



# IMPACT OF INFORMATION MODULE ON KNOWLEDGE REGARDING UTERO-VAGINAL PROLAPSE AND ITS PREVENTION AMONG WOMEN

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## ABSTRACT

**Background:** Utero-vaginal prolapse is one of the main contributory factors to reproductive health problems that affect women's quality of life. **Aim:** To assess the impact of information module on knowledge regarding utero-vaginal prolapse and its prevention among women.

**Method and Materials:** A quantitative research approach with a pre-experimental one-group pre-test and post-test design was used for the study. The setting of the study was selected villages in Indore. By using the non-probability purposive sampling technique 241 women were selected. A self-structured questionnaire was used to assess the demographic data and knowledge regarding utero-vaginal prolapse and its prevention among women. The pretest knowledge was evaluated on day 1 and information module was administered regarding utero-vaginal prolapse and its prevention to the women and on the 7<sup>th</sup> day after intervention post-test knowledge was evaluated. The data analysis was done using descriptive and inferential statistics.

**Result:** In the pretest, 106 (44%) participants had obtained poor grade, 72 (29.9%) participants had obtained average grade, 54 (22.4%) participants had obtained good grade and 9 (3.7%) participants had obtained excellent grade. In posttest, 45 (18.7%) participants had obtained average grade, 137 (56.8%) participants had obtained good grade and 59 (24.5%) participants had obtained excellent grade. The intervention was very helpful in increasing the knowledge of the women. A statistically significant association was found between pre-test knowledge score and age, education, occupation; if married- number of children ( $P=0.005$ ), showing that the pretest knowledge grade is dependent on age, education, occupation and if married- number of children. **Conclusion:** The findings of the study showed, information module was effective in increasing the knowledge of women regarding utero-vaginal prolapse and its prevention.

**Keywords:** Knowledge, women, utero-vaginal prolapsed, prevention.

## Introduction

Uterine prolapse occurs when pelvic ligaments and floor muscles stretch and weaken, not providing adequate support for the uterus. Though there are multifactorial predisposing factors for the weakening of muscles and ligaments. The contributing factors found were early marriage and child birth, multi parity, inadequate food during pregnancy and postpartum period, vaginal delivery, home delivery, less rest period in postpartum, heavy work, no kegal exercise and illiteracy [1]. Uterine prolapse is an important health problem for women. It is one of the main contributory factors to reproductive health issues that affect women's quality of life. The prevalence of pelvic organ prolapse was 29.8%. The factors causing pelvic organ prolapse found were parity, minimum birth interval, maternal age at birth and latest birth interval [2].

## Need of the study

Globally World Health organization estimates that the reproductive ill health accounts for 33% of the total disease burden in women and also report the Global prevalence of uterine prolapse as 2 to 20% among women younger than 45 year of age. Approximately 50% of all parous women present with some degree of uterine prolapse whereas only 10 – 20% had symptoms of uterine prolapsed [3].

The higher burden of uterus prolapse is found in those with poor economic background, those aged above 30 years and with more than two deliveries conducted at home [4]. Women carrying heavy loads on their backs is common in developing countries may cause pelvic organ prolapse. Pelvic organ prolapse was also higher among those whose duration of work greater than 10 years [5]. The significant association was seen between number of vaginal deliveries, with pelvic organ prolapse, with women carrying heavy loads [6], perineal lacerations and forceps deliveries were associated with pelvic floor disorders 5-10 years after a first delivery, 19 (4%) participants had prolapse symptoms [7].

Uterus prolapse negatively influences the women's physical, mental, and social well-being and adversely affects women's daily life. Most participants (>85%) had the major physical discomforts due to uterine prolapse as difficulty with sitting walking, lifting, working, and standing. [8].

The estimated probability of uterus prolapse at the age of 64 years was 12 times higher after vaginal delivery compared with cesarean delivery [9]. It is most common indications for gynecologic surgery as the uterus descends down ward into the vagina [10].

Devendra Raj Singh et al.(2016), conducted a descriptive quantitative study, to assess the knowledge on risk factors of uterine prolapse among reproductive age group women of Bajrabarahi Municipality of Lalitpur, Nepal. Result showed that the study results shows that out of total 46.5% of respondents have adequate knowledge and 53.5% of respondents have inadequate knowledge regarding risk factors of uterus prolapse [11]. Binjwala S. et al assessed the Knowledge on uterine prolapse among married women of reproductive age in Nepal. 53% of the women had never heard about uterine prolapse, and only 37.5% of women who had ever heard about uterine prolapse showed a satisfactory level of knowledge about uterine prolapse [12].

In former research studies it was found that there is still a knowledge gap among women regarding uterine prolapse. Hence, the researcher found important to assess the impact of information module on knowledge regarding utero-vaginal prolapse and its prevention among women. This strategy was empirically evaluated for its efficacy in increasing the knowledge regarding utero-vaginal prolapse and its prevention among women.

## PROBLEM STATEMENT

A study to assess the impact of information module on knowledge regarding utero-vaginal prolapse and its prevention among women.

## OBJECTIVES

1. To assess the pre - intervention knowledge regarding utero-vaginal prolapse and its prevention among women in selected villages of Indore. Madhya Pradesh.
2. To assess the post - intervention knowledge regarding utero-vaginal prolapse and its prevention among women in selected villages of Indore, Madhya Pradesh.
3. To evaluate impact of information module on knowledge regarding utero-vaginal prolapse and its prevention among women in selected villages of Indore Madhya Pradesh.
4. To find association between the pre- test knowledge score of women with their selected socio - demographic variables.

## HYPOTHESIS

**H<sub>1</sub>**-There will be a significant increase in post test knowledge score after intervention regarding utero-vaginal prolapse and its prevention among women at  $P \leq 0.05$  level of significance.

**H<sub>2</sub>**. There will be significant association between pre-test knowledge score regarding utero-vaginal prolapse and its prevention among women with their selected socio - demographic variables at  $P \leq 0.05$  level of significance.

**Method and Materials:** The present study was aimed to assess the impact of information module on knowledge regarding utero-vaginal prolapse and its prevention among women. Quantitative approach was used. A pre experimental one group pretest - posttest design was adopted for the study. The setting of the study was selected villages of Indore Madhya Pradesh. The samples were selected from women who fulfilled the designated set criteria of interest to the researcher from selected villages of Indore, Madhya Pradesh. The sample size comprised of 241 women and was selected using non-probability purposive sampling technique. Self structured questionnaire was used to measure the knowledge regarding utero-vaginal prolapse and its prevention among women. The pretest knowledge was evaluated on day 1 and information module was administered to the women and on day 7<sup>th</sup> after intervention post test knowledge was evaluated. The data collection technique used was paper and pencil test. The data analysis was done using descriptive and inferential statistics.

## Result and Discussion

### Section I: Distribution of participants according to socio-demographic variables

Majority of the participants were in the age group 24-28 years, 79 (32.8%), 231 (95.9%) were Hindus. 221 (91.7%) participants were educated and received formal education, while 20 (8.3%) participants had received informal education. Majority of the participants were from joint family i.e. 144 (59.8%), 137 (56.8%) participants were housewives, 69 (28.6%) were laborer and 35 (14.5%) were doing some other type of job. Majority of the participants 150 (62.2%) had a family income between Rs. 5001-10000.

Majority of the participants 176(73%) had never heard about uterine prolapse and 65(27%) had heard about uterine prolapse. Out of 65, 46 (70.76%) received information from relatives and 19(307%) from health care worker.

Majority of the participants were married 188 (78%) and 53 (22%) participants were unmarried. Of the 188 married participants, 33 (17.6%) participants had 1 child, 88 (46.8%) had two children, 52 (27.7%) had three children and 15 (8%) had four children, and 113 (46.9%) participants had a birth interval of 2 years. 42 (17.4%) participants experienced complications during vaginal delivery, while 199 (82.6%) participants did not experience any complication.

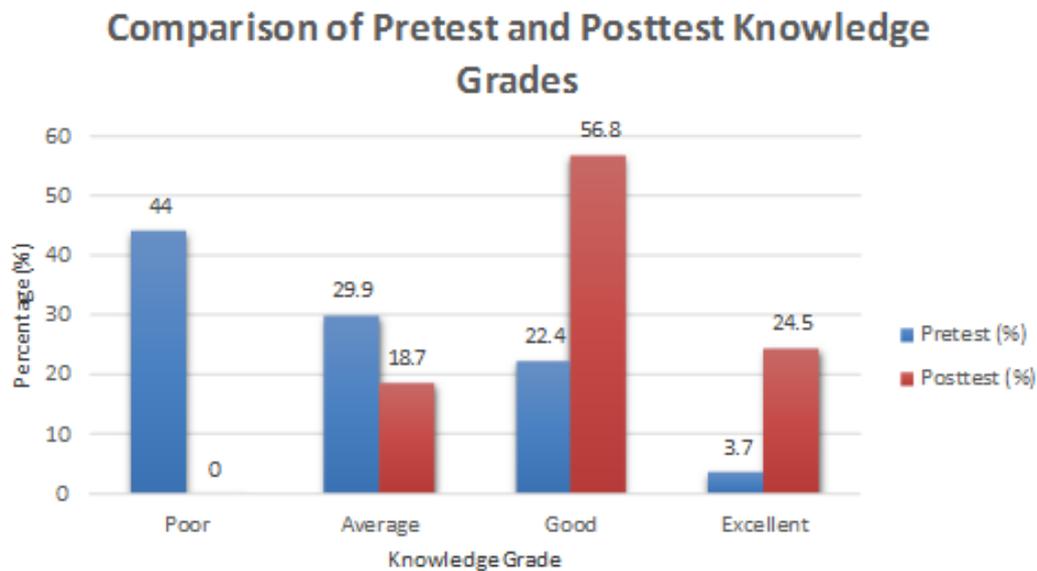
Majority of the participants 213 (88.4%) did not have any medical problem in reproductive system, 28 (11.6%) participants had medical problem in the reproductive system. 218 (90.5%) participants had no medical issues related to uterine prolapse and 23 (9.5%) participants had medical issues related to uterine prolapse.

### Section II- Distribution of participants according to pretest and posttest knowledge grades.

**Table No.1**  
**Comparison of pretest and posttest grades**

(N=241)

S. No.	Knowledge Grades	Pretest		Posttest	
		No.	%	No.	%
1.	Poor (0-7)	106	44.0	0	0.0
2.	Average (8-14)	72	29.9	45	18.7
3.	Good (15-21)	54	22.4	137	56.8
4.	Excellent (22-28)	9	3.7	59	24.5
	Total	241	100.0	241	100.0



**Graph 1: Bar diagram showing comparison of pretest and posttest knowledge grades**

The above table and graph shows the distribution of participants according to pretest and posttest knowledge grades. In the pretest, 106 (44%) participants had obtained poor grade, 72 (29.9%) participants had obtained average grade, 54 (22.4%) participants had obtained good grade and 9 (3.7%) participants had obtained excellent grade.

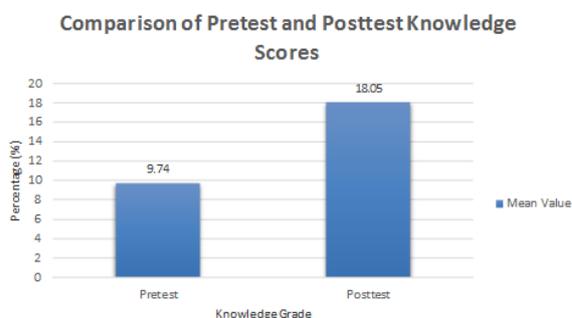
In the posttest, 45 (18.7%) participants had obtained average grade, 137 (56.8%) participants had obtained good grade and 59 (24.5%) participants had obtained excellent grade. The intervention was very helpful in increasing the knowledge grade of the participants.

**Table No. 2  
Comparison of Mean pretest and posttest scores**

(N=241)

Pretest / Posttest	No.	Mean	SD	't' value, df	P value
Pretest	241	9.74	5.80	-27.615, df=240	0.001*
Posttest	241	18.05	4.82		

**Paired 't' test applied.,  $p < 0.05$  – Significant,  $p < 0.001$  – Highly Significant**



**Graph 2: Bar diagram showing comparison of mean pretest and posttest knowledge scores**

The above table and graph shows the comparison of mean pretest and posttest knowledge scores. The mean pretest knowledge score was  $9.74 \pm 5.80$  and mean posttest knowledge score was  $18.05 \pm 4.82$ . The difference was found to be statistically significant ( $P=0.001$ ), showing a significantly higher mean posttest score in comparison to the mean pretest score. The intervention was effective in increasing the knowledge grade of the participants. Hence hypothesis  $H_1$  is accepted.

Table No. 3

## Area wise distribution of the knowledge scores of the samples regarding uterine prolapse

(N=241)

S. No.	Area of knowledge	Pretest				Posttest			
		Mean	SD	F value	P value	Mean	SD	F value	P value
1.	Reproductive system	5.45	2.60	134.979	0.001*	9.04	2.59	257.752	0.001*
2.	Etiology and signs & symptoms	2.22	2.59			4.44	2.25		
3.	Diagnosis, treatment and prevention	2.07	2.44			4.61	2.69		

The above table shows the comparison of mean pretest and posttest knowledge scores in relation to area of knowledge. In the pretest, the mean knowledge score in the area 'Reproductive system' was  $5.45 \pm 2.60$ , in the area 'Etiology and signs & symptoms of uterine prolapse' was  $2.22 \pm 2.59$  and in the area 'Diagnosis, prevention and treatment' was  $2.07 \pm 2.44$ . In the posttest, the mean knowledge score in the area 'Reproductive system' was  $9.04 \pm 2.59$ , in the area 'Etiology and signs & symptoms of uterine prolapse' was  $4.44 \pm 2.25$  and in the area 'Diagnosis, prevention and treatment' was  $4.61 \pm 2.69$ .

In the pretest, the mean knowledge score was highest in the area 'Reproductive system' and lowest in the area 'Diagnosis, prevention and treatment'. The comparison of mean pretest knowledge score in relation to the area of knowledge was found to be statistically significant ( $P=0.001$ ), showing that the mean pretest knowledge score significantly varied in relation to the area of knowledge.

In the posttest, the mean knowledge score was highest in the area 'Reproductive system' and lowest in the area 'Etiology and signs & symptoms of uterine prolapse'. The comparison of mean posttest knowledge score in relation to the area of knowledge was found to be statistically significant ( $P=0.001$ ), showing that the mean posttest knowledge score significantly varied in relation to the area of knowledge.

### Section III: Association between pretest knowledge grade and socio - demographic variables

A statistically significant association was found between age, education, occupation, if married-number of children; and pretest knowledge score ( $P=0.005$ ), showing that the pretest knowledge grade is dependent on age; education; occupation and if married, number of children.

A statistically significant association was not found between other socio-demographic variables and pretest knowledge score ( $p>0.05$ ), showing that the pretest knowledge grade is independent of these socio-demographic variables.

### Discussion:

Majority of the participants were in the age group 24-28 years, 79 (32.8%), 231 (95.9%) were Hindus. 221 (91.7%) participants were educated and received formal education, 144 (59.8%) lives in joint family, 137 (56.8%) were housewives, 150 (62.2%) had a family income between Rs. 5001-10000, 176(73%) had never heard about uterine prolapsed, 188 (78%) were married, out of the 188 married participants 88 (46.8%) had two children,. 113 (46.9%) participant had a birth interval of 2 years, 199 (82.6%) participants had no complications during vaginal delivery, 213 (88.4%) participants did not have any medical issues in the reproductive system and 218 (90.5%) participants had no medical issues related to uterine prolapse.

In the pretest, 106 (44%) participants had obtained poor grade, 72 (29.9%) participants had obtained average grade, 54 (22.4%) participants had obtained good grade and 9 (3.7%) participants had obtained excellent grade. In the posttest, 45 (18.7%) participants had obtained average grade, 137 (56.8%) participants had obtained good grade and 59 (24.5%) participants had obtained excellent grade. The intervention was very helpful in increasing the knowledge grade of the participants. The mean pretest

knowledge score was  $9.74 \pm 5.80$  and mean posttest knowledge score was  $18.05 \pm 4.82$ . The difference was found to be statistically significant ( $P=0.001$ ), showing a significantly higher mean posttest score in comparison to the mean pretest score. The information module was effective in increasing the knowledge of the participants.

Area wise distribution of the knowledge scores of the samples regarding uterine prolapsed shows that in the pretest, the mean knowledge score was highest in the area 'Reproductive system' and lowest in the area 'Diagnosis, prevention and treatment' and in the posttest, the mean knowledge score was highest in the area 'Reproductive system' and lowest in the area 'Etiology and signs & symptoms of uterine prolapse'. The comparison of mean posttest knowledge score in relation to the area of knowledge was found to be statistically significant ( $P=0.001$ ).

The present study is supported by Nathan et al., conducted a study to assess the effectiveness of structured teaching program on knowledge regarding preventive measures of uterine prolapse among mothers the results shows that in pre-test 28 (70%) subjects had an average knowledge and nine (22.5%) of them had poor knowledge, and 3 (7.5%) of the subjects had good level of knowledge regarding preventive measures of uterine prolapse. In the Post- test, 28 (70%) of the subjects had good knowledge and 12 (30%) had average knowledge. No one had poor level of knowledge in the post-test. The mean pre-test knowledge score was  $11.85 \pm 4.36$  and the mean post-test knowledge score was  $19.75 \pm 2.98$ . There was a statistically significant improvement in the level of knowledge regarding preventive measures of uterine prolapse among the mothers [13].

Similarly, another study conducted by Divya et al., to evaluate the effectiveness of Educational Intervention Package on Utero-Vaginal Prolapse and its prevention among women in Chennai. In the pre-test, 50 (83.3%) of women had inadequate knowledge, eight (13.3%) of women had moderately adequate knowledge and 2 (3.3%) of women had adequate knowledge. In post-test, majority 46 (76.7%) of mothers had adequate knowledge, 14 (23.3%) mothers had moderately adequate knowledge and none of them have inadequate knowledge. The mean pre-test knowledge score was  $7.2 \pm 2.9$  and the mean post-test knowledge score was  $9.5 \pm 2.8$ . The paired t-value was 26.3, which was statistically significant at  $p < 0.001$  [14].

In present study, a statistically significant association was found between age; education; occupation; if married, number of children; and pretest knowledge grade ( $P=0.005$ ), showing that the pretest knowledge grade is dependent on age; education; occupation; and if married-number of children. The study is supported by Parvathavarthini K. et. al. conducted clinical epidemiological study of uterine prolapse, result showed uterine prolapse is strongly associated with age, parity and place of delivery [15].

### Conclusion:

The findings of the study showed information module was effective in increasing the knowledge regarding utero-vaginal prolapse and its prevention among women and suggested that research studies should be continued to reduce the incidence of uterine prolapse and to enhance the overall health and quality of life of women.

**Conflict of interest** -The authors declare no conflict of interests.

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