

Awareness of Cervical Cancer among Staff Nurses in a Tertiary Level Cancer Centre in Bangladesh

SUSHMITA BARDHAN¹, SHAHANA PERVIN², SUZON KUMAR MAZUMDER³

Abstract

Background: Cervical cancer is the second leading malignancy and cause of death in Bangladeshi women. Health professional's misconceptions about the disease and lack of knowledge may worsen the situation. Nurses form a large proportion of the health care provider workforce. Among them who had opportunity to work in cancer hospital should know better about cervical cancer than other hospitals in the country. This survey was undertaken with an intention to address this important health issue by determining the awareness of cervical cancer among nurses at a tertiary cancer centre of Bangladesh.

Objective: To provide the baseline information about the knowledge of cervical cancer and explore attitude and practice of cervical cancer screening among staff nurses.

Methods: A pretested structured self-administered questionnaire based cross sectional survey was done on 154 staff nurses working in National Institute of Cancer Research and Hospital (NICRH), Dhaka, containing mostly recognition and some recall type questions about knowledge of cervical cancer, its risk factors, screening techniques, attitude towards cervical cancer screening and its practices.

Results: 100% respondents heard the name of cervical cancer but 35.7% did not know about any of its risk factors and only 3.2% aware about more than 3 risk factors. Twenty seven percent not aware about any symptom, only 51.9% identified the foul smelling excessive vaginal discharge and irregular abnormal vaginal bleeding as the symptom and 16.8% know that post coital bleeding may be the symptom. Only 42.2% know VIA as a screening test, 39.6% know actual screening interval, 23.37% know who should be screened, 42.2% aware about HPV vaccine, 35.7% can do VIA, 42.2% said that they referred patient for screening but only 16.2% of themselves have ever been screened.

Conclusion: The majority of nursing staff in NICRH had inadequate knowledge about cervical cancer screening and their attitude and practice towards cervical cancer screening could not be termed positive. There is an urgent need for orientation course for working nurses and integration of cervical cancer prevention issues in the existing curriculum of nurses in Bangladesh.

Introduction:

Worldwide cervical cancer is the 4th most common cancer in women. The WHO estimated 5,28,000 new cervical cancer occurrence and 2,66,000 deaths globally each year¹. Nine of 10 cervical cancer deaths occur in less developed regions². In Bangladesh it is the second leading malignancy and cause of death^{2,3} in women.

Early detection and treatment of precancerous lesions are the key to reducing cervical cancer mortality and

incidence. Among all malignant tumours, cervical cancer is the one that can be most effectively controlled by organized screening programs⁵. An organized screening program can reduce incidence and mortality by 80% as shown in developed countries⁶. Developed countries have reduced incidence and mortality of cervical cancer through cytology based screening program. Though vast majority of the world's population live in low and middle income countries (LMICs), cytology based screening programs have

1. Medical officer, Department of Gyane Oncology, National Institute of Cancer Research & Hospital, Mohakhali, Dhaka.
2. Professor, Department of Gyane Oncology, National Institute of Cancer Research & Hospital, Mohakhali, Dhaka.
3. RS, Surgical Oncology, National Institute of Cancer Research & Hospital, Mohakhali, Dhaka.

Address of Correspondence: Dr. Sushmita Bardhan, Medical officer, Department of Gyane Oncology, National Institute of Cancer Research & Hospital, Mohakhali, Dhaka. Mobile: 01913704319

been ineffective in them. Visual inspection with acetic acid (VIA) and the HPV test have proven to be effective primary screening methods for cervical cancer screening in LMICS⁷. Several common challenges remain for continued scale up such as training and maintaining a cadre of personnel who can carry out screening and treatment activities is a significant challenge. Studies in Bangladesh produced several recommendations for improvements in program, training of providers and referral system, but continuous quality monitoring of these components has yet to be implemented routinely⁸.

Health professionals misconceptions about the disease and lack of knowledge have led to suboptimal care due to insufficient information being given to patients⁹. Nurses form a large proportion of the health care provider workforce. They act as primary care providers, especially in resource poor and remote areas. They are also a useful link in providing health education¹⁰. Nurses who had opportunities to work at cancer hospitals should know better about cancer screening than other hospitals in the country. This survey was undertaken with an intention to address this important health issue by determining the awareness of cervical cancer among nurses at a tertiary cancer care centre in Bangladesh.

Objectives:

To determine the baseline information about the knowledge of cervical cancer and explore attitude and practice of screening among staff nurses.

Materials and methods:

This is a cross sectional survey carried out in National Institute of Cancer Research and Hospital in Dhaka.

Sample size calculation: The target population was 230. We used a 95% confidence level and 5% error with a response rate of 50% by which the sample size needed was 145. All nurses were approached and 158 agreed to participate in survey. The final sample size was 154. Approval from the institutional ethics committee was obtained and verbal informed consent for interview was taken before administering the questionnaire. Questionnaire included-

- Knowledge about cancer as a disease, risk factors, symptoms, screening methods.
- HPV relation and knowledge about vaccine.
- Knowledge of VIA and willingness to undergo screening by VIA.

Both closed and open ended questions were used for data collection. The options for closed ended questions include yes/no.

Results:

Table-I shows that 64.9% of the respondents had their age between 20-30 years, 76.6% nurses were married, 60.38% were the mother of 1 to 3 children and 61.03% not used any contraceptives. All the respondents have heard the name of cervical cancer and also known that if early diagnosis is possible then it can be cured. (Table-II)

Foul smelling vaginal discharge and irregular abnormal vaginal bleeding as a symptom was known to 51.9% nurses but only 16.88% aware about post coital bleeding as a symptom. Two or less risk factors of cervical cancer were known to 43.5% nurses, more than 3 risk factors known to only 3.2% of nurses, 35.7% not aware about any risk factors (Figure-1). Regarding the question who should be screened, maximum (53.9%) said that women above 30 years of age should be screened. Only 23.37% aware about the correct answer that is women above 21 years of age or those who are sexually active for last 10 years which even is earlier should be screened. 22.7% thought that screening should be done for married women only, 50% thought that screening interval should be 1 year, 39.6% knew the correct answer, that is 3 years (Table III). The table also shows that only 42% knew about HPV vaccine.

Nobody knew that cervical cancer can occur without symptom. Twenty seven percent nurses were unaware about any symptoms of cervical cancer (Table-II, Figure-2).

Table-I
Demographic characteristics

Variable	Number	Percentage
Age (years)		
20-30	100	64.9%
31-40	44	28.5%
>40	10	6.5%
Marital status		
Married	118	76.6%
Unmarried	36	23.37%
Parity		
Nulipara	53	34.41%
Para(1-3)	93	60.38%
Para(>3)	8	5.19%
Contraceptive user		
Used	60	38.9%
Not used	94	61.03%

Table-II
Knowledge about cervical cancer

Variables	Number	Percentage
Heard the name of cervical cancer	154	100%
If cervical changes are found early they are easily curable	154	100%
Cervical cancer can present as-		
Without symptom	0	0%
Foul smelling excessive vaginal discharge	80	51.9%
Irregular abnormal vaginal bleeding	80	51.9%
Post coital vaginal bleeding	26	16.88%

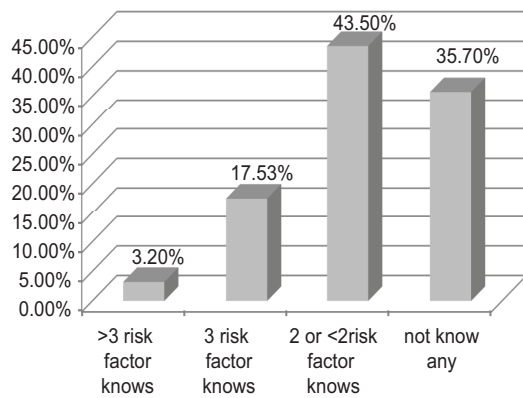


Fig.-1: Knowledge about risk factors.

Figure-3 shows the level of their knowledge regarding screening methods. VIA(Visual inspection by acitic acid) was known to 42.2%, Pap's smear known to 29.22%,cervical biopsy known to 9.7%,colposcopy known to 4.5% of the respondents and 14.2% of the responders not aware about any screening methods.

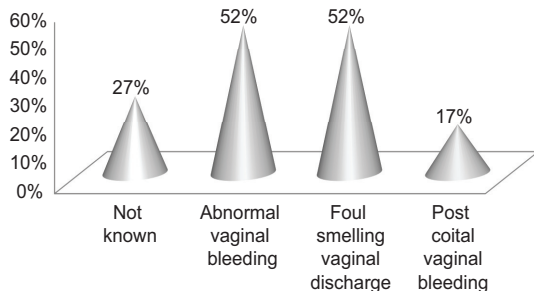


Fig.-2: Knowledge about symptoms

Table-III

Knowledge regarding screening of cervical cancer

Variables	Number	Percentage
Who should be screened for cervical cancer:		
Married women only	35	22.7%
Women above 30 years of age	83	53.9%
Women above 21 years of age or those who are sexually active for last 10 years(which is earlier)	36	23.3%
Screening interval-		
One year	77	50%
Two years	47	30.5%
Three years	61	39.6%
Should only be done when there are symptoms	15	9.7%
Not know any	22	14.2%
Knowledge about cervical cancer acquired from-		
HPV Vaccine known to	65	42.2%
Know how to do VIA	55	35.7%

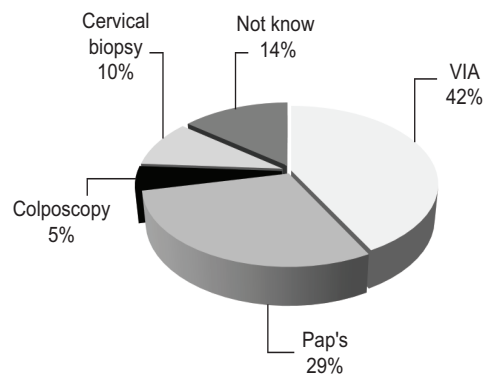


Fig.-3 : Knowledge about diagnostic modalities

Table-IV
Practices on cervical cancer screening

Variables	Number	Percentage
Don't ask patients routinely whether screened for cervical cancer	50	32.5%
Don't refer patients for screening	35	22.7%
Respondents who have ever been screened	25	16.2%

Table IV shows 32.5% do not ask patients routinely whether they are screened for cervical cancer. 42.2% said that they referred patient for screening but only 16.2% of themselves have ever been screened.

Discussion:

Cervical cancer as a disease was correctly identified by all of the nursing staff. They also agreed that if diagnosis of precancerous lesion is possible then it is curable. But maximum of them not aware about screening procedures and screening interval.

Clinically cervical cancer commonly presents with foul smelling and/or blood stained vaginal discharge or post coital bleeding; intermenstrual bleeding and pelvic pain. Some of the risk factors for development of cervical cancer are early sexual intercourse, multiple sexual partners, sexually transmitted infection and smoking. Only 43.5% of our study subjects correctly knew about at least one risk factor for development of cervical cancer and 35.7% not know any risk factors in contrast to 42.3% reported in a study by SM Jain in India 2016⁴. Most of them felt that bleeding per vagina may be one of the presenting features, which is almost similar to 68.9% reported in a study by SM Jain in India⁴. 42.2% know VIA as a screening test and 39.6% know actual screening interval in contrast to 60.1% in a study by Rahman.H. in India 2015⁹. 42.2% of our nurses aware about HPV vaccine in contrast to 18% in a study done by Singh. E. of India in 2012¹⁰. The difference may be due to time interval as the study done before 7 years.

The workforce is aware that screening can prevent cervical cancer, but due to lack of knowledge about screening modalities and availabilities of screening facilities, directing patients to avail these facilities is an issue leading to lesser screening practice. Such ignorance in nursing staff is a matter of concern for the society. 42.2% said that they referred patient for screening but only 16.2% of themselves have ever been screened. The negative attitude among nurses,

working in departments other than gynaecology may be acceptable, but this would not explain the reluctance to get screened themselves despite the availability of a free service.

Limitations:

There are certain limitations inherent to the design of the present study; firstly it is a single institute based study. Secondly regarding the questions which are mainly recognition and some recall type. Both the recall and recognition questions have limitations. We predicted that recognition scores would be greater than recall scores¹¹, but it is difficult to determine which better captures the concept of cancer awareness because it is limited by memory, while recognition overestimates awareness because participants find it easy to guess. Thirdly, the method used for estimating the knowledge of practice of screening or to ask patient for screening—which may be faulty due to inaccurate recall or desirability bias¹². However, there is a need for further investigations on different approaches to measure cancer knowledge related to behavioral outcomes and identifying best measure to predict early cancer¹⁰.

Conclusion:

The majority of nursing staff in NICRH have inadequate knowledge about cervical cancer screening and their attitude and practice towards cervical cancer screening was not be termed positive. There is an urgent need for re-orientation course for working nurses and integration of cervical cancer prevention issues in the nurses existing curriculum in Bangladesh.

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