

Women's Knowledge Regarding Cervical Cancer in Selected Urban Areas of Dinajpur

*Rehana Z,¹ Wares SM,² Haque M,³ Hossain S,⁴ Begum RA⁵

This cross-sectional study was conducted with the aim to find out the level of knowledge among women regarding cervical cancer (in selected urban areas of Dinajpur) on 150 respondents and sample was selected by convenient technique. Data were collected by using structured questionnaire by face to face interview at the residence of the respondents. Mean age of the respondents was 34.23 (SD±7.63) years. majority of respondents 42 (28%) were educated to class VI to X, and most of them were housewife 138 (92%). Majority 109 (72.66%) respondents had monthly family income less than 1 lac. It was observed that 131(87.33%) respondents had knowledge about cervical cancer, 19(12.67%) respondents did not know cervical cancer as a disease, among the 131 respondents who had previous knowledge about cervical cancer 67(44.7%) knew it from their relatives, 85(56.7%) believed that cervical cancer can not be prevented, 89 (59.3%) did not know that diagnosis of cervical cancer can be made before appearance of typical sign/symptoms. Ninety persons (60%) did not know about screening tests, 92(61.3%) could not believe that cervical cancer curable disease if diagnosed in the early stage, 114(76%) did not know and 17(11.3%) knew about free VIA test in govt. hospitals, 123(82%) respondents did not know that VIA test was done by female health worker. Highest percentage of the respondents recognized post coital bleeding 39(26%), followed by irregular menstruation 21(14%), foul smelling vaginal discharge 17(10%) as a symptom of cervical cancers. It was observed that the respondents thought that early marriage 43(28.7%), multiparty 20(13.3% cases), multiple sex partners 16(10.7%) as a leading risk factors of disease. Overall level of knowledge regarding cervical cancer was very poor in 61(40.7%) woman. The findings suggest that programmatic approaches to increase knowledge about cervical cancer and its prevention is necessary to reduce cervical cancer in Bangladesh.

[Dinajpur Med Col J 2013 Jul; 6 (2):159-166]

Key words: Cervical cancer, Prevention, Knowledge, Risk factors, Dinajpur

Introduction

The cervix is the lower part of the uterus (womb). It is sometimes called the uterine cervix. The body of the uterus (the upper part) is where a baby grows. The cervix connects the body of the uterus to the vagina (birth canal). The part of the cervix closest to the body of the uterus is called the endocervix. The part next to

the vagina is the exocervix (or ectocervix). The 2 main types of cell covering the cervix are squamous cells (on the exocervix) and glandular cell (on the endocervix) .The place where these 2 cell types meet is called the transformation zone. Most cervical cancer start in the transformation zone.

1. *Dr. Zeenat Rehana, Medical Officer, Government Urban Dispensary, Dinajpur.
2. Dr. S. M. Wares, Assistant Professor, Department of Paediatrics, Dinajpur Medical College, Dinajpur.
3. Dr. Musarrat Haque, Associate Professor, Department of Community Medicine, NIPSOM, Dhaka.
4. Dr. Shaila Hossain, Professor, Department of Community Medicine, NIPSOM, Dhaka.
5. Dr. Mst. Rowshan Ara Begum, Resident Surgeon, Department of Gyne & Obs, Dinajpur Medical College Hospital

* For correspondence

Cervical cancers and cervical pre-cancers are classified by how they look under a microscope. There are 2 main types of cervical cancers: squamous cell carcinoma and adenocarcinoma. About 80% to 90% of cervical cancers are squamous cell carcinomas. These cancers are from the squamous cells that cover the surface of the exocervix. Under the microscope, this type of cancer is made up of cells that are like squamous cells. Squamous cell carcinomas most often begin where the exocervix joins the endocervix.

Most of other cervical cancers are adenocarcinomas. Cervical adenocarcinomas seem to have becoming more common in the past 20 to 30 years. Cervical adenocarcinoma develops from the mucus-producing gland cells of the endocervix. Less commonly, cervical cancers have features of both squamous cell carcinomas and adenocarcinomas. These are called adenosquamous carcinomas or mixed carcinomas.

Although cervical cancer start from cells with pre-cancerous changes (pre – cancers), only some of the women with pre-cancers of the cervix will develop cancer. The change from cervical pre-cancer to cervical cancer usually takes several years, but it can happen in less than a year. For most women, pre – cancerous cells will go away without any treatment.¹

The term cervical intraepithelial neoplasia (CIN) was introduced to emphasize the unity of those conditions formerly designated dysplasia or carcinoma in situ. CIN has been divided into three grades: CIN I corresponds to mild dysplasia; CIN II corresponds to moderate to severe dysplasia; and CIN III corresponds to severe dysplasia and carcinoma in situ. CIN is regarded as a single disease and begins at the squamocolumnar

junction in the epithelium of the transformation zone.

About one quarter of the cases of CIN I and II will progress to a more severe lesion without treatment and over a half of the untreated cases of CIN III will eventually develop invasive carcinoma.

Among women aged more than 25 years, CIN III is found in 0.2-0.4 per cent . It takes 1-17 years for an in situ lesion to become invasive, with an average of 10 years. So the mean age at which carcinoma in situ is found is 35 years, the comparable figures for micro-invasive carcinoma and invasive cancer being 44 and 53 years, respectively. Recently, in many developed countries there is a second peak of invasive carcinoma at between 30 and 40 years, and in these younger women the change from an in situ to be much faster (weeks or months rather than years).

CIN are symptomless conditions which may show no naked-eye signs of their presence. Indeed , the affected cervix usually looks remarkably healthy .The disease is therefore discovered either incidentally during the histological examination of cervixes removed for other reasons, or as a result of programme for the routine screening by cervical cytology or colposcopy.²

Developed countries have been successful in controlling the incidence of cervical cancer. Whereas developing countries have failed dismally in this respect.The success of developed countries is largely attributed to the widespread and systematic use of the Papanicolaou (Pap) smear. The value of the cervical cancer screening in reducing the risk of cervical cancer and mortality has been firmly established and it is estimated that regular screening reduces the risk of cancer up to 80%. Taking measures against cervical cancer is among the primary concerns of our

country because of many risk factors such as polygamy, having a polygamous spouse, involvement in sexual activity at an early age (<16 years of age), smoking, human Papiloma virus (HPV) history, not being previously screened, low socio-economic status and poor hygiene.³

Almost all women are at risk of cervical cancer! It occurs most often in women over age 30. The Human Papilloma virus (HPV) is the main cause of cervical cancer. It passes from one person to another during sexual intercourse. At least half of sexually active women will have HPV at some points in their lives, but few women will ever get cervical cancer. In most cases, HPV will go away naturally; however, if it does not, there is a chance that over time, it may cause cervical cancer.⁴

Methods

This is a descriptive type of cross sectional study conducted at selected urban areas (Munsipara, Balubari, Paharpur) of Dinajpur from January to June 2012. The study included all the married women within 20-52 years of the selected areas. Respondent was taken by convenience sampling those who were willing to participate in the interview, were interviewed at their residence. Total 150 respondents were interviewed due to limitation of time.

A structured questionnaire was used as research instrument. The questionnaire was developed on the basis of the specific objectives of the study. Data were collected by face-to-face interview by asking them questions as per the written questionnaire. When selecting and involving participants, researchers must ensure that full information about the purpose of and use of each participant's contribution was made known to those involved. Signed consent was sought from them, and confidentiality was assured.

Results

In this study the mean age of the respondents was 34.23 (SD±7.63) years. Respondents by level of education shows that majority 42(28%) were educated upto class 6-10, 109 (72.66%) respondents had monthly income less than 1 lac, 138(92%) were house wife and 12(8%) were engaged in service. 140 (94%) were Muslim, 08(5%) Hindu and 2(1%) other religion. 81(54%) respondents conceived twice, 31(20.7%) respondents conceived thrice, 27(18%) conceived once and 1(2.67%) respondents conceived more than 4 times Most Respondents 92(61.3%) were para 2, 46(30.67%) were para 1 and 3(2%) were in nulli para.

Table I: Distribution of the respondents according to their previous knowledge about cervical cancer

Respondents' knowledge	Frequency	Percent
Yes	131	87.33
No	19	12.67
Total	150	100.0

It was observed that 131(87.33%) respondents had knowledge about cervical cancer and 19(12.67%) had no knowledge about cervical cancer previously. Among the 131 respondents who had previous knowledge about cervical cancer, most (44.7%) gathered knowledge from their relatives and 11.3% knew it from TV. Nineteen respondents(NA) had no knowledge about cervical cancer.

Table II: Distribution of the respondents according to knowledge about prevention of cervical cancer by vaccination

Knowledge	Frequency	Percent
yes	46	30.7
no	85	56.7
NA	19	12.7
Total	150	100.0

Among the 131 respondents who knew about cervical cancer, 85(56.7%) did not know about prevention of cervical cancer and 46(30.7%) knew that cervical cancer could be prevented.

Table III: Distribution of the respondents according to knowledge about diagnosis of cervical cancer before appearance of s/s

Knowledge present	Frequency	Percent
yes	42	28.0
no	89	59.3
NA	19	12.7
Total	150	100.0

It was observed that 42(28%) respondents out of 131 knew, 89(59.3%) did not know about diagnosis of cervical cancer before appearance of s/s.

Table IV: Distribution of the respondents according to knowledge about complete cure if diagnosed early

Knowledge present	Frequency	Percent
yes	39	26.0
no	92	61.3
NA	19	12.7
Total	150	100.0

Among the respondents 39(26%) knew 92(61.3%) did not know that Cervical cancer has complete cure if diagnosed early.

Table V: Distribution of the respondents according to knowledge about screening tests (VIA, PAP test, Biopsy)

Knowledge about screening tests (VIA,PAP test, Biopsy)	Frequency	Percent
yes	41	27.3
no	90	60.0
NA	19	12.7
Total	150	100.0

It was observed that 41(27.3%) respondents knew 90(60%) did not know about the screening tests

Table VI: Distribution of the respondents according to knowledge about free VIA test done in govt hospitals

Knowledge present	Frequency	Percent
yes	17	11.3
no	114	76.0
NA	19	12.7
Total	150	100.0

It was observed that 114(76%) respondents did not know about VIA test done with free of cost in govt. hospitals.

Table VII: Distribution of the respondents according to knowledge about symptoms of cervical cancer

Symptoms	Frequency	Percent
Lower abdominal pain	15	10.0
Foul smelling pervaginal discharge	17	11.3
Irregular menstruation	21	14.0
Post menopausal bleeding	11	7.3
Fever	7	4.7
Post coital bleeding	39	26.0
Menorrhagia	1	.7
Others	20	13.3
NA	19	12.7
Total	150	100.0

It was observed that most 39(26%) respondents mentioned post coital bleeding, 21 (14%) respondents mentioned irregular menstruation, foul smelling vaginal discharge 17(11.3%) as symptoms of cervical cancer.

Table VIII: Distribution of the respondents according to knowledge about risk factors of cervical cancer

Risk factors	Frequency	Percent
Hereditary	2	1.3
Organism	5	3.3
Cu T	2	1.3
Non use of condom	7	4.7
Use of oral contraceptive	2	1.3
Early marriage	43	28.7
Multiple sex partners	16	10.7
multiparity	20	13.3
multiple miscarriage	14	9.3
others	20	13.3
NA	19	12.7
Total	150	100.0

The study shows that most 43(28.7%) respondents mentioned early marriage, 20(13.3%) multiparity and 16 (10.7%) mentioned multiple sex partners as the leading risk factor of Cervical cancer.

Table IX: Distribution of the women according to their level of knowledge regarding cervical cancer

Knowledge	Frequency	Percentage
Very good	5	3.2 %
Good	7	4.7 %
Average	12	8 %
Poor	46	30.7 %
Very poor	61	40.7 %

Knowledge:

Very good (knowledge- regarding cervical cancer prevention by vaccination, regarding screening test, regarding cervical cancer is a curable disease if detected in early stage, regarding symptoms of cervical cancer, regarding risk factors of cervical cancer) in 5 (3.2%) women.

Good (knowledge- regarding cervical cancer prevention by vaccination, regarding screening test, regarding cervical cancer is a curable disease if detected in early stage, regarding symptoms of cervical cancer) in 7 (4.7%) women.

Average (knowledge- regarding cervical cancer is a curable disease if detected in early stage, regarding symptoms of cervical cancer, regarding risk factors of cervical cancer) in 12 (8%) women.

Poor (knowledge- regarding symptoms of cervical cancer, regarding risk factors of cervical cancer) in 46 (30.7%) women.

Very poor (knowledge- regarding symptoms of cervical cancer) in 61 (40.7%) women.

No knowledge (They did not know cervical cancer as a disease) in 19 (12.7%) women.

Discussion

This cross sectional study was carried out in selected urban areas of Dinajpur among 150 married women. The sample was selected conveniently and the study included those 20 to 52 years old, who were willing to participate. Data was collected with the help of structured questionnaire by face to face interview and necessary clarification was given where needed. The aim of the study was to assess the level of knowledge regarding cervical cancer and its prevention.

Among the respondents majority 41(44.67%) were 31-41 years old, 58(38.67%) were from 20-30 years old, and rest 25(16.67%) were 42-52 yrs. Their mean age was 34.23 (SD±7.63) years. These findings are similar with study findings of Keokedthong Phongsavan et al 2010, where mean age was 34 years.⁵

Majority 42(28%) of the respondents were educated up to 6-10, 39(26%) were educated up to class 1-5, 36(24%) were graduate, 20(13.3%) were educated up to SSC and 1(7%) respondent was illiterate Majority of respondents 109 (72.66%) had monthly income less than 1 lac, 34(22.66%) had monthly income between 1-2 lac and rest 7(4.66%) had monthly income between 3-4 lac. Respondent's occupation reveals that majority 138(92%) were house wife and 12(8%) were engaged in service Similar findings was seen in study of P.M.TEBEU et al 2008 where housewives 93.5%.⁶

Respondent's religion shows that 140(94%) were Muslim, 08(5%) Hindu and 2(1%) other religion, 110 respondents were between 16-20 yrs at marriage, 34 were between 21-25 and the rest 06 respondents were between 26-30 at marriage. Mean age at marriage was 21.69 yrs. SD+_15.066, minimum age was 16yrs and maximum age was 30 years. 81(54%) respondents conceived twice, 31(20.7%) respondents conceived thrice, 27(18%) conceived once and 1(2.67%) respondents conceived more than 4 times. Most Respondents 92(61.3%) were para 2, 46(30.67%) were para 1 and 3(2%) were nullipara. It was observed that 55(36.67%) respondents admitted history of miscarriage and rest 95(63.33%) had no history of miscarriage. It was observed that 131(87.33%) respondents had knowledge about cervical cancer and 19(12.67%) had no knowledge about cervical cancer previously.

This is higher than 82.5% reported by Sven Ackermann et al.⁷

In my study among the 131 respondents who had previous knowledge about cervical cancer, most 67(44.7%) gathered knowledge from their relatives and from medical professionals 26(17.3%) and 17(11.3%) knew it from TV.19 respondents (NA) had no knowledge about cervical cancer. This findings are dissimilar with study of P.M.TEBEU et al 2008, where women learned of cervical cancer from media 75%, from medical stuff 41.7%, and from relatives 37.5%.⁶

Among the 131 respondents who knew about Cervical cancer, 85(56.7%) did not know about prevention of Cervical cancer.

It was observed that 89(59.3%) respondents out of 131, did not know- Cervical cancer can be diagnosed before appearance of sign symptoms. This is similar to 58.5% reported by P.N. Aniebue et al among female under graduate students in a Nigerian University.⁸

The low level of awareness in this study could be attributed to poor publicity on cervical cancer. Ignorance of the existence of screening services, absence of symptoms. Among the respondents 92(61.3%) did not know that Cervical cancer has complete cure if diagnosed early. It was observed that 90(60%) respondents did not know about the screening tests. The study reveals that 67(44.7%) respondents wished to undertake a screening test. This is lower than 52.8% reported by P.N. Aniebue et al among female under graduate students in a Nigerian University.⁸

It was observed that 114(76%) respondents did not know about VIA test done with free of cost in govt hospitals. It was observed that most 39(26%) respondents mentioned post

coital bleeding, 21(14%) respondents mentioned irregular menstruation as the symptoms of cervical cancer. This is comparable to white vaginal discharge and abnormal vaginal bleeding reported by A.C. Ansink et al.⁹

The study shows that most 43(28.7%) respondents mentioned early marriage, 20(13.3%) multiparity and 116(10.7%) mentioned multiple sex partners as the leading risk factor of Cervical cancer. This findings are similar to Keokedthong Phongsavan et al 2010,¹⁰ It was observed that the level of knowledge regarding cervical cancer was very poor in 61 (40.7%) women.

This study indicates that women in selected urban areas have limited knowledge regarding cervical cancer and even less about screening and prevention. So it can be concluded that accurate information must be readily available to women to increase their knowledge, especially on the risk factors associated with cervical cancer, to guide them on the importance of regular screening.

Conclusion

The study was conducted among women in selected urban areas of Dinajpur with a view to assess level of knowledge regarding cervical cancer and its prevention .The majority of women have limited knowledge regarding cervical cancer and even less about screening and prevention. There is a need to educate the general community about the disease and its prevention.

Such an educational program would need to be linked to an appropriate screening and treatment program. It was encouraging that most of the interviewed women expressed an interest in knowing more about the disease and expressed to come to either a district or a medical college hospital 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 regarding cervical cancer and its prevention.

Recommendations

Cervical cancer is among the few cancers that can be prevented in western countries, the decline in cervical cancer incidence and mortality has been attributed to extensive screening programme. In our country cervical cancer screening programme is not wide spread .From analysis of the data of this study following recommendations can be made to increase the level of knowledge about cervical cancer and its prevention.

- 1) Public health campaigns can significantly contribute to raising awareness about cervical cancer.
- 2) Misconceptions in knowledge about cervical cancer and screening need to be addressed through an adequate public health campaign.
- 3) The campaign will need to be followed by education of health professionals involved in providing health care to women and the improvement of health services.
- 4) Study findings will also be used to inform and facilitate the change in the government's policy regarding cervical screening.
- 5) We conclude that the first step in cervical cancer prevention is through public education. An aggressive campaign with in depth teaching about cervical cancer including its existence, risk factors, and methods of prevention by radio or by health care providers, mainly general practitioners, should be conducted
- 6) Vaccination against HPV should be included in national EPI(Expanded programme on immunization) schedule. Consequently, numerous lives could be spared. We hope to see declining death rates from cervical cancer during the next decade. This study can contribute to the development of a multi-strategy health program that will take into account women's knowledge of

cervical screening and cancer and emphasize a non-stigmatizing approach to encourage women to attend cervical screening. Additional studies empowering women's knowledge of control over their health are recommended.

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