

Influencing Reasons for Participation and Nonparticipation of Women in Cervical Screening

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Abstract

Introduction and background: Cervical cancer is one of the leading responsible condition for causing high death rate among women after breast cancer. It is preventable and curable disorder, but the prevalence of cervical cancer remaining too high in India. Majority of women do not aware of cervical screening procedures. Maharashtra is standing in second position in possessing more number of cervical cancer cases.

Methodology: A quasi- experimental pretest and post research design was used to execute the study. This study was conducted in selected hospitals of PCMC. The samples were the women age group between 30-60 years attending Gynec OPD. The systemic random sampling techniques was used to select the samples. Total sample size was 501. A self-administered tool was administered to find the reasons for participation and nonparticipation in cervical screening. Tool and content validity was done. The reliability of the tool was done r value is = 0.88. The study proposal has been approved by the Ethical Committee, MGM Institute of Health Sciences, Kamothe, Navi Mumbai. Permission has been taken from the concerned authority of the selected urban health care centers for data collection. The content was prepared on prevention and early detection of cervical screening in the form of video and modules in their regional languages.

Results: Majority of participants among three experimental groups, about 38.32 % in verbal group, 41.91% in written group and 40.71 % in video group have responded that they could not take part in the cervical screening programme as they are very embarrassed with cervical screening procedure. While others had responded that, I am healthy I do not have to go for this test, some women said, I have only one sexual partner so I don't require this test. A few women have assumed that the test is very expensive, thinking that not required the Pap test as no symptoms of cancer observed and other have stated that don't know the frequency of test.

Conclusion: A key strategy to improve the attendance of the women for cervical screening is to spread the awareness on prevention and early detection of cervical cancer by using various educational methods.

Key Words: *Influencing reasons, participation, non-participation, women, cervical screening*

Introduction and Background

Cervical cancer is one of the extreme cancers among the Indian women, it is one of the leading cancers among the women after the breast cancer. Cervical cancer is

noticeably preventable and curable but in some regions terrifyingly very high. Statistics shows that, nearly 90% of deaths due to cervical cancer had occurred in low and middle income nations. The incidence of cervical cancer cases in India accounts for 23 % (1,22,844) in worldwide and India is the second positioned populated country in the world. There is a great burden for developing and middle income nations with high frequency of cervical cancer due to absence of screening services to detect precancerous lesions at an initial stage.¹

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In India, The proportion of the range is raised up from 15 % to 55 % female cancers from diverse parts of India. About 80% of the women with cervical cancers reported in the clinics in advanced stage of cancer. More than 200 women die every day, eight women die every hour and one woman die every 8 minutes. As per 2012 statistics, after Uttar Pradesh, Maharashtra has shown the increasing trend in the sum of cases with cervical cancer.²

Primary prevention of cervical cancer is likely to be achieved by administering two doses of HPV vaccine. It is a quadrivalent vaccine protect the women from HPV 6, 11, 16 and 18 and bivalent vaccine, protect the women from HPV 16 and 18. The action of this vaccine is more efficacious, if it is administered before the sexual exposure, between the age group of 9 -13 years.³

Another important strategy of prevention of cervical cancer is secondary preventive approach, it is the systematic screening of women through an organized program along with treatment and follow-up of the abnormal pap test. The national guideline for cervical cancer screening in India advocates screening of women between 30 to 59 years of age.⁴

Though women were given adequate education on prevention of cervical cancer, and importance of cervical screening, majorly women are not convinced for the test. Many times the women who were taken for the particular study, they only take part in the cervical screening, but not others. The women those who have participated also do not follow the next periodical schedule of the screening programme.⁵

The reasons for not participating in the cervical screening have many reasons such as lack of money to reach the private clinics, less public clinics available to provide screening at free of cost, difficult in attending various appointments, lack of resources at public health clinics, family members do not allow for the test, lack of time, fear, embarrassment etc.⁶

In previous studies, the present researcher has organized cervical screening programmes, during initial interview, it was revealed that 99 % of the women have never undergone for cervical screening. Researcher has given education on prevention of cervical cancer for those women who have never undergone through Pap

test, after giving education also some of the women have not participated in cervical screening. Then the researcher has developed interest to find the reasons for non-attendance in screening. This study results showed the reasons for non-participation of women in cervical screening

Objectives of the Study

1. To find influencing reasons for participation and nonparticipation for cervical screening among three experimental groups.
2. To find the views of women regarding verbal, written and video based health education on prevention and early detection of cervical cancer.

Methodology

Research Design: A quasi- experimental pretest and post research design used to execute the study.

Setting: This study was conducted in selected hospitals of PCMC.

Sample type: The women age group between 30-60 years attending Gynec OPD recruited as a sample. The systemic random sampling techniques was used to select the samples.

Subject Size: Total sample size was 501.

Sampling criteria: Sample includes women who were;

- age group between 30-60 years
- Seeking help for reproductive related health services at the Gynec OPD
- resident of Pune Chinchwad Municipal Corporation
- able to read and understand Marathi /English

Tools of Data Collection

The tool consisted of three sections;

Section 1 contains the reasons for non-participation in cervical screening before attending the health education. This scale included 15 items to find out the reasons why women have not participated in cervical

screening. These 15 statements had two options namely; Yes or No.

Section 2 contains the reasons for non-participation in cervical screening even after attending the health education. This scale included 8 items to find out the reasons why have not participated for cervical screening even after attending the intervention. These 8 statements had two options namely; Yes or No.

Section 3 of the tool is on reasons for participation in cervical screening among three experimental groups after attending health education. This scale included 8 items to find out the reasons why have they participated for cervical screening after attending the health education. These 8 statements had two options namely; Yes or No.

Tool validity and reliability:

Content validity and face validity of tool for conduct of study was done by the experts of tool validation committee of Mahatma Gandhi Memorial Institute of Health Sciences. The content validity of three interventions (verbal, written and video) was done by experts of FOGSI, POGS and PCMC. The reliability of the tool was calculated using value of Cronbach’s Alpha (α) method for reasons checklist. It was found reliable

that is $r = 0.88$.

Ethical consideration:

The study proposal has been approved by the Ethical Committee, MGM Institute of Health Sciences, Kamothe, Navi Mumbai. Permission has been taken from the concerned authority of the selected urban health care centers for data collection. Participants were explicated regarding the study and then informed consent was taken before the data collection

Educational Program

The content was prepared on prevention and early detection of cervical screening in the form of videos and modules in their regional languages. Content has covered the definition, mode of transmission of cancer, HPV vaccines and screening tests such as (Pap test, VIA, VILI and HPV DNA.

Statistical Analysis

Descriptive and inferential statistics were applied for the present study. The collected data was arranged in tables, figures, numbers and graphs. Various tests like Mean, Median, frequency distribution, tests were applied.

Results

Table No 1: Responses on reasons for non-participation in cervical screening before educational intervention n=167 in each group

Reasons	Verbal		Written		Video	
	f	%	f	%	f	%
Not aware of cervical cancer screening	89	53.29	97	58.08	90	53.89
This test make me worry and fear of exam	52	31.13	54	32.33	53	31.73
Fear of test results.	22	13.17	14	8.38	26	15.56
It is test is too painful.	26	15.56	38	22.75	34	20.35
It is too embarrassing	64	38.32	70	41.91	68	40.71
Male examiner may discourage me	12	7.18	32	19.16	37	22.15
This test is too expensive	52	31.13	63	37.72	55	32.93
I am healthy, so not required the test	71	42.51	70	41.91	74	44.31

Cont... Table No 1: Responses on reasons for non-participation in cervical screening before educational intervention n=167 in each group

This test is not important for my age.	32	19.16	32	19.16	36	21.55
I have only one sexual partner	70	41.91	71	42.51	73	43.71
I am not aware of the place of Pap test.	50	29.94	50	29.94	51	30.53
My partner does not allow for test	22	13.17	33	19.76	26	15.56
PAP test results cannot be trusted	16	9.58	8	4.79	13	7.78
I do not know who will perform test	34	20.35	43	25.74	38	22.75
Don't know the frequency of test	75	44.91	71	42.51	73	43.71

In all three study groups majority of women has never participated in the cervical screening in their life as they have no adequate knowledge and their responses to the reasons for non-participation were: absence of information, it was too embarrassing to have a test like this, Pap test may be expensive, I am healthy so I don't require pap test, and do not know how frequently I have has to be screened

Table No 2: Responses on reasons for non-participation even after attending educational intervention among three study groups n=-104

Reasons	Verbal		Written		Video	
	f	%	f	%	f	%
	23		64		17	
I feel Pap smear test is painful.	14	60.86	59	92.18	14	82.35
It is too embarrassing to have a test	20	86.95	61	95.31	2	11.76
I do not need test as I have only one sexual partner	4	17.39	54	84.37	4	23.52
My husband does not like	21	91.30	60	93.75	12	70.58
I don't have any discomfort or pain , healthy	21	91.30	62	96.87	15	88.23
Fear of test results.	8	34.78	9	14.06	6	35.29
I did not find time to go for Pap smear test	4	17.39	4	6.25	15	88.23
I could not come as I go for job in week days	2	8.69	4	6.25	14	82.35
Clinic is far away from my home	21	91.30	60	93.75	14	82.35
Appointment timings are not suitable	3	13.04	8	12.5	1	5.88
Waiting list is too long	1	4.34	2	3.12	0	0
Forgotten screening dates	5	21.73	58	90.62	15	88.23
Did not understand the concept and confused about Pap smear test	2	8.69	51	79.68	3	17.64

Across three experimental groups, a few of the participants had not participated in the screening even after attending the educational programme, their responses for non-participation were, this test is painful, husband did not like for these kind of investigations, the clinic is far away from my home and don't require Pap smear test, as I am healthy.

In written and video based group, majority of participants said that we have forgotten the dates for screening. 88.23% of women from video group said that, they could not participate in the screening as did not find time to go for Pap smear test.

Table No 3: Responses on reasons for participation after educational intervention among three study groups

n=354

Reasons	Verbal		Written		Video	
	n=135		n=89		n=130	
	f	%	f	%	f	%
I realized that this test can find cervical changes before they become cancer	70	78.65	63	70.78	121	93.07
I understood that cervical screening is simple procedure.	72	80.89	53	59.55	128	98.46
I realized that it is too cheap to have a Pap smear test in future.	41	46.06	50	56.17	129	99.23
Educator encouraged me to participate in test	80	89.88	41	46.06	124	95.38
I had no fear and worries about Pap smear test and its results	12	13.48	41	46.06	45	34.61
I did not feel embarrassing after attend the health education	12	13.48	41	46.06	17	13.07
It was clear about the clinic and doctor	10	11.23	20	22.47	124	95.38
My partner and other family members also well understood about importance of test	19	21.34	25	28.08	65	50

Across all three study groups, there were four main reasons and responsible factors, motivated them to participate in cervical screening programme, they are, they have realized that a Pap smear test can detect the pre-cancerous lesions, adequately understood that

cervical screening is simple test, realization that it is not too inexpensive to test in future and being educated and examined by a health educator encouraged me to participate in a Pap smear test examination.

Table 4: Views of women regarding educational programmes

View of women	Verbal		Witten		Video		Chi-square
	f	%	f	%	f	%	
Opportunity to express doubts	125	79.11	127	83.01	121	77.07	1.74 P=0.42
Feel comfortable during education	124	78.48	134	87.58	124	78.98	5.39 P=0.067
Like to attend such education programme	136	86.08	130	84.97	130	82.80	0.67 P=0.71
Motivated for further screening	122	77.21	131	85.62	118	75.16	8.03 P=0.018

In all three study groups Majority of participants expressed the views that , they have got an opportunity to express their doubts regarding cervical cancer during education, they were comfortable during education, willing to attend such health education programs in the future and they were motivated for regular screenings in future.

Table 5: Cumulative index of reasons for nonparticipation in cervical screening before health education among three experimental groups: n=501

Reasons	95% CI					
	Verbal		Written		Video	
I am not aware of cervical cancer and its screening procedures	45.74	60.87	50.61	65.58	46.34	61.47
This test make me worry and fear of exam	24.12	38.17	25.25	39.44	24.69	38.8
I don't want to get a Pap smear test because of fear of test results.	8.05	18.32	7.56	17.61	10.08	21.07
It is test is too painful.	10.08	21.07	11.11	22.44	9.57	20.4
It is too embarrassing to have a Pap smear test	45.74	60.87	35.61	50.64	39.15	54.28
Being examined by a male provider would discourage me from getting a Pap smear test.	8.05	18.32	7.56	17.61	7.06	16.91
This test is too expensive	29.23	43.84	30.38	45.09	28.09	42.58
I don't need a Pap smear test, as I don't have any discomfort or pain	46.34	61.47	36.79	51.86	42.13	57.3
This test is not important for my age.	40.93	56.1	39.74	54.89	39.74	54.89

Cont... Table 5: Cumulative index of reasons for nonparticipation in cervical screening before health education among three experimental groups: n=501

I do not need a Pap smear test as I have only one sexual partner	25.82	40.07	24.12	38.17	24.69	38.8
I don't know where I must go for Pap smear test.	37.96	53.07	36.79	51.86	35.61	50.64
My partner does not want me to have a Pap smear test	41.53	56.7	39.15	54.28	39.74	54.89
PAP test results cannot be trusted	8.05	18.32	6.57	16.2	6.57	16.2
I do not know who will perform Pap smear test	37.96	53.07	36.79	51.86	36.2	51.25
I do not know how often I need to get a Pap smear screening.	37.96	53.07	36.79	51.86	36.2	51.25

Table 6: Cumulative index of reasons for nonparticipation in cervical screening after health education among three experimental groups:

Verbal: Total No.of participants in screening=**135** Not Participated =**23**

Written: Total No.of participants in screening= **89** Not Participated -**64**

Video: Total No.of participants in screening: **130** Not Participated – **17**

Reasons	95% CI					
	Verbal		Written		Video	
I feel Pap smear test is painful.	53.47	68.28	88.13	96.26	76.58	88.15
It is too embarrassing to have a Pap smear test	81.86	92.07	92.12	98.53	6.89	16.66
I do not need a Pap smear test as I have only one sexual partner	11.66	23.15	78.88	89.89	17.1	29.97
My husband does not want me to get a Pap smear test	87.04	95.59	90.08	97.43	63.68	77.51
I don't need a Pap smear test, as I don't have any discomfort or pain , healthy	87.04	95.59	94.25	99.52	83.36	93.13
I don't want to get a Pap smear test because of fear of test results.	27.57	42.02	8.8	19.35	28.06	42.55
I did not find time to go for Pap smear test	11.66	23.15	2.58	9.93	83.36	93.13
I could not come as I go for job in week days	4.43	12.98	2.58	9.93	76.58	88.15
Clinic is far away from my home	87.04	95.59	90.08	97.43	76.58	88.15

Cont... Table 6: Cumulative index of reasons for nonparticipation in cervical screening after health education among three experimental groups:

Appointment timings are not suitable	7.95	18.16	7.49	17.52	2.32	9.47
Waiting list is too long	1.26	7.45	0.49	5.78	0	0
Forgotten screening dates	15.49	28	86.22	95.05	83.36	93.13
Did not understand the concept and confused about Pap smear test	4.43	12.98	73.59	85.8	11.87	23.44

Discussion

In current study majority of participants among three experimental groups, about 38.32 % in verbal group, 41.91% in written group and 40.71 % in video group have responded that they could not take part in the cervical screening programme as they are very embarrassed with cervical screening procedure. Similar findings are seen in the study conducted by Augusto EF (2013), results shown that embarrassment was the supreme obstacle to seek care from health care professionals, which was conveyed by all subjects, irrespective of educational qualification.⁷

In the current study, across three experimental groups, the responses of women for not attending the cervical screening as follows; absence of knowledge, embarrassment, assuming that the test is very expensive, thinking that not required the Pap test as no symptoms of cancer observed and don't know the frequency of test. This study is supported by other study conducted by Marie G, results showed that, I feel healthy (55%) , feel discomfort to be confronted with gynecologic examination (29%), fear that they discover something abnormal e.g., cancer (14), embarrassed to show myself naked (12%) and it is too expensive (8%).⁸

In the present study, majority of the participants, had responded that, it is too embarrassing to have the test like this, I am healthy I do not have to go for this test, some women said, I have only one sexual partner so I don't require this test . Similar responses are observed in a study conducted by Laura Conde-Ferráez1 (2012), investigator had interviewed the participants to find the reasons, responses were ignorance about cervical screening, lack of time, recent sexual exposure, embarrassment and scary of test and outcomes. Only

38.9% know regarding cervical cancer and 25% knew about Pap smear⁹

Conclusion:

Cervical cancer has become one of the most important health issues in the public health. According to the review of literature and results of the current study, awareness regarding cervical cancer amongst the women found was very poor even in the urban community. A key strategy to improve the attendance of the women for cervical screening is to spread the awareness on prevention and early detection of cervical cancer by using various educational methods.

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