



Original Research Article

Midwives Knowledge and Attitude towards the Use of Anti-Shock Garment In the Control of Post Partum Haemorrhage in Selected Hospitals in Ondo State

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Received: 15/07/2015

Revised: 22/08/2015

Accepted: 24/08/2015

ABSTRACT

Post partum haemorrhage (PPH) constitutes a global health problem. However, despite effective and numerous benefits associated with the use of Non-Pneumatic Anti shock garment in the management of PPH, its utilization is still very low. This study was therefore designed to assess midwives awareness, knowledge and attitude towards PPH control using anti shock garment.

This descriptive study was carried in four (4) secondary and one (1) tertiary maternity health institutions in Ondo State Nigeria. Systematic random sampling technique was utilized in the recruitment of the study participants. A self structured questionnaire with reliability of 0.82 was used for data collection. Data was analysed using SPSS version 16 and hypothesis was tested at 0.05 level of significance using chi-square test.

A total of 177 midwives participated in this study with only few having university degree (21.5%); approximately 70.6% demonstrated a high level of knowledge of PPH with 54.2% demonstrating a low level of the control device (NASG). However, 67.8% were aware of the existence this garment and 59.3% showed negative attitude towards its utilization. No association was observed between availability of the garment and attitude to utilization ($p = 0.494$).

Midwives demonstrated a high level of knowledge about causes and complications of PPH but a knowledge deficit in the control device used for its management, therefore, there is need for availability of this control device in all health institutions offering maternity services and midwives should be trained on its use and encouraged to use it.

Keywords: knowledge, Attitude, Postpartum, Haemorrhage, Anti shock garment.

INTRODUCTION

Postpartum Haemorrhage (PPH) is the leading cause of maternal mortality and severe morbidity. Every year, an estimated 529,000 women die from complications of pregnancy and childbirth; a number that translates into a global ratio of 400 maternal

deaths per 100,000 live births, in other words, one woman dies every minute of every hour of every day. ^[1] Postpartum Haemorrhage of all aetiologies accounts for 25% - which is one quarter of the maternal deaths worldwide. Recent evidence from World Health Organisation strongly

suggested that deaths due to postpartum haemorrhage were underestimated and could reach as high as 40% of all maternal morbidity in some African countries as well as South Africa, South East Asia, and Latin America. Indeed postpartum haemorrhage is the cause of close to 50% of maternal mortality in Guatemala and Afghanistan. [2] An estimated 150,000 women die from postpartum haemorrhage each year and most of these deaths occur in low resource settings especially in developing countries where health care facilities and staff are not equipped to handle obstetric emergencies. [3]

According to Adesokan, [4] postpartum haemorrhage is defined as “excessive bleeding from the genital tract at any time following the birth of the baby up to 6 weeks after delivery which is in excess of 500mls or any amount sufficient enough to cause cardiovascular collapse which is detriment to the life of the woman”.

Although postpartum haemorrhage is a killer, but it is also one of the few obstetric complications with proven effective intervention, one of the promising technologies to reduce this, is the use of lightweight, neoprene covering that resembles the bottom half of a wetsuit which is referred to as “Non-Pneumatic anti-shock Garment” otherwise known as “life wrap”.

Currently, Non-pneumatic Anti shock Garment (NASG) is a first aid device in the form of a lower body suit of articulated neoprene and Velcro segments that provides lower body circumferential counter pressure which restores blood pressure to the core, thus reverses hypovolaemic shock and decreases postpartum haemorrhage. Evidence suggests that this promising technology help overcome delays in transport and in acquiring appropriate haemorrhage management at referral facilities. It also plays a role in sophisticated tertiary care units by keeping women stable whilst

awaiting definitive haemorrhage therapies such as blood transfusion and surgeries.

Despite the introduction of this evidence based, low cost, and first aid device into Nigeria in 2008, there has not been a significant reduction in maternal morbidity and mortality as India and Nigeria at the country level accounted for a third of global maternal death with India at 19% (56,000), and Nigeria 14% (40,000), [5] with postpartum haemorrhage still the leading cause of maternal mortality (25%). Although Nursing and Midwifery Council of Nigeria, in the recent past have organise workshop and training about the use of NASG for nurses in Nigeria to educate them on the availability and the use of the garment in the control of PPH, nothing has been documented about the effects of these workshops. While a number of studies had been carried out to assess the utilization anti shock garment in the management of post partum haemorrhage in many countries of the world, Nigeria inclusive there is still dearth of information about the knowledge and attitude of health workers midwives to be specific about it use. Hence this study seeks to assess the knowledge and attitude of midwife toward the use of Non-Pneumatic Anti-Shock Garment in the management of post partum haemorrhage.

Objectives of the Study: This study is designed to:

1. Assess midwives awareness and knowledge of anti-shock garment in the management of post partum haemorrhage;
2. Determine midwives attitude to the use of anti shock garment in the management of post partum haemorrhage.

MATERIALS AND METHODS

Research Design: Descriptive design was used to determine the awareness, knowledge and attitude towards the utilization of anti-

shock garment in the control of postpartum haemorrhage among midwives in obstetrics and gynaecology unit of the selected hospitals.

Population: This study was carried out in the gynaecology unit of four selected hospital is in Ondo state. Four (4) secondary level of hospital Mother & Child Hospital Akure, and State Specialist hospitals (Akure, Ondo, Ikare); and one tertiary level hospital Federal Medical Centre (FMC) Owo were chosen. FMC Owo is the only tertiary level hospital in Ondo State.

Sampling Technique and Sample Size Determination: The study was intended to use a calculated 190 out of the total no of 289 midwives in the obstetric and gynaecology units of the selected hospitals. This figure was gotten from the Deputy Director of Nursing/Matron or their representatives in the selected hospitals.

The study utilized systematic random sampling technique for sample selection where the sample interval (k) is 2, hence the first midwife was selected randomly from the sampling frame, thereafter every 2nd midwife were selected on the nominal roll as respondents until the minimum required number was achieved (190). Therefore the quota from each hospital that participated in the study was as follows: Mother & Child Hospital Akure 64, Federal Medical Centre Owo 36, State Specialist Hospital Akure 51, State Specialist Hospital Ondo 29, State Specialist Hospital Ikare 12, making a total of 192 midwives that participated in the study.

Instrument for Data Collection: This study utilized a self-administered questionnaire developed from reviewed literature. The questionnaire items were structured to collect information relevant to the study. The reliability of the questionnaire was ascertained using test retest method of reliability check

Method of Data Analysis: Data collected was analysed using Statistical Package for Service Solution (SPSS) version 16, both descriptive and inferential statistics were used.

RESULTS

Socio demographic characteristics of the respondents showed that vast majority (76.8%) are married, 21.4% single, 1.1% widow while only 1 (0.6%) of the respondents is separated. Academic qualifications of the respondents shows that vast majority (78.5%) are diplomate while 38 (21.5%) have a university degree. The mean age of the respondents was observed to be 34.55years, with age range of 37 and Std. Deviation of 8.56. While the number of years that respondents have spent on the job revealed an average of 9.67 years, with Std. Deviation of 7.78 and range of 33. Overwhelming majority of the respondents 160 (90.4%) are Christians by religious inclination while 17 (9.6%) are Muslims. Professional designation of the respondents showed that about two third (32.2%) of the respondents are NOII, 23.7% NOI, 14.1% PNO, 12.4% CNO, those that are SNOs accounted for 11.3% while the rest (6.3%) are ACNOs.

Respondents' Awareness Of Anti-Shock Garment: Table 1 presented the respondents level of awareness of anti-shock garment. two third (67.8%) of the respondents have heard of the garment while 57 (32.2%) said they have never heard of the garment before. major source of information include seminar 48.6%, printed material and media 5.6% each friends and colleague 5.1% while internet accounted for 4.5%.

Table also shows that only 57 (32.2%) of the respondents have touch the garment before while vast majority 120 (67.8%) have never touch the garment. for majority they only touch the garment in during workshop while few in their practice

area and some while in school. only 58.8% of the respondents are aware of what the garment is used for.

Knowledge Of Post Partum Haemorrhage And Anti-Shock Garment: Midwives knowledge of PPH as shown in figure 1 shows that majority of the midwives 125 (70.6%) have good knowledge of postpartum haemorrhage while 52 (29.4%) have poor knowledge. Midwives knowledge of anti shock garment shows that more than half 96 (54.2%) of the midwives have poor knowledge of anti-shock garment while 81 (45.8%) have good knowledge (figure 2).

Attitude Of Midwives To Utilization Of Anti Shock Garment: Attitude of the respondents to the utilization of anti shock

garment in the management of PPH as presented in table 2 shows that 10.2% of the respondents strongly agree that the use of anti shock garment is unnecessary especially in centre where there is facility for blood transfusion while 14.1% agree. Vast majority believed the there is no need for the garment since it is not readily available. The table also shows that majority of the respondents are undecided if the garment is expensive or not. Most of the respondents believed that application and removal of the anti-shock garment requires a lot of procedure that takes time. Many of the respondents disagree that the garment is only meant to be used by the doctors.

Table 1: Respondents awareness of anti-shock garment

Variable	Label	Frequency (N = 177)	Percentage (%)
Having heard of anti-shock garment before	Yes	120	67.8
	No	57	32.2
Source of information	Seminar	86	48.6
	Internet	8	4.5
	Printed material	10	5.6
	Media	10	5.6
	Friends and colleague	9	5.1
	Not applicable	54	30.5
Having touch anti-shock garment before	Yes	57	32.2
	No	120	67.8
Where respondents touch the garment before	Workshop	35	19.8
	Practice area	21	11.9
	School	1	0.6
	Others	4	2.3
	Not applicable	116	65.5
Awareness of what anti-shock garment is used for	Yes	104	58.8
	No	73	41.2

Table 2: Attitude of midwives to utilization of anti shock garment

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
The use of anti shock garment is unnecessary especially in centre where there is facility for blood transfusion	18 (10.2)	25 (14.1)	27 (15.3)	63 (35.6)	44 (24.9)
There is no need of the garment, since it is not readily available	61 (34.5)	58 (32.8)	18 (10.2)	9 (5.1)	31 (17.5)
The garment is expensive, therefore not affordable	39 (22.0)	46 (26.0)	64 (36.2)	11 (6.2)	17 (9.6)
Its application and removal requires a lot of procedures that takes time.	21 (11.9)	35 (19.8)	53 (29.9)	40 (22.6)	28 (15.8)
The garment can transmit HIV to patients; hence it is not advisable to be used in a hospital setting.	6 (3.4)	7 (4.0)	54 (30.5)	38 (21.5)	72 (40.7)
Anti shock garment is only beneficial to people in the rural areas/primary care settings	31 (17.5)	14 (7.9)	34 (19.2)	45 (25.4)	53 (29.9)
The garment is only meant to be utilized by doctors	5 (2.8)	8 (4.5)	32 (18.1)	42 (23.7)	90 (50.8)
Anti-shock garment is ineffective in patients with cervical lacerations	50 (28.2)	33 (18.6)	41 (23.2)	22 (12.4)	31 (17.5)

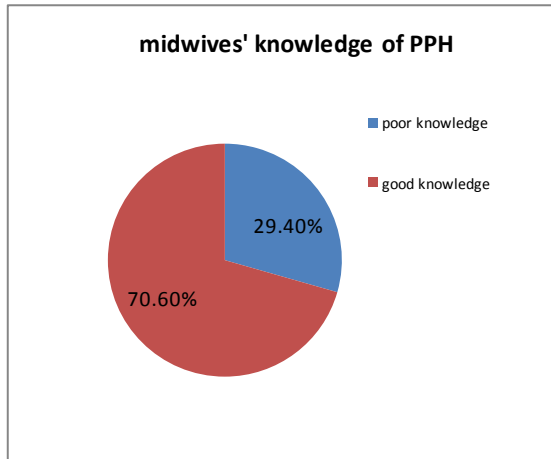


Figure 1: Midwives' Knowledge of post partum haemorrhage

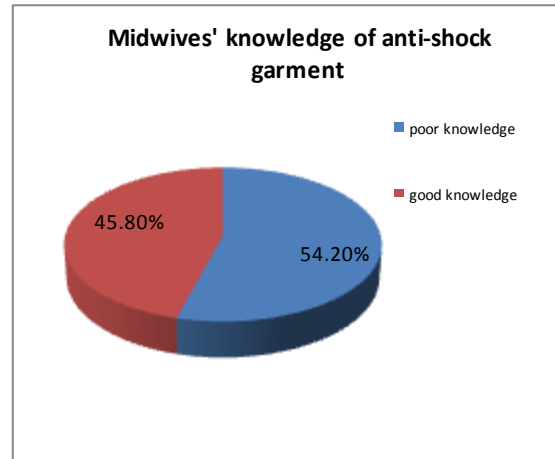


Figure 2: Midwives' knowledge of anti-shock garment

DISCUSSION OF FINDINGS

Midwives awareness of anti-shock garment showed that majority were aware of the existence of garment, this is closely related to the submission of Onasoga, et al [6] in a study to assess the knowledge of strategies used in the prevention and management of postpartum haemorrhage in Bayelsa State, that 73.9% of their respondents were aware of anti-shock garment. Results also showed that not all the respondents that were aware of the existence of the garment know what is used for. This suggest that awareness is not the only factor that determine utilization, as this is also affected by the availability of the garment and knowledge of the health practitioners about it and how it is been used. It is therefore important that that campaign about any new technology that enhances care for the patient should go beyond merely creating awareness. The importance of regular seminar in disseminating information as it relate to techniques that can improve the practice of nursing was further established by this study, as majority of the respondents said their source of information was through seminars.

Despite high level of awareness of this garment only about two third of the respondents have ever touched the garment,

and this happens majorly during workshop while only few touched it during their practice, this further confirm the fact that majority heard about the garment during workshops. It is important to note that a good number of the respondents knew what the garment is been used for.

Results of this study revealed good knowledge of postpartum haemorrhage among the respondents but poor knowledge of anti shock garment. The poor knowledge of the garment coupled with non availability could be attributed to been responsible for the low level of utilization in our maternity health care facilities. Respondent shows negative attitude towards the utilization of this garment, this is the direct reflection of their knowledge about the importance, mode of action and usefulness of the garment. This is also emphasized by the believe by some of the respondents that blood transfusion facilities is a better alternative to utilization of anti shock garment in the management of post partum haemorrhage. This is probably responsible for the believe that it is only useful in the centres in the rural areas. Study also shows gross unavailability of this garment in the centres were this study was conducted, this study was conducted in secondary and tertiary health institutions, and with low level of availability of this

garment, we can therefore, imagine what will be obtainable in primary maternity facilities. Some of the respondents opined that the garment is expensive and that its application and removal requires a lot of procedure. Few of the respondents believed that the garment is capable of transmitting HIV, it is not certain what could be responsible for this wrong perception, whether is the poor knowledge of the garment, or knowledge of the mode of transmission of the this infection or the fact that a good number of the them has never seen this garment so they did not know what it looks like. The effectiveness of the garment in the management of postpartum haemorrhage in women with cervical laceration shows varying believe. Hypothesis testing for the hypotheses generated for the study showed that there is a significant relationship between midwives knowledge of anti shock garment and its utilization ($P < 0.05$). The study also observed that there is no association between availability of the garment and midwives attitude towards its use ($P > 0.05$). Midwives' years of experience and their attitudes towards the utilization of anti shock garment show that there is no association between the two ($P > 0.05$). Also type of health facility that the midwife is working in (secondary or tertiary facility) was observed not to influence their knowledge about the garment ($P > 0.05$).

CONCLUSION

The study observed good knowledge of post partum haemorrhage but poor knowledge anti shock garment among midwives in secondary and tertiary maternity health institutions in Ondo state. Utilization of the garment for the management of post partum haemorrhage was very poor, non availability of the garment was major factor responsible for its poor utilization. The garment should

therefore be made available in all health institutions offering maternity service, midwives and other health practitioners involved in the rendering maternity service should be trained on how to use this important garment in the management of post partum haemorrhage.

IMPLICATIONS FOR MIDWIFERY PRACTICE: Midwives play a vital role in the reduction of maternal mortality in all the three important level of provision of health care and in most cases handle most of the deliveries in the primary and secondary health facilities. Postpartum haemorrhage is one of the leading causes of maternal mortality especially in the developing countries. It is therefore, important that midwives are always abreast with current techniques and equipments used in preventing and management of postpartum haemorrhage. This study showed poor knowledge of anti shock garment among the midwives, it is therefore important that regular seminar and workshop should be organised for the practicing midwives and this important concept be included in the curriculum of midwives training programme in the country.

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How to cite this article: OGBEYE GB, OHAERI BM, OLATUBI MI. Midwives knowledge and attitude towards the use of anti-shock garment in the control of post partum haemorrhage in selected hospitals in Ondo state. Int J Health Sci Res. 2015; 5(9):389-395.
