

Video Assisted Teaching Module on Knowledge Regarding Pelvic Inflammatory Disease and its Prevention Among Rural Married Women of Dehradun : A Community Based Study

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Abstract

Introduction: Pelvic inflammatory disease (PID) is an inflamed and infectious condition of female reproductive system. Infection spread from lower genital tract to upper genital tract. Multiple factors are involved in PID. In India, prevalence of PID among gynecological diseases is 3-10%. Rural Women in reproductive age group are more prone to PID. *Methodology:* In the present study, quantitative research approach was selected to conduct the study. Pre experimental approach and one group pretest posttest design were used to assess the effectiveness of Video assisted teaching module on knowledge regarding PID among married women of reproductive age group. The study was conducted in 2018 among 60 married women of selected rural community of Raipur, Dehradun. Purposive sampling technique was used to select the participants. *Results:* Out of 60 women, it was observed that majority of married women 20(33.3%) were in 34-41 years age group. Half of the participants were got married in age group of 18-21 years. Majority of the subjects 35(58.3%) had no knowledge about PID. Mostly participants 48(80%) have no family history of PID. Findings show that the mean pre test knowledge score was 12.60 with standard deviation 5.403 which increased after intervention to the mean post test knowledge score 23.13 with standard deviation 3.228. The calculated 't' value ($t_{59} = 17.524$) was significantly higher than the table value. *Conclusion:* The study revealed that video assisted module was significantly effective to enhance the knowledge of rural women regarding PID and its prevention. There was a significant association among education, knowledge regarding PID and family history of PID with post test knowledge scores. There is a need to aware the women regarding gynecological diseases and its prevention.

Keywords: Pelvic Inflammatory disease; Video assisted teaching module; Knowledge; Prevention; Rural married women.

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Introduction

Reproductive health is a state of complete physical, mental and social well being, it is not merely the absence of disease or infirmity in all matters relating to the reproductive system and its function and processes.¹ In females, reproductive organs are one of the most sensitive and fragile system of her body as it prone to infection. Obstetrics, gynecological, and contraceptive morbidities are the three broad categories of reproductive disorders.² Gynecological diseases have negative impact on physical, social, mental and spiritual health of the women³. The untreated physical and pathological conditions can cause obstetric complications, congenital infections, and chronic pain which significantly increases the risk of acquiring pelvic inflammatory disease, sexually transmitted infection (STI) and cancer. Pelvic inflammatory disease (PID) is one of the common disease of woman reproductive system. It is the inflammation and infection of the upper genital tract organs including uterus, fallopian tubes, ovaries and cervix. PID can cause serious damage to woman's reproductive tract, causing infertility, chronic pelvic pain, and tubal pregnancy.^{4,5} According to previous studies, Pelvic inflammatory disease incidence varies between 0.28% and 1.67% globally.⁶ In India, 3-10% of gynecological admissions are contributed to pelvic inflammatory disease.⁷ PID affects not only the health but also social well being of women, particularly those in the reproductive and economically most productive age group^{8,9}. Approximately more than 100,000 women become infertile each year as a result of PID. Annually more than 150 women die from PID or its complications. PID is related to 94% of all sexually transmitted infection related morbidity¹⁰. A community based study on gynecological morbidity in different places of India shows that women having PID in rural area of Maharashtra is 24%, Karnataka is 11%, rural area of Kerala is 5.9% and in Delhi is 26.2%⁷. The prevalence of acute PID in South India was reported to be 5%, in Bombay urban slums 16.5% and in urban Calcutta it was reported to be 17.2%. Only 15.7% women were reported positive for PID in Bikaner, Rajasthan¹¹. Prevalence of PID in Uttarakhand among women was reported 52.2%. About 1/3 rd of currently married women in Uttarakhand state suffer from reproductive tract infections^{12,13}.

Niesseria, Gonorrhoea and Chlamydia trachomatis are the common cause of PID among women. Approximately 85% cases are non iatrogenic infections occurred in sexually active

women of reproductive age and the remaining 15% infections occurs after procedures which break the cervical mucus barriers such as intrauterine device (IUD), endometrial biopsy, or uterine curettage which allows vaginal flora to infect the upper genital tract.^{5,14} Women with PID are at increased risk of chronic pelvic pain, ectopic pregnancy, and tubal infertility. Approximately 12% of women are infertile after a single episode of PID, almost 25% after two episodes of PID and over 50% after three episodes of PID⁹. The young women should be educated regarding the risk of sexually transmitted diseases. Public health awareness regarding pelvic inflammatory disease and its consequence will help to reduce the incidence of PID. Although pelvic inflammatory disease affect women in both urban and rural areas, but the disease and its sequel are more common among rural women. In rural areas, the lack of awareness and health facilities in turn lead to high incidence of pelvic inflammatory disease. Due to traditional beliefs and practices woman is conditioned to think about the family first and because of their 'culture of silence' and they believe that it is not a problem for which they should seek medical help³.

The prevalence of PID is very high globally as well as in India also. The majority of women in their reproductive age are ignorant about the disease and its prevention, thus the education for them is needed especially to the sexually active women. It is important to reveal this disease because it may cause cervical cancer.

Methodology

Present study was conducted among married women of reproductive age group in selected rural community of Raipur Block, Uttarakhand. Quantitative approach was selected for the study. In this study, pre experimental, one group pre test-post test design was used to assess the effectiveness of the video assisted teaching module on knowledge regarding PID. There were 73 married women selected by purposive sampling technique for the study who met the inclusion and exclusion criteria for sample selection. The sample mortality was 13 so the final study was conducted among 60 women. A structured knowledge questionnaire was administered to the participants for data collection. Content validity and reliability of the tool was established. Pretest was conducted on day 1st with intervention and Post test on day 8th. Self developed structured questionnaire was used by researcher which contains 30 questions to assess

the knowledge regarding PID. 1 mark was given for each correct answer and 0 was given for each incorrect answer. The women were classified into three groups: poor knowledge (0-10), average

(11-20) and good knowledge (21-30) based on the obtained knowledge scores.

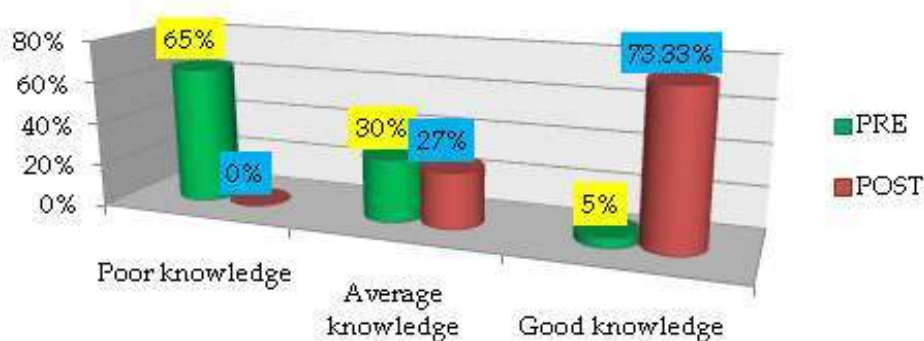
Results

Table 1: Frequency and percentage distribution of socio demographic characteristics of married women

N=60					
S. No.	Demographic variables	Category	F	%	
1	Age	18-25 years	10	16.7%	
		26-33 years	13	21.7%	
		34-41 years	20	33.3%	
		42-49 years	17	28.3%	
2	Family	Nuclear	31	51.7%	
		Joint	26	43.3%	
		Extended	3	5%	
3	Education	No formal	7	11.7%	
		Primary	12	20.0%	
		Secondary	15	25.0%	
		Hr. Sec. & above	26	43.3%	
4	Occupation	No (Housewife)	34	56.7%	
		Govt. Job	4	6.7%	
		Pvt. Job	14	23.3%	
		Self employed	8	13.3%	
5	Marriage age	18-21 Years	30	50%	
		22-25 Years	22	36.7%	
		26-29 Years	5	8.3%	
		30 & above	3	5.0%	
6	Knowledge on PID	Yes	25	41.7%	
		No	35	58.3%	
		Source of information			
		Mass media	5	8.3%	
		Friends	4	6.7%	
		Family members	8	13.3%	
7	Family history of PID	Yes	12	20%	
		No	48	80%	

Table 2: Frequency and percentage distribution of pre test and post test knowledge scores. N=60

Knowledge score	Poor knowledge (0-10)		Average knowledge (11-20)		Good knowledge (21-30)	
	Frequency	%	Frequency	%	Frequency	%
Pre-test	39	65%	18	30%	3	5%
Post-test	0	0%	16	26.66%	44	73.33%



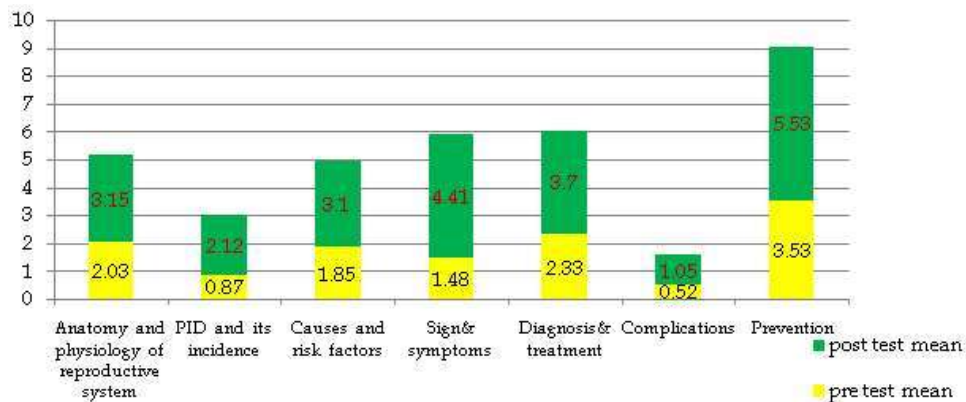
Comparison between pre test and post test knowledge scores

Fig. 1: Figure showing comparison between the pre-test and post-test level of knowledge scores among married women.

Table 3: Aspect wise enhancement of knowledge scores on pelvic inflammatory disease and its prevention.

N=60

Knowledge Aspect	Pre-test			Post-test			Percentage of enhancement
	Mean	Mean%	SD	Mean	Mean%	SD	
Anatomy and physiology of reproductive system	2.03	50.83	1.17	3.15	78.75	.92	20.60
PID and its incidence	.87	28.89	.82	2.12	70.56	.66	20.02
Causes and risk factors	1.85	46.25	1.29	3.1	77.50	.83	35.54
Sign & symptoms	1.48	29.67	1.21	4.41	88.33	.66	45.34
Diagnosis & treatment	2.33	46.67	1.21	3.7	75.33	.10	23.78
Complications	0.52	25.83	.60	1.05	52.50	.72	21.25
Prevention	3.53	50.48	1.49	5.53	79.05	0.85	43.17

**Fig. 2:** Aspect wise comparison between pre test and post test knowledge scores based on mean in different components of questionnaire of pelvic inflammatory disease and its prevention.**Table 4:** Effectiveness of the video assisted teaching module in terms of increasing the knowledge level.

N=60

S. No.	Knowledge of women	Mean	S.D.	S. E. Mean	t value	Df	P value
1	Pre-test score	12.60	5.403	.698	17.524	59	.000*
2	Post-test score	23.13	3.228	.417			

t 59= 2.00 p< 0.05 * significant

Table 5: Overview of association between pre test knowledge level with selected socio demographic variables

N=60

S. No.	Demographic variables	Category	F	Knowledge level			df	Chi-square	P value
				Poor	Average	Good			
1	Age	18-25	10	9	0	1	6	3.484	0.746
		26-33	13	8	5	0			
		34-41	20	11	7	2			
		42-49	17	11	6	0			
2	Family	Nuclear	31	19	11	1	4	1.212	0.876
		Joint	26	10	5	2			
		extended	3	1	2	0			
3	Education	No formal	7	6	1	0	6	14.99	0.002*
		Primary	12	12	0	0			
		Secondary	15	9	3	3			
		Hr. Sec. & above	26	12	14	0			
4	Occupation	Housewives	34	20	13	1	6	3.137	0.79
		Govt. Job	4	3	1	0			
		Pvt. Job	14	9	4	1			
		Self employed	8	7	0	1			

5	Marriage age	18-21	30	21	7	2	6	2.639	0.85
		22-25	22	14	7	1			
		26-29	5	2	3	0			
		30 & above	3	2	1	0			
6	Knowledge on PID	Yes	25	8	14	3	2	16.708	.0002*
		No	35	31	4	0			
7	Family history of PID	Yes	12	5	5	2	1	6.02**	0.049*
		No	48	34	13	1			

** Chi square, *significant, $p < .05$

In the present study it was observed that majority of married women 20(33.3%) were in 34-41 years age group. According to type of family, majority of women living in nuclear family 31(51.7%). Half of the participants were got married in age group of 18-21 years. Majority of the subjects 35(58.3%) had no knowledge about PID. Mostly participants 48(80%) have no family history of PID. The table 2, depicts that in pre test 39(65%) of the women had poor knowledge, 18(30%) of the women had average knowledge, and 3(5%) had good knowledge. In the post test none of the women had poor knowledge, 16(26.66%) had average knowledge, and 44(73.33%) had good knowledge regarding pelvic inflammatory disease and its prevention. Table 4 shows that the mean pre test knowledge score was 12.60 with standard deviation 5.403 which increased after intervention to the mean post test knowledge score 23.13 with standard deviation 3.228. the calculated 't' value ($t_{59} = 17.524$) was greater than the table value ($t_{59} = 2.00$) at .05 level of significance showed that the intervention was significantly effective to enhance the level of knowledge. There was a significant association among education, knowledge regarding PID and family history of PID with post test knowledge score.

Discussion

Pelvic inflammatory disease is a clinical disorder of the female genital tract which includes the inflammation of the endometrium, cervix, ovaries and fallopian tubes. PID may occur due to multiple factors including poor hygiene and untreated bacterial infections. It is commonly seen in young adults of reproductive age and women with multiple children. PID is one of the most common disorders among the married women in India¹⁵. The present study was conducted with aim to assess the knowledge of rural married women regarding PID and its prevention. The study communicated that rural woman had poor knowledge 18(30%) regarding PID. This finding is comparable with study by Rani *et al.*, conducted in Tamilnadu, India regarding knowledge about PID.

The study revealed that 36% of the participants had inadequate knowledge of PID¹⁶.

A study was conducted in urban community of Manglore, India to assess the effectiveness of structured teaching programme on knowledge regarding PID. The pre test level of knowledge showed that 61.7% subjects had poor knowledge, 38.3% subjects had average level of knowledge and none of them had good level of knowledge regarding PID. Whereas the post test showed that 86.7% subjects had good level of knowledge. The intervention was effective to enhance the knowledge of the women. The present study investigated that mean post test knowledge score was significantly higher than that of mean pretest knowledge score. The present study was supported by study conducted by Neupane (2015)¹⁰. The present study revealed that there was significant association between pre test level of knowledge and selected socio demographic variables such as education, previous knowledge of PID, and family history of PID of the women. These findings are consistent with study conducted by Bindu kaipparettu and Suhair Mohmmmed among adolescent girls in Saudi Arabia found that there was a significant association between knowledge score and demographic variables like education and previous information about pelvic inflammatory disease¹⁷.

The present study determined the association between post test knowledge and family history of PID. There was no study to support the findings.

Conclusion

Pelvic inflammatory disease is common disorder among married women. The young women should be educated regarding the risk of sexually transmitted diseases. Public health awareness regarding pelvic inflammatory disease and its consequence will help to reduce the incidence of PID. There is a need to develop such educational program to minimize the prevalence of PID. It will be directly helpful in enhancing the physical and reproductive health status of the women. The health

promotion and awareness program regarding PID and its prevention may decline the morbidity and mortality among underserved population of India.

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