduction in mortality, the quality of care provided to pregnant women and newborns in health facilities must meet quality criteria which include health care that must be safe, effective, timely, efficient, equitable and people-centred (WHO, 2021).

Improving quality of care depends on the availability of quality health data that can be used to drive quality improvement. Such data is considered useful to relevant stakeholders when it is reliable, authoritative, useable, understandable and comparative (WHO, 2008) and this is a core aim of the MPD-4-QED Programme.

In the MPD-4-QED collaborating hospitals as at 31 August 2021, intrahospital maternal mortality ratio was 1361 per 100,000 live births, which refers to all women who were admitted to the hospital regardless of where she gave birth. The pre-discharge maternal death among women who delivered in the hospital was 682 per 100,000 hospital live births.

It was on this basis that the MPD-4-QED Quality of Care Improvement Strategy meeting was held virtually for a period of two days with participants from 20 MPD-4-QED hospitals (obstetricians and neonatologists), Regional Coordinators, the Central Coordinating Unit, WHO country office, WHO HQ and the Department of Hospital Services of the Federal Ministry of Health. The hospitals were selected based on their high or low maternal and/or perinatal mortality (number of deaths and/or rate), region and number of deliveries (mix of high, medium, low density hospitals). The aim of the meeting was to identify the most critical areas where the implementation of a quality improvement intervention is needed and feasible in the hospitals.

Discussions were around identifying the main reasons why women and babies die in these facilities, the processes of engagement and communication across levels of care, possible solutions at both macro and micro levels and how the network could help to improve quality of care in hospitals. Emphasis was on prioritization of solutions that are out-of-the-box, requiring minimal funding and can be implemented at individual facility level.

Issues identified across multiple hospitals for deaths included:

- High burden of maternal deaths due to eclampsia and post-partum haemorrhage, and high burden of perinatal deaths due to birth asphyxia
- Late presentation of women and babies in critical conditions after complex referral pathways (often returning home between been referred from secondary facility to referral-level facility)
- Late presentation of women and babies due to sociocultural beliefs where patients prefer to stay at home
- Poor engagement with other facilities when referral occurs including limited communication between levels of care
- Large number of patients who have not had antenatal care (unbooked)
- Misinformation about cost of services in tertiary facilities, causing delays after the women or baby has been referred

Potential solutions recommended by participants to address these issues include:

- Focus on eclampsia, postpartum haemorrhage, birth asphyxia
- EmONC training for lower level facilities, including refresher training and subsequent supervisory visits
- Engagement with community (including with faith-based organizations, traditional birth attendants) focusing on

the importance of accessing care early at facility, birth preparedness and giving birth at facility; raising awareness of eclampsia and birth asphyxia

- Revival of voluntary obstetric/neonatology visits to lower level facilities
- Training and capacity building for midwives
- Strengthening of referral systems/communication between levels of care (including between public and private facilities)
- Sharing of information between hospitals, professional bodies and state including MPD-4-QED hospital level data
- Media engagement to increase public awareness on identification of danger signs and promote early careseeking behaviour

Health information systems serve multiple users and enables decision-makers at all levels of the health system to identify problems and needs, make evidence-based decisions on health policy and allocate scarce resources optimally (WHO 2008). The outputs of the meeting will be used to develop Quality of Care Improvement Strategy for the network.

References

Maternal, Newborn, Child and Adolescent Health, and Ageing, World Health Organization, 2021 https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/quality-of-care

Health Information System: Toolkit on monitoring health systems strengthening, World Health Organization, 2008 https://www.who.int/healthinfo/statistics/toolkit_hss/EN_PDF_Toolkit_HSS_InformationSystems.pdf

7. Appointments and promotions

We wish to congratulate our MPD-4-QED network members on the following formidable achievements:

- Appointment of the Southeast Regional Coordinator, Professor Joseph Ikechebelu as Deputy Vice Chancellor, Nnamdi Azikiwe University, Nnewi.
- Appointment of the National coordinator, MPD4QED programme, Professor Jamilu Tukur as the Provost, College of Medical Sciences, Umaru Musa Yaradua University, Katsina



Professor Joseph Ikechebelu

- Election of the Northcentral regional Coordinator, Professor Abiodun Aboyeji as the Vice President of the Society of Gynaecology and Obstetrics of Nigeria (SOGON)
- Promotion to the Rank of Professor: Professor Karima Tunau (HC for UDUTH Sokoto) and Professor Ngozi Orazulike (HC for UPTH PortHarcourt)
- Promotion to the rank of Associate Professor: Dr George Eleje (HC for NAUTH Nnewi)

Planned Activities

- Secondary data analysis by the various regions
- Monthly Regional Teleconferences for collaborators May, June and July 2021

For further information, visit our social media platforms:

Website: https://www.mpd4qednigeria.com

Twitter: https://www.twitter.com/mpd4qednigeria **Facebook:** https://www.facebook.com/mpd4qednigeria

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