Short Communication

AN AWARENESS PROGRAM ON PREVENTION OF VAGINAL CANDIDIASIS AMONG PREGNANT WOMEN

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Abstract :

Introduction : Vaginal candidiasis common problem among pregnant women. According to Jumbo G.T.A et al., during pregnancy women who did not know Candidiasis as a disease were 94.1% and 83.6% of the respondents felt there was no compelling need for treatment while 86.3% did not consider the disease of any serious clinical significance¹.

Objective : This study was conducted to find the effectiveness of an awareness programme on prevention of vaginal candidiasis among pregnant women in selected seven Rural Maternity Child Welfare centres (RMCW's) of Udupi district.

Materials and Method : Evaluative survey approach was used to find the effectiveness of awareness program. The sampling technique used was non probability convenient sampling. Total of 142 pregnant women those who visited antenatal clinics of RMCW's were selected. One group pre-test – post-test design was used to assess the knowledge by administering a structured knowledge questionnaire, followed by awareness program. On seventh day post-test was conducted using same questionnaire to evaluate the knowledge of the subject.

Result: Majority of the pregnant women (89.2%) had poor knowledge in pre-test whereas 95.8% of them acquired a good knowledge in post-test.

Conclusion: Health professionals caring for pregnant women should find out about symptoms of vaginal candidiasis and they can give them knowledge and make aware, which may help them in improving their health by adopting preventive measures and help them to avoid the complications.

Key words: vaginal candidiasis, knowledge, pregnant women, awareness program

Introduction:

Among all motivations of women motherhood is the most universal and the strongest. Motherhood is a beautiful and joyous experience to a woman. The feeling of a life growing inside makes her ecstatic. The health of the mother during pregnancy is important to give birth to a healthy baby. Reproductive tract infections are common during pregnancy and vaginal candidiasis (moniliasis or thrush) is a most common and frequently distressing infection for many pregnant women.

Wilkinson described vaginal Candidiasis for the

first time in 1849. Vaginal candidiasis is a fungal or yeast infection of the vulva and/or vagina. *Candida albicans* is the predominant species causing 70-90% of cases. Most women experience a vaginal candida infection at some point in their lifetimes (Edwards 2004) and 40–45% will have two or more episodes; about 75% (Mitchell H 2004) of cases occur during the reproductive years. Recurrent vulvo-vaginal candidiasis (RVVC), also known as chronic recurrent thrush, is a largely unrecognized but highly debilitating condition, which affects an estimated 3-6% of women worldwide. In the United States, candida is the second most common cause of vaginal infections.²

Parveen N et al., conducted a descriptive cross-sectional study among 110 pregnant women in Isra University, Hyderabad in 2008, to identify the frequency of vaginal

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candidiasis in pregnant women attending routine antenatal clinic. Vulva and vagina were inspected for signs of inflammation and discharge with sterile speculum and vaginal specimens were collected with sterile cotton tipped swabs. Swabs were subjected to Gram staining and examined microscopically for the diagnosis of candidiasis. Result revealed that frequency of vaginal candidiasis during pregnancy was found to be 38%, in which 27% were symptomatic and 11% were asymptomatic group, increased ratio of infection was observed in multigravida and diabetic women.³

Women are unlikely to seek advice because there is a tendency to view "white discharge" as normal and also because the condition is associated with shame and guilt. Usually women complain of vaginal discharge when they think it is unusual for them or if it causes itching or discomfort.^{4,5}

The need for the study arises from the facts gathered from the few research studies focused on this area of health related issues, also the incidents the researcher come across in day to day life. This study has been taken up and supported by above stated studies and the data. It is evident from the above cited studies that, vaginal candidiasis is common during pregnancy and pregnant women are at high risk of developing it. So, the investigator strongly felt the need of conducting a to assess the knowledge of pregnant women regarding vaginal candidiasis and to find the effectiveness of an awareness program on prevention of vaginal candidiasis among the rural pregnant women who are attending the Rural Maternal & Child Welfare centers of Kasturba Hospital, Manipal. With the help of awareness programme, pregnant women can be given information regarding vaginal candidiasis and need based care can be implemented hence, pregnant women can be motivated to seek timely medical advice for health problems.

Materials and Method:

In order to achieve the objective of the study, an evaluative approach was used to find the effectiveness of awareness programme on prevention of vaginal candidiasis. One

group pre-test – post-test design was used to assess the knowledge. Data was collected by using non-probability convenient sampling from 147 pregnant women who fulfilled the sampling criteria and from those who were available during the period of data collection. Structured knowledge questionnaire was used to assess the knowledge and a modified Srivastav Socio economic status scale to assess the socio economic background. Descriptive and inferential test was performed by using SPSS version 16.

Results :

Description of sample characteristics:

Data shows that most of the pregnant women (52.8%) belonged to the age group of 26-33 years. 57% were in 3rd trimester of pregnancy, 80.3% of them belonged to Hindu religion. Majority of the pregnant women (83.14%) belonged to moderate socio economic status. (Table 1)

Description of sample based on pre-test post-test Knowledge scores

The structured knowledge questionnaire on prevention of vaginal candidiasis was used to assess the pre-test knowledge of 147 pregnant women and there was a sample mortality of 22 pregnant women during the post-test. So 120 pregnant women's data was only available for further analysis. The maximum score for knowledge questionnaire was 16 and the scores were categorized arbitrarily. Out of 120 pregnant women 89.2% had poor knowledge in pre-test; where as 95.8% had good knowledge in post-test on prevention of vaginal candidiasis.

Computation of effectiveness of awareness program in terms of gain in knowledge scores.

Effectiveness of the awareness program was computed by Paired t test as shown in Table 2. Using paired t test (pre and post) investigator observed that, $t = -23.45$, $df = 119$ and $p \text{ value} < 0.001$, there was significant difference between pre-test and post-test mean, $CI (-5.66 - 4.78)$.

Association between pre-test knowledge scores with selected variables

The significance of association was computed using Chi-square. Data show that there is no significant association between pre-test knowledge score and selected demographic variables. Thus it can be inferred that risk status of vaginal candidiasis is independent of selected demographic variables. (Table 3)

Table 1: Frequency and percentage of sample characteristics. n = 142

Sample Characteristics	f	%
Age in years		
18 - 25	56	39.4
26 - 33	75	52.8
34 - 40	11	7.7
Trimester of pregnancy		
1 st	15	10.6
2 nd	46	32.4
3 rd	81	57
Religion		
Hindu	114	80.3
Christian	0	0
Muslim	28	19.7
Health information source		
News paper	11	7.7
Magazines	05	3.5
Television	41	28.9
Radio	10	7.0
Health Personnel	48	33.8
Family members	19	13.14
Friends	03	2.1
Neighbors	05	3.5
Socio Economic Status		
Low	10	7.0
Moderate	118	83.14
High	14	9.9

Fig 1: Frequency and percentage distribution of pre-test and post-test knowledge scores on prevention of vaginal candidiasis.

Table 2: Mean and Standard Deviation value of pre-test and post-test of knowledge scores of the pregnant women on prevention of vaginal candidiasis. n = 120

Knowledge	Mean	SD
Pre-test	5.74	2.25
Post-test	10.97	1.77

Table 3: Chi-square value showing the association between pre-test knowledge score and selected variables n = 120

Variables	Knowledge		c ²	Df	P value
	Poor	Good			
Age in years			1.219	2	0.355
18 - 25	44	05			
26 - 33	55	08			
34 - 40	08	0			
Trimester of pregnancy			2.046	2	0.345
1 st	10	1			
2 nd	29	6			
3 rd	68	6			
Religion			.086	1	0.722
Hindu	86	10			
Muslim	21	03			
SESS			0.026	2	1
Low	7	01			
Moderate	92	11			
High	08	01			

Discussion :

The pre-test data showed 89.2% of the pregnant women had poor knowledge, whereas 95.8% had good knowledge in post-test. The following study finding supported this study finding.

Thankamma M.S. conducted a study in Udupi district, the result revealed that, in experimental group 22(73.33%) scored good in pre-test, whereas in control group 13(43.33%) participants scored good score in pre-test. But in the post test experimental group exhibited 100% knowledge, whereas control group exhibited only 90% knowledge.⁶

The findings of the present study indicated that, mean percentage of post-test knowledge score (10.97) was higher than that of pre-test mean percentage score (5.74). There was significant difference between the mean pre-test and post-test knowledge scores of the samples (t=23.45 and p<0.001)

The above finding from the present study is supported by

the study which is conducted by the Oesman MH et al., in Italy, the findings of the study revealed that there was a significant gain in knowledge for patients who viewed the video tape ($t=5.43$, $df=213$, $p<0.05$) and they were more satisfied with their education compared with the control group ($t=4.75$, $df=213$, $p<0.001$).⁷

Chi-square was computed between pre-test knowledge scores and selected demographic variables showed that

there was no significant association between pre-test knowledge scores and selected demographic variables. The present study supported by the study conducted by Malathi K. a study on Effectiveness of Planned Teaching Regarding Management of BPH on BPH patients, result revealed that there was no significant association between the pre-test levels of knowledge with selected variables.⁸

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