Original Article

Knowledge About The Screening of Cervical Cancer for Its Early Detection Among Women of Reproductive Age Group in Dhaka City

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Abstract

Background: Cervical cancer is one of the main reasons for the death of women's in the world. It is a major public health problem and it is the second most common cancer in women worldwide which is the leading cause of deaths of women in developing countries. Proper knowledge about the screening and concerned them about its curability if diagnosed in early stage could have a major impact.

Objective: To assess the level of knowledge about the screening of cervical cancer for its early detection among women of reproductive age group.

Methods: This was a Descriptive type of cross-sectional study. It was conducted from September 2024 to November 2024. A total of 100 participants participated in the study. Data were collected using self-administered structured questionnaire. The data were processed by computer and statistical analysis of data was carried out by using SPSS method.

Results: Result showed that among 100 respondents' majority 23 (23) were 30-34 years old. 51 (51) respondents were married. 22 (22) participants got knowledge about screening test of cervical cancer from mass media and 14 (14) knew about different types of screening test. 27 (27) participants of reproductive age group had the knowledge that cervical cancer is curable if detected in early stage.

Conclusion: Unfortunately, the cervical cancer is the second leading cause of deaths in cancer in Bangladesh. There is a huge need to continue with the innovative steps that have been made to overcome the health care barriers crippling this population.

Key words: Knowledge; Screening; Cervical Cancer; Reproductive Age.

Introduction

Cervical cancer is the fourth most common cancer in women worldwide and a leading cause of cancer deaths in developing parts of the world. During the past few decades' tremendous strides have been made toward decreasing the incidence and mortality of cervical cancer with the implementation of various prevention and screening strategies. The causative agent linked to cervical cancer development and its precursors is the Human Papilloma Virus (HPV). Prevention and screening measures for cervical cancer are paramount because the ability to identify and treat the illness at its premature stage often disrupts the process of neoplasia. In resource-rich countries, cervical cancer incidence and mortality are lower due to the availability of screening and human papillomavirus (HPV) vaccination.[1] Cervical cancer screening can detect precancerous changes, and treatment of these precursors can prevent the development of invasive cancer.[2] Vaccination is the only way to primarily prevent cervical cancer, while cervical cancer screening measures are essential for secondary prevention. The first cervical cancer screening test was

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developed by George Papanicolaou and Herbert Traut, who described it in their book Diagnosis of Uterine Cancer by Vaginal Smear in 1943.[3]

Although many discoveries and developments have been made since the 1940s, the basis of the "Pap smear", or analysis of cervical cytology remains integral to screening today. In the early 2000s, development of liquid-based cytology was introduced as an alternative and now preferred method of performing a Pap smear.[4] Other modalities of cervical cancer screening historically used in resource-scarce settings or less-common settings include Visual Inspection with Acetic acid (VIA) and Visual Inspection with Lugol's Iodine (VILI).[5] Cervical cancer remains a significant worldwide health concern. The annual number of global new cases of cervical cancer has been projected to increase between 2018 and 2030 from 570,000 to 700,000 and the annual number of deaths projected to increase from 311,000 to 400,000.[6] Cervical cancer is a fully preventable disease, but remains the main cause of cancer death in women in 36 low-income and middle-income countries (LMICs).[7] In Bangladesh, cervical cancer is the second most common cancer of female (12%). The number of new cases was 8,068 (10.6 per 100,000 women) and deaths was 5.214 (7.1 per 100, 00 women) in 2018.[8] The prediction was that without any intervention, a total of 505,703 women in Bangladesh will die from cervical cancer by the year 2070, and the number will rise to 1,042,859 by 2120.[9]

Until vaccination uptake is significant, screening by a highly sensitive methodology should be utilized. The WHO strategy to eliminate cervical cancer (a cervical cancer incidence rate of less than or equal to 4 per 100,000 women) by 2030 is an attainable goal.[10] Good knowledge, attitudes, cost-effectiveness, and recommendations from healthcare workers are important factors associated with cervical cancer screening in women. Public health campaigns and mass media can also play an important role in raising awareness about the screening of carcinoma cervix and continuous efforts could be made to reduce the mortality rates from cervical cancer.

Materials and Methods

This was a descriptive type of cross-sectional study regarding Knowledge about the screening of carcinoma cervix among women of reproductive age group. It was conducted from September 2024 to November 2024. A total of 100 respondents were selected. Data were collected using self-administered structured questionnaire consisting of information about socio-demographic data, information about personal history of respondents and knowledge about the screening of cervical cancer for its early detection. After collection of data, it was checked, verified, and edited to reduce inconsistency. The data were processed by computer and statistical analysis of data was carried out by using SPSS 25 (Statistical Package for Social Science). Only the prevalence of knowledge about the cervical cancer screening was done in this study.

Study Population

Study population were female teachers, female staffs, female guardians and female students of reproductive age group from 15-49 years of age which is defined by WHO as reproductive age for women.

Inclusion Criteria

1. Women of reproductive aged from 15-49 years
2. Those who were willing to participate

Exclusion Criteria

1. Those who were not willing to participate
2. Those who were absent at the study place on data collection day

Study Place

The study was carried out among the respondents of Novelty School and College, Dhaka South City Corporation. Study place was selected purposively according to the convenience of the investigator.

Limitations of the study

1. The survey was limited to selected urban area of Dhaka South City Corporation and the respondents were selected by convenience sampling; therefore, the study cannot be considered as representative of whole population.
2. As in all questionnaire based study, this study relies only on the participants' self-reporting, which may not represent their actual practice.
3. Short time frame, limitation of funding, manpower scarcity were the shortcomings for this study.

Results

Table-1: Distribution of Respondents According to Age

Age group	Frequency
15-19 years	10 (10%)
20-24 years	18 (18%)
25-29 years	13 (13%)
30-34 years	23 (23%)
35-39 years	14 (14%)
40-44 years	11 (11%)
45-49 years	11 (11%)

The distribution of participants by age group shows that the largest proportion falls within the 30–34 years range,

accounting for 23% (n=23) of the total sample. This is followed by the 20–24year group at 18% (n=18) and the 35–39 year group at 14 (14). Both the 40–44 year and 45–49-year groups each contribute 11 (11), while the 25–29year group makes up 13 (13). The smallest representation is observed in the 15–19 year group, comprising 10 (10) of the participants. Overall, the distribution indicates a higher concentration of individuals in the 30–34-year category, with relatively fewer participants at the youngest and oldest age ranges (Table 1).

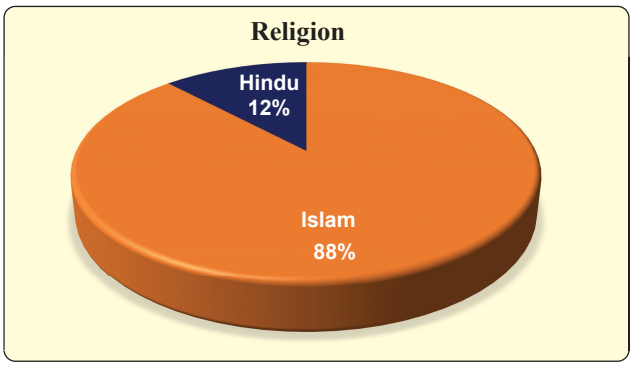

Figure-1: Distribution of Respondents by Religion (n=100)

The distribution of respondents by religion shows that majority respondents belonged to Muslim family, which is 88 (88) of the total sample, and very few participants were Hindu, comprising 12 (12) of the participants (**Figure 1**).

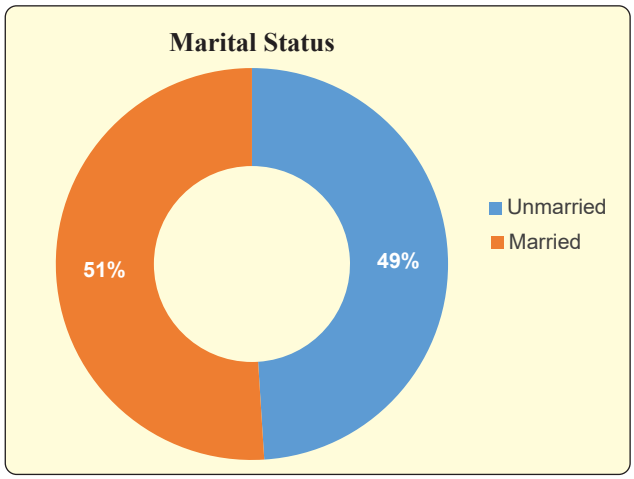

Figure-2: Distribution of Respondents According to Marital Status (n=100)

The distribution of respondents according to marital status shows that more than half of the participants were married, which is 51 (51) of the total respondents, while 49 (49) of the participants were unmarried (**Figure 2**).

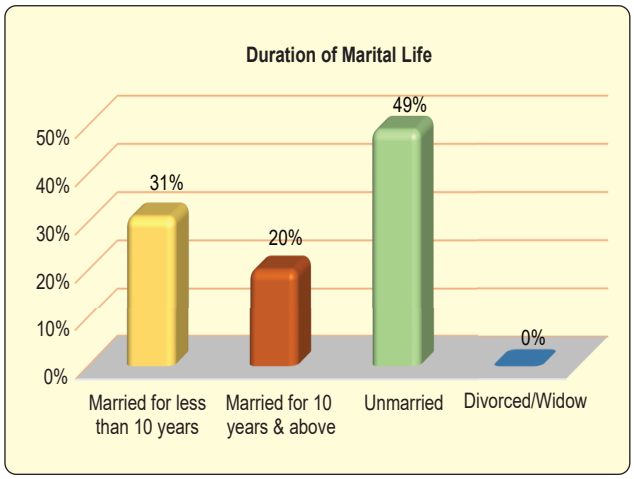

Figure-3: Distribution of respondents according to their duration of marital life (n=100)

The distribution of participants according to their duration of marital life shows that among the 100 respondents, 31 (31) respondents got married for less than 10 years, and 20 (20) women were leading their conjugal life for 10 years and above, whereas 46 (46) female respondents found unmarried. The smallest representation falls in the divorced or widow category, which is 3 (3) of the total sample (**Figure 3**).

Table-2: Distribution of Respondents According to The Source of Knowledge About Screening of Carcinoma Cervix

Source of Knowledge	Frequency
Family	11 (11%)
Relatives	1 (1%)
Medical professionals	12 (12%)
Mass media	22 (22%)
Others	5 (5%)
Have no knowledge about Ca-cervix screening	49 (49%)

The distribution of respondents according to the source of knowledge about screening of carcinoma cervix represents information about which we should concerned that 49 (49) participants, which is majority of the sample, did not know about the screening of cervical cancer.22 (22) respondents had knowledge about screening test through the mass media. Family members and medical professionals play important role in raising concern about screening of cervical cancer, which

contributes 11 (11) and 12 (12) of the sample accordingly. Very few participants, which is about 5 (5) of the total sample, knew from other source and only 1 (1) respondent heard about ca-cervix from relatives.

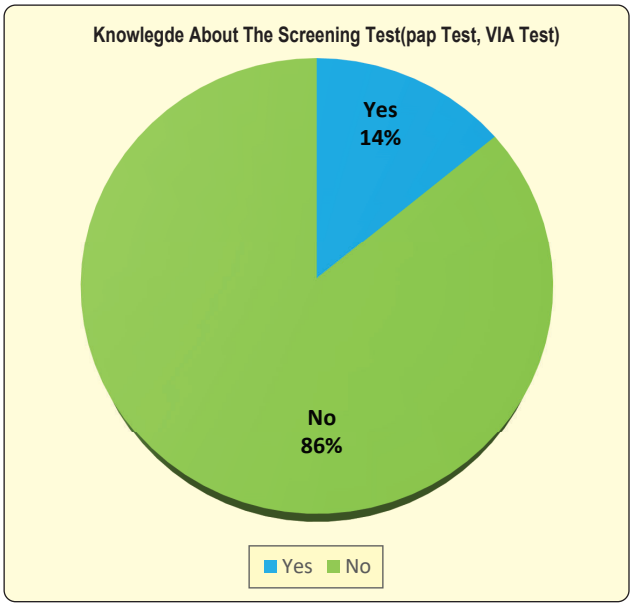

Figure-4: Distribution of Respondents According to Their Knowledge About Different Types of Screening Test (PAP test, VIA test) (n=100)

The distribution of respondents according to their knowledge about different type of screening test (PAP test, VIA test) shows that among the 100 respondents, very few 14 (14) respondents could share their knowledge about PAP test, VIA screening test and majority of the participants which is 86 (86) of the total sample had no knowledge about the different way for cervical cancer screening like PAP test, VIA test etc. (**Figure 4**).

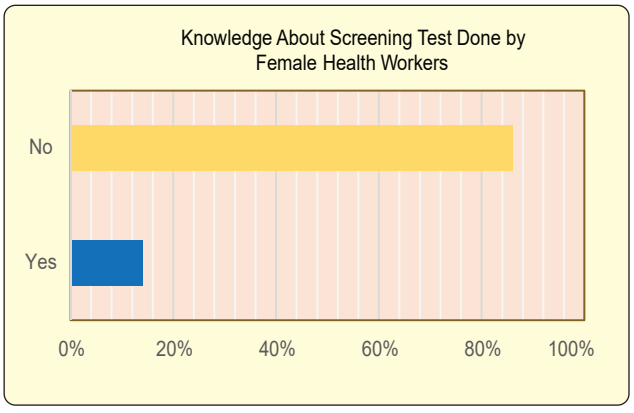

Figure-5: Distribution of Respondents According to Their Knowledge About Screening Test Done by Female Health Workers (n=100)

The distribution of respondents according to their knowledge about screening test done by female health workers shows that, only 14 (14) participants had idea about screening test done by female health workers; whereas majority of the study population which is 86 (86) of the sample had no knowledge that screening test of cervical cancer is perform by female health workers. (**Figure 5**)

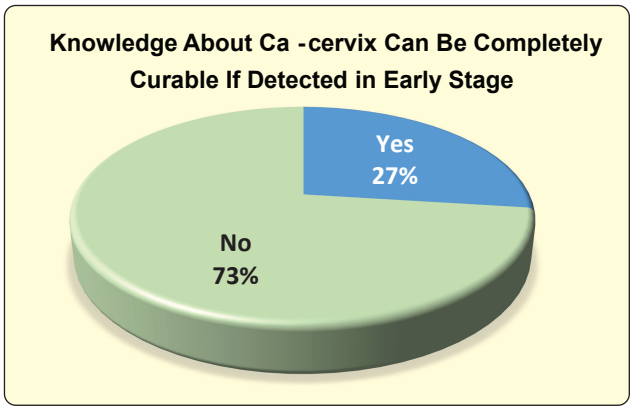

Figure-6: Distribution of Respondents According to Knowledge About Cervical Cancer Can Be Completely Curable If Detected in Early Stage (n=100)

The distribution of respondents according to knowledge about cervical cancer can be completely curable if detected in early stage shows that, very few women of reproductive age group which is 27 (27) of the sample knew that cervical cancer can be completely curable if detected in early stage and we should raise our concern that about 73 (73) of the total respondents had no idea about high survival rate of cervical cancer is possible if detected in early stage by screening. (**Figure 6**)

Discussion

In this cross-sectional study, all of the respondents gave average feedback about the knowledge of the screening of cervical cancer for its early detection. In this study, participants were from reproductive age group (15-49 years). Among 100 respondent majority 23% were 30-34-year-old which is similar to the findings of another study done in Dhaka where highest proportion 35% of women belonged to the age group 31- 34 years.[11] 88% respondents were Muslim. More than half of the participants 51% were married which is slightly more than another study where 46.3% study population were married.[12] 20% women were married for 10 years and above.

49% participants had no knowledge about the screening of cervical cancer which is resembles to another finding where approximately 40% of respondents did not know that not adhering to cervical cancer screening could be seen as a risk factor.[13] Only 14% could share their knowledge about PAP test, VIA screening test which differ from another study in Dhaka where half 50% respondents had sufficient knowledge about different types of screening test.[14] 14% respondents mentioned that they knew screening test is done by female health workers. 27% women of reproductive age group share their knowledge about cervical cancer which can be completely curable if detected in early stage which differ from a study done at Ethiopia where 43% participants share their knowledge about the early detection of cervical cancer.[15] Public health campaigns can significantly contribute to raise the knowledge about screening of carcinoma cervix. The outcomes of this study might be helpful for the implementation of future health program to increase awareness among the women of our society.

Conclusion

The cervical cancer is a deadly cancer that clutches lives of the women in most of the cases due to lack of consciousness. An important aspect of cervical cancer prevention is public awareness in the female population. Public health program about cervical cancer including its existence, risk factors, symptoms, screening and vaccination should be conducted widely by social media and community-based health education program. January is declared as the cervical health awareness month, nationwide effort to encourage on cervical health awareness can make it possible to get rid of the burden of cervical cancer disease. It was encouraging that most of the interviewed women expressed an interest in knowing more about cervical cancer and wanted to come to come health center for health check-up and for screening if any is provided. It will be beneficial to plan studies to be carried out with larger sample groups in determining level of knowledge about the screening of cervical cancer and its prevention. Study findings could also be used to informed and facilitate the Government strategy regarding cervical cancer.

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