

Effectiveness of structured teaching programme on knowledge regarding vaginal candidiasis among adolescent children Admitted in tertiary care hospital Bangalore.

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Abstract-

Background: Candidiasis is the most common vaginal infection in most countries affecting about 50-72% of women, 40- 50% having recurrent episodes. The majority of cases of vulvovaginal candidiasis are caused by *Candida albicans*; however, episodes due to non-*albicans* species of *Candida* appear to be increasing. Adolescence girls are more vulnerable to Candidiasis. The aim of the study is to investigate the knowledge of vaginal Candidiasis in adolescent girls and how to manage this case. The study was based to determine whether adolescent girls still maintain lifestyle modification to avoid vaginal Candidiasis.

Methodology: In this study quantitative research approach is used, and involves description of research design. Setting for study is Tertiary care hospital Bangalore. population selected was adolescent between age group 17-21. sample size is 30. Non-probability sampling technique was used, common measurement approaches used in nursing research includes physiologic measures, observation, interview, questionnaire and scales. measurement tools- Socio-demographic proforma. Structured knowledge questionnaire.

Result: The effectiveness of structured teaching programme on management of vaginal candidiasis shows that the mean pre-test knowledge score was 13 (SD -3. 6) was significantly lower than the mean post-test knowledge score 14.6 (SD-4.3) with a mean difference of 2. The calculated 't' value (17.7) was more than the table value (2.11) at 0.05 level of significance so there was a significant increase in the post - test level of knowledge of adolescent girls regarding management of vaginal candidiasis.

Conclusion: the structured teaching programme was effective in improving the knowledge of management of vaginal candidiasis.

Key words: Effectiveness, Structured Teaching Programme, Knowledge, Vaginal candidiasis

INTRODUCTION

Vaginal Candidiasis is a yeast infection caused by fungal organism *Candida albicans*. Vaginal Candidiasis estimated to be the second most common cause of vaginitis after bacterial vaginosis. Adolescence girls are more vulnerable to Candidiasis. Approximately 30 to 50% of women are affected by vaginal Candidiasis at least once during their lifetime. Typical symptoms in Vulvo pruritus or burning sensation (27%) and dysuria (33%). In most cases it is caused by *Candida albicans*, *Candida glabrata* or *Candida krusei*. The aim of the study is to investigate the knowledge of vaginal Candidiasis in adolescent girls and how to manage this case. The study was designed by college based sought to determine whether adolescent girls still maintain lifestyle modification to avoid vaginal Candidiasis.

Fortunately, the infection is rarely life threatening, whereas it is usually associated with such morbidities like discomfort, pain, sexual dysfunctions, vaginal dryness, itching, burning, soreness. The predisposing factors include: hormonal fluctuations in luteal phase of menstrual cycle. The problem with the use of antifungal agents. Vaginal Candidiasis affect approximately 20 % of women annually but it is not well characterized epidemiologically of 1027 respondents to two mailed cross-sectional survey at a large university 37.5 % reported a prior clinical diagnosis of vaginal Candidiasis. The frequency of first diagnosis increases rapidly after Age 17, with an estimated 54.7% of women experiencing the condition by age 25. In a proportional hazardous model of age at first diagnosis

OBJECTIVES

- To assess the existing level of knowledge regarding vaginal candidiasis among Adolescent girls.
- To evaluate the effectiveness of structured teaching programme on knowledge regarding vaginal candidiasis among Adolescent girls
- To find out association between existing level of knowledge regarding vaginal candidiasis among Adolescent girls with selected demographic variables.

HYPOTHESIS OF THE STUDY

H0: There is no significant difference between existing level of knowledge and pre-test score regarding vaginal candidiasis among Adolescent girls

H1: There is a significant difference between existing level of knowledge and post-test score regarding vaginal candidiasis among Adolescent girls.

H2: There is a significant association between pretest knowledge score regarding vaginal candidiasis among Adolescent girls.

Methodology

Research approach: In this study quantitative research approach is used. population selected was second year girls between age group 17-21. sample size is 30., common measurement approaches used in nursing research includes physiologic measures, observance, interview, questionnaire and scales. measurement tools- Socio-demographic proforma. Structured knowledge questionnaire.

Research Design: Description of research design.

Sampling technique: non-probability sampling technique was used

Sample size:30

Setting of the study: Tertiary care hospital Bangalore

Population: Adolescent girls between the age group of 17-21.

Tool used for data collection:

Section-1: Section A: Socio-demographic proforma

Researcher develops a demographic proforma, which includes the demographic information of the adolescent girls such as family annual income, educational status of parents, residential area, occupation of mother, dietary habit, history of medical illness, previous information on vaginal candidiasis.

Section B: Structured knowledge questionnaire

A structured knowledge questionnaire was developed to determine the knowledge of Adolescent girls on knowledge regarding vaginal candidiasis. The purpose of the knowledge questionnaire was to collect data about the knowledge of Adolescent girls before and after the administration of structured teaching programme on knowledge regarding vaginal candidiasis 19 items. Each item had 4 options. The respondents were requested to select the correct option given. Each correct answer carried a score of 'one' and each wrong answer carried a score of 'zero'.

Distribution of score and ranking

SCORE	RANKING
0-5	Poor
6-10	Average
11-15	Good
16-19	Excellent

SOCIO-DEMOGRAPHIC VARIABLES

Table 1: Distribution of samples according to family annual income.
N=30

Family annual income	Frequency	Percentage
<5000	2	6.67%
5000-10000	9	30%
10000-20000	12	40%
>20000	7	23.33%

The data presented in table 1 illustrates that most of the subjects that is 12(40%) of them have the annual income between 10000 – 20000/- , 7(23.33) of them have annual income greater than 20000/- , 9(30%) of them have annual income 5000-10000 and 2(6.67%) of them have annual income less than 5000/-

Table 2: Distribution of samples according to educational status of parents

N=30		
Educational status of parents	Frequency	percentage
High school	2	6.67%
Higher secondary	10	33.33%
Degree	14	46.67%
Post graduate and above	4	13.33%

Data presented in the table 2 illustrate that among most of the subjects 14(46.6%) had education status degree, 10(33.3%) had education up to higher secondary, 4(13.3%) had education up to post graduate and 2(6.67%) had education up to school level.

Table 3: Distribution of samples according to residential status.

N=30		
Residential status	Frequency	Percentage
Urban	7	23.33%
Rural	23	76.67%

Data presented in table 3 illustrate that most of the subjects 23(76.67%) reside in the rural area and 7(23.33%) reside in the urban area.

Table 4: Distribution of sample according to occupation of mother

N=30		
Occupation of mother	Frequency	Percentage
Government sector	3	10%
Private sector	7	23.33%
None of the above	20	66.67%

Data presented in table 4 illustrate that among most of the subjects 20(66.67%) mother were unemployed, 7(23.33%) were worked in private sector, 3(10%) were worked in government sector.

Table 5: Distribution of sample according to dietary habit

N=30		
Dietary habit	Frequency	Percentage
Vegetarian	0	0
Non-vegetarian	30	100%

Data presented in table 5 illustrate that among all of the second year BSc nursing student 30(100%) were non-vegetarians.

Table 6: Distribution of sample according to history of medical illness
N=30

History of medical illness	Frequency	Percentage
Diabetes mellitus	0	0
Thyroid problems	0	0
Others	1	3.33%
Nil	29	96.67%

Data presented in table 6 illustrate that most of the subjects 29(96.67%) have no history of medical illness and 1(3.33%) have history of other medical illness.

Table 7: Distribution of sample according to any previous information regarding vaginal candidiasis.
N=30

Previous information regarding	Frequency	Percentage
Yes	29	96.67%
No	1	3.33%

Data presented in table 7 illustrate that majority of subjects 29(96.67%) relieved that obtained previous knowledge regarding vaginal candidiasis, out of 30, 1 (3.33%) have no any previous information regarding vaginal candidiasis.

Knowledge level of Adolescent girls on vaginal candidiasis

In order to assess the knowledge level of Adolescent girls on vaginal candidiasis, structured knowledge questionnaire was administered and the comparison between the pretest and post test knowledge score was identified and shown as following headings Comparison of the pretest and posttest knowledge score of Adolescent girls

regarding vaginal candidiasis

The knowledge score obtained by the Adolescent girls were tabulated

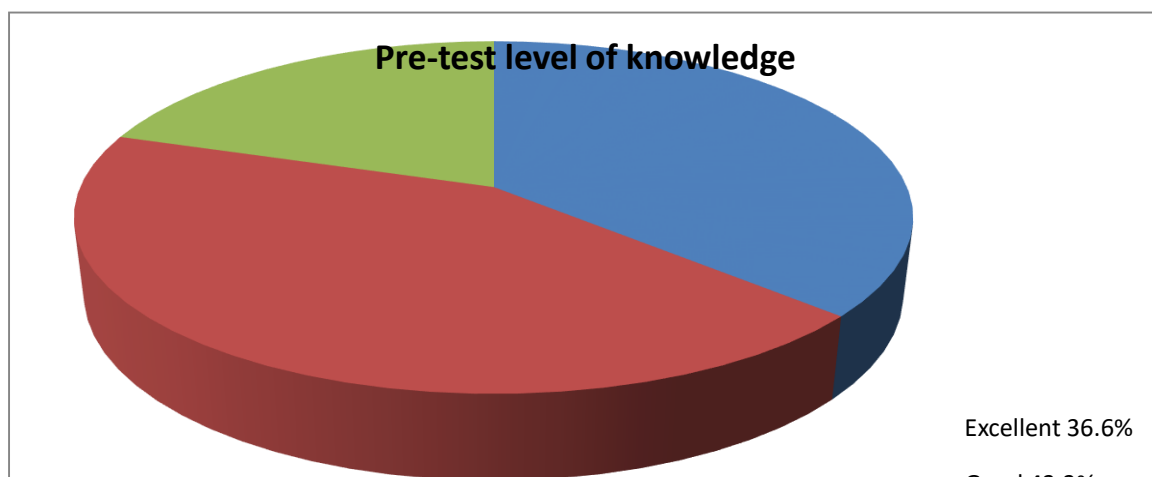
. The frequency and percentage distribution of the pretest and posttest knowledge score was presented in table 8

SECTION 2

Table: 8

Frequency and percentage distribution of pretest and posttest knowledge score of Adolescent girls

Maximum possible score =19



N=30

Knowledge score	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage%
16-19 (Excellent)	11	36.6%	25	83.3%
11-15 (Good)	13	43.3%	5	16.7%
6-10 (Average)	6	20%	–	–
6-10 (Average)	–	–	–	–

The data presented in Table: 8 indicate that majority of Adolescent girls that is 0 out of 30 had poor knowledge and during pretest 6 (20%) had average knowledge in pretest whereas 25 (83.3%) out of 30 had good knowledge during the posttest. This is depicted in the form of pie diagram fig no.3 and 4

Description on assessment of pretest and post -test level of knowledge scores of Adolescent girls.

Figure 1: Pie diagram showing frequency distribution and percentage of Adolescent girls based on pretest score of knowledge regarding vaginal candidiasis.

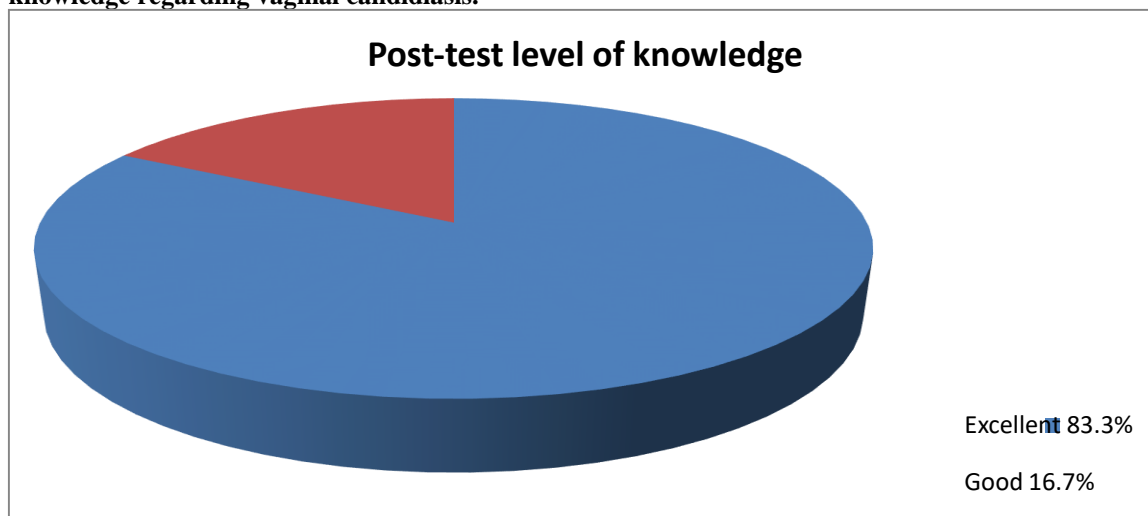


Figure 2: Pie diagram showing frequency distribution and percentage Adolescent girls based on posttest score of knowledge regarding vaginal candidiasis.

SECTION 3

Effectiveness of structured teaching programme on knowledge regarding vaginal candidiasis.

The effectiveness of structured teaching programme on vaginal candidiasis was also identified by the computation of range, mean, median and standard deviation which is depicted in the table 9.

Table 9: Range, mean, median and standard deviation of knowledge scores of Adolescent girls.

Knowledge	Range	Mean	Median	Standard deviation
Pretest	7-19	13	14	3.6

Post test 12-19 14.6 18 4.3

Maximum possible score: 19

The data prescribed in table: show that, the posttest score (12-19) was comparatively higher than the pretest range score (7-19). Mean posttest score (14.6) is higher than mean pretest score (13). Hence it is apparently clear that there is a considerable gain in knowledge of Adolescent girls after the structured teaching programme on vaginal candidiasis.

To find out the significant difference between the mean of the pretest and posttest knowledge scores of Adolescent girls, the mean, mean difference, median, standard deviation difference and ‘ t’ test was computed as presented in Table:9. The following null hypothesis (H₀) was stated to test the statistical significance.

H₀: There will be no significant difference between existing level of knowledge and pretest score regarding vaginal candidiasis among Adolescent girls.

Pretest	13	3.6	Significant at
0.05			
1.6	0.7	17.7	
Posttest	14.6	4.3	

The data presented in Table: 10 show the pretest mean was 13 with standard deviation 3.6 and posttest mean was 14.6 and standard deviation is 4.3 as the table ‘t’ value (2.11) is less than the calculated ‘t’ value (17.7) and the degree of freedom 58 at 0.05 level of significance.

TABLE: 10

Significant association between pretest level of knowledge among second year B S.c nursing students regarding vaginal candidiasis with selected socio- demographic variables.

Pretest level of knowledge

Socio- demographic variables	Chi square(χ^2)	Degree of freedom	Table value of chi square	Inference
Family income	34.62	9	16.92	**
Educational status of parents	9.03	9	16.92	*
Residential status	0.71	3	7.82	**
Occupation of mother	4.89	6	12.59	**
Dietary habit	0	3	7.82	**
History of any illness	0.99	9	16.92	**

Pretest	13	3.6	Significant at
0.05			
1.6	0.7	17.7	
Posttest	14.6	4.3	

The data presented in Table: 10 show the pretest mean was 13 with standard deviation 3.6 and posttest mean was 14.6 and standard deviation is 4.3 as the table ‘t’ value (2.11) is less than the calculated ‘t’ value (17.7) and the degree of freedom 58 at 0.05 level of significance.

TABLE: 11

Significant association between pretest level of knowledge among second year B S.cnursing students regarding vaginal candidiasis with selected socio- demographic variables.

Pretest level of knowledge

Socio- demographic variables	Chi square(χ^2)	Degree of freedom	Table value of square	chi Inference
Family income	34.62	9	16.92	**
Educational status of parents	9.03	9	16.92	*
Residential status	0.71	3	7.82	**
Occupation of mother	4.89	6	12.59	**
Dietary habit	0	3	7.82	**
History of any illness	0.99	9	16.92	**
Previous knowledge of vaginal candidiasis	1.38	2	4.30	**

*Significant at 0.05 level of significance

** Not significant at 0.05 level of significance

- There is no significant association between pretest level of knowledge with the family income. The calculated chi square value is 44.62, $P < 0.05$ significance.
- There is significant association between pretest level of knowledge score with the educational status of parents. The calculated chi score value is 9.0, at $P > 0.05$ significance.
- There is no significant association between pretest level of knowledge score with residential status. The calculated chi score value is 0.71, at $P < 0.05$ significance.
- There is no significant association between pretest level of knowledge score with occupation of mother. The calculated chi square value is 4.89, at $P < 0.05$ significance.
- There is no significant association between pretest level of knowledge score with dietary habit. The calculated chi square value is 0, which is $<$ table value 7.82 at $P < 0.05$ significance.

- There is no significant association between pretest level of knowledge score with history of any illness. The calculated chi square value 0.99 which is less than table value 16.92 at $P < 0.05$ significance.
- There is no significant association between pretest level of knowledge score with previous knowledge of vaginal candidiasis. The calculated chi square value is 1.38, which is less than table value 4.30 at $P < 0.05$ level of significance.

The calculated chi square value was more than table value at 0.05 level of significance for two of the demographic variables namely gender and educational status of parent. Hence, the research hypothesis H1 accepted for those two of the socio demographic variables and rejected for rest of socio demographic variables. Thus it was proved that there was a significant association between the pretest score of knowledge and the social demographic variables namely gender and educational status of parents.

The table describes that there is no significant association between selected demographic variables such as family income, residential status, occupation of mother, dietary habit; history of any illness, previous knowledge of vaginal candidiasis. Hence the research hypothesis H1 was accepted.

DISCUSSION

In the present study, assessment of pre-test knowledge level of Adolescent girls show that among 30 subjects, no one has poor knowledge 6 (20 %) had average knowledge, 13 (43.3%) had good knowledge and 11 (36.6%) had excellent pre- test knowledge regarding management of vaginal Candidiasis.

The effectiveness of structured teaching programme on management of vaginal candidiasis among Adolescent girls admitted in tertiary care hospital Bangalore shows that the mean pretest knowledge score was 13 (SD -3.6) was significantly lower than the mean post-test knowledge score 14.6 (SD-4.3) with a mean difference of 2

The calculated 't' value (17.7) was more than the table value (2.11) at 0.05 level of significant so there was a significant increase in the post - test level of knowledge of Adolescent girls regarding management of vaginal candidiasis. Hence the null hypothesis (Ho) was rejected and the research hypothesis (H1) was accepted. From this it can be said that the structured teaching programme was effective in improving the knowledge of management of vaginal candidiasis.

In the present study, assessment of association between pretest knowledge of second year BS.c nursing students and selected demographic variables (educational status of parents, residential status, occupation of mother, previous information on vaginal candidiasis, dietary habits, annual income, history of any illness) shows that the calculated chi square value was less than the table value of 0.05 level of significance for all the 8 demographic variables. Hence the null hypothesis was accepted. Therefore the knowledge of Adolescent girls was not influenced by any of the socio-demographic variables.

RECOMMENDATION

A study may be conducted other strategies like video assisted teaching or role play and video making.

A comparative study can be conducted with different population and setting

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