

AWARENESS AND ATTITUDE TOWARDS HPV AND ITS VACCINES AMONG MARKET WOMEN IN BODIJA MARKET, IBADAN.

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ABSTRACT

BACKGROUND

Cervical cancer, commonest among cancers of the female genital tract continued to pose major challenge to women of reproductive age in developing countries though infection by its causative agent, human papilloma virus (HPV) is preventable. This study aimed to assess awareness and attitude of market women concerning HPV and its vaccines in prevention of cervical cancer.

MATERIALS AND METHODS

A cross sectional study involving 329 market women, using multistage sampling technique. Instrument was an interviewer-administered questionnaire on socio-demographic characteristics, knowledge and awareness of HPV and its vaccine, sexual history and attitude towards HPV vaccines. Data analysis was done using SPSS version 20.0 with statistical significance level set at $p < 0.05$.

RESULTS

Mean age of respondents was 29.49 ± 3.65 years. All respondents were sexually active with majority (94.8%) having multiple sexual partners. Awareness of HPV vaccine and Pap smear test was among 1.2% and 9.4% respectively. Attitude towards HPV vaccination was good in 304 (92.4%) with 302 (91.8%) willing to take the HPV vaccines. There was significant association between attitude towards HPV vaccine and willingness to take HPV vaccine ($\chi^2 = 111.8$, $p < 0.001$).

CONCLUSIONS

Awareness of HPV and its vaccines is low among market women in our community. Policies and actions to step up information dissemination are urgently needed in order to stem the scourge of cervical cancer in our society.

KEYWORDS: Awareness, Market women, Ibadan, HPV vaccines

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INTRODUCTION

Worldwide, cervical cancer is one of the common cancers among women and it has been considered as one of the greatest threats to women's lives¹. Every year, cancer causes almost fifty-one million deaths among women out of which cervical cancer is the third commonest and is responsible for almost 9% of the new cancer cases and 8% of the total cancer death^{2,3}.

Unfortunately, 85% of cervical cancer occurs in the low and middle income countries⁴. In 2008 alone, proportion of women who died from cervical cancer was 275,100 globally and more than 85% of them occurred in developing countries². Human papillomavirus (HPV) has already been documented as the most common sexually transmitted infection throughout the world and is also primary the cause of cervical cancer⁵. About 50% – 80% of women who are sexually active have had the HPV infection at least once in their lifetime⁵.

An efficient screening program has contributed to significant reduction of cervical cancer in many developed nations. However, the uptake of screening is low ranging from 0.4% – 20.2% in developing countries⁶. Reasons given for the low uptake include

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low educational level, low acculturation, cost, unavailability and inaccessibility to services as well as lower cognitive scores with social, psychological and demographic factors^{5,7-9}.

In most developing countries, knowledge of women about cervical cancer and screening tests is still very low. In a study conducted in the Southwestern part of Nigeria, awareness of HPV virus amongst women between 20 and 65 years was about 15% while over 50% of the population had no access to cervical cancer screening¹¹.

The present approach to prevention of cervical cancer is directed towards either immunization against HPV infection before coitarche or screening for the presence of pre-invasive lesions of the cervix¹². HPV vaccination may prevent HPV acquisition, regression of cervical dysplasia or warts, condylomata and high-grade squamous intraepithelial lesions thus reducing the morbidity and mortality related to HPV infection and cervical cancer¹³. In general, improvement of existing health services, awareness about cervical cancer, accessibility to effective HPV vaccination and screening programs could reduce the burden of cervical cancer among women³.

Market women form an essential economic main force in the nation and in this manner, it is imperative to know whether market women have adequate information about HPV and HPV vaccination¹⁴.

To our knowledge, very few previous studies have evaluated the attitude and awareness about HPV and HPV vaccine among market women of reproductive age. This study was therefore conducted to assess awareness and attitude of market women in Ibadan, Nigeria towards HPV vaccine and its uptake.

MATERIALS AND METHODS

This was a questionnaire based cross-sectional study conducted between January and March 2015 among market women aged 18 years and above in the largest cosmopolitan open market located in the heart of Ibadan.

Bodija Market represents various socio-demographic groups of female traders in Ibadan. It has 15 blocks which was divided into 3596 stalls with some other traders displaying their wares by the roadside. Three of the blocks were randomly selected and female traders in every 4th stall, who satisfied the inclusion criteria, were selected using systematic random sampling. Only consenting female traders were interviewed and participants were randomly selected where there is more than one eligible female trader. A minimum

sample size of 329 is expected to give the study significant results and power of 80%.

The instrument was an interviewer-administered questionnaire which was validated and translated to the local language. It consists of 42 open and close ended questions and was divided into five sections: Socio-demographic characteristics of the participants, Knowledge and awareness of HPV, sexual history, knowledge of HPV vaccine, and Attitude towards the vaccine. In assessing knowledge, points were allocated to correct responses and the total points were converted to percentages. Respondents with less than 30% were regarded as having poor knowledge. Data were analyzed using SPSS version 20.0. Tests of significance were done with p-value set at <0.05 while associations were determined using chi-square statistics. Ethics approval was obtained from Oyo state ethics committee.

RESULTS

In this study, we aimed to determine the level of awareness of market women in our environment to HPV and its vaccines. We interviewed 329 market women and their social demographic characteristics are presented in table 1. The mean age of respondents was 29.5±3.7 years with majority having secondary level of education and most of them are married. Only 31(9.4%) have ever heard of Pap smear screening test for cervical cancer and only 4(1.2%) had ever heard of HPV out of which only 1 had a good knowledge. Almost all 30(96.8%) who have heard of Pap smear screening had the hospital or healthcare provider as their source of information as shown in table 2. All the respondents are sexually active with 312(94.8%) currently having more than one sexual partner. None of our respondents has ever had Pap smear test done nor had vaccination against HPV.

About half of the respondents, 164 (49.8%), were sexually-active by age 18 years and 9(2.7%) reported previous history of sexually transmitted infections (STIs) as presented in table 3.

Table 4 shows that at the current price of the HPV vaccine and if the women are found eligible, only 82(24.9%) will be willing to take the vaccine but with reduction in cost, 302 (91.8%) of the respondents indicated their readiness to be vaccinated.

A significant association was found between attitude towards vaccination and willingness to take HPV vaccination ($\chi^2=111.8, p<0.001$).

DISCUSSION

The study was conducted to assess the awareness and attitude of market women toward HPV vaccination. The findings from this study demonstrated a very low awareness about HPV vaccination among market women in our community. This value is far lower than 19.7% and 68.6% reported in Lagos and Kaduna respectively among similar group of women apparently because of the cosmopolitan nature of these two towns^{14,15}.

The study further showed that awareness of Pap smear was significantly higher than that of HPV vaccination. Although the media is a good means of dissemination of information, none of the women in the study indicated to have received information from the media. This calls for media training and education on HPV vaccination¹². Findings from previous studies corroborate the findings from this study where most of the respondents had little or no awareness of HPV^{14,16,17}. Those who were aware reportedly received the information on HPV from hospitals and health care providers. Therefore, low awareness can also be related to poor health-seeking behaviour.

In consideration to the association of early coitarche, low socio economic status and multiple sexual partners

to prevalence of cervical cancer, it is pertinent to note that more of our respondents are already at higher risks. There is therefore an urgent need to ensure an effective cervical cancer screening program for these women.

The study found that low awareness has little or no impact on respondents' attitudes towards HPV vaccination. The study also revealed that respondents are well acquainted with the relevance and importance of vaccination. However, there is more to do as far as sensitization and awareness are concern.

CONCLUSION

A high proportion of the female traders in Bodija Market, Ibadan were yet unaware of HPV and HPV vaccination, despite their high risk sexual behaviour. In waging war against cervical cancer, additional efforts need to be put into educating the public about its prevention. It is also expedient for Government and Non-Governmental Organizations including donor agencies to ensure that HPV vaccination is readily available and accessible to women in an affordable manner.

Table 1: Socio-demographic characteristics of participants

Variable	Frequency (329)	Percent
Age		
15-24	34	10.3
25-34	268	81.5
35-44	27	8.2
Mean \pm SD	29.49 \pm 3.65	
Marital Status		
Single	23	7.0
Married	298	90.6
Separated	7	2.1
Widowed	1	0.3
Educational status		
Primary and below	82	24.9
Secondary	218	66.3
Post-secondary	29	8.8
Parity		
0	22	6.7
1	61	18.5
2	107	32.5
3	86	26.1
4	40	12.2
>4	13	4.0

Table 2: Awareness of HPV and awareness of Pap smear

Variable	Frequency (329)	Percent
Ever heard of HPV		
Yes	4	1.2
No	325	98.8
Knowledge of HPV (n=4)		
Poor	3	75.0
Good	1	25.0
Ever heard of pap smear		
Yes	31	9.4
No	298	90.6
Source of information of pap smear (n=31)		
Healthcare provider/hospital	30	96.8
Family/friend	1	3.2

Table 3: Sexual history of participants

Questions	Frequency	Percent
Had sexual intercourse before		
Yes	329	100
No	0	0
Age at first sexual intercourse		
< 18 years	164	49.8
	165	50.2
Number of sexual partners		
1	17	5.2
2	121	36.8
3	122	37.1
4	43	13.1
>4	26	7.9
Ever contacted STI?		
Yes	9	2.7
No	320	97.2

Table 4: Willingness to take and attitude towards HPV vaccination

Variable	Frequency	Percent
Willingness to be vaccinated against HPV?		
Yes	302	91.8
No	27	8.2
Attitude towards HPV vaccine		
Good	304	92.4
Poor	25	7.6

If HPV vaccine is free or at a lower cost, would want to be vaccinated?		
Yes	306	93.0
No	23	7.0
Feel embarrassed to be seen taking vaccine		
Yes	11	3.3
No	318	96.7
Would you let your 9-14 year old sibling take the vaccine		
Yes	309	93.9
No	20	6.1
The cost is ten thousand naira, would you get the vaccine at this price		
Yes	82	24.9
No	247	75.1

	Attitude		Total	Chi Square	Pvalue
	Good(%)	Poor (%)			
Willingness to take HPV vaccination					
Yes	293 (97.0)	9 (3.0)	302	111.80	<0.0001
No	11 (40.7)	16(59.3)	27		
Total	304(92.4)	25(7.6)	329		

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