



Awareness programme on attitude regarding prevention of cervical cancer among the women from rural areas of Thane District

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Abstract:

Introduction – Globally cervical cancer is one of the most common cancer among women (WHO 2008). As per National Cancer Registry, crude incidence and Mortality rate due to cervical cancer in India is 134 per 1000 and 74 per 1000 women respectively. Hence to assess the effectiveness of awareness of cervical cancer among women, data were collected from rural community in Thane District. **Objectives:** To assess the attitude in relation to prevention of cervical cancer among the women from rural areas of Thane District, To assess the effectiveness of awareness programme on attitude towards prevention of cervical cancer among the women from rural areas. **Material and Methods-** A total of 1000 married women aged from 25 to 60 years and were selected using purpose sampling. **Result** - Attitude level regarding prevention of cervical cancer among women before awareness programme mean attitude were negative (47.11) S.D.(6.87) with compare to after awareness programme it was positive mean 91.62, S.D. 4.23 and calculated Z-Value was 27.41 at 0.00. There was significant difference in the mean of pre test attitude score among the women after administration of awareness programme in relation to prevention of cervical cancer. **Conclusion-** It shows there is need to spread awareness among the women from rural area in relation to prevention of cervical cancer.

Key words: Cervical Cancer, Awareness, Attitude, Programme

Introduction:

Cervical cancer, the third most common cancer among women in the world, was responsible for 275,000 deaths in 2008, 88 per cent of which occurred in developing countries and 159,800 in Asia [1]. One in every five women in the world suffering from cervical cancer in the world [2]. Although cervical cancer is the most frequent cancer diagnosed in Indian women, age adjusted incidence rates vary from 22.3 per 100,000 women population in Trivrunthpuram to 22.5 per 100,000 women population in Aizwal [3]. As per national cancer registry, crude incidence and mortality rate due to cervical cancer in India is 134 per 100,00 and 74 per 100,00 women respectively. Age adjusted incidence rate of cervical cancer reported for six cities are Bangalore 18.1 Bhopal 18.7, Chennai 24.8 Delhi 17.6 and Mumbai 13.0 per 100,00 [4]. The incidence of cervical cancer begins to rise among Indian women in their 30s and peak at ages 40 to 50 years. Worldwide, an estimated 503,232 women develop cervical cancer and 275,008 Women die due to this disease [5]. Since over 70 per cent of the

Indian population resides in rural areas, cancer cervix still constitutes the number one cancer in either sex [7].

Cervical cancer is the most common cancer among women in the less developed countries which account for 80% of the global burden of disease & over 80% of the global mortality due to cervical cancer. One woman dies of cervical cancer every two minute. The incidence of cervical cancer 9.2 per 100,000 women in USA almost doubles i.e. 7.2 per 100,000 women in India. The reason for this high incidence in our country are many, important one being that cancer cervix does not cause any symptoms in its early stage, so by the time symptoms appear, the cancer had already advanced. Our women traditionally approach the doctor only when they have some problem. Hence they seek help late [8].

Cervical cancer is the most frequent cancer afflicting women in India. Over 366 million Indian women aged 15 and older are at risk for developing cervical cancer. Of the estimated 5,30,000 cervical cancer cases globally per year, India contributes over

134,000 cases, representing more than one-fourth of the world's cervical cancer burden. Each year almost 73,000 women die from the disease. If the situation remains unaddressed, the projected number of new cervical cancer cases in 2025 is estimated at almost 204,000 and the projected number of cervical cancer deaths is estimated at over 115,000. Cervical cancer is a major and devastating cause of mortality and morbidity worldwide with an estimated global incidence of 5,00,000 new cases and 2,70,000 death of women from the disease annually [9]. Hence this was aimed to determine attitude regarding prevention of cervical cancer among women aged between 25-60 years in a rural community in Thane District.

Problem statement

To assess the effectiveness of awareness programme on attitude in relation to prevention of cervical cancer among the women from selected rural areas of Thane District.

Objectives:

- 1) To assess the attitude in relation to prevention of cervical cancer among the women from rural areas of Thane District.
- 2) To assess the effectiveness of awareness programme on attitude towards prevention of cervical cancer among the women from rural areas.
- 3) To find out the association between pre test attitude score with their demographic variable

Operational Definition:

Assess-

According Cambridge advanced learner dictionary to judge or decide the amount, value, quality or importance of something.

According to this study:- Statistical measurement of attitude related to prevention of cervical cancer among the women from the score and based on close ended questionnaire and Lickert's attitude scale.

Effectiveness:

According to oxford Dictionary, it refers to production of intended or expected effect.

According to this study,

It refers to improved knowledge and change in attitudes in relation to prevention of cervical cancer as determine by post test scores.

Awareness Programme:

According to oxford dictionary it means detail proposal for giving information.

In this study Awareness programme refers to giving details information about prevention and control of cervical cancer among women.

Women- as per English pro an adult female.

In this study women are adult female, of age 25-60 years from rural areas of Thane District.

Cervical cancer- As per C.S Dawn this is primary malignant epithelial growth invading cervix.

In this study-It is cancer that begins on cervix, which the opening of the womb, cells on the cervix begin to grow abnormally and sometimes, if they are not treated, they become cancer.

Attitude: According to Oxford dictionary, it is opinion or way of thinking, behavior reflecting this. In this study, it is an opinion or way of thinking regarding prevention of cervical cancer among women from rural area.

Prevention: According to English pro the act or process of preventing obstacles that keeps something from happening.

In this study prevention refers to preventing Risk factors such as early marriage, multiple sexual partner, marital status, life style., unhygienic practices, parity, genital warts, genital infection, hereditary factors which are risk factors for the development of cervical cancer.

Setting of the study: The present study will be conducted in the rural areas in Thane District. Thane District which is 100km away from Mumbai city where the only facility for womens health is primary health center and sub center and private nursing homes and also nurses working in the rural areas lacking the knowledge related to prevention of cervical cancer.

Scope of the study

1. Data gathered through this study will help to reveal the attitudes of women with regard to prevention of cervical cancer.
2. The findings may serve as a guide to plan health education programme for women regarding the early detection of cervical cancer, and for prompt treatment to prevent further complication.
3. The data may help to enlighten the administrators to conduct training in health check up camps for the nurses and female health worker in their specific area for early detection of cancer of cervix.
4. The findings may form a base for further studies in the field and thus may be used for further reference.

Assumptions:-

- 1) Women's from rural areas may have positive attitude towards prevention of cervical cancer.
- 2) Attitude will differ from women to women towards prevention of cervical cancer.
- 3) Women from one area is educated there will be dissemination of information related to cervical cancer.

4) Awareness regarding prevention of cervical cancer among the women from rural area will help to disseminate the information from women to women.

Delimitation:

The study will be limited to the women's who are –

- 1) In age group between 25 to 60yrs and willing to participate in the study.
- 2) Able to read write and understand Marathi.
- 3) Available during the data collection period.
- 4) Limited to selected rural area.

Hypothesis:

H0. – There will be no significant difference between the pretest and post test attitude score of women regarding prevention of cervical cancer.

H1: There will be significant difference between the pretest and post test attitude scores of women on prevention of cervical cancer after intervention.

Ethical consideration: The research problem and objectives were approved by the research ethical committee as well as from university and procedure as below:

- 1) Permission from Director medical education and research were obtained.
- 2) Permission from District health officer, Thane were obtained.
- 2) Informed consent from subject prior to the study.
- 3) Wellbeing of the subject is protected'
- 4) Confidentiality of data is maintained for ever by the researcher.
- 5) Self respect and dignity of subjects is maintained during the study
- 6) Appreciation is given to all participant after completion of research study.

CONCEPTUAL FRAMEWORK-

The overall conceptual under pinning of a study is framework. Not every study is based on a theory or conceptual model but every study has a framework in a study that has its roots in a specified conceptual model, the framework is often called the conceptual framework [10].

The purpose of the conceptual model is to make research findings meaningful and generalizable. Theories and conceptual model often provide a basis for predicting the occurrences of phenomena and it helps to stimulates research and the extension of knowledge by providing both direction and impetus [11].

The model postulates that health seeking behavior is influenced by a person's perception of a threat posed by a health problem and the value associated with action aimed at reaching the threat.

According to the Modified Health Belief Model (Rosenstock, 1974) is concern with what

women believe to be true about themselves in relation to their health. This model is based on three component are 1) perceived susceptibility, 2) perceived seriousness of a disease, 3) perceived benefits of action [11].

Perceived susceptibility in this study a women's belief that they will or will not contract a disease. Perceived susceptibility ranges from being afraid of contracting a disease to completely denying that as they don't have symptoms so they will not fall sick. a women who exposed to risk factors of cervical cancer may believed that she is at danger for cervical cancer and may seek screening (pap test). While another women may believed no serious threats to risk factors of cervical cancer and will not seek screening or will not practiced prevention of risk factors.

Perceived seriousness of a disease concern the perception of seriousness and its effect on the women's lifestyle this is depend on how much a women knows about a disease and can result in change in health behavior.

Perceived benefits of action is concerned with how effective the individual believes preventive measures will be in preventing illness.eg- the women may believe that HPV vaccination for girls, marriage at appropriate age, safe sex, hygienic practices, and most important early screening and avoiding smoking all will prevent cervical cancer in them, Therefore the women may adopt this preventive measures.

Modifying factors for one's health beliefs include demographic variable (age, race,) sociopsychological variable (attitude). These factors interact to influence perceived benefits of preventive action minus perceived barrier to preventive action . cues to action is also modifying factors and are provided by spreading awareness related to prevention and control of cervical cancer among the women. The likelihood of talking recommended preventive health action is thus a composite of individual perception and modifying factors.

This model is useful in teaching the women about cervical cancer, it's prevention and control, The investigator can assess the women's health belief and mutually structure goals to help realistically meet health needs of women in relation to cervical cancer. Teaching and health promotion activities are ineffective, unless the women believe that they are important and necessary.

Materials and Methods

The research was conducted in a rural area of Thane District from Thane district, India. The 6 village from Thane District with a population of 2lakhs census (2011) was chosen as the study area. The study was

carried out between 2011 to December 2012. The total of 1000 women were selected from study area by using purposive sampling method. The mean age of women 42.5 ± . The household visit carried out.

Likert 5 point attitude scale was used to determine the women attitude relation to prevention of cervical cancer, awareness is given in the group of 10-

15 women at a time and after 7 days post test was carried out. As the data for attitude was in the ordinal format hence the non parametric Wilcoxon test for comparison was used here the Wilcoxon test was used to compare the attitude within the group.

Result

Sample Characteristics

Table 1 presents the demographic characteristics of women.

Demographic data

Sr. No	Demographic Characteristics	Frrquency	Percentage
1	Age		
	25-35 years	300	30.0
	36 – 46 years	398	39.8
	47 – 57 years	196	19.6
	Above 57 years	106	10.6
2	Education		
	Primary	194	19.4
	Secondary	602	60.2
	Graduate	98	9.8
	Professional	106	10.6
3	Occupation		
	Housewife	398	39.8
	Employed	300	30.0
	Farm workers	196	19.6
	Industrial workers	106	10.6
4	Monthly Income in Rs.		
	< 5000	300	30.0
	5001 to 7000	292	29.2
	7001 to 9000	302	30.2
	>9001	106	10.6
5	Religion		
	Hindu	708	70.8
	Budhist	98	9.8
	Christian	194	19.4
6	Marital status		
	Married	796	79.6
	Remarried	106	10.6
	Widow	98	9.8

7	Type of family		
	Nuclear	202	20.2
	Joint	798	79.8
8	Diet		
	Vegetarian	202	20.2
	Mixed	798	79.8
9	Age of menarche		
	Before 12 years	194	19.4
	12 to 16 years	602	60.2
	16 to 19 years	98	9.8
	19 years & above	106	10.6
10	Menstrual cycle		
	Regular	486	48.6
	Irregular	310	31.0
	Sometimes regular	98	9.8
	Sometimes irregular	106	10.6
11	Menstrual flow		
	Medium	692	69.2
	Heavy	202	20.2
	very heavy	106	10.6
12	Menstrual bleeding period		
	Three to five days	600	60.0
	Five to seven days	294	29.4
	More than seven days	106	10.6
13	Material used during menstrual period		
	Sanitary napkins	194	19.4
	Cotton cloth	602	60.2
	Sometimes both	204	20.4
14	Age at marriage		
	Before 16 years	96	9.6
	16 to 20 years	300	30.0
	21 to 25 years	392	39.2
	More than 25 years	212	21.2
15	Age at birth of first child		
	Less than 18 years	204	20.4
	19 to 25 years	602	60.2
	26 to 32 years	98	9.8
	33 years and above	96	9.6

16	Number of children		
	No children	106	10.6
	One	496	49.6
	Two	292	29.2
	More than two	106	10.6
17	Do you have following complaint related to private part		
	White discharge	398	39.8
	Itching at private part	194	19.4
	Dyspareunia	204	20.4
	Post coital bleeding	204	20.4
18	Family history of cancer		
	Yes	96	9.6
	No	700	70.0
	Don't know	204	20.4
19	If yes, relation with deceased		
	Mother	96	9.6
	No history of cancer	904	90.4
20	Have you done screening for cervical cancer		
	Yes	98	9.8
	No	902	90.2
21	from which source you have information of cervical cancer .		
	Tv	42	4.2
	Radio	46	4.6
	Camp	6	0.6
	Community health nurse	4	0.4
	No information of cancer	902	90.2

Table 1 :reveals the data about age that maximum sample 398 (39.8%) belonged to age group of 36-46 years. 300 (30%) sample in age group of 25-35 years .196(19.6%) belongs to the age group of 47-57 years and minimum samples 106(10.6%) belongs to the age group of above 57 years. Thus, the majority of the samples were from the adult age group as per definition of eligible couple

In relation to education maximum 602(60.2%) of the sample had studied till secondary. 194(19.4%) of the sample had studied up to primary and minimum 98(9.8%) were graduate category. very few samples 106 (10.6%) were studied up to professional qualification. All 1000samples are literate.

In regard to occupation: reveals that maximum

sample 398 (39.8%) belonged to house wife group. 300 (30%) sample were in employed group.196(19.6%) belongs to the farm workers and minimum samples 106(10.6%) belongs to the Industrial workers occupation. Thus, the majority of the samples were working and earning member of the family.

Income focuses that maximum302(30.2%) of the sample belongs to 7001 to 9000 income. Out of remaining 300(30%) of the sample have less than five thousand income and minimum 106(10.6%) were more than 9001 category.very few samples 292 (29.2%) have monthly income of 5001 to 7000 / month. All the samples are in the manageable range. the data about religion that maximum sample 708

(70.8%) were from Hindu religion. 194 (19.4%) sample were belongs to Christian followed by minimum samples 98(9.8%) belongs Buddhists religion. Thus, the majority of the samples were from the Hindu religion

In relation to marital status, maximum 796(79.6%) of the sample were married. Out of remaining 106(10.6%) of the sample were Remarried and minimum 98(9.8%) were widow category.majority of them were married.

In regard to type of family, maximum sample 798 (79.8%) belongs to joint family and remaining 202 (20.2%) sample were from nuclear family.

In regard to type of diet, maximum sample 798 (79.8%) belongs to mixed diet type and remaining 202 (20.2%) sample were vegetarian type of diet.

Data reveals that maximum sample 602 (60.2 %) belonged to 12-16 years age at menarche. 194 (19.4%) sample had their menarche in age group of before 12 years .106 (10.6 %) belonged to 19 years and above age at menarche. Minimum 98 (9.8%) sample had their menarche in age group of 16-19 years

In relation to menstrual cycle maximum 486(48.6%) of the sample had regular cycle. 310(31 %) of the sample had irregular cycle. Minimum 98 (9.8%) sample had their sometimes regular cycle and remaining 106 (10.6 %) belonged to sometimes irregular.

In case of menstrual flow maximum 692(69.2%) of the sample had medium flow.294(20.2 %) of the sample had heavy flow. Minimum 106 (10.6 %) belonged to very heavy flow.

With regard to menstrual bleeding period maximum sample 600 (60 %) belonged to category of average 3-5 days,294 (29.4%) sample belong to 5to 7 days category. Minimum samples 106(10.6%) are in the range of more than seven days

Material used during period depicts that, maximum sample 602 (60.2%) uses cotton cloth,194 (19.4%) sample replied they use sanitary napkins. Very few samples 204(20.4%) said sometimes both.

the data about age at marriage ,that maximum sample 392 (39.2%) belonged to age group of 21-25 years. 300 (30%) sample in age group of 16-20 years .212(21.2%) belongs to the age group of more than 25 years and minimum samples 96(9.6%) belongs to the age group of before 16 years age of marriage. Thus, the majority of the samples were before 25 years.

the data **about age at birth of first child** ,that maximum sample 602 (60.2%) belonged to age group of 19-25 years. 204 (20.4%) sample in age group of Less than 18 years .98(9.8%) belongs to the age group of 26 to 32 years and minimum samples 96(9.6%) belongs to the age group of 33 years and above. Thus,

the majority of the samples gave birth before 25 years. The data **about number of children focuses on**, that maximum sample 496 (49.6%) have one child.292 (29.2%) sample have two children .106(10.6%) have no children and more than two children.

The data **regarding complaints depicts**, that maximum sample 398 (39.8%) have white discharge. Minimum sample 194 (19.4%) sample have Itching at private part. 204(20.4%) have Dyspareunia and Post coital bleeding.

Data reveals that maximum sample 700(70 %) said no. 204 (20.4%) sample said don't know. Minimum 96 (9.6%) sample replied yes for family history of cancer **If yes, relation with deceased** data reveals that 96(9.6%) of the sample had relation of mother

Done Screening for cervical cancer focuses, 98(9.8%) of the sample replied yes remaining 902(90.2 %) of the sample replied no, which shows there is great need for awareness programme.

With regard to information from source, maximum sample 46 (4.6%) said radio,42 (4.2%) sample said TV. Minimum samples 4(0.4%) said community health nurse. Very few 6 (0.6%) said camp. it shows that health care personnel have to take more effort to spread awareness among the rural community

Table 7 presents assessment and comparison of level of attitude regarding prevention of cervical cancer among the women in pre test and post test.

Assessment and comparison of level of attitude regarding prevention of cervical cancer among the women (overall attitude) in pre test and post test.

Table 7 - Distribution of samples in relation to overall Attitude level

n = 1000

Sr. no.	Overall Attitude level	Pre test		Post test	
		F	%	F	%
1	Positive attitude (>or = 61)	0	0	1000	100
2	Negative attitude (<or = 60)	1000	100	0	0

Table 7, fig. 9 focuses that, in pre test 1000(100%) had negative attitude and none of the sample had positive attitude. The post test score reveals that

1000(100%) had positive attitude and none of the sample had negative attitude towards cervical cancer .

This table explains that there were boost in the number

Table 9 - Comparison of the pre and post Attitude level.

n = 1000

of sample from negative to positive attitude after administration of awareness programme.

Sr. No.	group	Mean	S.D.	Sum of Ranks		W value	Z value	Significance	
				+ ve	- ve				
2.	Attitude level	Pre test	47.11	6.87	1000	0	0	27.41	0.00
	Post test	91.62	4.23						

level of significance is 0.05 for ‘z’ table value of 1.96

Table 9 and can be interpreted as follows:

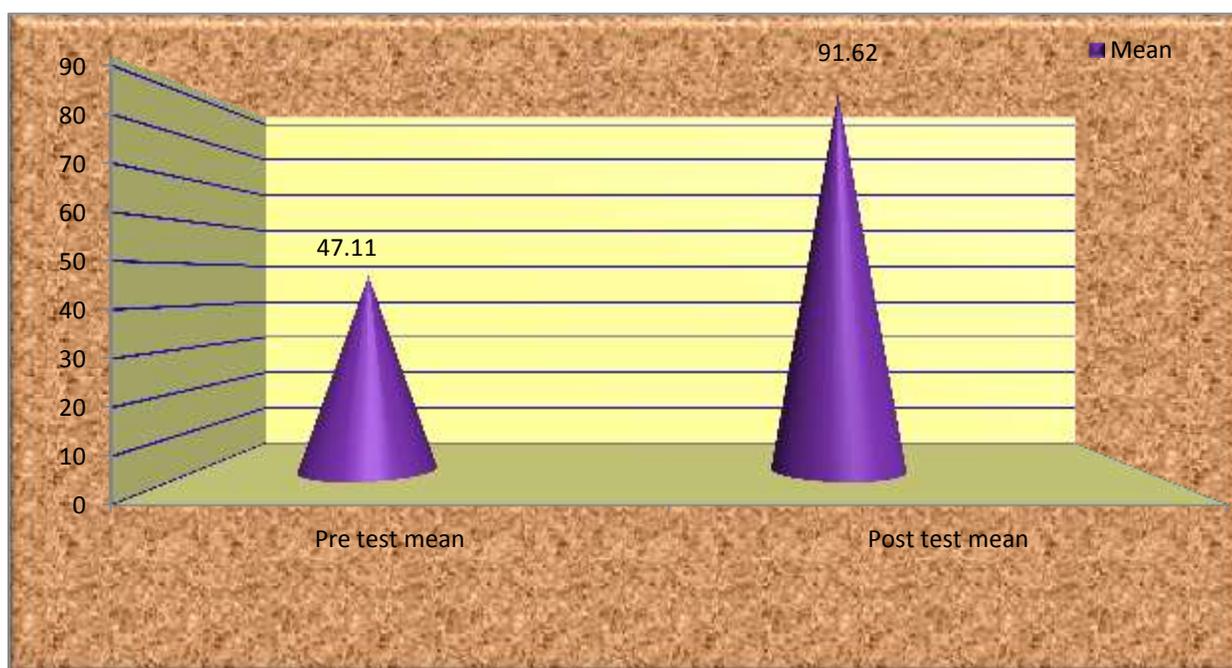
Before calculating the ‘Z’ value, Null hypothesis (H_{02}) and alternate hypothesis (H_2) was stated.

Hypothesis was tested using wilcoxon test as the data was in the ordinal format and is presented in table 9. The Ztable value for 0.05 level of significance was 1.96.

❖ H_{02} - There will be no significant difference in the mean of pre test and post test attitude score among the women after administration of awareness programme in relation to prevention of cervical cancer

❖ H_2 - There will be significant difference in the mean of pre test and post test attitude score among the women after administration of awareness programme in relation to prevention of cervical cancer

The wilcoxon calculated value was found to be 0 with the positive ranks showing lower total among both the ranks. After conversion into Z state the calculated ‘Z’ value was found to be 27.41, which is more than the Z tab score of 1.96. Therefore the null hypothesis H_{02} is rejected and it proves that there is significant difference in pre test and post scores of attitude level in pre and post test among women in rural area of thane district .



Discussion

The present study tried to present the effectiveness on attitude awareness of women in relation to prevention of cervical cancer. Approximately pre test mean score was 47.11 and post test mean score was 91.62 which was improved after the intervention. Before the intervention there was negative attitude towards prevention of cervical cancer.

Roy and Tang (2008) conducted hospital based study among women attending department of obstetrics and Gynecology was 16%. In another study carried out in slum areas of Mumbai City showed that 9.7% wives had heard of PAP smear test. In other study 11% of the female college student aged 17-24 year (Saha et al 2010) and 5% women (Roy and Tang 2008) heard of PAP smear test. Most of the study investigated awareness of cervical cancer among women in hospital based whereas the present community based study

Conclusion:

India continues to contribute as much as 18 to 24% to the global figure of the cases of cervical cancer diagnosed every year . since high awareness will lead to early diagnosis and prompt treatment regarding cervical cancer among the women. We must do our best in spreading awareness in all the corners of India not leaving any area. Today HPV vaccines are available for prevention of cervical cancer. in present study it was observed that low awareness and negative attitude related to prevention of cervical cancer priorer to awareness programme and after intervention there was improvement seen in knowledge and development of positive attitude was there it shows that health education and health information is essential to decrease incidence and prevalence of cervical cancer.

Recommendations

- The same study could be replicated on large samples
- Study could be done in different setting
- Study could be done to find out the nurses knowledge and attitude regarding prevention of cervical cancer.
- Study could be done to find out the high risk group of women for developed of cervical cancer.
- Study could be done to motivate the parent for their acceptance of HPV Vaccination for their daughter

- Study could be done to screening the women who are at risk of department of cervical cancer
- Study could be done for men's participation in prevention of cervical cancer
- Study could be done to prepare the women for care during chemotherapy and radiation who has already diagnosed with cervical cancer. The researcher assessed the perceived barriers of women regarding prevention of cervical cancer and the findings of the study revealed, that the knowledge scores of majority of women 141(70.5%) had neutral attitude to prevention of cervical cancer, 31(15.5%) of women had negative attitude whereas minimum of the women 28 (14%) had positive attitude. The results of the study was similar by the findings of a study by Levya M et al¹⁹ where majority (62.5%) of women had a neutral attitude towards cervical cancer screening, (29.5%) had a positive attitude and a minority of them (6.4%) had a negative attitude towards cervical cancer screening.

Beliefs about health and cancer have altered predictors of adherence among white women with abnormal pap smears but these were not applicable to other groups because health beliefs can vary by ethnicity. In some studies, Latinos and women of Asian descent endorsed more misconceptions about cancer and fatalistic beliefs[20].It has been seen that 10% of women in Queensland and 13% in Victoria with cervical cancer had a previous abnormality which was not treated. Women need full information about treatment if they are to be fully protected. Other problems identified were lack of follow up system for women who have been treated to ensure that they are re-screened, lack of monitoring to ensure that treatment is effective and a lack of management services for some women who live in remote areas [21].

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