

Health Education Intervention on Husbands' Perception Towards Participation in Reproductive Health Services

Hadiza Mohammed Sani¹, Abdullahi Haruna Ibrahim^{2,*}

¹Department of Nursing Ahmadu Bello University, Zaria, Nigeria.

²Department of Nursing Bayero University, Kano, Nigeria.

*corresponding authors: ahibrahim.nur@buk.edu.ng

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Abstract

Aims: The study was conducted to determine the effect of husbands' participation in reproductive health education on the spousal utilization of maternal health services in Kaduna North Senatorial District, Kaduna state.

Methods: A Quasi-experimental study design was used. The study group had a pre-intervention followed by an intervention (health education) of two sessions which lasted for thirty minutes each with an interval of four weeks between them. Then a post-intervention test after nine months. The researcher used a multistage sampling technique in the selection of towns and a systematic sampling technique for the selection of participants, a questionnaire was used to collect data.

Results: The result shows a statistically significant positive change in husbands' perception regarding participation in their spouses' utilization of reproductive health services ($p < 0.05$) with mean change from 2.79 ± 0.405 pre-intervention to 3.11 ± 0.540 post-intervention.

Conclusion: As a promising approach, the intervention improved husbands' perception of participation in spouses' utilization of reproductive health service. The study recommended the integration of a module on husbands' participation in reproductive health services in the healthcare packages for prospective husbands and those with wives as well as those cohabiting to improve their perception and participation in reproductive health services.

Keywords: health education intervention, husbands' participation, reproductive health services.

Introduction

Men's involvement in reproductive health is recognized as a key strategy in improving maternal health and accelerating the reduction of maternal mortality in general, as the important role that male partners play in women's reproductive health is becoming increasingly recognized (Kriel et al., 2019). In today's societies, greater attention is being focused on how to incorporate men into reproductive health education interventions (Rahman et al., 2018). This is as studies increasingly point at the need for improved male involvement in reproductive health decisions and practices, particularly related to abortion and sexually transmitted diseases/HIV (Chibango & Maharaj, 2018), family planning (Kriel et al., 2019), and breastfeeding (Salim & Stones, 2020) to improve service uptake and adherence to the regimen.

Male involvement in reproductive health is a complex process of social and behavioral change that requires men to play a more responsible role in reproductive health. It not only implies contraceptive acceptance but also refers to the need to change men's attitudes and behavior towards women's health to make them more supportive of women using healthcare services and sharing child-bearing activities. Men have an important role in maternal and newborn health (MNH) as partners and parents and can influence behaviors related to MNH within their households and communities (Tokhi et al., 2018). Participation of men in reproductive health leads to better understanding between husband and wife, it reduces not only unwanted pregnancies but also reduces maternal and child mortality in connection with pregnancy and labor by being prepared for obstetric emergencies (Gathuto, 2014). This will ultimately lead to reduced maternal and child mortality, as nearly half of maternal deaths are preventable (Artal-Mittelmark, 2022).

In many developing countries, men are the key decision-makers and chief providers, often determining women's access to economic resources. This practice has implications for maternal health as it determines the nutritional status of women during pregnancy; women's access to maternal health services since healthcare systems in most developing countries require out-of-pocket payments; and women's chances of receiving emergency obstetrics care, which is vital in averting maternal mortality (Yargawa & Bee, 2015).

Where men are actively involved in spouses' utilization of reproductive services, researchers have shown improvements in health outcomes, however, the number of men who demonstrate such behaviors as accompanying their pregnant spouses on antenatal care visits is generally very low, especially in low-and-middle-income countries which lead to calls by health organizations, governments, and non-governmental organizations for increased male involvement in spouses' utilization of reproductive health services (Gopal et al., 2020). Buttressing this, findings from a previous study in Nepal show limited male involvement in reproductive health due to factors such as sociocultural and psychological norms, lack of education, and misinformation and dominance of females as healthcare providers in many MCH clinics (Sharma & Khatri, 2018). As reported by a study in Kenya conducted by Lusambili et al. (2021), sociocultural factors such as stereotyping and the feminization of reproductive and maternal health issues presented an additional barrier threatening effective male involvement coupled with stigma and peer pressure which hinder even the most well-meaning educational programs targeting men. They added that another key barrier to effective male engagement was the tension between men's financial responsibilities, their role in contributing to the household economy, and the need to participate in reproductive and

maternal health activities and decision-making, as well as competing priorities, hindered their ability to access information, participate in related activities and make informed decisions.

Researchers in Nigeria unceasingly lament the effect of the patriarchal nature of the society where men are socially and economically dominant, especially in the northern region of the country; they exert a strong influence over their wives, determining the timing and conditions of sexual relations, family size, access to health care with low knowledge of obstetric and newborn care needs and limited involvement across the spectrum of maternal and newborn care (Sharma et al., 2019). The National Demographic Health Survey (NDHS) in Nigeria reported that only 7% of currently married women make decisions on their own health care, while three in five report that their husbands mainly make such decisions (NDHS, 2018). Another study added that they generally do not accompany and support their wives in the utilization of reproductive health services such as antenatal care and are not expected to be in the labor room during delivery (Falade-Fatila & Adebayo, 2020). The National Demographic Health Survey (NDHS) in Nigeria reported that only 7% of currently married women make decisions on their own health care, while three in five reports that their husbands mainly make such decisions. The report further added that this situation makes men critical partners for the improvement of maternal health and reduction of maternal mortality and strategies targeted at empowering the women and increasing men's participation such raising their awareness on their roles and about important components of a woman's reproductive life by engaging them in health education are needed.

Health indices in the study area, Kaduna State are poor as can be seen in the maternal mortality ratio of 1,400 deaths per 100,000 live births as estimated using the sisterhood method and utilization of maternal health services depends on individual and household factors (Gulumbe *et al.*, 2018). Very few population-based studies have been carried out in Nigeria regarding determinants of maternal service utilization; most maternal health studies in the country have been institution-based, while most of the population-based studies were small-scale research focusing on a handful of communities, usually small-sized rural communities (Babalola & Fatusi, 2019). Their geographic scope limits the applicability of their result on a large scale, particularly considering the complex multi-ethnic setting of Nigeria. This prompted the researcher to conduct the study to determine the effect of a structured intervention on husbands' perception towards participation in their spouses' utilization of reproductive health services.

Methods

Research Design

A quasi-experimental research design was used for the study, with the study setting being Kaduna State, Nigeria.

Study Population and Sampling

The population of this study was made up of husbands of women aged 15-49 years, the World Health Organization's recommended childbearing age who are residing in Kaduna state. The Local Government Areas selected were Zaria (Study Group) and Makarfi (Control Group) respectively. Inclusion criteria: Husbands of pregnant women who have had at least one child, have been residents of Kaduna state for a period not less than one year, and are attending clinics in their communities. Exclusion criteria: husbands

who do not live together with their wives and those whose wives' pregnancy is more than 16 weeks of gestation.

Sampling:

A total of 174 couples were recruited in the study. The formula below was used to obtain the sample size for the study and how it was used in the study is described underneath.

$$\text{Sample size (n)} = \left(\frac{p_1(1-p_1)+p_2(1-p_2)}{(p_1-p_2)^2} \times C \right)$$

Where:

p1 and p2 are estimated proportions of the sub-populations in group1 and group 2 respectively.

C is the Z-value at the 95% confidence interval (0.05) =7.85

p1 and p2 are estimated at 40% and 20% respectively.

$$\begin{aligned} \text{The minimum sample size is therefore} &= \left(\frac{0.4(1-0.4)+0.2(1-0.2)}{(0.4-0.2)^2} \times 7.85 \right) \\ &= 10 \times 7.85 \\ &= 78.5 \approx 79 \end{aligned}$$

To calculate for non-response, the formula 1/1-f was used.

Where f = 10% = 0.1

$$= 79 \times 1 / 1 - 0.1$$

$$= 79 / 0.9$$

$$= 87$$

Therefore, 87 participants were selected for each arm (control and study groups) of the study respectively.

Multistage sampling technique was used, which involved the following:

Stage 1: Selection of one Senatorial Zone from the three Senatorial Zones (Kaduna North).

Stage 2: Selection of Local Governments from the Selected Senatorial Zone (Zaria and Makarfi).

Stage 3: Selection of wards from the Local Government Areas.

Stage 4: Selection of respondents from the household.

Data Collection

A pretest structured questionnaire with CVI of 0.86 and Cronbach's Alpha =0.921 was used for data collection. The questionnaire consists of two sections: Section A on socio-demographic characteristics of the respondents, and Section B carries a structured scale measuring the perception of husbands towards participation in their spouses' utilization of reproductive health services.

Phase I: Pre-intervention

The researcher administered the structured questionnaire to the participants who met the inclusion criteria set for the study. In households with more than one husband or wife, numbers were assigned to them, and one respondent was then randomly selected using paper balloting.

Phase II: Intervention

We adopt Mullany et al. (2007), the intervention consists of two 30-minute sessions, which were administered to the husbands in their households.

1st session: in this session, which was conducted on the day of enrollment, a pre-test was administered to the participants and then, the researcher took the participants through pregnancy care and birth preparedness, antenatal care (ANC), and benefits of ANC.

2nd session: in this session which was conducted four weeks after the first session, there was a recapping of the first training session, discussion on labour, delivery, and post-partum care.

Phase III: Post-intervention

Nine months after the intervention, the researcher administered the same structured questionnaire used in the pretest to participants in both the study and control groups.

Data Analysis

Data collected were statistically analyzed with the IBM SPSS version 26. Statistical tools used include frequency tables for the socio-demographic characteristics and two sample t-tests to test the study hypothesis. Where Likert Scale was used, an acceptance means of 2.5 was adopted to determine husbands' perceptions.

Ethical Considerations

Before the commencement of the data collection process, ethical clearance was obtained from the Research and Ethical Committee of Kaduna State Ministry of Health, Nigeria and permission for the conduct of the study was obtained from the Heads of the Local Government Areas used in the study. Informed consent was obtained from all the participants who participated in the study after explaining the study requirements, their roles, and rights to voluntary participation, as well as the confidentiality of all information they entrust to the researcher.

Results

A total of 174 participants participated in the study; 87 each for the study and control. Data from 136 (68 in each group) were successfully retrieved and analyzed (pre and post-intervention) (Figure 1). There was no significant difference in their classifications along the selected demographic variables ($p > 0.05$), except for the husband's occupation ($p = 0.018$) (Table 1).

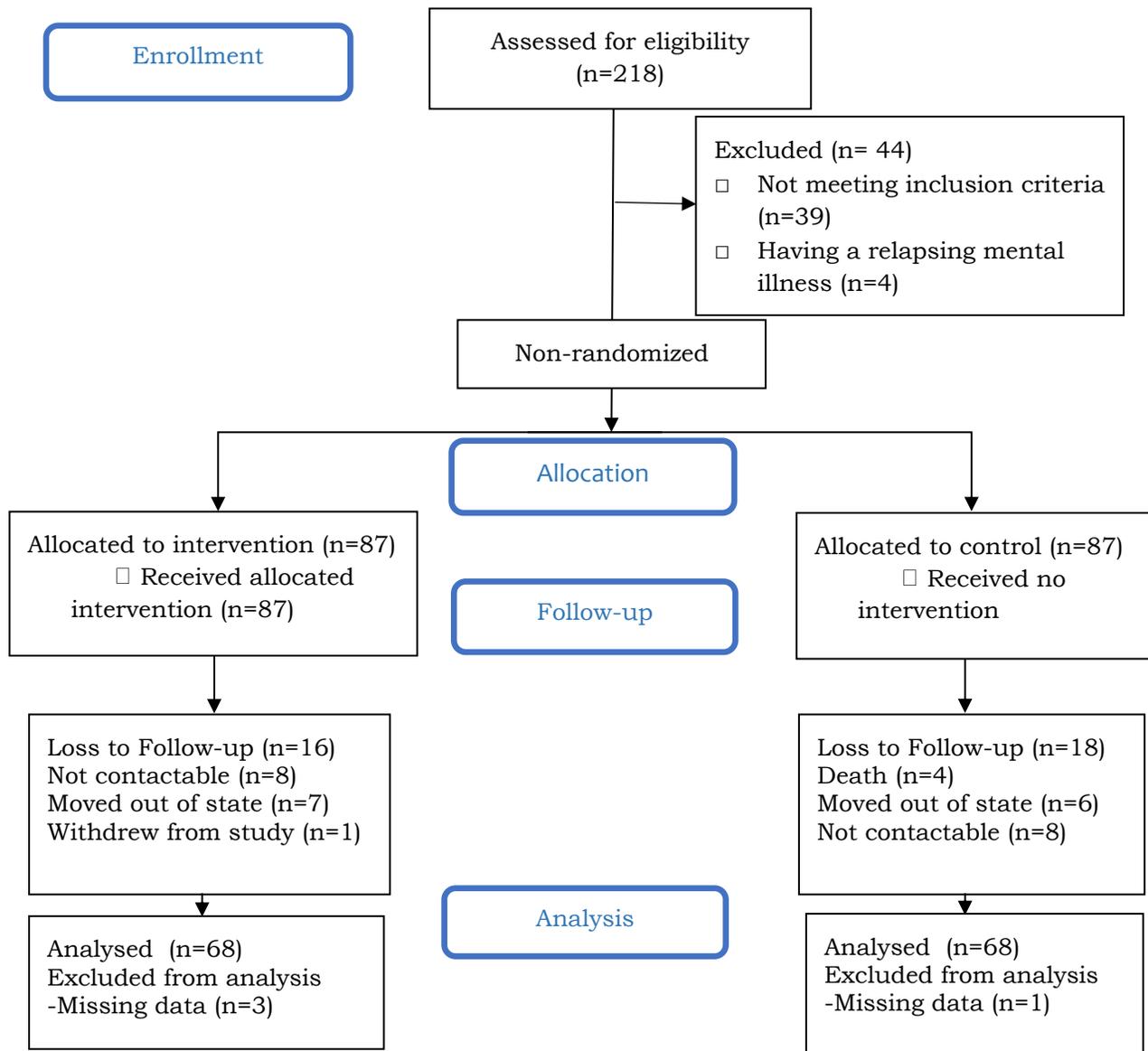


Figure 1. Consolidated Standards of Reporting Trials (CONSORT) flow chart for Participants' recruitment

Table 1. Socio-demographic characteristics of respondents
(n=68 for each of the groups)

Variables	Variable options	Study	Control	χ^2	p-value
Age	15-30 years	28(41.2)	25(36.8)	5.211	0.157
	31-45 years	24(35.3)	22(30.9)		
	46- 55 years	12(17.6)	17(25.0)		
	Above 55 years	4(5.9)	5(7.4)		
Ethnic Group	Hausa/Fulani	61(89.7)	65(95.6)	1.794	0.408
	Yoruba	3(4.4)	1(1.5)		
	Others	4(5.9)	2(2.9)		
No of wives	One	28(41.2)	25(36.8)	1.426	0.699
	Two	14(20.6)	11(16.2)		
	Three	12(17.6)	17(25.0)		
	Four	14(20.6)	15(22.1)		
Family type	Nuclear	28(41.2)	25(36.8)	0.278	0.598
	Extended	40(58.8)	43(63.2)		
Level of Education	No formal education	24(35.3)	26(38.2)	0.328	0.955
	Primary education	23(33.8)	22(32.4)		
	Secondary education	13(19.1)	11(16.2)		
	Tertiary education	8(11.8)	9(13.2)		
Occupation	Farmer	6(17.6)	30(42.6)	11.9	0.018
	Daily labourer	7(20.6)	4(11.8)		
	Civil servant	10(30.9)	14(22.1)		
	Business	18(25.0)	5(14.7)		
	Others	4(5.9)	3(8.8)		

There was an inverse change in the husbands' perception in the control group on the need for husbands to participate in their spouses' utilization of maternal health services compared with the experimental group, whose perception improved positively on the need for husbands' participation. The positive trend in the need for husbands to participate in their spouses' utilization of maternal health services could be seen among the male subjects in the study group (Experimental) (Table 2). This positive improvement could be attributable to the training intervention as it tended to have increased their awareness of the importance of husbands' knowledge on making informed decisions about their pregnant wives and the benefits of antenatal along with postnatal care.

The mean perception of husbands in control group decreased from 2.72 ± 0.371 to 2.67 ± 0.360 after the intervention with mean difference of -0.05 and t-value (0.782) with ($p=0.436$). For the study group, husbands' perception regarding participation in their spouses' utilization of reproductive health services increased from 2.79 ± 0.405 to 3.11 ± 0.540 ($p=0.000$) after intervention, with a mean difference of 0.32 after the intervention (Table 3). This means there was a significant difference in the husbands' perception before and after the intervention as such, the null hypothesis is rejected, which is further buttressed by the observation that such difference did not occur in the perceptions of husbands in the control group.

Table 2. Perception of husbands on participation in their spouses' utilization of maternal health services (n = 136)

Variables	Groups	Pre		Post	
		Mean	Std. Dev.	Mean	Std. Dev.
Husbands should participate in RHS	Control	2.97	0.753	2.31	0.885
	Study group	2.97	0.791	3.07	0.698
Husbands should be present at ANC health education sessions.	Control	2.40	0.756	2.29	0.774
	Study group	2.40	0.672	3.00	0.773
Husbands should accompany their wives to the hospital for ANC	Control	2.68	0.800	2.13	0.879
	Study group	2.63	0.879	2.93	0.779
Reproductive health education helps husbands in making informed decisions about the care of their pregnant wives.	Control	3.25	0.632	2.10	0.849
	Study group	3.21	0.783	3.24	0.672
RHE helps in deciding the right place of delivery.	Control	2.99	0.635	2.22	0.844
	Study group	3.03	0.646	3.13	0.731
RHE does not consume the husbands' time unnecessarily compared to its benefits.	Control	2.25	0.817	2.22	0.619
	Study group	2.72	0.789	3.13	0.896
Reproductive health education is not strictly a woman's affair.	Control	2.09	0.893	2.28	0.750
	Study group	2.16	1.031	3.22	0.826
RHE is important to the husband as it increases his knowledge of the care of his pregnant wife and the benefits of antenatal care.	Control	3.04	0.558	2.29	0.793
	Study group	2.94	0.790	3.15	0.653
Reproductive health education when attended by husband will help in providing a positive outcome to the pregnancy	Control	2.82	0.645	2.60	0.813
	Study group	3.09	0.481	3.09	0.663

Table 3. Two samples t-test on husbands' perception of participation in reproductive maternal health services before and after health education intervention

Groups	Stages	n	Mean	Std. Dev.	t-value	df	p-value
Control	Before	68	2.72	0.371	0.782	134	0.436
	After	68	2.67	0.360			
Study group	Before	68	2.79	0.405	3.812	134	0.000
	After	68	3.11	0.540			

Discussion

Findings revealed that exposure of husbands to the training significantly improved their perception of participation in reproductive health education services in the state. In the Prevention of Mother to Child Transmission (PMTCT) context, MI includes men's attendance at antenatal care (ANC) clinics (where they are involved in ANC activities, including health education), undertaking an HIV test within the ANC, and financial and psychological support. Positive participation included total involvement of the male partner in PMTCT interventions, reminding the spouse of clinic and treatment schedules, and resource provision. Healthcare workers described MI as either involvement along the pregnancy continuum or Passive Involvement. Participants preferred the positive involvement of male partners.

It agrees with Maluka & Peneza (2018) in a study on perceptions of male involvement in pregnancy and childbirth in Masasi District, Tanzania, who discovered that Men did not wish to be more actively involved in antenatal care and delivery. Society perceived men as being breadwinners and their main role in pregnancy and childbirth was to support their partners financially. Many men have an uncertain perception about their role in maternity services, which contributes to the creation of a tendency towards the estrangement regarding the role of the partner maternal care services, which contrast the result of this study.

This agrees with Wilunda et al. (2017), in a study of Barriers to utilization of antenatal care services in South Sudan study through a FGD, which discovered that most men perceived ANC attendance as unnecessary because foremothers never used to attend ANC. The female believes their men know nothing about the benefits of the hospital. They keep them at home saying that their mothers never used to go to the hospital and were giving birth to many children like them. This is mostly because of the African culture of men's dominance and seeing pregnancy childbirth as a normal process that does not require any medical attention.

This study also agreed that reproductive health education could be beneficial to men in deciding where and when to seek maternal health care. The finding agrees with Gathuto (2014), who explained that reproductive health seeking was seen by men as "women's work." Men saw the antenatal clinic as a women's space and the definition and organization of the program as fundamentally female-oriented. Predictably, men thought that antenatal clinic activities fell outside their area of responsibility. Consequently, men perceived that attending the antenatal clinic would be "unmanly" (Gathuto, 2014). It is also in line with the findings from Wicaksono (2016), who argued that increasing men's participation could yield health benefits for men, women, and children by ensuring the use of antenatal care (ANC), healthy practices during pregnancy, institutional delivery, and childcare. A study by Lewis et al. (2015) on the role of husbands in maternal health and safe childbirth in rural Nepal reported that husbands were aware of their lack of knowledge and voiced a sense of helplessness in knowing how to care for their wives. Therefore, reproductive health education will go a long way in improving the husbands' level of knowledge on maternal and child health care, their perception on maternal health service utilization, including reproductive health education, and consequently improve the utilization of maternal health services as established in this study.

Limitation

Although there is a 46-kilometer separation distance between the study and control group participants, the researchers have no control over the participants' movement and their chances of mixing together at some point within the 9-month period between the pre and post-tests.

Global Contribution to Nursing Practice

Increasing the participation of husbands in their spouses' utilization of reproductive health services is viewed as the needed ingredient to improve service utilization and reduce the global burden of maternal morbidity and mortality, especially in the patriarchal societies across the world. The study has established a strategy that positively changed husbands' perceptions regarding their involvement in their spouses' utilization of reproductive health services. The study findings would form a pedestal on

which other studies can be based. It would form the basis for a series of interventions to bridge the gap in the existing body of knowledge with respect to husband's perception towards reproductive health and subsequent utilization of maternal health services.

Conclusion

From the result of the study, it was concluded that there is a positive shift in husbands' perception after the intervention as such, health education intervention is effective in changing the perception of husbands regarding their participation in spouses' utilization of reproductive health services.

Author Contribution

The authors jointly worked on the study from conceptualization to data collection, analysis, report writing and submission of the manuscript for publication.

Conflict of Interest

Nothing to declare.

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