



Socio-Demographic Determinants Of Knowledge On Primary Health Care Services Among Rural Women In Rivers East Senatorial District

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ABSTRACT

This study investigated the socio-demographic determinants of knowledge on primary health care (PHC) services among rural women in Rivers East Senatorial District. The research design adopted for this study was a descriptive research design. The population of the study consisted of fifty-three thousand, and forty-two (53,042) women attending primary health care centres in Rivers East Senatorial District. A multi-stage sampling procedure was adopted to select a sample size of five hundred and thirty-nine (539) respondents for the study. Data was collected using a structured questionnaire and analysis was carried out using SPSS version 25.0. Analytical tools such as percentage and Chi-square at 0.05 alpha level was employed. The result of the study showed that higher proportion of respondents aged 52-60 years (27.3%), with Master's degree (30.8%), married (23.8%), with four children (25.6%) and Christians had good knowledge of PHC services. However, the findings of the study showed that socio-demographic factors such as age ($p>0.05$), educational status ($p>0.05$), marital status ($p>0.05$), parity ($p>0.05$) and religion ($p>0.05$) had no statistically significant association with the knowledge of primary health care services among women in the study area. It was concluded that socio-demographic characteristics did not significantly determine knowledge of primary health care services. It was recommended among others that, periodic seminars on primary health education should be organized by public health nurses for women to enhance their knowledge of primary health care services.

Keywords: Determinants, Socio-demographics, Primary Healthcare

INTRODUCTION

Knowledge may not epitomize behavioural change or positive health outcome, but it can facilitate improvement in primary health care services utilization and desired health outcome can be achieved. According to Dixit and Bandhani (2019), primary health care services are not only making a difference on the local level, it is having an impact on health planning at the national and international levels. Primary health care (PHC) needs to be adapted to varying circumstances at local and national levels. Any country that establishes a solid basis for PHC both provides for the needs of its most vulnerable and needy populations and, at the same time, empowers its most "neglected resource" – women. Primary health care (PHC) relies heavily on the contributions of women (Dixit & Bandhani, 2019) thus, their socio-demographic characteristics must not be ignored in the perusal of knowledge about the services in PHC among these neglected resources.. One of such factors which cannot be overemphasized is education. Education according to Amaele (2010) is the development of the in-built potential of an individual to his/her own advantage and to the advantage of the society. Education is a central tool required to reduce the social, economic and psychological vulnerability of individuals especially women to health problems. Having higher education increased the chances of being knowledgeable. The study of Akhtar et al (2018) showed that there was a significant association between educational qualification and knowledge of women about prenatal care which is also a component of the primary health care services.

Maternal age could be an issue of public health concern because women of advanced maternal age experience higher rates of pregnancy related complications, obstetrical intervention, and severe maternal morbidity than younger mothers (Magawa, 2012) thus, having more awareness or knowledge about their primary health care issues. Age is strong epidemiological variable that influences certain health conditions in women. Both the younger and older age of women can be implicated for the knowledge of primary health care services. On the other hand, age in a way can be related to the number of children a woman has. Women having more children tend to visit or utilize the health care facilities more often than those having none because they, at one point or the other will need to use either the prenatal or postnatal services including immunization, family planning and treatment of infectious diseases. All these expose such women to the primary health care services by experience thus, increasing their knowledge of the primary health care services.

Marital status can in a way have an association with the knowledge of primary health care services among rural women. Marriage is a union between a man and woman that is legally binding. The support and assistance that a married woman may enjoy in seeking or utilization of health care services may not be the same for her unmarried counterpart. This is because an unmarried woman may feel some level of shame or shyness which may limit her frequency of visiting the primary health care facility for patronage thereby limiting the information she would have obtained about the services from the health care personnel. However, for the married woman, it may not be so as she may have more courage to visit and obtain the needed information about primary health care services thereby, increasing her knowledge of the primary health care services.

However, it has been argued that, both the socio-demographic characteristics and knowledge are inevitable in influencing primary healthcare services patronage among rural women. Women being the major users of PHC services due to their reproductive health care roles which in a patriarchal society like Rivers State is viewed as the sole responsibility of the women are to be targeted in any programme intended to heighten the knowledge of women on PHC as it is said that, one cannot use what he/she does not know. However, the knowledge of women on PHC has gone unraveled both by scholars and researchers, which is evident in the paucity of studies on knowledge of women on PHC services particularly in Rivers State. Therefore, this study was aimed at investigating the socio-demographic determinants and knowledge of primary health care services among rural women in Rivers East Senatorial District.

Primary health care services are grossly underutilized due to inadequate knowledge. Several awareness programmes aimed at boosting women's knowledge about health care services such as immunization and family planning has been embarked on by several organizations and there are several studies highlighting the utilization of primary health care services among women but, very few on the knowledge of women on these services. In as much as maternal health is concerned, primary health care services are inexorable yet, there is paucity of studies highlighting its knowledge in relation to the socio-demographic characteristics of women, which could have a strong influence on any health related issue, both by scholars and organizations in Rivers State. Furthermore, rural women are one group of people that need awareness about the primary health care services available as studies have shown a poor level of utilization of PHC services in the rural area which might be due to inadequate knowledge of these services and the benefits to them. Thus, this study investigated the socio-demographic determinants of knowledge about primary health care services among rural women in Rivers East Senatorial District.

Research Questions

The study provided answers to the following research questions:

5. What is the knowledge of primary health care services among rural women in Rivers East Senatorial District based on age?
6. What is the knowledge of primary health care services among rural women in Rivers East Senatorial District based on educational qualification?
7. What is the knowledge of primary health care services among rural women in Rivers East Senatorial District based on marital status?
8. What is the knowledge of primary health care services among rural women in Rivers East Senatorial District based on parity?

9. What is the knowledge of primary health care services among rural women in Rivers East Senatorial District based on religion?

Hypotheses

The following null hypotheses postulated were tested at 0.05 level of significance:

- Ho₁:** There is no significant association between age and knowledge of primary health care services among rural women in Rivers East Senatorial District.
- Ho₂:** There is no significant association between educational qualification and the knowledge of primary health care services among rural women in Rivers East Senatorial District.
- Ho₃:** There is no significant association between marital status and the knowledge of primary health care services among rural women in Rivers East Senatorial District.
- Ho₄:** There is no significant association between parity and the knowledge of primary health care services among rural women in Rivers East Senatorial District.
- Ho₅:** There is no significant association between religion and the knowledge of primary health care services among rural women in Rivers East Senatorial District.

METHODOLOGY

The research design adopted for this study was a descriptive research design with a population which consisted of fifty-three thousand, and forty-two (53,042) women attending primary health care centres in Rivers East Senatorial District. A sample size of 539 was determined for this study using Taro Yamane’s formula: $n = \frac{N}{1 + N(e)^2}$. Where n is the sample size, N is the population size, and e is the level of precision (5%). Applying the above, $n = \frac{53,042}{1 + (53,042 \times (0.05)^2)} = 399$. Adding 10% attrition rate = 10% of 399 = 39.9 = 439. The researcher added one hundred to the calculated sample size to reduce the error margin and for a better generalization of the findings thus, the sample size for the study was 539.

A multi-stage sampling procedure was used. The procedure involved three stages. At the first stage, the simple random sampling technique was used to select five (5) local government Areas out of the eight local government areas that made up Rivers East Senatorial District. At the second stage, the simple random sampling technique was used to choose one rural community in each of the local government areas selected. At the third stage, the simple random sampling technique was used to select one primary healthcare centre each in the selected communities and then the respondents were randomly selected from those health centres for the study. A structured questionnaire titled “knowledge of primary health care services questionnaire (KPHCQ)”, with a reliability coefficient of 0.63 was used for data collection. The administration of the instrument was done by a face to face delivery to the participants. Data collected were analyzed using Statistical Product for Service Solution (SPSS) version 23.0. Statistical tools used were: percentage and Chi-square at 0.05 level of significance.

RESULTS

The findings of the study are presented below:

Table 1: Summary of Chi-square test showing association between age and knowledge of primary health care services among rural women in Rivers East Senatorial District

Age	Knowledge of PHC services		Total	df	X ² -value	p-value	Decision
	Good	Poor					
25-32 years	63(21.9)	225(78.1)	288(100)	3	1.678	0.642	Not rejected
33-42 years	26(23.0)	87(77.0)	113(100)				
43-51 years	12(16.9)	59(83.1)	71(100)				
52-60 years	9(27.3)	24(72.7)	33(100)				
Total	110(21.8)	78(78.2)	505(100)				

*Not Significant

Table 1 showed the summary of Chi-square test of association between age and knowledge of primary health care services among rural women in Rivers East Senatorial District. The result showed that there was a no significant association between age and knowledge of PHC services (X²-value = 1.678,

df = 3, p > 0.05). Thus, the null hypothesis which states that there is no significant association between age and the knowledge of primary health care services among rural women in Rivers East Senatorial District was not rejected.

Table 2: Summary of Chi-square test showing association between educational status and knowledge of primary health care services among rural women in Rivers East

Marital Status	Knowledge of PHC services		Total	df	X ² -value	p-value	Decision
	Good	Poor					
NCE	15(19.5)	62(80.5)	77(100)	3	3.945	.267	Not rejected
HND	53(23.8)	170(76.2)	223(100)				
Degree	30(18.1)	136(81.9)	166(100)				
Masters	12(30.8)	27(69.2)	39(100)				
Total	110(21.8)	78(78.2)	505(100)				

*Not Significant

Table 2 showed the summary of Chi-square test of association between educational qualification and knowledge of primary health care services among rural women in Rivers East Senatorial District. The result showed that there was a no significant association between educational qualification and knowledge of PHC services (X²-value = 3.945, df = 3, p > 0.05). Thus, the null hypothesis which states that there is no significant association between educational qualification and the knowledge of primary health care services among rural women in Rivers East Senatorial District was not rejected.

Table 3: Summary of Chi-square test showing association between marital status and knowledge of primary health care services among rural women in Rivers East

Marital Status	Knowledge of PHC services		Total	df	X ² -value	p-value	Decision
	Good	Poor					
Single	32(17.9)	147(82.1)	179(100)	2	2.572	0.276	Not rejected
Married	76(23.8)	243(76.2)	319(100)				
Divorced	2(28.6)	5(71.4)	7(100)				
Total	110(21.8)	78(78.2)	505(100)				

*Not Significant

Table 3 showed the summary of Chi-square test of association between marital status and knowledge of primary health care services among rural women in Rivers East Senatorial District. The result showed that there was a no significant association between marital status and knowledge of PHC services (X²-value = 2.572, df = 2, p > 0.05). Thus, the null hypothesis which states that there is no significant association between marital status and the knowledge of primary health care services among rural women in Rivers East Senatorial District was not rejected.

Table 4: Summary of Chi-square test showing association between parity and knowledge of primary health care services among rural women in Rivers East Senatorial District

Parity	Knowledge of PHC services		Total	Df	X ² -value	p-value	Decision
	Good	Poor					
None	24(20.0)	96(80.0)	120(100)	7	1.188	.991	Not rejected
One	7(20.0)	28(80.0)	35(100)				
Two	29(22.1)	102(77.9)	131(100)				
Three	26(22.4)	90(77.6)	116(100)				
Four	10(25.6)	29(74.4)	39(100)				
Five	8(24.2)	25(75.8)	33(100)				
Six	5(21.7)	18(78.3)	23(100)				
Seven	1(12.5)	7(87.5)	8(100)				
Total	110(21.8)	78(78.2)	505(100)				

*Not Significant

Table 4 showed the summary of Chi-square test of association between parity and knowledge of primary health care services among rural women in Rivers East Senatorial District. The result showed that there was a no significant association between parity and knowledge of PHC services (X^2 -value = 1.188, $df = 7$, $p > 0.05$). Thus, the null hypothesis which states that there is no significant association between parity and the knowledge of primary health care services among rural women in Rivers East Senatorial District was rejected.

Table 5: Summary of Chi-square test showing association between religion and knowledge of primary health care services among rural women in Rivers East Senatorial District

Religion	Knowledge of PHC services		Total	df	X^2 -value	p-value	Decision
	Good	Poor					
Christianity	75(22.0)	266(78.0)	341(100)	2	.034	.983	Not rejected
Islam	28(21.2)	104(78.8)	132(100)				
Others	7(21.9)	25(78.1)	32(100)				
Total	110(21.8)	78(78.2)	505(100)				

*Not Significant

Table 5 showed the summary of Chi-square test of association between religion and knowledge of primary health care services among rural women in Rivers East Senatorial District. The result showed that there was a no significant association between religion and knowledge of PHC services (X^2 -value = 0.034, $df = 2$, $p > 0.05$). Thus, the null hypothesis which states that there is no significant association between religion and the knowledge of primary health care services among rural women in Rivers East Senatorial District was not rejected.

DISCUSSION OF FINDINGS

The result showed that, good knowledge was found more among those aged 52-60 years (27.3%) followed by those aged 33-42 years (23.0%), 25-32 years (21.9%) and those aged 43-51 years (16.9%). It can be deduced from the findings of this study that good knowledge of primary health care was found more among the older respondents. This finding may not be surprising given that there is the possibility that those who were older gained the knowledge about primary health care services due to the numerous experiences they have had much more than the younger respondents. However, this finding was at variance with that found in Vietnam which showed a good knowledge of primary health care among respondents of which their mean age was 23.1 years (Bao & Minh, 2014). This variation is explainable by the fact that the present study was carried out among medical students. These respondents were majorly very young people. It is a known fact that you can hardly see any one in old age going to school to study medicine because it is highly demanding, whereas the respondents in the present study which was carried out in a rural area constituted majorly of older women. As clearly many young people always prefer staying in the city leaving the rural area more populated with the older people.

Another explanation that could be given for the variation could be the difference in the study location. The finding of this study is not in keeping with that of Akhtar et al. (2018) which was carried out in Lahore which showed that more than half of the respondents had good knowledge of primary health care services among which majority were of the younger age. This variation might be due to the difference in the study location, study population and sample size. The study of Akhtar and colleagues had only pregnant women as the population and smaller sample size which was less than half the sample size of the present study. The finding of this study is also not in agreement with that of Dixit and Bandhani (2019) whose study on women's knowledge regarding primary health care services in Garhwal region of Uttarakhand showed that majority of the respondents were young people among which more of the respondents (65%) had knowledge about the primary health care services provided. This variation might be due to the difference in the study location, study population and sample size. The study of Dixit and colleagues had smaller sample size less than half the sample size of the present study.

The result showed that, good knowledge of primary health care services was found more among those who had Masters (30.8%) followed by those who had HND (23.8%), NCE (19.5%) and those with

first degree (18.1%). Thus based on educational status, respondents with higher educational qualification such as Masters were more knowledgeable about primary health care services. This finding is expected thus not surprising because it is widely believed that education enhances access to a wide range of information as it creates opportunities for the enlightenment of an individual about vast issues of life including primary health care thus, the findings. The finding of this study corroborates that of Akhtar et al. (2018) which was carried out in Lahore which showed that more of the respondents had higher educational level and that more than half of the respondents had good knowledge of primary health care services. This similarity found might be due to the fact that in recent times, education is helping to fill the gap in knowledge including health care. The finding of this study is also similar to that of Afaya et al. (2020) which was carried out in Ghana showing that, women who attained basic school education were 4.47 times more likely to have good knowledge of ANC compared to those with no education. The tested hypothesis on this showed that there was no significant relationship between knowledge of primary health care services and educational status.

This finding is at variance with the result of the tested hypothesis in the study of Akhtar et al. (2018) which showed that there was a significant association between educational qualification and knowledge of women about prenatal care which is also a component of the primary health care services. This variation might be attributed to the difference in the study settings in terms of location, population and sample size. The finding of this study is also not in agreement with that of Dixit and Bandhani (2019) whose study on women's knowledge regarding primary health care services in Garhwal region of Uttarakhand showed that majority of the respondents were illiterates and with lower educational level yet the knowledge about the primary health care services provided among the respondents was good. This variation might be due to the difference in the study location, study population and sample size. The study of Dixit and colleagues had smaller sample size which was less than half the sample size of the present study.

The result showed that, good knowledge of primary health care services was found more among those who were married (23.8%), than those who were single (17.9%). Thus based on marital status, the married women were more knowledgeable about primary health care services than the single respondents. Marital status can in a way have an association with the knowledge of primary health care services among rural women. Marriage is a union between a man and woman that is legally binding. The support and assistance that a married woman may enjoy in seeking or utilization of health care services may not be the same for her unmarried counterpart. The finding of this study is also similar to that of Afaya et al. (2020) which was carried out in Ghana that, not being married and divorced women were 75% and 91% respectively less likely to have good knowledge regarding ANC [OR = 0.25, (95% CI: 0.13–0.51), $p < 0.001$; OR = 0.09, (95% CI: 0.03–0.26), $p < 0.001$]. This is because unmarried woman may feel some level of shame or shyness which may limit her frequency of visiting the primary health care facility for patronage thereby, limiting the information she would have obtained about the services from the health care personnel however, for the married woman, it may not be so as, she may have more courage to visit and obtain the needed information about the primary health care services thereby, increasing her knowledge about the primary health care services.

The result showed that, good knowledge of primary health care services was found more among Christians (22.0%) followed by Muslims (21.1%). Thus based on religion, respondents who were Christians were more knowledgeable about primary health care services than the Muslims. This finding might be explained by the fact that the study was carried out in a Christians dominated area. The tested hypothesis on this showed that there was no significant relationship between knowledge of primary health care and religion. The finding of this study is also similar to that of Afaya et al. (2020) which was carried out in Ghana showing that, respondents who belonged to the Islamic religion were 85% less likely to have good knowledge on ANC which is one of the components of primary health care services compared to respondents who were Christians [OR = 0.15, (95% CI: 0.08–0.27), $p < 0.001$]. In other words, more Christians than Muslims were knowledgeable about primary health care services focused on maternal health care. It is worthy of note that, adequate knowledge can have a positive influence on the use of indigenous resources such as traditional birth attendants for maternal health care as a component of primary health care services. This is necessary given that, many rural women prefer their primary health care services including maternal and infant care and treatment of infectious diseases attended to by traditional birth attendants. This is because, knowledge can enhance

the awareness of these indigenous health care personals on various primary health care services including the maternal health care of women to help increase their knowledge on risk factors during pregnancy, hygiene, and good postpartum care.

CONCLUSION

Based on findings of the study, it was concluded that the socio-demographic characteristics of rural women in Rivers East Senatorial District do not have a strong influence on their knowledge of primary health care services. Socio-demographic characteristics are not key players in the knowledgeability of rural women about primary health care services.

RECOMMENDATIONS

Based on the findings of the study the following recommendations were made:

- 1 Public health nurses should organize periodic seminars on primary health education for women to enhance their knowledge of primary health care services.
- 2 All rural women, irrespective of their age, educational status and marital status should endeavour to develop their knowledge of primary health care services by constantly participating in the primary health care practices.
- 3 Ministry of health and programme developers should organize training and retraining programmes for health personnel to adequately educate women using health education materials and to technically carry out the procedures.
- 4 Primary health care workers should encourage rural women to have a good knowledge of primary health care services and their health status by involving them in the primary health care services delivery in the rural areas.

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