

*Original Article*

## Awareness Level of Cervical Cancer among Rural Women Attending Manikgonj 250-Bedded District Hospital, Manikgonj

Farzana Rahman<sup>1</sup>, Avisak Bhattacharjee<sup>2</sup>

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### *Abstract*

**Background:** Cervical cancer is a typically slow-growing cancer that may not have symptoms, but can be early diagnosed by Pap smear and Visual Inspection of Cervix with Acetic Acid (VIA). The burden of the disease is increasing in developing countries day by day due to the ascending trend of transmissible diseases such as HIV and Human Papilloma Virus (HPV). **Objective:** The main aim of this study was to assess the level of awareness regarding cervical cancer among the women attending outpatient department of Manikgonj 250-bedded district hospital, Manikgonj. **Materials and Methods:** This study was conducted among the women attending the OPD of Obstetrics & Gynaecology Department of Manikgonj 250-bedded district hospital from June, 2017 to October, 2017. The respondents were selected by random sampling. A pre-structured, interview-based data collection sheet was prepared, which was used as a research tool. Data were collected by interview of the patients and then data were gathered, decorated and tabulated after data cleaning and edition. Then the results were presented in tabular and figure forms. As it is a descriptive type of cross-sectional study p value determination was not required to see the level of significance. **Results:** In this study mean age of 50 respondents was  $24.18 \pm 6.63$  years. The maximum respondents (62%) were from 20–30 years age group. Out of 50 respondents 46% were married and 24% were unmarried. Among the study subjects 84% knew about cervical cancers, 28% respondents knew about the disease from uthan boithok and 26% by electronic and print media. Thirty six percent respondents knew about the risk factors of the disease, 42 (84%) heard about the disease, 60% thought that they are at selfrisk and 12% respondents underwent screening before. Among those (70.45%) who did not undergo screening blamed not having adequate knowledge about the risk factors. Seventy two percent of total respondents knew that district hospital is a center for screening. Fifty percent women did not have any knowledge regarding vaccination. **Conclusion:** Majority respondents in this study did not know clearly about cervical cancer, specially its risk factors, vaccination, prevention and clinical profile of the disease.

**Key words:** Human papillomavirus; Cervical cancer; Rural women; Bangladesh

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### **Introduction**

Cervical cancer is an insidious disease. It is the commonest cancer among women that may not have symptoms but can be found with regular Pap tests. It is a procedure where cells of cervix are scraped and

examined under a microscope. Human papillomavirus (HPV) is almost always responsible for cervical cancer. Cervical cancer is a malignant condition of the cervix uteri. It may present with vaginal bleeding,

1. Medical Officer, Department of Obstetrics & Gynecology, Manikgonj 250-Bedded District Hospital, Manikgonj
2. Registrar, Department of Surgical Oncology, National Institute of Cancer Research & Hospital, Mohakhali, Dhaka-1211

**Correspondence** Farzana Rahman, Email: [rinkymgcc@gmail.com](mailto:rinkymgcc@gmail.com)

but symptoms may be absent until the cancer is in its advanced stage.<sup>1</sup>

Surgery including local excision, Wertheim's hysterectomy in early stages, and chemotherapy and radiotherapy in advanced stages of the disease are the modalities of treatment. Pap smear screening, visual inspection of cervix with acetic acid (VIA) and colposcopy can identify potentially precancerous changes. Treatment of high-grade changes can prevent the development of cancer. In developed countries, the widespread use of cervical screening programs has reduced the incidence of invasive cervical cancer by 50% or more.<sup>2</sup>

Approximately 80% of cervical cancers occur in developing countries.<sup>3</sup> Worldwide, cervical cancer is the 12<sup>th</sup> most common cause and 5<sup>th</sup> most deadly cancer in women.<sup>4</sup> In Bangladesh genital cancer is increasing day by day. Unfortunately, there are few population-based data about its magnitude. Among those, cervical cancer constitutes about 22–29% (from hospital-based data) throughout the country.<sup>5</sup> The yearly burden of cervical cancer is about 17,686 and around 10,364 women die from cervical cancer each year.<sup>6</sup> Bangladesh is a developing country with limited resources. The Government of Bangladesh (GOB) has developing a cervical cancer screening program through VIA. GOB has a plan to make it a nation-wide program. VIA is performed at Upazilla Health Complexes (UHC), Maternal and Child Welfare Centers (MCWCs), District Hospitals (DHs), Medical College Hospitals (MCHs) and in Bangabandhu Sheikh Mujib Medical University (BSMMU) by trained Family Welfare Visitors (FWVs), Senior Staff Nurses (SSNs) and doctors.<sup>7</sup>

The services for cervical and breast cancer screening are currently available as opportunistic screening at 252 facilities including BSMMU, 14 MCHs, 57 DHs, 61 MCWCs, 15 (out of 482) UHC, 44 (out of 3725) Union Health & Family Welfare Centers (UH&FWC), 25 Urban Primary Health Care Centers and 35 Non-Government Organizations (NGO). The trained manpower uses VIA technique to detect the pre-cancer or early stages of cervical cancer among women of 30 years and above visiting the aforementioned centers.

VIA positive women are referred to BSMMU and various government MCHs for colposcopic evaluation and necessary management. This service is technically and financially supported by GOB, BSMMU and UNFPA.<sup>7</sup>

During the last five years only three lac women have received screening services. During evaluation of the 'Cervical Cancer Screening Program of Bangladesh' low coverage of the target population was observed.<sup>8</sup> Lack of awareness about cervical cancer and its prevention, low availability of services may be underlying factors for this low intake of services. In fact, it was observed that the uptake of screening in developing countries is poor.<sup>9</sup> Lack of awareness of cervical cancer has been identified as one of the factors contributing to the high prevalence of this condition in the developing world compared to the developed world.<sup>10</sup>

Unlike developed countries, cervical cancer prevention programs have failed to meet their objectives in developing countries due to financial, social and logistic shortcomings.<sup>11</sup>

Many studies have been done in our country regarding cervical cancer, which were both hospital-based and community-based. But this study tried to find out the awareness and perception of women attending the OPD of a district level hospital. It assessed the awareness and knowledge of women about cervical cancer and cervical screening. The study tried to find out the status of the information about the disease, the rate of adoption of screening and vaccination, barrier of screening and vaccination in our perspective.

## Materials and Methods

Among the outpatients attending the OPD of Manikgonj 250-bedded district hospital from June, 2017 to October, 2017, the respondents were selected by purposive sampling. Thereafter, they were scrutinized according to the eligibility criteria. Participants who were in their reproductive age and who were mentally fit for giving interview were included. Data were collected by a pre-structured, peer reviewed and interview-based data collection sheet. Data were gathered, decorated, tabulated after data cleaning and edition. Then the results were found.

**Data analysis**

All data were recorded, managed and analyzed with the help of statistical packages for social science (SPSS) version 23.0 (Illinois, Chicago, USA). Frequencies and percentages were used for the quantitative and qualitative variables respectively. As it was a descriptive type of study no p value was determined here.

**Results**

Table I shows that out of 50 participants majority (86%) belonged to <30 years of age. The mean age of the participants was 24.18 ± 6.63 years.

Table I: Distribution of study population according to age (n=50)

Age (years)	Frequency	Percentage
<20	12	24
20–30	31	62
31–40	5	10
>40	2	4
Total	50	100

Table II shows the educational status of the study population. Majority (42%) received education up to primary level.

Table II: Distribution of respondents according to educational status (n=50)

Level of education	Frequency	Percentage
Illiterate/only can sign	15	30
Primary	21	42
SSC level	5	10
HSC level	6	12
Graduate and above	3	6
Total	50	100

Table III shows the distribution of subjects according to marital status. Out of 50 respondents 23 (46%) were married, 12 (24%) were unmarried, 10 (20%) were widows and 5 (10%) were divorced.

Table IV shows distribution of study population according to socioeconomic status. Out of 50 respondents 34 (68%) were from middle class and 14 (28%) and 2 (4%) were from poor class and affluent class respectively.

Table III: Distribution of subjects according to marital status (n=50)

Marital status	Frequency	Percentage
Married	23	46
Unmarried	12	24
Widows	10	20
Divorced	5	10

Table IV: Distribution of study population according to socioeconomic status (n=50)

Socioeconomic status	Frequency	Percentage
Middle class	34	68
Poor class	14	28
Affluent class	2	4

This study shows out of 50 subjects, 42 (84%) women heard of cervical cancers and eight (16%) could not recall whether they heard of cervical cancer before.

Fig 1 shows that the risk factors were mentioned as genital infection (27.77%), OCP (38.88%), multiple sexual partners (16.67%), white discharge (38.88%), repeated MR (11.11%), many children in early age (16.67%) and no breast feeding (5.56%).

Fig 1. Risk factors as mentioned by respondents (n=18)

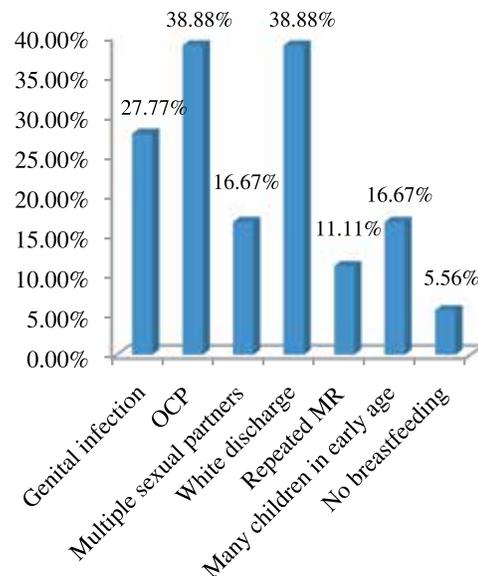


Table V shows distribution of subjects according to ways they received information by. They heard about cervical cancer from uthan boithok (28%), electronic

and print media (26%), miking of VIA camp (24%), doctors and other hospital service providers (8%), relatives (6%), patients (4%) and booklets (4%).

Table V: Distribution of subjects according to various sources of information (n=50)

Ways of information	Frequency	Percentage
Uthan boithok	14	28
Electronic & print media	13	26
Miking of VIA camp	12	24
Doctors and other hospital service providers	4	8
Relatives	3	6
Patients	2	4
Booklets	2	4
Total	50	100

Table VI shows the overall perception of respondents regarding cervical cancer. Out of 50 respondents,

30 (60%) perceived themselves at in a risk of developing the disease and 6 (12%) confirmed that they were screened before for cervical cancer. Among 44 respondents who did not undergo screening, 31 (70.45%) stated that they did not have adequate knowledge regarding screening. Six (13.64%) subjects did not go for screening because of apprehension of painful procedure and 7 (15.91%) felt embarrassment to expose private parts. Among 50 participants, 45 (90%) told that they had intention to undergo screening in future and 5 (10%) did not show any interest for screening. Among 50 participants, 36 (72%) knew that district hospitals are the ideal places of cervical cancer screening, 10 (20%) subjects knew that other hospitals are the ideal places and 4 (8%) respondents knew that private chambers are the ideal places of cervical cancer screening. Half of the respondents (50%) had no knowledge about vaccines. Among the rest of the respondents 14%, 16% and 20% mentioned prevention, treatment and others as purposes of vaccination respectively. However, 23 (46%) respondents received the vaccine.

Table VI: Cervical cancer screening perceptions and women’s knowledge among subject attending Manikgonj 250-bedded district hospital (n=50)

Variables	Responses	Number	Percentage
Perceives self at risk	No	20	40
	Yes	30	60
Ever been screened for cervical cancer	No	44	88
	Yes	6	12
Reasons for not screening (n=44)	Did not have adequate information	31	70.45
	Apprehension of painful procedure	6	13.64
	Too embarrassed to expose private parts	7	15.91
Intention to screen in future	No	5	10
	Yes	45	90
Reasons for unwillingness to screen in future (n=5)	Had a hysterectomy	2	40
	Felt the procedure was too embarrassing	3	60
Ideal screening centre/institution	District hospitals	36	72
	Any other hospitals	10	20
	Private chambers	4	8
Knowledge about vaccines	Prevention of disease	7	14
	Treatment	8	16
	Others	10	20
	Did not know	25	50
Received vaccination against HPV after delivery	Yes	23	46
	No	27	54

Table VII: Distribution of respondents according to knowledge regarding presentations of cervical cancer (n=42)

Presentations of cervical cancer described by respondents	Frequency	Percentage
Could not mention anything regarding disease presentation	21	50
Bad/fatal disease of uterus curable if diagnosed early	12	28.57
Sores or growths in the uterus	11	26.19
Irregular/heavy per vaginal bleeding	10	23.8
Lower abdominal pain or per vaginal discharge	6	14.28
Caused by having multiple sexual partners	3	7.1
Know about disease but has never seen someone affected	10	23.8

Some respondents had multiple presentations

Table VII shows that among 50 subjects 42 reported having information regarding cervical cancer. Among them 21 (50%) could not mention anything regarding its presentation. Of those who had some information about cervical cancer, 12 (28.57%) subjects gave a general description of a bad disease or fatal disease of the uterus which is curable when diagnosed early, 11 (26.19%) informed that there might be sore or growth in the uterus, 10 (23.8%) informed that there might be per vaginal bleeding and 6 (14.28%) respondents told of lower abdominal pain or per vaginal discharge might be present in this disease.

## Discussion

Cervical cancer is a major public health issue in today's world. Unfortunately, majority of our respondents are not aware of its public health importance. The current study is the first to explore the level of awareness of cervical cancer in district level hospital. Most of the women in this study had inadequate knowledge about cervical cancer. For this reason, it is essential to give them a message regarding cause of disease. Besides, the attributable factors that are responsible for cervical cancer must be emphasized for our future policy making. The positive discovery of this study is that massive campaigning regarding the disease was not ended in smoke as out of 50 respondents 42 (84%) heard about cervical cancer. Our findings are a bit lower than that of Assoumou et al<sup>12</sup>.

In a study done by Parvin et al<sup>13</sup> conducted among the college-going women of Dinajpur city, it was revealed that 81.3% respondents heard of cervical cancer. Their findings strongly support that of ours.

In Bangladesh, risk factors for cervical cancer are

related to early marriage, early onset of sexual activities, multiparity, STDs and low socioeconomic condition.<sup>14</sup> Lack of knowledge about the risk factors is also an important determinant behind the increasing incidence of cervical cancer.<sup>15</sup>

In this study, only 18 (36%) women knew about the risk factors of cervical cancer. Among them, 38.88% mentioned OCP and white discharge as important risk factors. Out of these 18 women, 27.77% mentioned genital infection as a risk factor. Only 16.67% could mention having multiple sexual partners as a risk factor. Importance of sexual practice for developing cervical cancer was not found as a vital issue among the participants rather they were very aware of personal hygiene. These findings are in contrast to those of Moore et al.<sup>16</sup> According to their findings, their participants emphasized sexual practice as an important risk factor.<sup>16</sup>

According to The American Cancer Society risk factors for cervical cancer are: HPV infection, smoking, HIV infection, Chlamydia infection, stress and stress-related disorders, dietary factors, hormonal contraception, multiple pregnancies, exposure to diethylstilbesterol and a family history of cervical cancer.<sup>17</sup> Human papillomavirus (HPV) infection with high risk types 16, 18 has been shown to be an important factor for cervical cancer in 70% of cases.<sup>18</sup>

In this study, only 7 (14%) women clearly mentioned that vaccination could prevent the disease. But it was found that 23 (46%) respondents accepted vaccination against HPV after delivery. It is the credit of the health care providers who could convince them to receive vaccination. But out of these 23 only 14 patients knew about the prevention strategy of

vaccination. Remaining nine participants although received it but did not know clearly the purpose of receiving vaccination. Papri et al<sup>19</sup> revealed similar results in 2015 where they found that very few of their respondents were aware of the importance of vaccination.

This scenario again enlightened the role of our health care providers in awareness of women regarding cervical cancer. Cervical cancer screening program is established in developed countries. Deaths from cervical cancer decreased by 74% in the last 50 years largely due to widespread Pap smear screening.<sup>4</sup>

In this study it was found that only 12% respondents underwent screening for cervical cancer and 72% had the information that screening is available at Manikgonj Sadar (District) Hospital.

According to the US National Cancer Institute's 2005 Health Information National Trends Survey, only 40% of American women surveyed had heard of human papillomavirus infection and 20% had heard of its linkage to cervical cancer.<sup>20</sup>

In Australia, there were 734 cases of cervical cancer in 2005. The number of women diagnosed with cervical cancer has dropped on average by 4.5% each year since organized screening began in 1991. Regular Paps tests prevent more than 1200 women each year from being diagnosed with cervical cancer.<sup>21</sup> Most of the women who develop cervical cancer either never had a Paps test or did not have them regularly.

In this study, out of 50 respondents, 37 (74%) mentioned lack of adequate information as the cause of disease, 6 (13.64%) told that total procedure is painful and 7 (15.91%) women mentioned that it is 'Too embarrassed to expose private parts'. So, the major barrier is not having adequate informations regarding screening procedure. Tebeu PM et al<sup>22</sup> differed in their study in 2008 where they identified the major barriers in Cameroon were negligence and fear of discovering a serious disease.

Among the 42 subjects who heard about cervical cancer, 12 (28.57%) during expression of cervical cancer description mentioned it as 'bad fatal disease of uterus curable if diagnosed early' and 11 (26.19%) described it as the presence of 'sores on growth in uterus'. So, it was predicted that clear idea regarding the presentations of disease would not be available

in our respondents. To improve the condition, the problems of ongoing campaigning must be revised.

At present we have sufficient knowledge to prevent at least one-third of cancers depending on the availability of resources, early detection and effective treatment of predisposing factors and one-third could be cured with modern facilities. Also there is cancer control strategy in Bangladesh. Government has taken pragmatic steps towards developing the cervical cancer screening program.

Curative treatment of cervical cancer can be provided if early detection is possible. Though it is a common cancer in female, apt knowledge regarding the risk factors and ways of prevention of cervical cancer may show excellent response. Keeping it in mind, the country policy makers took many projects to campaign against cervical cancer through awareness of community people.

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