

Labour and Delivery Practices in Selected Primary Health Centres in Jos Metropolis, Plateau State

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Abstract

Every labour and child delivery activity comes with a collateral vicissitude hence the need to be accurate in its handling toward producing positive outcome. This concern has immensely drawn the attention of the global stakeholders which found its expression in Sustainable Goal Development three (Target 1) aimed at reducing the maternal mortality globally. This study was necessitated by the fact that the level of maternal mortality in Nigeria is unacceptable which invariably makes a lot of practitioners and researchers uncomfortable hence the need to further make an inquiry into how delivery and labour activities are conducted. Evidence abounds that the maternal mortality rate in Jos follows the pattern of that of the nation as a whole. The study was carried out in the selected primary health centres within the two main local government areas that constitute Jos metropolis. The setting of the study was picked as it functions as the operational level of primary health care. The level of care sophistication is relatively low in this setting. The study adopted a descriptive, cross sectional and non-experimental research design. The study population comprised nurses and community health workers working in those primary health centres. Multisampling technique was used in selecting the health centres used in the study. The sample size was one hundred and thirty-five. Convenience sampling technique was adopted in accessing the respondents. A total of one hundred and thirty-three inclined thereby creating a response rate of 98.5%. The ethical injunctions guiding research were observed as the respondents' informed consent was sought. Assurance was given in the aspects of confidentiality and anonymity. The right to withdraw clause was also emphasized. Data was analyzed using percentages and frequency counts. Results reveal the techniques embedded in labour and delivery as these include assessment of patient's psychological readiness and foetal readiness for continuous maternal support; and use of partograph. Further, results indicate lack of adequately trained health workers, lack of cordial relationships between mothers and health personnel, inadequate facilities, and financial strain as the factors that affect labour and delivery practices in primary health centres in Jos Metropolis. The import of the findings is that efforts should be strengthened toward upgrading the skills of the health workers, and making adequate provision for needed resources.

Keywords: Labour, Delivery, Practices, Primary Health Centres

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INTRODUCTION

Maternal health is described as the health of women before and during pregnancy, at childbirth and during the postpartum period (WHO, 2017). Emphasis is greatly placed on reducing the maternal mortality globally. The maternal mortality ratio in Low-and Middle-Income Countries is disquieting with about 34% of global deaths occurring in Nigeria and India. The maternal mortality ratio of Nigeria is 814 per 100,000 live births (WHO, 2019). The goal of SDG 3 in Nigeria is to achieve an annual 7.1% decline in maternal mortality in Nigeria (WHO, 2019). It, therefore, follows that the efforts toward achieving this goal have to be intensified. Evidence abounds that maternal deaths are associated with pregnancy-related causes that occur during pregnancy, labour/delivery or up to a year after the end of pregnancy. Pregnancy-related deaths can also occur outside the delivery hospitalization which may be connected with cardio-vascular conditions during pregnancy; severe bleeding and amniotic fluid embolism during delivery, severe bleeding and hypertensive disorders of pregnancy a week after delivery. Mothers could equally develop infections from one week to 42 days (Colarusso, 2019). Pregnant women are expected to safely go through the gestation period and have the desired outcome under the presumption that the body is programmed to accommodate the developing fetus while preparing the mother for labour and delivery (Soma-Pillay, 2016). The physiological changes in pregnant women are widespread, affecting every organ of the body, and include changes in the uterus, as well as body weight, hematological, cardiovascular, respiratory, renal, gastrointestinal, and endocrine changes (Shagana, 2018; Soma-Pillay, 2016). At the end of an uncomplicated pregnancy, most of the associated physiological changes resolve without much residual effect, but this may not be the case with all pregnancies. Every pregnancy has associated risks, and none is entirely free from risk (WHO, 2014). There can be pathological deviations from the routine anatomical and

physiological changes of pregnancy, and any effort put in place to monitor specified signs during pregnancy could contribute to improving maternal and fetal outcomes (Shagana, 2018). Risk factors associated with increased maternal mortality have individual and country-specific variations, but being an adolescent and having high parity, or the number of times a woman has given birth, is generally associated with having the highest risk for complications and death during pregnancy and childbirth (UNICEF, 2019). Country-specific factors that predispose women to inequalities increase the risk of maternal mortality and tend to be more pronounced in low-income countries (UNICEF, 2019). The implication is that despite the presence of inherent risks, and associated risk factors of pregnancy, it is still possible to prevent maternal deaths that occur from the commonly known causes. Using antenatal care services influences and contributes to improvement in both maternal and child outcomes. Experts have advocated for specific utilization of skilled antenatal care (ANC) and birth attendants globally as the most crucial intervention to reduce maternal mortality (Odetola, 2015). Antenatal care services for pregnant women, which are enmeshed in a continuum of care, include prenatal or antenatal care, care during delivery, and postnatal care that is guided by a minimum package of care as recommended by the World Health Organisation which covers routine and emergency care (UNFPA, 2019).

According to the United Nations Population Fund (2019), mothers and children constitute a priority group. They comprise approximately 70% of the population in the developing countries. Mothers and children not only constitute a large group, but they are also a vulnerable or special-risk group as the problems affecting the health of the mothers and children is multi-factorial. The risk is connected with child-bearing and care of women and the infant during labour and delivery.

Providing the recommended minimum package is determined mainly by the availability of trained or skilled attendants and support staff in healthcare centres who can utilize available technology to prevent and manage complications (UNFPA, 2019). Moreover, this necessary element of skilled health providers is mainly available in designated health facilities or obstetric centers (Engjom, 2016). For a country to achieve a reduction in maternal deaths, pregnant women must have access to care, which is demonstrable in the actual utilization of antenatal services and, more importantly, delivery services.

Statement of the problem

Primary health care is an essential health care as it intends to meet the expectations of affordability, availability or accessibility to health care among the people at the grassroots. A broad range of services are provided to the people as these include antenatal care, and skilled birth attendance (WHO, 2017). The level of sophistication in terms of funding, availability of quality manpower and availability of equipment needed to provide maternal health services is relatively low which informs the asymmetry inherent in the provision of services across communities Wagner et al., (2015) identified four phases of the perinatal continuum as these include pre-pregnancy; pregnancy; labour and delivery; post-partum. Labour and delivery dimension constitutes the core of the phases as this is the critical point at which the outcome of pregnancy is determined. The study was occasioned by the necessity to determine how this phase is handled in the face of the shortcomings encountered by the primary health centres. The study aims at unravelling how this phase is negotiated, and the factors modulating it.

Objectives of the study

- I. Assess labour and delivery practices among women attending selected primary health centres in Jos metropolis
- II. Determine the factors that affect labour and delivery practices among women attending primary health centres in Jos Metropolis

MATERIAL AND METHODS

The study adopted a descriptive, cross sectional and non-experimental design aimed at examining labour and delivery practices in some selected primary health centers in Jos Metropolis. The setting of the study was conducted in Jos metropolis comprising Jos South and Jos North Local Government Areas of Plateau State, Nigeria. Plateau State is made up of seventeen local government areas of which the above named two are part. The two local government areas constitute the Jos Metropolis that serves as the headquarters of Plateau State. The two local government areas have ten political wards each. The population of Jos North Local government area is 429,300 while that of Jos South Local Government Area is 306,716 (National Population Commission, 2006). The Jos North and Jos South Local Government Areas have 33 and 40 primary health centres respectively. Besides, some private hospitals also exist alongside. All these equally offer maternal and child health services of various degrees in terms of quality and extensiveness. The principal source of maternity care in the two Local Government Areas is the primary health centres. Multistage sampling technique was employed to select the primary health centres used for this study. The required political wards were first selected from which five health centres were picked for the study in Jos North, and four from Jos South. Nurses and community health workers constitute the study population. The population size was one hundred and thirty-five (135). The instrument used for this study was questionnaire which was segmented into three as these include: socio-demographic section;

the section for items on labour and delivery practices; and section for factors that affect labour and delivery practices. Convenience sampling approach was adopted in accessing the respondents. The purpose of the study was explained to the respondents in order to seek their informed consent. They were assured of anonymity and confidentiality of information volunteered. They were equally informed that they had a right to withdraw their participation without any attendant victimization. In effect, one hundred and thirty-five copies were prepared and distributed while one hundred and thirty-three (133) copies were retrieved thereby producing a response rate of 98.5%.

RESULTS

Table 1: Respondents distribution by health centres

| LGA | PHC | Percentage (%) |
|-------------------|------------|----------------|
| Township | 17 | 13 |
| Tudun Wada | 15 | 11 |
| Kabong | 12 | 9 |
| Jenta Adamu | 16 | 12 |
| Dogon Agogo | 13 | 10 |
| Jos South, Bukuru | 13 | 10 |
| Vom | 15 | 11 |
| Du | 16 | 12 |
| Bukuru Express | 16 | 12 |
| Total | 133 | 100 |

Table 1 reveals that a total of 17 (13%) of the respondents were from Township primary health centre, 15 (11%) from Tudun Wada; 12 (9%) from Kabong; 16 (12%) from Jenta Adamu Primary; 13 (10%) from Dogon Agogo; all in Jos North Local Government Area while the respondents' distribution by primary health centres in Jos South is as follows: 13 (10%) from Kuru; 15 (11%) from Vom; 16 (12%) from Du; and 16 (12%) from Bukuru Express.

Table 2: Socio- Demographic Data of the Respondents

| Demographics | Respondents | Percentage |
|----------------------------------|-------------|------------|
| Sex | | |
| Male | 61 | 46 |
| Female | 72 | 54 |
| Total | 133 | 100 |
| Age | | |
| 20-24 | 24 | 18 |
| 25-29 | 29 | 22 |
| 30-34 | 35 | 26 |
| 35-39 | 26 | 20 |
| 40 years and above | 19 | 14 |
| Total | 133 | 100 |
| Marital status | | |
| Single | 49 | 37 |
| Married | 75 | 56 |
| Widowed | 5 | 4 |
| Divorced | 4 | 3 |
| Total | 133 | 100 |
| Religion | | |
| Christianity | 86 | 65 |
| Islam | 37 | 28 |
| Traditional | 7 | 5 |
| Others | 3 | 2 |
| Total | 133 | 100 |
| Educational qualification | | |
| RN | 5 | 4 |
| RN/RM | 9 | 7 |
| BSc Nursing | 4 | 3 |
| JCHEW | 76 | 57 |
| CHEW | 39 | 29 |
| Total | 133 | 100 |

| Demographics | Respondents | Percentage |
|--|-------------|------------|
| Occupational Experience (Years) | | |
| 0-5 | 28 | 21 |
| 6-10 | 39 | 29 |
| 11-15 | 36 | 27 |
| 16 years and above | 30 | 23 |
| Total | 133 | 100 |

Table 2 above indicates the diverse distribution of respondents by different variables. For sex distribution, 72 (54%) of the respondents are females while 61 (46%) of the respondents are males. The disparity is hinged on the fact that nursing still maintains the preponderance of females. The age distribution reveals that 24 (18%) were in the age bracket of 20-24; 29 (22%) were within 25-29 years, 35 (26%) respondents were found within 30-34 years, 26 (20%) respondents were in 35-39 years, while 19 (14%) respondents were within age range of 40 years and above. The marital status of the respondents shows that 49 (37%) were not married, 75 (56%) claim they were married, 5 (4%) were widowed, while 4 (3%) reported being divorced. Religious affiliation shows that 49 (37%) are Christians, 75 (56%) of the respondents are Muslims, 5 (4%) claimed they are traditional religion adherents, while 4 (3%) practice other forms of religion. Educational attainment shows that 5 (4%) of nurse respondents were Registered Nurses; 9 (7%) respondents were dual qualified nurses (RN/RM), 4 (3%) have Bachelor's degree in nursing, 76 (57%) are Junior Community Health Workers (JCHEW), while 39 (29%) are Senior Community Health Workers (SCHEW). For occupational experience, 28 (21%) of the respondents were within 0-5 years, 39 (29%) were found within 6-10 years, 36 (27%) were within 11-15 years, while 30 (23%) had worked for 16 years or more.

Table 3: Distribution of respondents by labour and delivery practices

| S/N | Item | YES | % | NO | % |
|-----|--|-----|-----|----|----|
| 1 | Do you assess patient's psychological readiness for continuous maternal support? | 121 | 91 | 12 | 9 |
| 2 | Do you assess foetal contractions in labour? | 127 | 95 | 6 | 5 |
| 3 | Do you do vaginal examination? | 119 | 89 | 14 | 11 |
| 4 | Do you make use of partograph for women in labour? | 105 | 79 | 28 | 21 |
| 5 | Do you allow the woman to drink fluid, eat meals during labour? | 97 | 73 | 36 | 27 |
| 6 | Do you educate the woman on positioning? | 133 | 100 | / | / |
| 7 | Do you follow the woman's wishes including her husband and relative? | 85 | 64 | 48 | 36 |
| 8 | Do you do artificial rupture of membranes? | 97 | 73 | 36 | 27 |
| 9 | Do you inform patient on progress of labour? | 111 | 83 | 22 | 17 |
| 10 | Do you augment uterine contractions with oxytocin after pre-mature rupture of membranes? | 89 | 67 | 44 | 33 |
| 11 | Do you encourage the woman to bear down with each contraction? | 117 | 88 | 16 | 12 |
| 12 | Do you give episiotomy if the perineum is tight? | 120 | 90 | 13 | 10 |
| 13 | Do you clamp and cut the umbilical cord by application of control cord traction? | 89 | 67 | 44 | 33 |
| 14 | Do you administer Oxytocin after the expulsion of the placenta? | 109 | 82 | 24 | 18 |
| 15 | Do you examine the placenta and membranes to ensure they are complete? | 133 | 100 | / | / |
| 16 | Do you do perineal repair? | 128 | 96 | 5 | 4 |
| 17 | Do you estimate blood lost? | 121 | 91 | 12 | 9 |
| 18 | Do you monitor vital signs | 133 | 100 | / | / |

Table 4 shows the various practices employed by the health workers during labour and delivery in primary health centres in Jos metropolis. Results show that 121 (91%) respondents agree that they assess patient's psychological readiness for continuous maternal support; 127 (89%) respondents agree that they assess foetal contractions in labour; 119 (89%) reported that they do vaginal examination; and 105 (79%) reported that they make use of partograph for women in labour.

Further results show that 97 (73%) of the respondents reported that they allow the woman to drink fluid, eat meals during labour; 133 (100%) educate the woman on positioning; 85 (64%) follow the woman's wishes including her husband and relative; 97 (73%) do artificial rupture of membranes; while 111 (83%) do inform patient on progress of labour; 89 (67%) augment uterine contractions with Oxytocin after pre-mature rupture of membranes; 117 (88%) encourage the woman to bear down with each contraction; 120 (90%) give episiotomy if the perineum is tight; 89 (67%) clamp and cut the umbilical cord by application of control cord traction; 109 (82%) administer oxytocin after the expulsion of the placenta; 133 (100%) examine the placenta and membranes to ensure they are complete; 128 (96%) do perineal repair; while 121 (91%) and 133 (100%) of the respondents estimate blood lost and monitor vital signs respectively.

Table 4: Respondents Distribution by the factors that affect labour and delivery practices in PHCs

| SN | Item | Yes | % | No | % |
|----|---|-----|-----|----|----|
| 1 | Lack of adequately trained health workers to cater for labour and delivery services | 117 | 88 | 16 | 12 |
| 2 | Lack of cordial relationship between mothers and health personnel | 97 | 73 | 36 | 27 |
| 3 | Inadequate facilities for labour and delivery in the PHCs | 133 | 100 | / | / |
| 4 | Financial cost of labour and delivery are not affordable among expectant mothers and family | 119 | 89 | 14 | 11 |

Table 4 shows the findings on the factors that affect labour and delivery practices in primary health centres in Jos metropolis. 117 (88%) respondents concurred that inadequacy of trained manpower affect delivery and labour practices; 97 (73%) respondents affirmed that lack of cordial relationship between mothers and health personnel is a factor that affects labour and delivery practices. All (100%) the respondents agreed that there is lack of adequate facilities for labour and delivery in the PHCs while 119 (89%) respondents subscribed that affordability is a factor affecting labour and delivery practices.

DISCUSSION

Labour and child delivery process is one of the most significant life events for a woman and her family. The process is colored by the circumstances and expectations of the woman, and her sense of self in the dynamic system comprising the known and unknown about childbirth. As Ito and Sharts-Hopko (2017) point out, child delivery process is a universal, natural health transition. However, this transition has been subject to changes in practice, personnel, and the distributions of authoritative knowledge as health care systems have modernized (Ito & Sharts-Hopko, 2017). The study examined some of the basic labour and delivery practices among health workers. Results show that health workers' labour and delivery practices were moving in the right direction as shown in table three. Majority were found to be performing those respective labour and delivery activities as indicated in the table. Evidence abounds in respect of congruity of this study with that of others. In a study on labour management practice, it was found that the magnitude of labour pain management practice is better than the previous way it was handled (Melesse et al, 2020). In a related development, the study on delivery care by obstetric nurses in maternity hospitals shows that nurses in delivery care used more of the partograph and less oxytocin. The study further reveals that the inclusion of nurses in vaginal delivery care has successfully brought women closer to a more physiological and respectful delivery (Gama et al, 2017). On the factors that affect labour and delivery practices in primary health centres in Jos metropolis. Results show that 88% of the respondents conceded that lack of enough trained health workers to cater for labour and delivery services is a factor; while 73% respondents are of the view that lack of cordial relationship between mothers and health personnel is a factor that affects labour and delivery practices. All the respondents (100%) concurred to inadequate facilities for labour and delivery in the PHCs; 89% agree that cost of obtaining labour and delivery services is prohibitive for expectant mothers and family. In effect, findings show that lack of enough trained health workers; lack of cordial relationships between mothers and health personnel; inadequate facilities; and poor affordability were implicated. the factors that affect labour and delivery practices in primary health centres in Jos metropolis. Similar to these results, a study of Thomas & Huth (2019) showed that obstacles to obstetric care were represented by the lack of adequate delivery places, insufficient transport and inadequate supply of health care providers, which resulted in adverse maternal outcomes in developing countries. Findings on some of these factors such as poorly trained health workers, lack of adequate facilities, and lack of cordial relationship are consistent with the outcome of the study conducted on the factors that influence the provision of intrapartum and post-natal care by skilled attendants in low-and middle-income countries (Munabi-Babigummira et. al, 2019) Finding on affordability challenges is consistent with the outcome of the study on barriers to accessing maternal care in low-income countries in Africa (Dahab & Sakellariou, 2020).

CONCLUSION

The study on labour and delivery practices at the primary health care level in Jos metropolis was expedient as it aimed at unraveling the actual practices, and the collateral challenges. The study outcome is compelling as it will enable the practitioners and various stakeholders to redirect their attention and focus toward achieving the third Sustainable Development Goal. More attention is required in the area of quality manpower, adequate funding which guarantees subsidized maternal care services. The providers should leverage on the referral system which is the fulcrum of the primary health care activities in order to ensure the flow of maternal services in a bi-

directional form.

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