

A Study to Assess the Effectiveness of Structure Teaching Programme on Knowledge Regarding Vaginal Candidiasis and its Prevention among Women Admitted at Hsk Hospital and Research Centre, Bagalkot

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Abstract

Original Research Article

Background: Genital tract infections are among the most common medical problems in women. Vaginal discharge cause women to seek treatment from health care providers however, some of these infections remain asymptomatic. Anatomy predisposes women toward greater risk of genital infection and also accounts for greater difficulty in diagnosis and treatment. **Methods:** A Experimental pre test post test research design, was used for present study. The samples of 40 women were selected by purposive sampling technique. data was collected by self-structured questionnaires, The data analysis done by using descriptive and inferential statistics. **Results:** Findings of the study revealed that in the pre test 13(32.5%), 22(55%), 4(10%), & 1(2.5%) women had very poor, poor, average & Good knowledge respectively. Where as in post test 23(57.5%), 15(37.5%) & 2(5%) women had excellent, good & average knowledge regarding vaginal candidiasis and its prevention respectively. In the pre test mean \pm SD of knowledge was 7.125 ± 2.89 , where as in post test 20.7 ± 2.35 . None of the sociodemographic variables were associated with knowledge regarding candidiasis and its prevention among women. **Conclusion:** The study concludes that after teaching programme subjects had improved knowledge regarding vaginal candidiasis and its prevention.

Keywords: Assess, Professional quality of life, Perceived stress, Interventional package, NICU.

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INTRODUCTION

Genital tract infections are often referred to as vaginal infection Vaginal candidiasis is very common yeast infection of the vagina it is caused by a fungal micro-organism called *Candida albicans* is also called as vaginal thrush, that occurs when there is over growth of the fungus is always present in the body in small amounts. However when an imbalance occurs, such as when the normal acidity of the vagina, changes or when hormonal balance changes, *Candida* can multiply. When that happens, symptoms of candidiasis appears [1].

Vulvo vaginal candidiasis (VVC) is common clinical problem in women of reproductive age throughout the world particularly in hot, subtropical climates. Annually in the United States there are approximately 13 million cases of vulvo vaginal candidiasis (VVC), resulting in 10 million gynecologic office visits per year. It is estimated that 75% of women will experience at least one episode in their lifetime, with a projected 50% of all women experiencing multiple episodes [2].

Candida albicans is a dimorphic communal organism of the urogenital tracts and has been identified as the main pathogenic agent in vulvo vaginal candidiasis (VVC), accounting for approximately 85-90% of patient with positive cultures [3]. Mechanical factors may also be important. Perspiration associated with tightly fitted clothes or poorly ventilated underwear increases local temperature and moisture. Mechanical irritation of the vulvovaginal area by clothing or with sexual intercourse may also predispose already colonized areas to infection. One study demonstrated a positive relationship between the monthly frequency of sexual intercourse and the incidence of recurrent vulvovaginal candidiasis [4].

Most episodes of vulvovaginal candidiasis respond well to treatment with currently available antifungal. While acute vulvovaginal candidiasis is largely treatable with current chemotherapeutics, there remains a subset of the population (5%-10% of women diagnosed with vulvo vaginal candidiasis) that exhibit recurrent vulvovaginal candidiasis (RVVC). Recurrent vulvovaginal candidiasis is defined as having three or

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more episodes per annum [5]. Candida species are part of the lower genital tract flora is 20 to 50% is healthy asymptomatic women vulvovaginal candidiasis is common in adults is 50% of female university students will have had at least one physician diagnosed episode by age 25, as many as 75% of premenopausal women report having had at least one episode, and 45% of women have two or more episodes vulvovaginal candidiasis is less common in postmenopausal women, unless they are taking estrogen therapy [6].

MATERIALS AND METHODS

Research approach quantitative research approach. The present study is pre-experimental one group pre-test -post-test design. A convenient sampling technique was used to select of 40 women from BVVS HSK Hospital and Research Centre, Bagalkot. Written consent was taken from participants for the study. Structured interview schedule by using Structured Questionnaires were used as tool for data collection. The data was analyzed by using descriptive and inferential statistical.

Study Design: The study design adopted for this study was pre-experimental one group pre-test -post-test design.

Setting of the study: The present study was conducted at BVVS HSK Hospital and Research Centre, Bagalkot,

Participants: In the present study 40 participant were the women with complaints of vaginal candidiasis admitted at HSK Hospital and research centre Bagalkot. who met the inclusion criteria were selected as sample for the study

Instruments: The study was conducted using a Structured interview schedule by using Structured knowledge Questionnaires regarding vaginal candidiasis and its prevention

Data Collection Procedures:

Permission was obtained from the Dean, HSK hospital & research centre, Bagalkot hospital. Ethical clearance was done. Consent was obtained from the participants. Pre-test data was collected by researcher herself by using Structured closed ended questionnaire through structured interview schedule. Structured interview was done for each participant within 30-45 minutes. Structured Teaching Programme was intervened with the areas like general aspects of vaginal candidiasis After 7 days from intervention, post test data was collected by using the same. Data collection was completed within 45days.

Variable under study:

Independent variable: for the present study was Structure teaching programme

Dependent variable: Knowledge regarding vaginal candidiasis and its prevention among women.

Socio-demographic Variables: Age, educational status, occupation, religion, monthly income of the family, Type of family, marital status of the women, and sources of information.

Statistical analysis:

The obtained data were statistically examined in terms of the objectives of the study using descriptive and inferential statistics. A master sheet was prepared with responses given by the study participants. Frequencies and Percentage was used for the analysis of demographic data, and Mean, standard deviation and 'paired t-test' were used to find the difference between pre-test and post-test assessment scores of women. Chi square and Fishers exact test was used to find association between pre-test knowledge scores with their selected demographic variables of women.

Ethical Clearance: A certificate of ethical permission was obtained from ethical committee of the institution and written consent was taken from each participant.

RESULTS

Section I: Description of socio-demographic characteristics of sample

In this study 35% of the subjects belong age group of 20-30 years, followed by 30 % in the age group of 30-40 years, 22.5% in the age group of 40-50 years and 12.5% were 50 years and above of age, according to educational status, 5% of the subjects were had no formal education, 25% up to primary education, 47.5% had high school, 22.5% had PUC and remaining 0% had degree and post-graduation. according to their occupation shows that 27.5% subjects were housewives, 32.5% were Agriculture, 12.5% was self-employed 12.5% were government employee 15% of the subjects were coolie, according to their religion shows that 50% subjects were Hindu, 17.5% were Christian and 32.5% were Muslim, according to their family monthly income shows that, 45% subjects had an income less than-Rs 3000/-, followed by 27.5% subjects with income between Rs. 3001/-6000/-, 17.5% had about Rs 6001-9000, 10% remaining 9001 and above, according to family type shows that 62.5% of subjects were from nuclear family, 37.5 % of subjects were from joint family, according to marital status reveals that, 12.5% of subjects are unmarried, 77.5% of subjects are married and 10% are widow, according to sources of information reveals that 52.5% of subjects are got information through mainly on mass media, and 10% of them depend on health personnel, 12.5% of them get the information through relatives and remaining 25 % being in contact with friends.

Section-II: Assessment of knowledge of women regarding vaginal candidiasis and its prevention

Table 1: Percentage wise distribution of study subjects according to levels of knowledge in pre-test

Test	Level of knowledge	Frequency (f)	Percentage (%)
Pretest	Excellent	0	0
	Good	1	2.5
	Average	4	10
	Poor	22	55
	Very Poor	13	32.5

Table 1. reveals that Percentage distribution of study subjects in pre-test reveals that out of 40 subjects 10% had average knowledge followed by none of them has excellent knowledge subject, 2.5% subjects with good, 55% subjects with poor and 32.5% with very poor knowledge on regarding vaginal candidiasis and its prevention

Section III: To assess the effectiveness of the STP on knowledge regarding vaginal candidiasis and its prevention.

Part-I: Comparison of knowledge level of women in pre-test and post-test.

Table 2: Percentage wise distribution of study subjects according to levels of knowledge in pre-test and post-test. n=40

Level of knowledge	Pre – test		Post-test	
	No. of respondents	Percentage	No. of respondents	Percentage
Excellent	0	0	23	57.5
Good	1	2.5	15	37.5
Average	4	10	2	5
Poor	22	55	0	0
Very poor	13	32.5	0	0
Total	40	100	40	100

Table 2 shows that Knowledge wise comparison of study subjects in pretest and post test reveals the following results. In pre-test, out of 40 subjects 10% had average knowledge followed by 0% subject with excellent, 2.5% subjects with good, 55% subjects with poor and 32.5% with very poor knowledge regarding vaginal candidiasis and its prevention. However after STP (post test) 5% subjects had average

knowledge followed by 57.5% subject with excellent, 37.5% subjects with good, no one has subjects with poor and with very poor knowledge regarding vaginal candidiasis and its prevention.

Part-II: Area wise effectiveness of STP on knowledge regarding vaginal candidiasis and its prevention.

Table 3: Area wise mean, S.D and mean percentage of the knowledge scores in pre-test and post test. N=40

Knowledge area	Max. score	Pre-test (O ₁)		Post-test (O ₂)		Effectiveness (O ₂ -O ₁)	
		Mean ± SD	Mean %	Mean ± SD	Mean %	Mean ± SD	Mean %
General aspects related to vaginal candidiasis	8	2.31±2.6	28.95	6.12±2.18	76.6	3.81±2.86	47.65
Causes and risk factor related to vaginal candidiasis	8	2.22±2.48	27.85	6.48±1.9	81.08	4.26±3.05	53.23
Prevention related to vaginal candidiasis	10	2.54±1.86	25.4	8.11±2.86	81.12	5.57±2.08	55.72
Total	26	7.125±2.89	27.4	20.7±2.35	79.61	13.8±3.04	53.07

Table 3 shows that Area wise comparison of mean and standard deviation of the knowledge scores of the pretest and posttest reveals an increase in the mean knowledge score of the women after STP. Comparison of area wise mean and Standard deviation (SD), of the knowledge scores in the area of “knowledge regarding vaginal candidiasis and its prevention” shows that the

pretest means knowledge score was 7.125 with SD 2.89 whereas post-test mean of knowledge score in this area was 20.7 with SD 2.35. where as in the area of “general aspects of vaginal candidiasis” shows that the pretest mean knowledge score was 2.31 with SD ±2.6 which was 28.95% of total score whereas post-test mean of knowledge score in this area was 6.12 with SD ±2.18

which was 76.6% of total score. In the area of knowledge on “Causes and risk factors of vaginal candidiasis, pre-test mean knowledge score was 2.22 with SD ± 2.48 which was 27.85 % of total score whereas post-test mean knowledge score was 6.48 with SD ± 1.9 which was 81.08 % of total score (Table 5.3). In the area of knowledge on “prevention of vaginal candidiasis” pre-

test mean knowledge score was 2.54 with SD ± 1.86 which was 25.4 % of total score whereas post-test mean knowledge score was 8.11 with SD ± 2.86 which was 81.12 % of total score.

Part-III: Testing of Hypothesis:

Table 4: Significant difference between the pretest knowledge and post test knowledge scores of women with vaginal candidiasis

Test	Mean t-value	Std. Error	Mean Diff.	SD Diff	Paired	Table
Pre-test (x_1)	7.125	0.49	13.8	3.049	28.24	2.02
Post-test(x_2)	20.7					

Table 4 shows that the calculated t value (28.24) was much higher than table ‘t’ table value (2.02) the hypothesis: **H₁ accepted and depicts that** -there is a significant difference between the pretest knowledge and post test knowledge scores of women regarding vaginal

candidiasis and its prevention. Hence the structure teaching programme was proved to be effective.

Section IV: Association between post-test knowledge scores and selected socio demographic variables

Table 5: Association between post-test knowledge scores and selected socio demographic variable

SI no	Socio demographic variable	Df	Chi square	Table value or P-Value	Fishers exact test	Level of significance	Inference
01	Age	1	1.43	3.84		0.05	Not significant
02	Educational status	1	1.92	3.84		0.05	Not significant
03	Occupation	1	2.03	3.84		0.05	Not significant
04	Religion	1	1.61	3.84		0.05	Not significant
05	Family monthly income	1	1.47	3.84		0.05	Not significant
06	Family type	1	0.026	3.84		0.05	Not significant
07	Marital status				0.155	0.05	Not significant
08	Source of information	1	0.67	3.84		0.05	Not significant

Table 5 shows that There is no significant association between post test knowledge scores and socio-demographic variables; age, occupation, religion, family monthly income, type of family, marital status, and sources of information regarding vaginal candidiasis and its prevention. Hence H₂ is rejected at 5% level of significance.

DISCUSSION

The findings of the present study are discussed in light of previous scientific studies in this chapter and discussion regarding findings of the study is presented in accordance with the objectives of the study and hypothesis. The current study aims find out the knowledge of women regarding vaginal candidiasis and its prevention among women admitted in BVVS HSK Hospital and Research Centre, Bagalkot.

Current study shown out of 40 subjects 10% had average knowledge followed by subject no one had with excellent, 2.5% subjects with good, 55% subjects with poor and 32.5% with very poor knowledge regarding vaginal candidiasis and its prevention.

A study was conducted to assess the knowledge of women regarding vaginal candidiasis and its

prevention in UAE Lathifa hospital dubai. 40 subjects were selected and results showed that most of the women had very poor knowledge regarding vaginal candidiasis and its prevention which is supportive to my study [7].

present study shown that the knowledge regarding “general aspects of vaginal candidiasis” shows that the pre-tests mean knowledge score was 2.31 with SD ± 2.6 whereas post-test mean of knowledge score in this area was 6.12 with SD ± 2.18 In the area of knowledge on “vaginal candidiasis”, pre-test mean knowledge score was 2.22 with SD ± 2.48 where as post-test mean knowledge score was 6.48 with SD ± 1.9 . In the area of knowledge on “causes and risk factors of vaginal candidiasis” pre-test mean knowledge score was 2.54 with SD ± 1.86 whereas post-test mean knowledge score was 8.11 with SD ± 2.86 In the area of Knowledge on “prevention of vaginal candidiasis .The overall findings reveal that the post-test knowledge score (20.7 ± 2.35) was more when compared to the pre-test knowledge score (7.125 ± 2.89). Hence it indicates that the STP was effective in enhancing the knowledge of women

A similar study was conducted to determine the effectiveness of Structured Teaching Programme on vulvo vaginal candidiasis and its prevention in India. 120

women were selected randomly. The study concluded that in all the three areas the post test scores were high as compared to pre-test scores. This shows that the Structured Teaching Programme administered by the researcher was effective. This study is supporting the present study [8].

Current study shown that there is No significant association was found between the knowledge of vaginal candidiasis and its prevention and their socio-demographic variables: age occupation, family monthly income, marital status of women, type of family, religion and source of information. Whereas a significant association was found between the knowledge of subjects regarding vaginal candidiasis and its prevention and their socio-demographic variable: educational qualification and regarding vaginal candidiasis.

LIMITATIONS: The study limited to the sample of 40 women with complaints of vaginal candidiasis admitted at HSK Hospital and research centre Bagalkot.

CONCLUSION

In pretest, out of 40 subjects 10% had average knowledge and no one have subject with excellent 2.5% subjects with good, 55% subjects with poor and 32.5% with very poor knowledge regarding vaginal candidiasis and its prevention. After teaching programme posttest 5% subjects had average knowledge followed by 23 (57.5%) subjects with excellent, (37.5%) subjects with good, no one have subjects with poor and with very poor knowledge regarding vaginal candidiasis and its prevention hence The study concludes that after teaching programme subjects had improved knowledge regarding vaginal candidiasis and its prevention.

Declaration by authors

Ethical Approval: Institutional ethical clearance approved.

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REFERENCES

1. Sobel JD: candidal vulvovaginitis . Clinical obstet gynecology 36; 153-165, 1993.
2. Fidel PL, Jr. History and update on host defense Against vaginal candidiasis. AMJ Repro Immune (2007) 57:2-
3. Naglik J.R, Chauucombe S.J, Hube B. candida albicans: secreted Aspartate proteinases in virulence and pathogenesis. (2003) Micro Bio Rev.67;3: 400-428.
4. Hilton E, Chandrasekaran V, Rindos P, Isenberg HD. Association of recurrent candidal vaginitis with inheritance of Lewis blood group antigens. J Infect Dis. 1995;172:1616–9.
5. Sobel JD. Pathogenesis and Treatment of recurrent vulvovaginal candidiasis. clinical infect Dis. 14: 5148-153
6. Gabbe, S.G. Obstetrics: normal and problem pregnancies. New York: Churchill Livingstone; 1996.
7. Rodrigues MT, Gonçalves AC, Alvim MC, Castellano Filho DS, Zimmermann JB, Silva VL, Diniz Assessing the knowledge of women regarding vaginal candidiasis association between vaginal secretion culture, socio-demographic characteristics and clinical manifestations of patients with vulvovaginal candidiasis. 2013 Dec;35(12):554-61
8. AT, Swaminathan N. Interventions for prevention and treatment of vulvovaginal candidiasis in women with HIV infection. 2011 Aug 10;(8):CD008739.