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Original Research Article

Knowledge and practices of birth preparedness and complication readiness among pregnant head porters in a hospital in Ghana

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ABSTRACT

Background: The death of a mother, foetus, or neonate is a tragic loss whenever it occurs. Birth preparedness and complication readiness (BPCR) is a strategy that helps women to consider all available maternal health care services during pregnancy and prepare for potential complications. This study aimed to assess the knowledge and practices of BPCR among pregnant head porters.
Methods: A Health facility-based cross-sectional survey targeting pregnant head porters was carried out from March to June 2019 at the Manhyia district hospital of the Kumasi metropolis of Ghana. Registry of the obstetrics and gynaecology department of the hospital aided in selecting the sixty-five pregnant head porters. A validated structured questionnaire was adapted for the study. Descriptive analysis, Kendall coefficient of concordance, one sample t test and multiple regression analysis were used for the data analysis.
Results: The demographics revealed 40% of the head porters had no formal education, 60% were married, 39% were between 23-35years, and 74% were from the Northern part of Ghana. Knowledge and practices of BPCR among the head porters were found to be moderate.
Conclusions: The study suggests increased outreach programmes in the communities on the need to consider each component of the BPCR as essential through public health education and the promotion of regular antenatal attendance. Moreover, there is the need for every delivery to be carried out by a skilled birth attendant.

Keywords: Head porters, Birth preparedness, Birth attendants, Complication readiness

INTRODUCTION

Efforts to improve the living standards of women and children have intensified worldwide since world leaders adopted the United Nations millennium declaration in September 2000 and committed themselves to reach Millennium Development Goals 4 and 5 on child mortality and maternal health.[1] In 2015, an estimated 303,000 women globally died during pregnancy and childbirth, whereas in 2016, maternal mortality was the second leading cause of death for women of reproductive age between 15-29 years.[2] Almost all maternal deaths (95%) occurred in low-income and lower-middle-income countries, and nearly two thirds (65%) occurred in Africa.[2] The report further stated that fertility rates were higher in resource-poor settings, and the risks of dying in labour were more significant.[2]

There are disparities between countries, and between women with high and low income and women living in rural and urban areas.[3] In the Ghanaian context, in 1990, maternal mortality rate (MMR) was 740 per 100,000 live births, 2000 was 484 per 100,000 live births, and 2017 recorded 308 per 100,000 live births.[3] This indicates that MMR has improved between 1990 and 2017 from 740

per 100,000 to 308 per 100,000.[3] There has been some progress on the MMR in Ghana, but that has not been enough to achieve the MDG 5. Ghana is behind as compared to Djibouti (248), Sudan (295), Zambia (213) and Angola (241), using 2017 figures as the base year for country comparison on MMR.[3]

Complications resulting from pregnancy are health problems that occur during pregnancy, affecting the mother's health, the baby's health, or both. It is of essence that women must receive health care before and during pregnancy to decrease the risk of pregnancy-related complications.[4] To improve maternal health, barriers that limit access to quality maternal health services must be identified and addressed at all health system levels.[5] The standard requires that all pregnant women have a plan for birth and deal with unexpected adverse events, such as complications or emergencies during pregnancy, childbirth, or the immediate postnatal period. This plan should be discussed and reviewed with a skilled attendant during each antenatal assessment and at least one month before the expected baby date of birth.[6] BPCR identified as a process of planning for normal delivery and anticipating the actions needed in the case of an emergency is recognized as a critical component in the reduction of maternal and neonatal mortality as every pregnant woman is assumed to be at risk of sudden, unpredictable complications that could end in death or injury to the fetus.[7,8]

Ghana maternal health survey conducted in 2017 reported that 98% of the age group 15-49 years who had a live birth or stillbirth in the five years before the survey received antenatal care (ANC) from a skilled provider. In terms of delivery care, 79% of live births or stillbirths were delivered in a health facility, primarily in the public sector facilities. The report stressed that 84% with live birth or stillbirth in the two years before the survey received a postnatal check within two days of delivery. The respondent believed postnatal care helps prevent complications after childbirth.[9] Though maternal health care has improved over the past twenty years, the pace has been slow and extra effort is required for Ghana to achieve the MDG 5 target of reducing MMR by three quarters by 2015.[10]

Notwithstanding the improvement in maternal mortality in Ghana, Black, King, Litchfield, Ammassari, and Tiemoko have argued that maternal mortality level in the country can further be reduced if much focus and interventions are directed towards vulnerable groups of which female head porters ("Kayayoo") form a majority.[11] Head portering is an ancient practice in Ghana used to transport farm produce to marketplaces for distribution. The activities of head portering play a significant economic role because many markets in Ghana are served by narrow, mud footpaths, which are not accessible by vehicle.[12] Many of the head porters were between 15-35 years who have migrated from the northern part of Ghana because of poverty, marriage pressures and lack of employment at home.[13] Most of the female migrants who travel down to the south and the middle belts of Ghana were young ladies who were mainly between the ages of 10 and 35 years and have limited or no formal education, and as a result, engage in head portering.[14] The head porters' status makes this study thought-provoking considering their level of income, lack of education, inability to eat well, living in harsh and hazardous conditions, making them vulnerable to risky behaviours in their quest to solve their living problems.[15] In many societies globally, cultural beliefs and inadequate education inhibit preparation for the delivery of an expected baby as no action is taken before delivery; the family tries to act only when labour begins.[15]

Nearly half of all maternal deaths in developing countries occur during labour or delivery or immediate postpartum.[16] It is therefore important to explore where the woman delivers and the person responsible for the delivery since these can influence the outcome of maternal health. BPCR is an essential component of maternal and child health, but little is known about the knowledge and practices of head potters on BPCR whose pregnancies are mostly unplanned. The objective of the study was to assess the knowledge and practice of head porters on BPCR at the antenatal clinic of Manhyia district hospital, Kumasi, Ghana.

METHODS

Study setting

The Manhyia district hospital is located at Manhyia, the administrative town of the Manhyia sub-metro of the Kumasi metropolitan assembly. The hospital was established as a community clinic in 1962 but now is a district hospital. The hospital currently has an estimated population of 294,092 within and around the Manhyia sub-metropolitan. The number of antenatal attendants at Manhyia district hospital was 23,034 in 2018.

Study population

Health-facility based cross-sectional survey was carried out from March to June 2019 at the Manhyia District Hospital. All pregnant head porters aged (15-35) who attended Manhyia district hospital for antenatal services were included in the study's population. A head porter within the Ghanaian context uses their head as a carrier to transport luggage from one destination for a fee. A woman who engages in such a business is referred to as a "kayayoo" (head porters). The "kayayoo" business is known to pose significant health-related risks to females.[17]

Inclusion criteria

The inclusion criteria were women whose pregnancy is twenty-four (24) weeks and beyond. The pregnant head

porter's antenatal cards were validated and reviewed to confirm the gestational age and occupation.

Exclusion criteria

The exclusion criteria were head porters whose gestational age could not be confirmed. Additionally, head porters who had challenges with communication were excluded from the study.

Sample size and sampling technique

Purposive sampling was used in selecting the head porters after identifying them from the registry of the obstetrics and gynaecology department of the hospital. Pregnant head porters with a gestational age of 24 weeks and beyond were included in the survey. The study recruited sixty-five head porters who consented to participate in forming the sample size for the study.

Questionnaire instrument

The instrument used was a validated structured questionnaire adapted from the survey tools developed by the maternal and neonatal program of John Hopkins program for international education in gynaecology and obstetrics. The questionnaire was adapted for use in the research, and some of the questions were reframed to suit the Ghanaian context. Although the original questionnaires were in English, questions were translated into the local languages during the data collection for those who could not speak English; hence the administration of the questionnaires was face to face in an interview mode.

The reliability assessment of the different subcomponents of the questionnaire after data collection revealed a Cronbach's alpha value of 0.940 for socio-demographic characteristics (7 items), 0.849 for factors associated with the knowledge level on BPCR (6 items) and 0.958 for factors influencing the practices of BPCR (13 items). All the alpha values were above 0.70, which is usually acceptable by researchers as good reliability of a scale to indicate its internal consistency.

Analytical framework

Data analyses was performed using SPSS v. 20. Descriptive analysis was made and presented using frequency tables and percentages of the head porter's socio-demographic characteristics, knowledge on BPCR and factors influencing the practices of BPCR of head porters who utilizes the antenatal services at the Manhyia District Hospital. Also, the study made use of multiple regression analysis.

Model 1

The study employed multi-regression analysis to establish the relationship and the significance of the independent variables on factors influencing the practices of BPCR. The estimated equation was specified as:

$MAR_{it} = \alpha i + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \varepsilon_t$
Where: X_1=age of pregnant head porter, X_2=parity of pregnancy, X_3=identify a place of delivery, X_4=save money, X_5=voluntary counselling and testing. Where β_0 represents the constant of the intercept, and'ε_t' is the error term. MAR is the dependent variable that represents the marital status of the pregnant head porter. The age of pregnant head porter, parity of pregnancy, identify a place of delivery, save money and voluntary counselling and testing are represented by X_1, X_2, X_3, X_4, and X_5, respectively. The independent variables are expected to have a positive relationship with the knowledge on factors influencing the practices of BPCR. The hypothesis of the study of the regression was constructed as follows for Model 1: Ho_1=age does not influence the practices of BPCR, Ho_2=parity does not influence the practices of BPCR, Ho_3=identifying place of delivery does not influence the practices of BPCR, Ho_4 = saving money does not influence the practices of BPCR, Ho_5=voluntary counselling and testing does not influence the practices of BPCR. In addition, one sample t test analysis was used on the head porter's view on the practices of BPCR.

Hypothesis

The null hypothesis (H_o) and (two-tailed) alternative hypothesis (H_1) of the one-sample t test is expressed as:

$H_o: \mu = 0$, (Do plan for BPCR practices)

$H_1: \mu \neq 0$, (Do not plan for BPCR practices)

The decision rule compares the hypothesized population mean (i.e. the test value) and expected mean (test statistic). The result is considered statistically significant if the *p*-value is less than chosen alpha level. The null hypothesis must be rejected. The test statistic for one-sample t test is denoted t, which is calculated using the following formula:

$$t = \frac{x - \mu}{s_x}$$

Where:

$$s_x = \frac{s}{\sqrt{n}}$$

Where: μ=proposed constant for the population mean, *x*=sample mean, n=sample size (i.e., number of observations), s=sample standard deviation, $S_{x\,=}$ estimated standard error of the mean.

Using one sample t test must meet the following assumptions: the sample data must be randomly selected from the population. Data must be continuous and uni-model (a single distribution). Sample data is likely to be

from a normally distributed population. The one-sample t test is fairly robust to non-normal data as long as the sample size is greater than 20.

Kendall's coefficient of concordance (W) analysis was used to rank the practices of BPCR among the pregnant head porter's. The degree of agreement of the rankings by the pregnant head porter's was then measured. W ranges from 0 to 1. When the (W) statistics is zero (0) it means there is no agreement, whiles one (1) denotes perfect agreement. In deriving W, let T; represent the sum of ranks for each BPCR practice being ranked. The variance of the sum of ranks is given by:

$$Var_T = \frac{\sum T^2 - (\sum T)^2/_n}{n}$$

Where Var denotes variance and n denotes the number of each BPCR practice. The maximum variance of T is given by

$$m^2 (n^2 - 1)/_{12}$$

Where m is the number of respondents. The formula for Kendall's coefficient of concordance Wis given by

$$W = \frac{\left(\sum T - (\sum T)^2/_n\right)/n}{m^2 * (n^2 - 1)/_{12}}$$

By simplifying equation five above, the result in the computational formula for W as:

$$W = \frac{12[\sum T^2 - (\sum T)^2/n]}{mn^2(n^2 - 1)}$$

Loading the data collected into the above formula gave the degree of concordance (W) between the rankings made by the respondents as 0.527. This implies that the level of agreement by the pregnant head porter's ranking are relatively good.

RESULTS

Socio-demographic characteristics of the pregnant head porters

A total of sixty-five pregnant head porters were included in the baseline study as they consented to participate. The majority were aged between 23-35 years, and the mean age was 25years. The religion of the pregnant head porters revealed 63% Muslims dominance as it is the dominant religion in the northern part of Ghana. On their marital status, 60% of them were married, with 37% single while 3% were divorced. Details of all participants have been provided in (Table 1).

Table 1: Socio-demographic characteristics of the pregnant head porters (n=65).

Variables	Category	N	%
Age (years)	15-18	21	32
	19-22	19	29
	23-35	25	39
Ethnicity	Grusi	26	40
	Mole-Dagbon	22	34
	Akans	9	14
	Ga-Adangbe/Ewe	8	12
Religion	Muslims	41	63
	Christians	22	34
	Traditionalist	2	3
Marital status	Single	24	37
	Married	39	60
	Divorced	2	3
Education	No formal school	26	40
	Primary	26	40
	Secondary	13	20
Income	GH¢ 200[#]	52	80
	GH¢ 300-500	13	20
Parity	1	16	25
	2-4	36	55
	>4	13	20

Cronbach alpha = 0.94, [#] $1= GH¢ 6.70

Factors associated with knowledge of BPCR

This section examined the pregnant head porter's views on the factors influencing their knowledge on BPCR using the one-sample t test (Table 2). The pregnant head porters indicated their opinions on a three Likert scale from disagreeing to agree, but the ranking was done using Kendall's Coefficient of Concordance of (W^a=0.527), which implies that 52.7% agreed to the overall ranking among the pregnant head porters. The second and fourth columns of (Table 2) indicates the mean of the five themes with the highest mean score of 2.48 (82.6%), confirming that identifying a skilled birth attendant is a critical aspect of BPCR practices for pregnant head porters. It was shown that the source of information on BPCR was ranked 2nd with a mean score of 2.31 (77%). The lowest-ranked theme had a mean score of 1.08 (36%), which was if the pregnant head porters had heard of BPCR practices. The second least mean score was 1.23 (41%) on the theme, which entailed the pregnant head porter identifying the mode of delivery they wanted. A one-sample t-test was used to compare the six constructs under the factors associated with knowledge on BPCR, as indicated in (Table 2). There was a statistically significant difference (p=0.001) between the sample and the population mean of zero (0). The critical t value is 2.00 for a two-tailed test, alpha of 0.05 and degrees of freedom of 64. The calculated t values are between 13 and 32, as indicated under column five under the t test of the six constructs. The absolute values of the calculated t value are greater than the critical value of 2.00, so the study

rejects the null hypothesis of no difference and declare statistically significant differences. That is, there are factors influencing the knowledge of head potters on BPCR (details on regression on factors influencing the practices of BPCR are provided in (Table 3).

Table 2: One-sample test on factors influencing knowledge on BPCR (n=65).

Construct	Descriptive			Test value				
	Mean	SD	W[a]	T value	Mean difference	SE	Sig. 2-tailed	95% C1
Heard of BPCR	1.08	0.269	6th	32.332	1.077	0.033	0.001	1.01-1.14
Source of information on BPCR	2.31	1.224	2nd	15.203	2.308	0.152	0.001	2.00-2.61
Preferred setting for delivery	1.77	0.46	3rd	31.013	1.769	0.057	0.001	1.66-1.88
Identified skilled birth attendant	2.48	0.793	1st	25.192	2.477	0.098	0.001	2.28-2.67
Identified mode of delivery	1.23	0.724	5th	13.707	1.231	0.09	0.001	1.05-1.41

df=64, W[a] =52.7%, SD=Standard deviation, SE=Standard error

Table 3: Regression on factors influencing the practices of BPCR.

Independent variables	Model 1			Collinearity statistics	
	B	P value	Adjusted R^2	Tolerance	VIF
Age	0.636**	0.000	0.825	0.140	7.151
Parity	0.227**	0.027		0.272	3.670
Identify a place of delivery	0.325**	0.000		0.609	1.643
Save money	0.382**	0.001		0.220	4.543
Voluntary counselling and testing for HIV	-0.552**	0.000		0.249	4.024
F=61.148, Sig = 0.000					

** Significant at 5%, Dependent variable: Marital status

The results of the multiple regression analysis on the factors influencing the practices of BPCR was based on the pregnant head porter's awareness and knowledge of BPCR. In model 1, the dependent variable was the marital status of the pregnant head porter, and the explanatory variables were age, parity, identifying a place of delivery, saving money and voluntary counselling and testing. Model 1 was statistically significant (adjusted R^2 =0.825, F=(5,64)=61.148; p<0.01). In the check for multicol-linearity in the multiple linear regression model, the collinearity statistics in terms of the Tolerance should be >0.1 (or VIF <10) for all variables; from (Table 3) the collinearity statistics by the figures of the tolerance and VIF indicated that there was no multicollinearity, which made the model more reliable.

DISCUSSION

Factors associated with knowledge of BPCR

Ninety-seven percent (97%) of the pregnant head porters acknowledged that they have heard of BPCR. Information is critical to the successful implementation of BPCR practices and, most importantly must be from a credible source. This finding is inconsistent with a large community study in rural Matlab of Bangladesh, where 26% of the women had good knowledge of BPCR practices.[18] Similarly, another study on BPCR conducted in the Kofale District in the South East of Ethiopia concluded that 41.3% of the women were well-prepared for birth and its complications.[19] Equally, little knowledge on BPCR has been reported in a study of a rural population in the southern highlands of Tanzania.[20] The discrepancies in the findings among these studies could be attributed to contextual factors such as demography and socioeconomic factors. Moreover, there is a vast distinction between one having heard about BPCR and their actual preparedness on BPCR.

On their sources of information about BPCR, 38% of the pregnant head porter's acknowledged Doctors/midwives as their source, the family had 25%, the traditional birth attendant was 20% with the media 17%. Traditional birth attendants, though have no formal training, play a crucial role of assisting women in delivering in the communities, provide education on nutrition, offer psychological support and counselling for women who use their services. The finding agrees with the need for emphasis on information provided to pregnant women during prenatal contact for better BPCR[18] as the other sources relied on might not provide accurate information. Though for a majority, the source of information on BPCR study was prominently coming from medical doctors and midwives, suggesting that the correct information might have been given which can promote adherence to the BPCR components, they remain a higher group who depended on other sources for information on BPCR though not tested for but could have been distorted. Other authors also emphasized the need for prenatal education for pregnant women in South-West Nigeria to promote birth readiness.[21] It is of essence to state that the right

source of information can create awareness and improve planning for BPRC for expectant mothers, thereby reducing complications.

A majority (74%) preferred the hospital setting for delivery whereas 26% preferred the home, in Ghana, obstetric care is not offered at home for pregnant women, and this was quite worrying as these women were therefore intending to use non-skilled attendants though they were attending the antenatal clinic. Though most head porters consider the hospital the best destination for childbirth, these were just reported and might not reflect an accurate picture as Ghana suffers a deficit between antenatal attendants and hospital birth. A pregnant head porter's ability to identify a preferred setting for delivery and knowledge of months of pregnancy hinges on the knowledge and optimization of BPCR interventions. The findings support the work in,[21] which established the need for prenatal education for pregnant women in the Nigerian context to improve their knowledge on danger signs of BPCR. Also, the Ethiopian context revealed that low knowledge on the practices of BPCR suggested the need to design appropriate interventions to improve education on BPCR.[19]

Knowledge on the mode of delivery, its benefits and complications were not too good as approximately 89% preferred vagina delivery but had not discussed with the health providers the benefits and complications since that remained what was culturally approved, they picked that as the preference. The result agrees with a study of a rural population in the southern highlands of Tanzania, which reported that 98% preferred vagina delivery as a mode of delivery and was the only way they could be accepted by their partners.[20] On the other hand, the result differed from a similar study in China where vagina birth (VB) ratio was 46.2% while the caesarean section (CS) ratio was 53.8% in Hunan Province in China. The reason is that it is less painful compared with VB, and these modes were discussed with their obstetricians.[22] A skilled birth attendant has acquired midwifery skills through formal training necessary to manage normal labour and delivery. Their role in BPCR practices helps recognize the onset of complication, perform essential interventions including treatment, and ensure prompt referral of mother and baby when the need arises.[23] The present study acknowledged the need for the utilization of the services of skilled birth attendants and planned services. The findings revealed the following composition traditional birth attendant (19%), family (15%) and midwives (66%). The study aligns with a study conducted in Southwest Ethiopia, where it was found that the utilization of the services of a skilled birth attendant significantly affect BPCR.[24]

Factors influencing the practices of BPCR

Four independent variables influenced the practice of BPCR; these were age (0.636), parity (0.227), identifying a place of delivery (0.325) and saving money (0.382) for delivery. These had a positive coefficient as they moved in the same direction and the marital status of the pregnant head porter improved their chances of complying with BPCR, as shown in (Table 4)**.** The variables had a positive relationship and influenced how prepared the head potters were towards BPCR. Among the four significant independent variables, age had the largest coefficient score of 0.636 with significant value of 5%. There was, however enough evidence to reject Ho_1, Ho_2, Ho_3 and Ho_4, as age, parity, identifying a place of delivery and saving money were significant. However, the marital status of the pregnant head porters also influenced their preparedness on BPCR when all the predictors in the model were included. This can be because as one age their sense of responsibility is expected to increase, and ideally older women will pay more attention to BPCR than their younger counterparts.

Maternal age plays a critical role in its relationship with the elements of BPCR. The age of the expectant mother influences the use of ANC. Teenagers accounting for forty per cent of the sample places a high risk of maternal death on the population. However, the results aligned with another study conducted in Ghana, which found that maternal age is a determinant of antenatal healthcare utilization by pregnant women.[18] It is unfortunate that most of the respondents in this study were adolescents and confirms the risk of complications in pregnancy and childbirth. However, within the Bangladesh context, a study revealed that the age of a pregnant mother served as a determinant for skilled care used.[18] A similar study in Ethiopia on antenatal care attendants suggested that the age of the pregnant woman is one of the major predictors identified to have impacted BPRC.[19] The concerns of the authors of these studies are that children of young mothers are disadvantaged at birth than children of older mothers in nutritional status.

Regarding parity, majority (55%) of the respondents had between 2-4 children and 20% had more than four children. The finding on parity in this study corresponds with parity as a predictor of knowledge on BPCR.[25] The parity of a pregnant mother can influence the use of a health facility for delivery or not. This is critical due to the distinction between primiparous and multiparous. Primiparous women have been those who have never given birth and will be hearing the information on BPCR for the first time as compared to multiparous women who would have listened to the information severally and, as such will be able to explain it better. It is common knowledge that childbirth for the first time is more complicated than subsequent ones. It can be said that multiparous preparation is less for birth than primiparous.

In identifying a place of delivery, 89% of the pregnant head potters had considered their preference while the other 11% were undecided. The result confirmed the importance of encouraging pregnant women to utilize ANC, access to health-facility is critical, and inadequate knowledge about the benefits of ANC is a concern.[24,26,27] Identifying a place of delivery and using a health care

facility is an essential component of maternal health as this could ensure safe and healthy births. It is essential to state that home delivery could increase the risk of maternal and neonatal mortality due to birth not being assisted by a skilled attendant, and this is a common practice among women of low socioeconomic status.

In this study, 68% of the pregnant head porters understood that money is required to pay for their delivery services and facilitate referral in case of complications. Inability to have money could deprive a pregnant woman of the opportunity to deliver in a health facility which can contribute to maternal and neonatal mortality, which is a common occurrence for women in low and middle-income countries. The finding of this study gives credence to a Kenyan context stressing the key role played by men in birth preparedness through financial support to their spouses. Moreover, the financial difficulties of a pregnant woman or her household are a barrier to complication readiness.[28] It is imperative to state that saving enough money towards childbirth is an intervention to improve access to health facility services especially attending antenatal care. Saving money is one of the most prevalent BPCR practices.

In terms of voluntary counselling and testing (VCT), 63% indicated their intention to go for it, whereas 17% was undecided, with 20% stating that they would not go for it. Counselling on complication readiness could play an important role in increasing the knowledge of pregnant head porters to bring about desirable health-seeking behaviour changes during pregnancy. Expectant mothers who received counselling could have a better knowledge of BPCR compared to those who did not. The coefficient of VCT was -0.552, which was significant; hence Ho_{10} must be rejected considering the inclusion of all other predictors in the model.

VCT signifies a moderate negative relationship with the marital status of the pregnant head porter. The association suggests that the more a pregnant head porter utilizes the VCT, the less she prepares for BPCR. It is of the essence to state here that a married pregnant head porter is likely to use VCT as a couple of decision making on pregnancy-related issues are more consultative than unilateral. It has a practical significance in that education and health awareness of HIV among the pregnant head porter could reduce or avoid mother to child transmission of HIV. Notwithstanding the insightful findings ascertained through this study, these findings cannot be generalized on the larger population due to the small sample size employed for the study.

CONCLUSION

Reduction of maternal mortality has become an explicit focus for all families, communities and nations. Considering the factors associated with the knowledge of BPCR among the pregnant head porters (it has been revealed that), their knowledge level on the importance of the role of the birth attendants in terms of BPCR was very high. The study found out that knowledge on BPCR significantly influenced the mode of delivery among the pregnant head porters. Age, parity, identification place of delivery, voluntary counselling and testing were among the significant predictors identified to impact factors influencing the practices of BPCR among the pregnant head porters. Birth preparedness and complication readiness and practices among the pregnant head porters were moderate despite their low level of education. The study suggests increased outreach programmes in the communities through public education, the promotion of regular antenatal attendance and instituting medical aid for pregnant women to help reduce any financial constraints in accessing healthcare. There is the need for every delivery to be done by a skilled birth attendant, essential obstetric and neonatal care should be accessible to address all complications of childbirth that cannot be managed by a skilled birth attendant.

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