Knowledge of male partner involvement in Maternity care among Nurses/midwives in tertiary hospitals in Owerri, Imo State Nigeria

Atenchong Ngwibete¹, Dr Chizoma M. Ndikom², Mr Felix Emeka Anyiam³
¹RN, BSN, MPH, Masters of Midwifery and Child Health Nursing Students, University of Portharcourt Nigeria
²Senior Lecturer/Maternal & Child Health Nurse Specialist, Department of Nursing, Faculty of Clinical Sciences, College of Medicine, University of Ibadan
³Research Officer & Data Analyst/Scientist, Centre for Health and Development University of Port Harcourt (UNIPORT)

Abstract: Male partner involvement has been recommended as an effective strategy to combat maternal and child death in pregnancy and childbirth and to promote effective child care. This study assessed nurses/midwives perception Knowledge on male involvement in midwifery care. A total of 84 nurses/midwives were purposively selected from the facility for the study. The study employed a quantitative approach in which a questionnaire was used to collect data. Data were analyzed using SPSS Version 25. Respondents’ were aware of the importance of male involvement in maternity care and 60.7% of the respondents had a good level of knowledge on male involvement in maternity care. Respondents’ number of years in practice (X² =13.76, p=0.001) and rank (X² =14.75, p=0.012) were significantly associated with their level of knowledge. If facilities can improve the knowledge of nurses/midwives and other health care providers on the concept of male involvement and in maternity care, there will be the implementation of a more ‘Male-friendly’ care approach in maternity care.

Keywords: Knowledge, male involvement, maternity care, Nurses/midwives

Introduction

The WHO has strongly advocated for maternal health care services in which no woman or newborn dies or incurs injuries during pregnancy or childbirth. To achieve this goal is it important that respectful maternity care is involved such that all women babies their families receive dignified care that is evidenced bases and tailored towards their specific needs(WHO, 2015). It is necessary for providers and planners working at the maternity care service to recognize the fundamental role of the man when providing care to women during pregnancy, labour, or delivery(Iliyasuet al., 2010; Kaye et al., 2014). It has been proven that when men are not well informed and involved in maternity care, it could lead to poor reproductive, maternal, and child health outcomes, unwanted infections, and unwanted pregnancies. Understanding that men are a critical influence to women’s health in Africa (Lowe, 2017) and how they access health care, provides evidence that men should be actively involved in antenatal, Labour, and postnatal care services because of their strong influence. To encourage improved reproductive health, emphasis needs to be focused on the understanding of men’s reproductive behaviour and the influence
on their wives (Chris, 2015). Physical accessibility of health services has been an important determinant of the utilization of health services in developing countries. Health care providers' knowledge about male involvement can have a significant effect on the practice of male involvement in maternity care services. Thus if nurses and midwives are well informed about the need of male involvement in partner care, it could create a convenient environment for male involvement and modify attitudes such that services provided is appealing and accommodating for women and their caregivers.

**Background**

The WHO recommended involvement at the Antenatal period, childbirth, and the postpartum period as an effective strategy to combat maternal and child death in pregnancy and childbirth. According to Mersha (2018), male involvement is a very important factor to consider when dealing with birth preparedness and complication readiness. The use of educational interventions to address the influence of men on their households and how they make health decisions has been inadequate. According to the WHO involving men in maternity care will ensure that care given to women will be implemented such that women are given the necessary respect, their choices are promoted, and promotes their autonomy in decision-making is encouraged when caring for them and their newborns (WHO, 2015).

Measures such as male involvement in care need to be taken to improve on MCH strategies to include individuals, families, and communities in such a way that will provide suitable care for pregnant women, mothers, and newborns in the hospital and at home. It will also address the failure of women to get quality and skilled care during ANC, labour and PNC periods. As far back as the mid-1990s, the inclusion of men in MCH programs has been given credit, considering the important role men have as partners/husbands, fathers, and community members. Male involvement will have also been credited as a way of promoting egalitarian decisions about reproductive and maternal health (August et al., 2016; Redshaw & Henderson, 2013; WHO, 2015). In this way, men and women have a joint responsibility and act as equal partners in public and private lives. This will encourage and enable men to take responsibility for their sexual and reproductive behaviour.

There are many factors intrinsic to the health care facility that affect male involvement in seeking and usage of maternity care services. Of these factors, nurses, midwives, and other health staff attitude and knowledge, practice and intrapersonal skills have been implicated (Chris, 2015; Gibore et al., 2019). Poor knowledge about the concept of male involvement has is evident by harsh behaviour and language from skilled health professionals who are deterrent to male participation in Maternal and Child Health care. These factors also discourage men from returning to participate in the care activities of their wives and children (Chris, 2015; Gibore et al., 2019; Sharma et al., 2018). Other factors related to health include in-services processes and proceedings and the structure of the health care setting to accommodate men (Sylvia and Mugyenyi, 2018). According to Chris (2015), the quality of care delivered at the health service poses challenges in male involvement in health-related issues. In most health settings, health services providers are usually overloaded with tasks coupled with poor infrastructure and limited resources. This affects the delivery of care which intends to affect satisfaction and patronage of the facilities. In Africa, for example, most clinics are often unable to accommodate pregnant women with their partners because of a lack of space/resources (Sharma et al., 2018). When there is limited physical
space to accommodate male partners they are not comfortable and this can add to the burden and stress. It is this important for nurses/midwives and other health care providers to know and understand that in Africa nations like Nigeria males hold authority over women, are more educated, and usually more financially empowered than women and children. This implicates the woman as a subordinate who must time tend to depend on them for virtually everything(Mfuh et al., 2016; Olayemi et al., 2009). According to Iliyasu et al. (2010), there is a need to increase male involvement in their partner’s maternity care through peer-led, culturally-sensitive community education and appropriate health system reforms in Nigeria. Based on this background the researcher sort to find out about Nurses' a midwives perceptions knowledge on male involvement in maternity care in the selected facilities.

Method

Design

The study employed a quantitative descriptive survey design in which a semi-structured questionnaire was used to collect data on Nurses/Midwives knowledge of male involvement in Maternity care in tertiary hospitals in Owerri.

Setting

The study was done in the two main tertiary hospitals in Owerri, Imo State of Nigeria; (Federal Medical Centre (FMC)Owerri and Imo State Specialist Hospital Owerri(IMSSH). The ANC, Labour, and Postnatal ward were used for this study.

Target population

The target population for this study comprised of all Nurses and midwives in the ANC, Labour and Postnatal wards of the facilities. In total there are 100( 46 in IMSSH and 56 in FMC).

Sampling Technique

The entire population was purposely considered for the study however only those who consented to participate in the study where used. A total of 84 respondents participated in the study.

Instruments for data collection

The researcher used a self-structured questionnaire made of closed-ended questions to collect data from the respondents. The questions are designed to collect data that will address the research objectives.

Validity of instrument

Validity was achieved through cross-checking and scrutinizing the information entered into the questionnaires. It was submitted to two research experts for further assessment and validation. Reliability of Instrument

Reliability of 8.0 was achieved after testing the questionnaire on a similar group of respondents

Method of data collection

Respondents were met in their wards of practice where the questionnaires were administered. The researcher visited the facilities ward at a different shift to collect data from the respondents.
Method of data analysis

Each questionnaire was coded and entered into SPSS version 25 for analysis. Generated were analyzed and represented using descriptive statistics. The results will be presented in tables and figures. A probability value of less than 0.05 will be considered statistically significant.

Ethical consideration

Ethical clearance for this study was obtained from the ethical committee of the facilities. Each respondent consented to partake in the study before the questionnaire was administered.

Results

Socio-Demographic Characteristics

Table 1: Socio-Demographic characteristics of respondents

| Facility | Frequency (n) | Percentage % |
|----------|--------------|--------------|
| FMC      | 46           | 54.8         |
| IMSSH    | 38           | 45.2         |

| Age      | Frequency (n) | Percentage % |
|----------|---------------|--------------|
| 21-30    | 22            | 30.1         |
| 31-40    | 39            | 53.4         |
| 41-50    | 17            | 23.3         |

| Mean ± SD | 35.37 ± 8.54 |

| Sex      | Frequency (n) | Percentage % |
|----------|---------------|--------------|
| Male     | 0             | 0.0          |
| Female   | 84            | 100.0        |

| Number of years of service | Frequency (n) | Percentage % |
|---------------------------|---------------|--------------|
| 0-<4                      | 21            | 25.3         |
| 4-<8                      | 24            | 28.9         |
| 8 years and above         | 38            | 45.8         |

| Education | Frequency (n) | Percentage % |
|-----------|---------------|--------------|
| RN only   | 8             | 9.5          |
| RM only   | 37            | 44.0         |
| RN/RM     | 35            | 41.7         |
| Bachelors | 4             | 4.8          |
| Masters   | 0             | 0.0          |
| Doctorate | 0             | 0.0          |

| Ward      | Frequency (n) | Percentage % |
|-----------|---------------|--------------|
| PNC       | 24            | 28.6         |
| Labour Ward | 34   | 40.5         |
| ANC       | 26            | 31.0         |

| Rank      | Frequency (n) | Percentage % |
|-----------|---------------|--------------|
| CNO       | 13            | 15.5         |
| ACNO      | 13            | 15.5         |
| PNO       | 23            | 27.4         |
| SNO       | 11            | 13.1         |
| NO1       | 10            | 11.9         |
| NO2       | 14            | 16.7         |
The Majority of the respondents were from the Federal Medical Center (FMC) 46(54.8%). Respondents had a mean age of 35.37 and a Standard deviation of 8.54. All respondents were females with up to 38(45.8%) having 8 or more years of experience. Educationally, the majority of respondents had only a Registered Midwives(RM 37(44.0%) or Registered nurse/Registered Midwife (RN/RM) 35(41.7%). Only 4(4.8%) had a Bachelor’s Degree(BSc) which is the highest degree obtained by Nurses/Midwives in both facilities. The majority 40.5%(34) of respondents worked in the labour ward and most 23(27.4%) of them were PNOs of ranks

Study Findings

Table 2 Respondents’ knowledge on the importance of male involvement

| Question Item                                                                 | Yes (%) | No (%) |
|------------------------------------------------------------------------------|---------|--------|
| The male partner alone decides the maternity care facility the women should use | 13 (15.7) | 70 (84.3) |
| The couple discusses, jointly on choosing the care facility and the male partner providing logistical support to access the site. | 74 (89.2) | 9 (10.8) |
| The male partner and relations deciding the site and care for the women       | 18 (22.0) | 64 (78.0) |
| The woman deciding alone and informing the male partner                       | 27 (32.9) | 55 (67.1) |
| It is important to involve men in the care activity of his partner in your ward | 54 (69.2) | 24 (30.8) |

Overall 70(84.3%) of the Nurses / Midwives disagreed that male involvement means the male partner alone should decide the maternity care facility the women should use. Up to 89.2%(74) knew it means the couple discussing/jointly choosing the care facility and the male partner providing logistical support to access the site. 64(78.0%) and 55(67.1%) of the Nurses/Midwives knew that male involvement does not imply the male partner and relations deciding the site and care for the women or the woman deciding alone and informing the male partner. More than half 54(69.2%) of the nurses and midwives agreed that it important to involve men in the care activity of his partner in your ward
Figure 1: Level of Knowledge or respondents

*Decision level 4-6=GOOD
0-3=POOR

Each knowledge question was scored by ticking respondents’ responses. A positive response was given a mark while a negative response scored no mak. After assigning scores to knowledge questions, 51(60.7%) of the nurses and midwives in the maternity wards seem to have a good level of knowledge of male involvement in maternity care. A minority of 33(39.4%) had poor knowledge.

Table 3 level of knowledge by socio-demographic characteristics of respondents

| Facility         |  Level of knowledge | Poor | Good | df | X² (p-value) | OR(95% CI) |
|------------------|---------------------|------|------|----|-------------|------------|
| Facility         |                     | N    | %    | N  | %           |            |
| FMC              | Poor                | 18   | 54.5 | 28 | 54.9        | 1          |
| IMSSH            | Good                | 15   | 45.5 | 23 | 45.1        | 0.001 (0.97)|
| Number of years in service | | | | | | |
| 0- <4            | Poor                | 5    | 15.2 | 16 | 32.0        | *13.76 (.001)|
| 4- <8            | Good                | 17   | 51.5 | 7  | 14.0        | Ref        |
| 8years and above|                     | 11   | 33.3 | 27 | 54.0        | 1.30(0.383-4.437)|
| Education        |                     | N    | %    | N  | %           |            |
| RN only          | Poor                | 2    | 6.1  | 6  | 11.8        | 1.75       |
|                  | Good                |      |      |    |             | (0.63)     |
From table 3. above, more respondents in FMC had better knowledge than those of IMSSH. Over half 28(54.9%) of the respondents in FMC had a good level of knowledge compared to 23(45.1%) of the respondents of IMSSH who had good knowledge.

Also as years of experience increased, Nurses/Midwives' level of knowledge increased. Mores of the Nurses/Midwives with over 8 years of experience had a good level of knowledge than those younger in service. The table also showed that 27(54.0%) of respondents who work for over 8 years had a good knowledge compared to 7(14.8%) who with 4-<8 years of service and 16(32.0%) of those with less than 4 years of service. This was statistically significant at $X^2=13.76$, df=2, $p=0.001$. Bivariate analysis
showed that respondents who were 4-<8 years and were 1.30 times more likely to have a good level of knowledge than those with less than four years of service(OR=1.30; p=0.001; 95%CI: 0.383-4.437).

Educationally, the majority of those with a Good level of had only a RM 24( 47.1%). Respondents' educational qualifications did not have any significant effect on their level of knowledge.

A total of 19(37.3%) respondents in the ANC ward had a good level of knowledge compared to 35.3%(18) in the labour ward and 27.5%(14) in the PNC ward. The table also showed that Nurses/Midwives' ward of practice did not significantly affect the level of knowledge.

Respondents rank significantly affected her level of knowledge at $X^2=14.75$, df=5, p= 0.012. Up to 11(21.6%) of the NO2 staff had a higher level of knowledge than the 9(17.6%) CNOs. Bivariate analysis showed that NO2 were 3.4 times more likely to have a good level of knowledge than the CNOs (OR=3.41; p=0.012; 95%CI: 0.27-43.13).

**Table 4 Association of the ward of practice and Nurses/Midwives’ awareness of the importance of male involvement in midwifery care**

| WARD   | PNC | Labour Ward | ANC |
|--------|-----|-------------|-----|
|        |     |             |     |
| Involving men in the care activity of his partner in your ward is important | Yes | No | Yes | No |
| N      | %   | N           | %   | df | X^2 (p-value) | OR(95% CI) |
| 15     | 28.3| 7           | 28.0| 2  | 1.38(0.50)    | 0.54 (0.16-1.6) |
| 19     | 35.8| 12          | 48.0|     |               | 0.41 (0.14-1.24) |
| 19     | 35.8| 6           | 24.0|     |               |               |

*Statistically significant (p<0.05)*

The majority of the respondents agreed that it is important to involve men in the care activities of their partners in the ward. Majority of the respondents who acknowledged the importance of male involvement in the ward activity were from the labour ward and ANC wards 19(35.8%) each. Respondents' ward of practice did not significantly affect respondents' knowledge of the involvement of men in ward activities.

**Discussion**

Findings in the study revealed that all the respondents were females, with a mean age of 35.37 ± 8.54 years. In both facilities, the labour ward had the highest number of staff making a total of 40.5% of the nurses and midwives in the study.
The nursing profession has been known to be for females. According to Newham & Alderdice (2017), the number of male nurses in reproductive health is low. However, Newham & Alderdice recommends more males to be included in midwifery practice because women are likely to provide more information to male care providers as they have a neutral perspective about pregnancy and childbirth. According to them, men have never been pregnant and so have less pre-conceived beliefs on how to behave while pregnant or what birth choices to make. The high number of staff in the labour ward can be justified by the fact that staff in the labour ward are known to have more duties which they perform simultaneously. Due to the very tasking nature of the labour ward, it’s good for facilities to have more hands in the labour ward.

From the study, the Nurses and midwives were knowledgeable about male involvement in maternity care. Up to 60.7% had a good level knowledge of male involvement in maternity care with a majority of over 70% highlighting that it is important for a couple to discuss and jointly choose the care facility of care with the male providing for care. The respondents also acknowledged that the concept of male involvement means males providing support for their spouses and not men domineering in decisions about care. The high number of respondents with a good level of knowledge may be because over 70% of the respondents had over 4 years of experience which gives them the insight to appreciate the importance of male involvement. According to the research, the concept of male involvement in maternal and child health is getting more attention in public health. More health care providers are recommending male involvement in family planning, maternity care, and child care. It is highly profitable when partners take a joint and mutual decision on pregnancy, birthing, and child-rearing (Mfuh et al., 2016; Tokhi et al., 2018a; WHO, 2015). According to the WHO (2015), male involvement decreases maternal and child death rate and improve the quality of care provided.

According to this study, almost 70% of the nurses and midwives agreed that it is important to involve men in the care activity of his partner in your ward. The relatively fair response rate can be attributed to the fact that male involvement in maternity care in Nigeria like most African countries is a relatively new concept (Gibore et al., 2019). According to research in Africa, though it is important to involve men in care activities of their partner, structural, policy, and cultural factors hinder male involvement.

More than half of the Nurses and midwives in the study had a good level of knowledge. When the level of knowledge was associate with demographic data, results showed that; facility of practice did not significantly affect one's level of knowledge however, Respondents FMC Owerri were more knowledgeable than those in IMSSH Owerri. This can be associated with the fact the FMC Owerri is a bigger institution and acts as a training institution for health professionals.

Also as years of experience increased, Nurses/Midwives' level of knowledge increased. Respondents' number of years of practice significantly affected her level of knowledge as respondents who were 4>8years and above were 1.30 times more likely to have a good level of knowledge than those with less than four years of service ($X^2=13.760$, df=2, p=0.001). This can be explained by the fact that as one's number of years of practice as a Nurse/Midwife increases, he/she is likely to gain more skills and knowledge.
The results also showed that respondents in the Labour wards were more knowledgeable than those in the ANC and PNC wards. Although there is cultural and policy restriction to male involvement in the labour wards, the need for support during birthing is very important and acknowledged by health care providers (Redshaw & Henderson, 2013; World Health Organization, 2018a). In a study by Kululanga, Sundby, Malata, & Chirwa, (2012) in Malawi health care practitioners in the labour ward during an interview demonstrated a high level of knowledge but were limited to practice because of cultural restrictions. Also, respondents rank significantly affected the level of knowledge service ($X^2=14.75, df=5, p=0.012$). Surprisingly, that NO2 were 3.4 times more likely to have a good level of knowledge than the CNOs. This can be explained by the fact that the junior staff are usually at the frontline in the ward attending to patients. This allows them to better appreciate the needs of the patient. Also, most of the staff in this category are recent graduates who are equipped with knowledge about maternity care,

A majority of the Nurses/Midwives in the study agreed that it is important to involve men in the care activities of their partners in the ward. The majority of the respondents who agreed to male involvement inward activity were from the labour ward. Upon interview with the nurses also confirmed that male involvement is more important in the ANC and labour wards. This result is similar to that in a study by Chris, (2015) in Zambia where healthcare providers showed awareness of the importance of male involvement of partners in the wards. However, these results contradict that in several studies in Africa where men did not seem to be aware of the importance of male participation in their partner's activities and considered it a taboo (Kaye et al., 2014; Tokhi et al., 2018b). The importance of male involvement is overstressed in the literature (August et al., 2016; Tokhi et al., 2018b; WHO, 2015) it is thus necessary for health care professionals to acknowledge the importance and benefits of male involvement in maternity care.

**Conclusion**

The paper used a quantitative approach to assess nurses'/midwives knowledge of Male involvement in maternity wards of FMC and IMSSH Owerri. Results proved that all respondents were females. The percentage of nurses /midwives who are knowledgeable about male involvement in partner care in the maternity ward was slightly above average. It also showed that respondent years of experience and rank of practice significantly affect their level of knowledge about male involvement in maternity care. Nurses and midwives in the wards need to be more enlightened about the concept of male involvement in maternity care. It is very likely that if knowledge about Male involvement is improved among health staff, there will show good attitudes and practices towards male involvement that will improve maternity care outcomes.

**References**

1. August, F., Pembe, A. B., Mpembeni, R., Axemo, P., & Darj, E. (2016). Community health workers can improve male involvement in maternal health: Evidence from rural Tanzania. *Global Health Action, 9*(1). https://doi.org/10.3402/gha.v9.30064

2. Chris, M. N. (2015). *Factors affecting male involvement in antenatal and postnatal care services in zambia : a case of kabwe urban and chamuka rural areas in central province*.  

Available Online: [https://aipublisher.org/ajahss-volume-3-issue-6-June-2021](https://aipublisher.org/ajahss-volume-3-issue-6-June-2021)
3. Gibore, N. S., Ezekiel, M. J., Meremo, A., Munyogwa, M. J., & Kibusi, S. M. (2019). Determinants of men’s involvement in maternity care in Dodoma region, central Tanzania. Journal of Pregnancy, 2019. https://doi.org/10.1155/2019/7637124

4. Iliyasu, Z., Abubakar, I. S., Galadanci, H. S., & Aliyu, M. H. (2010). Birth preparedness, complication readiness and fathers’ participation in maternity care in a northern Nigerian community. African Journal of Reproductive Health, 14(1), 21–32.

5. Kaye, D. K., Kakaire, O., Nakimuli, A., Osinde, M. O., Mbalinda, S. N., & Kakande, N. (2014). Male involvement during pregnancy and childbirth: Men’s perceptions, practices and experiences during the care for women who developed childbirth complications in Mulago Hospital, Uganda. BMC Pregnancy and Childbirth, 14(1). https://doi.org/10.1186/1471-2393-14-54

6. Kululanga, L. I., Sundby, J., Malata, A., & Chirwa, E. (2012). African Journal of Reproductive Health Male Involvement in Maternity Health Care in Malawi. African Journal of Reproductive Health, 16(1), 145–157. http://www.bioline.org.br/pdf/rh12016

7. Lowe, M. (2017). Social and cultural barriers to husbands’ involvement in maternal health in rural Gambia. Pan African Medical Journal, 27, 1–7. https://doi.org/10.11604/pamj.2017.27.255.11378

8. Mfuh, A. Y., Lukong, C. S., Olokoba, O. E., & Zubema, H. J. (2016). Male Involvement in Maternal Health Care in Jimeta Metropolis, Adamawa State, Nigeria. In Greener Journal of Epidemiology and Public Health (Vol. 4, Issue 2, pp. 027–039). https://doi.org/10.15580/gjeph.2016.2.082216132

9. Olayemi, O., Bello, F. A., Aimakhu, C. O., Obajimi, G. O., & Adekunle, A. O. (2009). Male participation in pregnancy and delivery in Nigeria: A survey of antenatal attendees. Journal of Biosocial Science, 41(4), 493–503. https://doi.org/10.1017/S0021932009003356

10. Redshaw, M., & Henderson, J. (2013). Fathers’ engagement in pregnancy and childbirth: Evidence from a national survey. BMC Pregnancy and Childbirth, 13. https://doi.org/10.1186/1471-2393-13-70

11. Sharma, S., Bhuvan, K. C., & Khatri, A. (2018). Factors influencing male participation in reproductive health: A qualitative study. Journal of Multidisciplinary Healthcare, 11. https://doi.org/10.2147/JMDH.S176267

12. Tokhi, M., Comrie-Thomson, L., Davis, J., Portela, A., Chersich, M., & Luchters, S. (2018a). Involving men to improve maternal and newborn health: A systematic review of the effectiveness of interventions. PLoS ONE, 13(1), 1–16. https://doi.org/10.1371/journal.pone.0191620

13. Tokhi, M., Comrie-Thomson, L., Davis, J., Portela, A., Chersich, M., & Luchters, S. (2018b). Involving men to improve maternal and newborn health: A systematic review of the effectiveness of interventions. In PLoS ONE (Vol. 13, Issue 1). https://doi.org/10.1371/journal.pone.0191620

14. Twinomuhangi Sylvia and Raymond Mugyenyi. (2018). Factors Leading to Low Male Partner Involvement during Child Birth in Kambuga Subcounty Kanungu District. 1(4), 3–16.

15. WHO. (2015). WHO recommendation on male involvement interventions for maternal and neonatal health (Issue May, pp. 1–9).

16. World Health Organization. (2018). Intrapartum care for a positive childbirth experience.