"A STUDY TO ASSESS THE EFFECTIVENESS OF HEALTH EDUCATION ON KNOWLEDGE REGARDING PREVENTION OF UTERO VAGINAL PROLAPSE AMONG PAROUS WOMEN IN SELECTED COMMUNITY AREA OF DEHRADUN, UTTARAKHAND".

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ABSTRACT

Background: Women are the ones, who conceive and give birth. In this process of pregnancy and labour women are subjected to a lot of stress and strain, where in their pelvic floor muscles and the structure of perineum loss its tone and may result in utero-vaginal prolapse. A uterine prolapse is when the uterus descends toward or into the vagina. It happens when the pelvic floor muscles and ligaments weak and are no longer able to support the uterus. It is more common as women get older, particularly in those who have gone through menopause. **Aim:** To assess the effectiveness of health education on knowledge regarding prevention of utero vaginal prolapse among parous women in selected community area of Dehradun. **Material and Methods:** Quasi-experimental (non-equivalent control group before after research design) design was adopted for the study. 60 subjects (30 in experimental group and 30 in control group) were selected through non-probability purposive sampling technique. Data was collected by using self structured knowledge questionnaire on prevention of utero vaginal prolapse. The tool was developed in two parts, demographic variables and the second part knowledge questions on prevention of utero vaginal prolapse. Collected data was analysed by using descriptive and inferential statistics. **Results:** The study revealed that the pre-test overall knowledge mean scores of respondents in experimental group were found to be 6.50 and in control group that was 5.93. The post-test overall knowledge mean score of respondents was found to be 16.33 and in control group 6.20. So, the results showed that health education was effective in improving knowledge of the parous women regarding the prevention of utero vaginal prolapse among experimental group. The pre-test knowledge of parous women in experimental group, majority 19 (63.3%) had inadequate, 11 (36.7%) had moderate and in post-test knowledge majority 17 (56.7%) had moderate knowledge, 13 (43.3%) had adequate knowledge towards prevention of utero vaginal prolapse. Similarly, pre-test knowledge of parous women in control group, majority 21 (70%) had inadequate, 09 (30%) had moderate knowledge and in post-test knowledge majority 19 (63.3%) had inadequate knowledge, 11 (36.7%) had moderate knowledge towards prevention of utero vaginal prolapse. **Conclusion:** The study concluded that health education was effective in increasing the knowledge regarding prevention of utero vaginal prolapse among selected community area.

Key words – Utero Vaginal Prolapse, Health Education, Prevention, Community

Introduction:

Women are the ones, who conceive and give birth. In this process of pregnancy and labour women are subjected to a lot of stress and strain, where in their pelvic floor muscles and the structure of perineum loss its tone and may result in utero-vaginal prolapse.[1]A uterine prolapse is when the uterus descends toward or into the vagina. It happens when the pelvic floor muscles and ligaments weak and are no longer able to support the uterus.[2]This is caused by weakness in all of the supporting muscles.[3] According to World Health Organization estimation, the reproductive ill health accounts for 33% of the total disease burden in the women globally. The global prevalence of uterine prolapse is 2-20%. Internationally according to Oxford Family Planning Association United Kingdom, the hospital admission for uterine prolapse is 20.4%, surgery for uterine prolapse is 16.2%. The incidence of uterine prolapse in U.S.A. (United States of America) is 11.4%, Egypt 56%, Italy 5.5%, Iran 53.6%, California 1.9% and Pakistan 19.1%. [4]

According to UNFPA (United Nation Fund for Population Activities, 2005), 600000 women in Nepal suffer from uterine prolapse and 200000 women need immediate surgery. A high 69.1% of the women have first degree pelvic organ prolapse and the 30.9% suffer from second and third degree utero vaginal prolapse.[5]The true incidence of this disorder is not known because many of the cases are asymptomatic and many women feel shy to complain of uterovaginal prolapse. Some degree of uterovaginal prolapse is see in 50% of parous women with 10-20% of these causing symptoms.[6] In India, it is found that among women visiting hospitals in Bengal, Delhi, Punjab and Uttar Pradesh with gynaecological problems, one in five are suffering from utero vaginal prolapse. Many studies have revealed that in India the prevalence rate is 15-20 %. In Northern India, it is 7.6% and in Eastern India it is 20%. In South India Tamilnadu, the incidence of uterine prolapse is 0.7% and in Karnataka the incidence of uterine prolapse is 3.4%.[7] Uterine prolapse seriously compromises the quality of the women affected. It had far reaching consequences not only for their physical health but also for their sexual lives, and their ability to work and earn a livelihood.[8]

Statement of the Problem:

A study to assess the effectiveness of health education on knowledge regarding prevention of utero vaginal prolapse among parous women in selected community area of Dehradun, Uttarakhand.

Objectives:

1. To assess the pre-test knowledge regarding prevention of utero vaginal prolapse among parous women in experimental group and control group

2. To administer health education regarding prevention of utero vaginal prolapse among parous women in experimental group

3. To assess the post-test knowledge regarding prevention of utero vaginal prolapse among parous women in experimental group and control group

4. To compare pre-test and post-test knowledge score regarding prevention of utero vaginal prolapse among parous women in experimental group and control group

5. To find out the association between pre-test knowledge score with the selected demographic variables among experimental group and control group.

Hypothesis:

P value will be tested at the level of significance 0.05

H_1- There is significant difference between the pre-test and post-test knowledge score among experimental group regarding prevention of utero vaginal prolapse

H_2- There is significant association between the pre-test knowledge score with selected demographic variables among experimental group and control group.

Material and methods:

The quantitative approach, quasi experimental, non-equivalent control group before after research design was adoptedfor the study to assess the effectiveness of health education on knowledge regarding prevention of utero vaginal prolapse among parous women in selected community of Dehradun. 60 subjects ie. 30 in experimental group and 30 in control group, were selected through non-probability purposive sampling technique. The conceptual framework used for this study was based on Betty Neumann's System Model proposed by Betty Neumann. The setting of the study was community (Lakhibagh) of Dehradun. The tool consist of socio demographic variables and self-structured knowledge questionnaire. The content validity of the tool was obtained from the experts in nursing field. The reliability of the tool was established by karlpearson's formula which (0.8) was found reliable. Feasibility of the study was confirmed by pilot study. The data collection was started from 18th to 24th August 2020. The data was organised, analysed and interpreted in terms of the study objectives. The data was summarized and tabulated by using descriptive statistics (Mean, Percentage, Standard Deviation) and inferential Statistics (Paired 't' test, Chi–square andChi–square with Yates correction, Fisher exact).

Research variables:

Independent variable: Health Education

Dependent variable: Knowledge

Results-

Section 1: Distribution of respondents according to socio-demographic variables:

Table No. 1 -Distribution of respondents according to socio-demographic variables:

(N=60)

S.No.	Demographic Variables	Experimental group (30)		Control group (30)	
		Frequency	Percentage	Frequency	Percentage
1	**Age in years**				
1.1	18 – 26 years	6	20%	8	26.7%
1.2	27 – 35 years	11	36.7%	6	20%
1.3	36 – 44 years	4	13.3%	10	33.3%
1.4	>44 years	9	30%	6	20%
2	**Religion**				
2.1	Hindu	13	43.3%	13	43.3%
2.2	Muslim	17	56.7%	17	56.7%
3	**Education status**				
3.1	No formal education	4	13.3%	5	16.7%
3.2	Primary education	14	46.7%	16	53.3%
3.3	Secondary education	9	30%	6	20%
3.4	Graduation or others	3	10%	3	10%
4	**Type of family**				
4.1	Nuclear family	15	50%	18	60%
4.2	Joint family	15	50%	12	40%
5	**Number of children**				
5.1	One	5	16.7%	4	13.3%
5.2	Two	7	23.3%	10	33.3%
5.3	Three	12	40%	11	36.7%
5.4	More than three	6	20%	5	16.7%
6	**Previous Sources of information**				
6.1	No	21	70%	23	76.6%
6.2	Yes- Family & friends	4	13.3%	2	6.7%
	Health personnel	3	10%	2	6.7%

	Mass media	2	6.7%	3	10%
	Others	0	0%	0	0%

Section 2: Distribution of respondents according to pre-test score and post-test score:

The pre-test knowledge regarding prevention of utero vaginal prolapse among parous women in experimental group, the overall knowledge mean scores of respondents were found to be 6.50, mean percent 26% and standard deviation of 2.96 and in control group mean scores of respondents were found to be 5.93, mean percent 23.72% and standard deviation of 2.94.

The post-test knowledge regarding prevention of utero vaginal prolapse among parous women in experimental group, overall knowledge mean scores of respondents were found to be 16.33, mean percent 65.32% and standard deviation of 2.99 and in control group knowledge mean scores of respondents were found to be 6.20, mean percent 24.8% and standard deviation of 3.38.

Section 3: Compare pre-test and post-test knowledge score:

Table 2, shows the compare pre-test and post-test knowledge score of experimental group, the combined 't' test value was significant i.e. 26.459 at $p < 0.05$ level andin control group combined 't' test value was not significant i.e. 0.795 at $p < 0.05$ level. So the results shows that health education was effective in improving knowledge of the parous women regarding the prevention of utero vaginal prolapse.

Table 2: Findings related to pre-test and post- test Knowledge score by paired "t" test

Aspect	Area wise	Experimental Group (N=30)					Control Group (N=30)				
		Group	Mean	SD	't' value	p value	Group	Mean	SD	't 'value	p value
1.	Introduction of utero-vaginal prolapse	Pre-test	1.10	0.92	8.746	0.000	Pre-test	1.06	0.78	1.044	0.305
		Post-test	2.53	0.57			Post-test	1.23	0.85		
2.	Etiology or Risk factors of utero-vaginal prolapse	Pre-test	1.33	0.99	6.624	0.000	Pre-test	0.90	0.88	0.226	0.823
		Post-test	2.46	0.73			Post-test	0.86	0.68		
3.	Clinical Manifestation or diagnostic evaluation of utero-vaginal prolapse	Pre-test	0.70	0.74	6.836	0.000	Pre-test	0.66	0.80	0.682	0.501
		Post-test	1.96	0.71			Post-test	0.56	0.56		
4.	Management of	Pre-test	0.50	0.73	7.527	0.000	Pre-test	0.30	0.53	2.283	0.030

	utero-vaginal prolapse	Post-test	2.13	0.93			Post-test	0.56	0.56		
5.	Prevention of utero-vaginal prolapse	Pre-test	2.86	1.73	15.739	0.000	Pre-test	3.00	1.61	0.162	0.873
		Post-test	7.23	1.75			Post-test	2.96	1.95		
Overall score		Pre-test	**6.50**	**2.96**	**26.459**	**0.000**	Pre-test	**5.93**	**2.94**	**0.795**	**0.433**
		Post-test	**16.33**	**2.99**			Post-test	**6.20**	**3.38**		

Section 4: Level of pre-test and post-test knowledge:

Figure 1: Illustrate the level of pre-test and post-test knowledge of experimental group and Figure 2 depict the level of pre-test and post-test knowledge of control group.
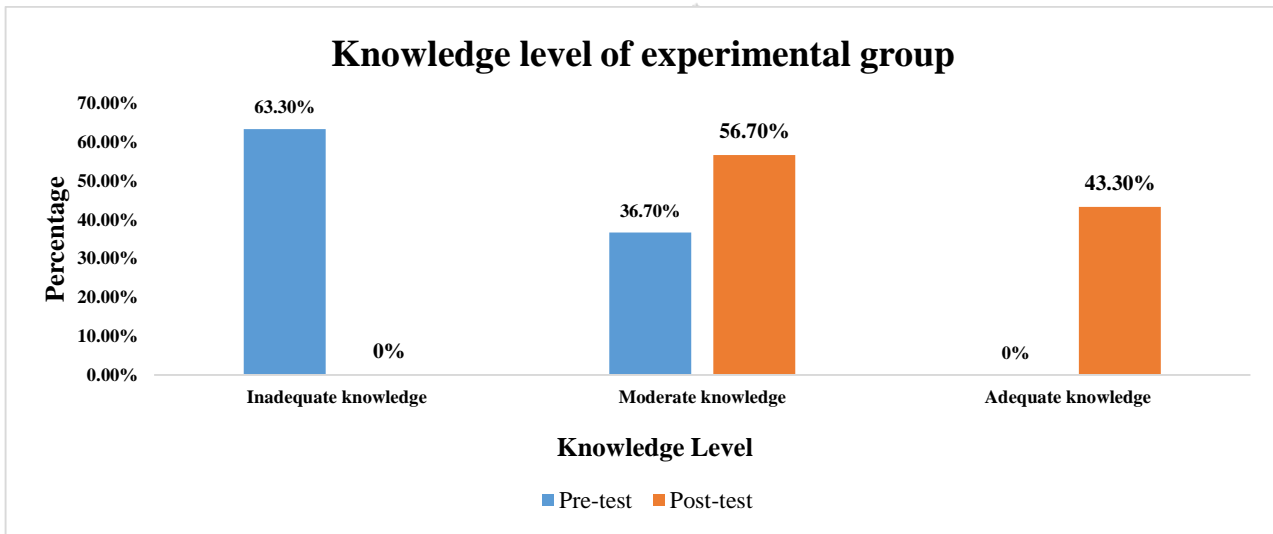
Figure 1: Finding related to Knowledge level of experimental group
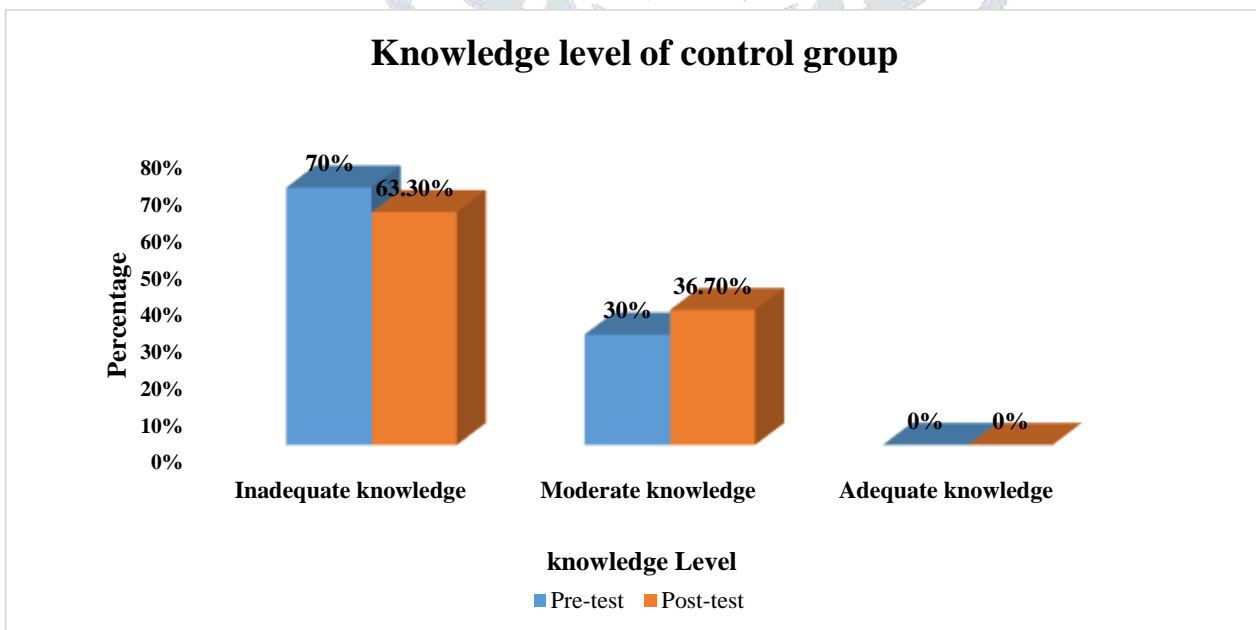
Figure 2: Finding related to Knowledge level of control group

Section 5: Association between pre-test knowledge score with the selected demographic variables:

Table 3 shows; there was significant association of education with pre-test knowledge score of parous women regarding prevention of utero vaginal prolapse in the experimental group.

Table 3: Association between pre-test knowledge score with the selected demographic variables among experimental group

(N=30)

S.No.	Variable	Inadequate	Moderate	Test, calculated value & df	Tabulated value	p value	Significance
1	**Age (in year)**						
1.1	18 – 26 year	3	3				
1.2	27 – 35 year	5	6	p = 4.697	-	0.072	NS
1.3	36 – 44 year	4	0				
1.4	>44 year	7	2				
2	**Religion**						
2.1	Hindu	7	6	X^2_{yates}= 0.314	3.84	0.575	NS
2.2	Muslim	12	5	df = 1			
3	**Education**						
3.1	No formal education	4	0				
3.2	Primary education	11	3	p = 7.725	-	0.006	S
3.3	Secondary education	3	6				
3.4	Graduation or other	1	2				
4	**Type of family**						
4.1	Nuclear family	9	6	X^2_{yates} = 0.000	3.84	1	NS
4.2	Joint family	10	5	df=1			
5	**Number of children**						
5.1	One	2	3	X^2 = 2.020			
5.2	Two	4	3	df=3	7.82	0.568	NS
5.3	Three	9	3				
5.4	More than three	4	2				
6	**Previous source of information**						
6.1	No	16	5	X^2_{yates} = 3.308	3.84	0.068	NS
6.2	Yes	3	6	df=1			

*Significant at 0.05 level.   S = Significant,   NS = Not Significant

X^2= Chi–square, X^2_{yates} = Chi–square with Yates correction, p= Fisher exact

Table 4: Association between pre-test knowledge score with the selected demographic variables among control group

Table 4 shows there was significant association of education and previous source of information with pre-test knowledge score of parous women regarding prevention of utero vaginal prolapse in the control group.

(N=30)

S.No.	Variable	Inadequate	Moderate	Test, calculated value & df	Tabulated value	p value	Significance
1	**Age in year**						
1.1	18 – 26 year	6	2	$X^2 = 1.746$			
1.2	27 – 35 year	3	3	df=3	7.82	0.627	NS
1.3	36 – 44 year	7	3				
1.4	>44 year	5	1				
2	**Religion**						
2.1	Hindu	9	4	$X^2_{yates} = 0.103$	3.84	0.747	NS
2.2	Muslim	12	5	df=1			
3	**Education**						
3.1	No formal education	5	0				
3.2	Primary education	13	3	p = 9.813	-	0.021	S
3.3	Secondary education	1	5				
3.4	Graduation or other	2	1				
4	**Type of family**						
4.1	Nuclear family	10	8	$X^2_{yates} = 2.916$	3.84	0.087	NS
4.2	Joint family	11	1	df=1			
5	**Number of children**						
5.1	One	3	1				
5.2	Two	5	5	$X^2 = 2.922$	7.84	0.404	NS
5.3	Three	9	2	df=3			
5.4	More than three	4	1				
6	**Previous source of information**						
6.1	No	19	4	$X^2_{yates} = 5.110$	3.84	0.023	S
6.2	Yes	2	5	df=1			

*Significant at 0.05 level.   S = Significant,   NS = Not Significant

X^2= Chi–square, X^2_{yates} = Chi–square with Yates correction, p= Fisher exact

DISCUSSION:

The result was supported by the finding of the study conducted by Genesta MG, in experimental group the mean post-test knowledge score (22.44) were apparently higher than that of mean pre-test knowledge score (9.84). The calculated 't' value was 26.077 which were greater than tabulated 't' value i.e. 2.05 at 0.05 level of significance. In control group the mean post-test knowledge score was 9.90 and mean pre-test knowledge score was 9.46. The p value 0.185 i.e. >0.05.[9]

This study revealed that there was significant association of education with pre-test knowledge score of parous women regarding prevention of utero vaginal prolapse in the experimental group and in the control group there was significant association of education and previous source of information with pre-test knowledge score of parous women regarding prevention of utero vaginal prolapse.

The result was supported by the finding of the study conducted by Vanamala P.T. that there was a significant association between pre-test knowledge score of postnatal mothers regarding prevention of utero vaginal prolapse and selected demographic variables like religion, education, income, and previous source of information.[10]

Recommendation:

- The study can be conducted on large samples regarding all the aspects of prevention of utero vaginal prolapse in all other communities so that the finding can be generalized.
- The study can be conducted to find out the knowledge and attitude of community regarding utero vaginal prolapse.
- The long term follow-up study can be conducted to find out the effectiveness of health education regarding utero vaginal prolapse.

Conclusion:

The study concluded that 70% parous women had inadequate knowledge regarding utero vaginal prolapse which indicated that the need of intervention to the parous women regarding prevention of utero vaginal prolapse. The findings showed that the health education was effective in improving the knowledge regarding utero vaginal prolapse in experimental group. It was also found that some socio demographic variables had significant association with the pre-test knowledge score.

Hence communities should be aware of the causes, risk factors, clinical manifestations, treatment and prevention of utero vaginal prolapse and protect themselves from its health hazards. They need to implement all the preventive measures mentioned in this study to their daily life style and also spread the information to their surroundings to prevent them from utero vaginal prolapse.

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