Original Article

Knowledge and Awareness About Risk Factors of Cervical Cancer, Its Screening and Vaccination Among the Women Attending Chittagong Medical College Hospital

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Abstract

Cervical cancer is one of the leading causes of morbidity and mortality amongst the gynaecological cancer in Bangladesh.This study was carried out to assess the knowledge of cervical cancer, awareness of the women towards the cervical cancer screening program and its vaccination in Bangladesh. A cross- sectional interview based study was conducted using a self administered questionnaire between January 1 ,2013 and June 31, 2013 on 508 respondents. Convenience sampling was applied among the women attending at Gynae Out Patient Department (GOPD) of Chittagong Medical College Hospital for VIA (Visual Inspection with Acetic Acid) test. Of the 508 respondents only 211(41.54%) told that they had idea about cervical cancer, while only 114 (22.44%) knew that VIA is the screening test for cervical cancer.A total of 390 (76.77%) respondents did not know any cause of cervical cancer.Most of the respondents (80%) came for VIA due to doctor's advice.After doing VIA among 229 respondents, 149 (65.07%) told that they had been counseled for the next follow - up by the health professionals and 118 (51.52%) were ready for routine periodic screening.Majority (85.88%) of the respondents were absolutely ignorant about the vaccine of cervical cancer. Age and marital status did not influence their knowledge but the level of education and occupation was found to positively influence their knowledge of cervical cancer and their acceptance of the screening test.This study highlights that majority of women in Bangladesh are not adequately equipped with knowledge concerning cervical cancer. Adequate health information and counseling on cervical cancer and regular screening test need to be emphasized in our country.

Key words: Knowledge and awareness; Risk factor; Cervical cancer; Screening program; Vaccination.

INTRODUCTION

Cervical cancer is the most common form of cancer in developing countries and the second most common form of cancer in the world as a whole. Almost 80% 0f cervical cancer occur in the developing countries. Bangladesh and India have annual incidence of cervical cancer of 11956 and 12595 respectively. According to the World Health Organization (WHO) statistics, incidence of cervical cancer cases in Bangladesh has been estimated at 167 per 1,00,000 populations and 6,582 women die every year in the country for this cancer[1].

The problem of cervical cancer in Bangladesh is particularly acute because of poverty, early age marriage, multiple marriages, high parity and illiteracy. In developing countries, women's knowledge about risk factors of cervical cancer is very limited. However it is considered one of the most preventable cancers[2]. Of all the screening tests available for cervical cancer, Visual Inspection with Acetic Acid (VIA) is the on going screening program in Bangladesh. VIA meets the criteria of a good screening test. It involves visually examining the cervix with naked eye after the application of 5% acetic acid[3]. It is claimed that majority of the cervical cancer(theoretically upto 90%) could be prevented if all women were offered screening programs[.4].

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Epidemiological studies have identified that infection with oncogenic types of Human Papilloma Virus (HPV) is a necessary cause of cervical cancer[5.] HPV vaccines have been developed and vaccination, if done before the person becomes sexually active, would offer great protection. HPV vaccine like 'Cervarix' offer protection against HPV-16 and-18 and are given in three doses over a six month period[6]. So this study was carried out to assess the knowledge and awareness about risk factors of cervical cancer , its screening and vaccination among the women came for VIA test (Visual Inspection with Acetic Acid) an screening procedure of cervical cancer in Gynae Out Patint Department of Chittagong Medical College Hospital, a tertiary hospital in Bangladesh.

MATERIALS & METHODS

A cross sectional, interview-based study was conducted in the Gynae Out Patient Department of Chittagong Medical College among the women who came here for VIA test. Women come here for VIA or Pap smear test being referred by doctors or from Inpatient departments (Admitted in the gynae ward) and also with self interest. An average of about 10 patients attend here to do VIA test. The study was conducted from January to June, 2013. A total of 1018 women undergone VIA test in this period. But among them , interview was taken from only 508 respondents.Because women who did not give consent were excluded from the study.

Data collection tools and analysis

Questionnaire containing both open and closed type of questions was designed based on the study objectives, taking help from the previous literature and studies available on the topic.Face to face interview was taken by two investigators to avoid interobserver error. Analysis was done using on Statistical Package for Social Science (SPSS version 18). Percentage were calculated for all the variables. Relevant tables and graphs were computed.

RESULTS

The age range of the participants was between 18 and 60 years. Majority (43.90%) of the participants were within the age range of 26 to 35 years. Among all the subjects, the majority (77.16%) were housewives. The occupation of the husbands were mainly private job and business. The subjects hailing from urban area in 57.48% cases and 38.58% respondents had income within Tk 5000-10,000.Of all the respondents 188 (37.01%) participants were educated up to secondary level and 21.26% were illiterate.

Age at first marriage of 400 (78.74%) participants was within 15 to 18 years. The parity distribution revealed 50.19% attendees had 3 to 4 conception. A total of 238 (46.85%) respondents used hormonal contraceptives and 28.35% used no contraceptive methods (Table 1).

A total of 76. 77% of the sample said that they 'don't know' the causes of cervical cancer and thus they were not asked any question related to the etiology (Table 2). More than five risk factors were reported from the participants which included early age at first marriage & coitus (5.71%), multiple partners and promiscuous behavior (5.11%), poor hygiene (3.75%), multiparty (3.95%) and infection (5.31%). About 80% of the respondents were referred by the registered doctors to do the screening test. Only 20% came with self interest.

Table 2 also shows that 22. 25% respondents had the VIA test before, while only 22.44% of the respondents knew that VIA or Pap smear is a screening test for cervical cancer. Majority (77.56%) of the attendees knew that it was a test for examination of the whole uterus.

Among 229 respondents in this study, 65.07% were given instruction for next follow up by the health care provider and 53.71% were ready for routine periodic screening if given the opportunity but 48.47% were still not sure. In total only 12 out of 85 respondents who were asked about vaccine against cervical cancer were aware of the vaccine of cervical cancer (Table 3). Rest of them told that they did not hear about the vaccine. The knowledge was significantly higher among the women with high education level, were employed and those who came from urban area (p<0.0001) (Table 4).

Table 1 : Demographic characteristics of the women participating in the study

Characteristics	No.	Percentage
Age (Years)		
18-25	79	15.55%
26-35	223	43.90%
36-45	171	33.66%
46-55	35	6.89%
Occupation of the Respondents		
Housewife	392	77.16%
Office job	34	6.79%
Garment worker	43	8.46%
House maid	13	2.56%
Day labour	8	1.57%
Others	18	3.55%
Residence of the Respondents		
Urban	292	57.48%
Rural	216	42.52%
Family Income (Taka)		
<5000	71	13.98%
5000-10,000	196	38.58%
10,000-20,000	156	30.71%
>20,000	85	16.73%
Education level		
Illiterate	108	21.26%
Literate	56	11.02%
Primary	156	30.71%
Secondary and above	188	37. 01%
Age at First Marriage (years)		
15-19	400	78.74%
>20	108	21.26%
Number of Concoption		
1-2	130	25.60%
3-4	255	50.19%
>4	123	24.21%
Use of Contraception		
Hormonal	238	46.85%
Cu T	27	5.31%
Barrier	71	13.98%
BLTL	28	5.51%
None	144	28. 35%

Table 2 : Knowledge and awareness of the women about risk factors of cervical cancer and its screening

Knowledge/Awareness	No.	%
Don't know	390	76.77%
Early age of marriage	29	5.71
Multiparity	15	3.95
Poor hygiene	19	3.75%
Infection	27	5.31
Multiple partners and promiscuous behaviour	26	5.11
Reason for coming for screening		
Doctor's advice	406	80
Self	102	20
Knowledge regarding VIA		
Examination of uterus	394	77.56
Cancer screening test	114	22.44
Previous screening for cervical cancer		
Yes	113	22.25
No	395	77.75
Have you been told anything about next follow up ? N=229		
Yes	149	65.07
NO	80	34.03
Would you come to do this screening test again for follow up?		
Yes	123	53.71
No	106	46.29

Table 3 : Awareness about vaccination of cervical cancer

Do you know there is a vaccine which is given to prevent cervical cancer? N=85		
Yes	12	14.12
No	73	85.88

Table 4 : Knowledge of the women according to socio demographic characteristics

Characteristics	Number	Having knowledge	P-value
Education level			
Upto primary level	320	36	χ^2=67.768
Secondary and above	188	82	p<0.001
Residence			
Urban	292	96	χ^2=34.588
Rural	216	22	p<0.0001
Employment status			
Unemployed	392	27	χ^2=253.047
Employed	116	91	p<0.0001

DISCUSSION

This study provides baseline information for   planning a cervical cancer prevention programme in Bangladesh.In this study, the knowledge   and   awareness   among the women about the risk factors of cervical cancer ,its screening and vaccination were identified. The results showed a deficiency in women's knowledge about the risk factors of cervical cancer which revealed that about 76.77% of the respondents had no knowledge about the cause of cervical cancer. Such findings have been reported by a number of previous studies in Arab communites.In the presnt study, the poor level of knowledge was related to   illiteracy   and unemployment. This relation between education and knowledge has been reported in previous studies in Arab and Hispanic women[7,8].

In this study, knowledge of women about VIA   test was also evaluated.Only 22.44% of the participants knew that it is a screening test for cervical cancer. A study conducted in tertiary   hospital   in Karachi, Pakistan   evaluated   the knowledge of interns and nurses about Pap smear, showed only 40% of the respondents were aware that Pap smear is the screening   test for   cervical cancer[9]. This result can explain   why most of the cervical cancer in our   country present in advanced stage.

Among 229 respondents, 65.07% were given instruction for next follow up by the health care providers and most (53.71%) of them were eager for routine screening while participants who did not get any instruction were not awere for next follow up screening. This result reveals that health care providers have a very important role to play in getting people interested in the screening program.

The results showed that very few of the respondents were aware of the vaccine against Human Papilloma Virus (HPV) which is an important cause of cervical cancer.Prevention of cervical cancer can be divided into primary prevention which includes vaccine and secondary prevention which includes   screening. Prevention of HPV infection is very essential in prevention of cervical cancer. Many studies have been done worldwide recently on the knowledge, awareness   and practice of HPV vaccine.The studies reported better knowledge in developed countries like USA, Belgium and Australia, but in developing countries like Thailand, Turkey and China had poor information about HPV vaccine[9].

CONCLUSION

This study highlights inadequate knowledge about cervical cancer and its screening amongst the women of Bangladesh. In this country, cervical cancer is the commonest genital tract cancer in female. Despite its public health importance, there are no effective prevention programs in Bangladesh and hence the risk of the disease and death from cervical cancer remains largely uncontrolled.Health education, promotion of screening program and raising awareness about its vaccination is the most cost effective approach in reducing the incidence of   cervical   cancer in resource crunched society like Bangladesh.Cervical cancer control activities should be included in   the   existing 'reproductive and child health program.Only through proper health education of the people and also the health care workers, burden of cervical cancer can be reduced.

DISCLOSURE

All the authors declared no competing interest.

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