

## Observational Study

# Awareness, outlook & general belief regarding cervical cancer and its prevention in women attending gynaecology OPD in rural setup in West Bengal

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Cervical cancer is a cause of significant disease worldwide. Human papilloma virus (HPV) is the cause of cancer cervix in almost all cases. Early detection and treatment is essential to prevent further spread. It is a well known fact that rural Indian population is usually less informed about cervical cancer and specially screening programmes and available modalities for screening, hence this study was taken to understand their knowledge, attitude & general belief regarding cervical cancer and simultaneously to inform them about the various detection & treatment modalities available. To assess the Awareness & General belief regarding prevention of cervical cancer among women attending gynecology outpatient department (OPD) in rural area setup and to find an association between knowledge and perceived barriers with socio- demographic Variables. The present descriptive study was designed in order to access the knowledge, attitude and belief of rural women based in rural setup of Kalyani. A sample size of 500 women attending Gynaecology OPD in GICE Hospital, aged between 25-55 years was targeted from January 2018 to June 2018. Simple random sampling technique was adapted for the sample collection. Pre tested questionnaire were used for data collection. The rural population in general has a very little knowledge regarding the causes of cervical cancer, signs and symptoms related to it and even have less information regarding prevention methods leading to late diagnosis or even treatment.

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**Key words :** Cervical cancer, Human papilloma virus (HPV), screening of cervical cancer.

Cervical cancer is one of the dreaded disease of India and worldwide<sup>1</sup>. Most of the involved countries are from low and middle income group. It is a well documented fact that HPV is the cause of cancer cervix in maximum cases<sup>2</sup>. Early age of first intercourse, multiple sexual partners, unprotected sex and sex with un-circumcised men, have been found to increase the risk of contracting HPV infection<sup>3,4</sup>. It is one of the leading cancer in Indian women and the second most common cancer in women worldwide. Though there are several methods of prevention of cervical cancer, prevention by vaccination is emerging as the most effective option, with the availability of two vaccines<sup>5</sup>.

There is very little or no knowledge regarding sources or prevention of the same. The primary reason for this is lack of access to screening and health services, and lack of awareness of the risk factors of the cervical cancer<sup>6</sup>.

### *Perspective of a Cervical Cancer in India :*

In India 365.71 million women above the age of 15 are

at a risk of developing carcinoma cervix. In 132082 women are diagnosed with carcinoma cervix. In 74118 women die due to ca cervix every year accounting for 26.7% of world wide incidence and 27% deaths worldwide<sup>5</sup>.

One women in India dies due to carcinoma cervix every 7 minutes accounting for more than 200 deaths every day. A lot of unexplored area remain regarding cervical cancer, various cervical cancer programmes are running in the country currently. ICMR has national cancer registry which maintain the data. But problem is it does not detect the data from whole country rather than few places of collection points.

The main disparity between low income families and high income families is lack of awareness in former compared to latter and lack of basic health care access to lower/middle income group.

### *Methodology :*

The present study was designed in order to access the knowledge and attitude of rural women based in rural setup of Kalyani. A sample size of 500 women attending Gynaecology OPD of GICE Hospital, aged between 25-55 years was targeted. Simple random sampling technique was adapted for the sample collection. Pre tested questionnaire were used for data collection. The present study

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was conceptualized and designed in order to assess knowledge and attitude of rural women.

The data analysis was done using SPSS package for analysis, version 16. The outcomes from this study will hopefully point out the major areas that need to be focused in order to build a public campaign to address the cause of cancer cervix, which is one of the leading causes of cancer related deaths in India.

### *Limitations :*

Resource constraints restricted the researchers from taking a truly representative sample of rural women to study their knowledge and attitudes regarding cancer cervix. Also, the researchers feel that ideally there should also have been an action component within the research, at least for IEC activities, which is again limited by the available time and personnel required.

### *Ethical Concerns :*

The study mandated procedures to ensure informed consent and maximize confidentiality. Participation of all respondents in the survey was strictly voluntary and there was no monetary or other compensation offered for participation. Measures were taken to assure the respect, dignity, and freedom of each individual participating in the data collection. Participation was based on informed consent. Each individual agreeing to participate and who was able signed the consent form.

### **FINDINGS**

This survey asked respondents via multiple choice questionnaires, questions about the cervix, cervical cancer, screening test, pap smear test, willingness to pay, perception regarding pap smear testing, HPV vaccination, willingness to pay for vaccination. Questions were spread out to assess knowledge and attitude regarding both screening and vaccination.

### *Respondent Profiles :*

In 49% of the respondents were in the age group of fifteen to twenty five years. This primarily includes school and college going students. In terms of educational qualification of the respondents, more than 20% of the respondents have received at least graduate degree. 40% had annual income less than Rs 50000 (Table 1)

Only 5% of respondents (Table 2) could identify the correct symptoms that a patient with cervical cancer may show and 80% said that they do not know what could be the symptoms of cervical cancer. Of this

Table 1 — Annual Family Income of the Respondents

< 50000	40 %
50000- 1lakh	20 %
1 lakh – 2 lakhs	20%
>2 lakhs	20%

Table 2 — Knowledge of symptoms

Correct symptoms	5%
Do not know symptoms	80%
Possible symptoms	15%

latter group which said they do not know the symptoms, the highest number were of housewives and school students.

Only 15% could identify the possible effects on cervical cancer on a patient, of this maximum women were employed and were "employed" group of the respondents. When asked about the age group most likely to get cervical cancer, only 24% said that it is menopausal age group. 49% had no idea (Table 3)

Table 3 — Age group likely to get cervical cancer

Reproductive group	12%
Menopausal group	24%
Any age group	15%
Don't Know	49%

Question	Respondents %
Know screening	15
Know pap test	12
Had pap test	30
Pap test is safe	14
Pap test in every two years for adult	29

### *Knowledge and Attitude Towards Screening Test :*

This section of the study started by asking the respondents if they know what is a screening test. Equal responses were received for choosing the correct definition from the given options and for opting for "don't know". However, in response to the next question, 12% of the respondents said that they have heard about a pap smear test. Of these 12%, the highest proportion was of employed women.

Consequently, this was also the category that had the maximum number of affirmative responses for ever having taken a pap test. Interestingly, in 3 % of the cases the pap test was self prescribed. The amount paid for the test ranged between 100 to Rupees 200.

When asked how much is a respondent willing to pay for screening test most of them say that it should be within Rs.500. Around 50% respondents of this hold some kind of health insurance. Only 14% respondents perceive PAP test to be safe, as against being risky and painful. On being asked if a healthy adult women should have a pap test every two years, maximum responses are registered as "cannot say". While 33% of respondents agree, 29% disagree (Table 4).

Table 4 — How much you are willing to spend on Pap Test every two years

Free	40%
Rs 50	11%
Rs 50-100	5%
Rs 100-200	3%
Rs 200-500	32%
Rs 500-1000	09%

### *Knowledge and Attitude Towards Colposcopy as a Diagnostic Tool :*

While from above it's noted that knowledge about PAP Smear is highly limited among rural population, the subjects are even unaware about colposcopy. 88% has no idea regarding colposcopy, surprisingly even after explaining the uses 80% doesn't consent for usage considering the fact that national cancer research institute are advocating use of colposcopy in field setup (Table 5)

**Knowledge and Attitude Towards HPV**

**Vaccination :**

In 80% do not know anything about the HPV vaccine. 61% can't say if HPV vaccine can prevent them from cervical cancer. 35% (Table 6 & 7) would like to take HPV vaccine as a preventive measure against cervical cancer. Most of the respondents 28% are willing to spend within Rs. 1000 to get the vaccination. 92% of respondents do not know where HPV vaccine is available, while 13% say that it is able in private clinics, Government health facilities and in medical stores.

**Decision Making**

**Environment :**

On being asked who decides in the family when to see a doctor, 44% said that the decision making is done according to the situation in hand and 35% said that they themselves decide when to seek medical care. It was also asked if they would be comfortable in talking about cancer screening to their guardians (or at home), to which 50% respondents answered in affirmative. However, 16% said they would do so only if it was urgent and 30% said they don't know (Table 8).

**DISCUSSION**

There is a lack of awareness regarding cervical cancer and HPV Vaccination, the general population at large is ignorant of the disease and prevention. But is willing to know and spend some amount for better screening. They also have positive perceptions about the HPV vaccination to prevent cervical cancer among the studied group. Beliefs and practices of preventive health seeking behavior primarily assessed through the respondents knowledge and perception regarding cancer screening (pap testing) are not based on any concrete evidence or information. The cause for above statement may be due to lack of awareness programmes, education or communication to community at large. The community elders also play almost negligible role in spreading information during major gatherings.

Knowledge about linkage between HPV and cervical cancer and hence HPV vaccine and cervical cancer is also

Yes	12%
No	88%
Will consent to use	20%
Will not consent to use	80%

Yes	35%
No	40%
Can't say	25%

Agree	27
Disagree	12
Can't say	61%

Yes	50%
No	4%
Only if its urgent	16%
Don't know	30%

absent in half of the responses. The peak incidence of HPV occurs between the ages 16 and 20 yrs, after the first sexual intercourse. The natural history of HPV infection coupled with the ability to clinically access the cervix makes cervical cancer the most preventable and treatable of all types of cancer. The dual application of primary and secondary prevention strategies offers an opportunity for comprehensive control of this cancer<sup>7</sup>.

There is higher incidence of ca cervix in developing countries than the developed countries. In low income countries, middle aged women have at least as many as HPV infections as young women, mainly because of variations in the age specific sexual behavior of the women and their partners<sup>8</sup>. Socioeconomic differences in cervical cancer risk seem to be explained not by differences in HPV prevalence but rather by factors that affect the natural history of HPV infection (eg, Early age at first sexual intercourse and child bearing, and high parity). Immune impairment due to HIV infection also leads to many fold increases both in the burden of HPV infection and in the already existing lack of adequate screening for cervical cancer.

This rural study can be a eye opener to even do larger studies and to involve more rural population at large. This is just a questionnaire based study to elicit information from rural population. There is a need for large scale screening programmes.

Another important dimension is availability of HPV Vaccine in government supply chain, as of now it's not available and cost can be a deterrent factor for rural household.

In this study, many women suggested they can afford maximum of Rs 500 for it. In this regard, several models of economic evaluation indicate that HPV vaccination in low and middle income countries where quality screening is not wide effective if the cost per vaccinated girl (including 3 doses of vaccine and program costs) is less than US\$ 10-25<sup>8</sup>.

What is required is commitment from government, and to follow three models, of HPV Vaccination, screening and treatment, More research is required regarding use of HPV Vaccinations and its viability in terms of cost among general population including government supply of vaccinations.

**CONCLUSION**

Every public health programme requires dedication from grass root level, it can be taken as a challenge to provide adequate healthcare to poor by government but implementation in this vast country is difficult. Hence po-

litical is also very important in this regard. Screening program for cervical cancer is nowhere on the national public health policy priorities. The Government of India has already launched a National Cancer control programme in 1975.

With a prime focus on early detection and primary prevention but implementation is hard to see yet.

Hence focus should be concentrated on following points:-

(A) Health education.

(B) Behavior change communication regarding preventive care seeking.

(C) Setting up primary prevention facilities.

(D) Plan and strategize for and extensive screening program and

(E) Deliberate on the possibility of introduction of the HPV vaccination

This study regarding awareness has opened our eyes regarding lack of knowledge in rural areas about cervical cancer and the need to open our eyes and to persuade the government to consider cervical cancer screening as one of the top priorities in country.

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