Communication Preferences for Human Papillomavirus and Other Health Information in Gwagwalada, Federal Capital Territory, Nigeria

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Abstract

Introduction: Primary prevention of infection-associated cancers such as cervical cancer includes deployment and acceptance of vaccines, which is centered on educating people, intervention program designs, and community inputs. Such health promotion programs in Africa have suffered setbacks through inadequate attention to the peculiarities of context. It is, therefore, important to ascertain available health communication resources and preferences. **Objective:** The objective of this study is to ascertain the knowledge of human papillomavirus (HPV) and cervical cancer, sources and communication preferences of health communication among the respondents. **Methods:** Four hundred 15–45-year-old patients, were selected by random sampling technique. A questionnaire was used to document their biodata, knowledge of HPV and cervical cancer, and health communication resources and preferences. Focus group discussions (FGD) was used to supplement the quantitative data. **Results:** The knowledge of HPV and cervical cancer was poor compared to 60% for HIV/AIDs. HPV was not considered sexually transmitted by the majority of respondents. The FGD revealed misconceptions that included HPV infection as "punishment from God," "spiritual attacks from enemies," "possibility of transmission through inheritance, poor hygiene, or mosquito bite." The preferred channel of health communication about HPV and cervical cancer was through religious associations, 30%; electronic media, 28.5%; traditional rulers, 12.2% and social clubs/ ethnic associations, 11.5%. The respondents recommended the use of communal methods such as town crier, ethnic associations, and traditional leaders for health communication. **Conclusion:** Respondents had poor knowledge of HPV and cervical cancer. Context tailored intervention programs, using their preferred means of health communication could improve knowledge and practice toward these conditions.

Keywords: Cervical cancer, health communication, human papillomavirus, Nigeria, vaccine

INTRODUCTION

Factors that endanger maternal health in Nigeria include poverty,^[1] sexually transmitted diseases,^[2] poor maternal health services,^[3] and harmful traditional practices^[4] among others. There is, however, an emerging concern among medical practitioners and researchers that cervical cancer has become one of the major causes of death among Nigerian women resulting in a vigorous media campaign for women to screen for cervical cancer,^[5] for early detection, and thus, prevention of its fatal consequences. Already, the National Cancer Control Plan for the period 2008–2013 target outputs was largely undermined by the paucity of epidemiological data in the general population.^[6] Such is not the case in developed countries where advances have been made in early case identification, prevention, and control using epidemiological

Access this article online					
Quick Response Code:	Website: www.njgp.org				
	DOI: 10.4103/NJGP.NJGP_16_17				

data.^[7] However, despite the apparent advances in cancer research and control in the United States, for example, there was low level of awareness of human papillomavirus (HPV) as 2% of a national sample named HPV as a sexually transmitted disease, and less than this ever heard of it as reported by Friedman and Shepherd.^[8] Thus, even there, an intensive public awareness campaign to bridge the knowledge gap is advocated.

So far, most health promotion and illness prevention programs in Africa have suffered serious setbacks and incurred huge

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How to cite this article: Jamda MA, Nnodu OE, Lawson L, Adelaiye RS, Zamani AE. Communication preferences for human papillomavirus and other health information in Gwagwalada, Federal Capital Territory, Nigeria. Niger J Gen Pract 2018;16:1-5.

financial costs because they have not paid attention to the peculiarities of the context in which they operate.^[9] In addition to the need to find out how much people know about disease conditions, their attitudes toward these diseases, and prevailing practices; it is pertinent to identify their resources and preferences for behavior change communication. This approach is more pertinent in sexual and reproductive health to reduce morbidity and its attendant complications. Many authors have observed that the counseling services offered in sexual and reproductive health clinics benefit the only population that have access to and can afford the services^[10] resulting in a dearth of sexually transmitted infection (STI) intervention services at the community level. Whereas, a few development partners such as the Society for Family Health, COMPASS, and CEDPA have packaged and sponsored Information Education and Communication (IEC) programs on reproductive health, especially on the prevention of STIs, HIV/AIDS, and utilization of services, not much have been reported on the overall impact of these efforts. In the meantime, opportunities for treatment at the primary health-care centers in this respect are virtually nonexistent.[11]

HPV, the disease agent strongly associated causation of cervical cancer is still largely a myth even among some health-care practitioners in Africa. It is virtually unknown in the local communities. As such, the health problems that it breeds are ascribed to witchcraft, malevolent forces, or harmful cultural practices.^[12] This calls for early sensitization and preparation for the introduction/expansion of HPV vaccines in adolescent females; and for older women, to screen for cancer and its precursor lesions. Social research has revealed that the tradomedical practitioners occupy a primary position in the career path of patients in Africa. They are usually the first point of call for help before patients visit hospital; and they remain a point of reference while they seek orthodox health care until the desired outcomes are achieved.^[13]

Whereas, a lot of work has been done on health-seeking behaviors of Nigerians for health-related problems, not much is known about their resources for health communication, their conceptions of disease entities and their preferences for intervention. The current study considers the increasing threat to maternal health by the HPV, and the need for a novel cost-effective and efficient approach to communicate with local communities for positive behavior change outcomes. It seeks, therefore, to present a preliminary descriptive report of the health communication preferences of sexually transmitted diseases and HPV of semi-urban and rural population in Gwagwalada Area, Council of Abuja, Nigeria.

METHODS

This study was conducted in Gwagwalada, a rapidly growing urban center, which is about fifty km from the Federal Capital Territory (FCT) city of Abuja. Gwagwalada is a university town, which also draws its residents from civil servants working in the FCT agencies and businesses. It has several public and private primary health care centers, missionary health facilities such as the St. Mary mission hospital, and the area council owned Township Comprehensive Health Center that provide secondary care. University of Abuja Teaching Hospital, serves as a referral center to these facilities (mentioned above).

This study employed questionnaire-based quantitative descriptive cross-sectional design, complemented by focus group discussions (FGD) among various ethnic and religious groups in the community. The four FGD groups involved in the study were Giri community (comprising Gbagyi, Bassa, Hausa, and Yoruba), Muslims, Catholics, and Protestants/Pentecostals. Eight participants per FGD group were selected per group. FGDs took place at the Giri village primary school, Hajj Camp primary school, Gwagwalada, and the last two beside Town hall Gwagwalada. The audio of the FGD was transcribed and compared with the notes taken by the secretary for consistency and ensuring there is no error. Data were then analyzed based on the identified thematic areas.

A calculated minimum sample size of 400 participants was arrived at for the quantitative component. Respondents for the quantitative component were recruited from their households using simple random sampling by consecutive selection. One respondent was selected per household and where there is more than one eligible respondent, one was selected by balloting. The inclusion criteria in respondent selection were aged 15–45 years, lived in the community for at least 1 year, and consent/assent (for those <18 years of age). Respondents were excluded if they were critically ill or cannot communicate in English language or other main languages selected for the study of FCT, for which interpreters were available. The other component of the data was published in African Journal of Reproductive Health.^[14]

Quantitative data were collected using a 70-item semi-structured, interviewer-administered questionnaire. The tool was used to obtain biodata of respondents and information on the health communication resources available in the community, relationship between HPV and cervical cancer and preferred mode of communication for positive behavior change regarding these health conditions. Field assistants were trained to administer the instrument.

Ethical considerations

There was no significant physical risk to the respondents except for the discomfort to participants regarding the sexual themes in the questionnaire during the interview. Conducting the interviews in private locations minimized the discomfort to respondents. Permission was sought from the school's authorities and community leaders, and consent was obtained from all respondents at the appropriate time. In addition, assent was obtained, following consent, from minors that were enrolled in the study. Respondents were assured of the confidentiality of all information volunteered through secured handling of filled questionnaires and nondivulgence of information except for research purposes. Identification codes were maintained to avoid tracing responses to the respondents. Participants were informed that the outcomes of the study will be communicated to them in addition to sharing health experts and authorities for possible input in health planning with the potential to improve their health service delivery.

RESULTS

The response rate was 100%. Participants between 15 and 19 years constituted 50% (200) followed by those aged 25–29 years, 13% (52), then persons aged 20–24 years were 11% (44). Nineteen percent (76) of the respondents had no formal education, 37.7% (151) had completed primary education, and 22.3% (89) had a secondary school, whereas 14.8% (59) had postsecondary education. About half (193) of the respondents were never married while 37.5% (150) were married. Among the 40% (160) that were married, 106 (89%) were the only wives of their husbands while 54 (13.4%) are in polygamous marriages. A total of 48 (12%) participants got married at or before the age of 18 years as shown in Table 1.

About knowledge of HPV, 33 (8.2%) respondents were aware of HPV and were through health-care workers. Sixteen (4%) reported that HPV causes cervical cancer.

About channels of communication of general health information, the following channels of communication were noted among the respondents; 112 (28%) films and video, 110 (27.5%) posters/fliers, 83 (20.7%) traditional healers, 42 (10.5%) ethnic associations, 22 (5.5%) cooperative and other economic groupings, and 31 (7.7%) town criers. However, the preferred channels of health communication in the cohort were 120 (30%) religious organizations, 114 (28.5%) electronic media, 49 (12.5%) traditional rulers, and 46 (11.5%) through social clubs/associations as shown in Table 2.

There was a substantial involvement of respondents in club/ association activities. Reported club memberships were academic, health, sports, economic, religious, gender and ethnic-related. The highest proportion of participants belonged to sexuality-related club 11 (2.7%) while 10 (2.5%) belonged to drama and debating clubs as shown in Table 3.

The distribution (from multiple responses) of access to mass media among respondents was as follows: 294 (73.1%) radio, 300 (74.6%) television, 134 (33.3%) mobile phones, 96 (24%) newspapers, 78 (19.4%) magazines, and 64 (15.9%) billboards.

About utilization of health facilities, the first point of call to access health care was public health facilities at primary level 178 (44.5%), private clinics 75 (18.7%), pharmacies/chemists 88 (22%), and traditional healers 40 (10%).

The preferred means of communication about HPV among the respondents in the communities were religious associations 30% (120), electronic media 28.5% (114), traditional rulers 12.2% (49), social clubs/associations 11.5% (46), and

Table	1:	Sociodemographic	characteristics	of	participants
(n = 40))))				

Characteristics	Frequency (%)			
Age (years)				
15-19	200 (50.0)			
20-24	44 (11.0)			
25-2	52 (13.0)			
30-3	37 (9.20)			
35-3	34 (8.50)			
>45	33 (8.30)			
Marital status				
Married	150 (37.5)			
Divorced/separated	8 (2.00)			
Cohabiting	2 (0.50)			
Widowed	3 (0.75)			
Never married	193 (48.3)			
Educational status				
No formal education	76 (19.0)			
Quranic education	25 (6.20)			
Completed primary school	151 (37.7)			
Completed secondary education	89 (22.3)			
Postsecondary education	59 (14.8)			
Source: Original from research data				

Source: Original from research data

Table 2: Channels of communication in the community						
Channel	Existing, frequency* (%)	Preferred, frequency* (%)				
Religious settings	Nil	120 (30)				
Communal methods	31 (7.8)	19 (4.8)				
Traditional healers	83 (20.8)	49 (12.2)				
Paper media	110 (27.5)	10 (2.5)				
Electronic media	112 (28)	114 (28.5)				
Clubs/associations	64 (16)	46 (11.5)				
Others	Nil	7 (1.8)				

*Multiple response. Source: Original from research data

Table 3: First health-care service point of call among participants

Career path	Frequency (%)
Traditional healers	40 (10.0)
Traditional birth attendants	10 (2.50)
Patent medicine store/pharmacy	88 (22.0)
Government-owned hospitals	178 (44.5)
Private hospitals	75 (18.75)

Source: Original from research data

communal methods 4.8% (19). The remaining respondents did not respond. Similar preference pattern for media of communication was reported for STDs generally.

Focus group discussion result

About their beliefs toward HPV, the community members consider STIs including HPV as "punishment from God" or "spiritual attacks from enemies" but that it could also be inherited or result from poor hygiene and/or mosquito bite. The

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community, however, reported that they could be prevented by the traditional way such as use of "magun"– a traditional method of preventing usually wives from having extramarital sexual relations – with a charm.

The community also believed poverty push ladies to bad sexual behavior, and thus contracting infections, by succumbing to enticement by older men with money.

Belief that STIs should be "treated at the herbal places rather than orthodox health facilities" as "hospitals do not have cure for curses and spiritual attacks," for protection one should watch out for (avoid) actions that attract "curses." It was also reported "to prevent STIs women should not be promiscuous."

On treatment modalities, the community belief "traditional medicine in the form of herbs is preferred to orthodox medicine for treatment of ailments. And within the orthodox medicine, the community members prefer private health facilities to public due to relatively shorter waiting time" according to the FGD participants.

DISCUSSION

This study established that small proportion of respondents (8.2%) was aware of HPV and much less than that had knowledge of its causal relationship with cervical cancer, though 60% had significant knowledge of HIV/AIDs and other STIs. This is probably as a result of widespread HIV/AIDS and STIs awareness campaigns and intervention programs in the communities. This implies the channel of health communication used for HIV/AIDs and other STIs education that led to the high level of knowledge of the diseases in the community is effective. However, the health communication probably had little or no content on HPV and cervical cancer. Thus, there is a dire need for health education about HPV infection, cervical cancer and its prevention either separately or as part of the campaign for HIV/AIDS and STIs in Gwagwalada and other parts of FCT. The channels used for HIV/AIDs and STIs awareness creation that still exist in the community, were religious associations, 30%; electronic media, 28.5%; traditional rulers, 12.2%, and social clubs/ethnic associations, 11.5%. They could be utilized to create awareness about HPV and cervical cancers since their use is believed to have contributed to the significant increase in knowledge of HIV/AIDs and STIs among 60% of women in the community. These methods could be easily adapted to HPV and cervical cancer education in the community because they are both transmitted through sexual routes. More so that most of them were the preferred channels of health communication reported by the respondents.

The positive outcome of HIV/AIDS and other STIs health campaigns reveals that the effect of intensive mobilization, sensitization, and well-planned behavior change communication could yield good results for HPV and cervical cancer awareness and communication.

Mattie^[15] has demonstrated the efficacy of health education in health promotion and disease prevention in all human societies.

Health education that would affect a positive and long-lasting behavior change has been described as requiring an effective communication strategy, one that relates to the situation and worldview of the recipients.^[16] Thus, it is important that the preferred channels of health communication of the respondents are used in communicating health information to them. In addition, it should utilize cultural symbols and community-specific preferred media of social transaction.

Public health facility utilization in the study site was 44.5%. This is a new dimension in the health-seeking behavior of Nigerians. Despite the unimpressive utilization of orthodox health-care facilities, among the respondents, there seems to be a reduced primary consideration for traditional medical consultation whose patronage was only 10%. In place of traditional healers, consultations were to pharmacies/patent medicine stores/chemists (22%). The previous studies have reported a tendency by Nigerians to seek help from traditional healers before attending orthodox health-care facilities.^[17,18] It may be plausible to argue that the nature of disease determines the choice of where to seek health care such that what obtains for STIs, and other medical conditions may not apply for other diseases. Whatever the case, the study provides guidance on the primary channels of care to target for IEC activities on HPV and cervical cancer.

The preferred channels of communication regarding HPV and cervical cancer among the respondents were religious organizations, electronic media, traditional rulers, and social/ethnic associations. That traditional rulers were the second most preferred channels of health communication reaffirmed the importance of traditional institutions in Nigerian health-care delivery system. Traditional rulers were regarded as gatekeepers.^[19] The people expect these leaders to assess all new ideas and agents to be introduced into the community with the view to guide them on what to accept or not. Usually what happens at the community level is, once contact has been made with traditional rulers, they in turn invite leaders of ethnic associations for discussions leading to eventual dissemination to the entire community. The finding that the communication channel preferred by the respondents after traditional rulers was ethnic clubs corroborates this fact. The success or otherwise of health campaigns on HIV/AIDS, tuberculosis, and polio among others had been attributed to the quality of strong advocacy programs at the community level.^[20] Thus, we anticipate that this will work for HPV and cervical cancer prevention as well.

The mass media also had fair acceptance as a means of health communication. Participants in the FGD emphasized this strongly, due to its wider reach and ease of repetitions, which serve as reminders. They preferred to be reached through the radio as not many people have televisions. Other preferences indicated by participants in the FGD were outreaches, community dialog, town criers, cooperative and market groups/ associations (during their scheduled meetings), drama, film shows and distribution of IEC materials, especially in the local languages. These findings indicate that a multimedia communication approach would be the most effective means of sensitizing community members about the HPV, cervical cancer, and other health issues.

CONCLUSION

We noted a high level of knowledge of STIs among respondents, which is attributable to the successful HIV/AIDs campaign programs and services in the community. These programs had utilized the preferred channels of health communication in the cohort – to achieve a high level of knowledge among 60% of the community. However, the respondents preferred health communications through religious organizations, electronic media, traditional rulers, and social clubs/associations. We, therefore, feel that information about HPV and cervical cancer, which takes cognizance of the communication preferences of community members, will achieve greater results.

There is an indication that the health career path for reproductive health problems for Gwagwalada residents starts with public health facilities before pharmacies or patent medicine stores as opposed to information from other parts of Nigeria regarding other medical conditions which indicated that traditional healers were first point of call. Therefore, a well-planned and implemented health communication and education program will succeed as most of the respondents indicated preference their community leaders and the mass media to inform them about HPV, cervical cancer, and other reproductive health issues. However, it is important that messages to be disseminated through all media should fulfill the objectives of factual information on the pathogenesis of disease, accurate portrayals of the risk of infection, differentiate between different STIs and honesty in accepting the limitation of knowledge and intervention.^[20] This principle should guide the future efforts at developing new behavior change communication materials.

Acknowledgment

We thank Zankli Medical Centre for the financial support, the women group, various ethnic associations, traditional and religious leaderships that mobilized the participants, and the participants for their cooperation during the study. We also appreciate the support we got from the principals of the schools visited and other persons that supported the community entry.

Financial support and sponsorship

This study was financially supported by Zankli Medical Centre, Abuja, Nigeria.

Conflicts of interest

There are no conflicts of interest.

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