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Original Research Paper

Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF MINT EXTRACT IN RELIEVING DYSMENORRHIC SYMPTOMS AMONG THE STUDENTS IN SELECTED COLLEGE OF NURSING, ODISHA.

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ABSTRACT

This study undertaken with the objectives to screen out the case of primary dysmenorrhea among the nursing student, to assess pretest and post test level of Dysmenorrhic symptoms among the students in both the experimental and control group, to find out the significant difference in the pretest and post test level of Dysmenorrhic symptoms in experimental group and as compared to control group and to find out the association between pre test level of Dysmenorrhic symptoms after administering Mint extract among experimental group with their selected demographic variables. The Health Promotion Model (HPM) by Nola Pender was used for conceptual frame work. A Quasi experimental pretest-post test control group design used in this study. Data was collected from 40 students suffering with primary dysmenorrhoea through non-probability purposive sampling technique by using WaLID Scale. Result suggest that mint extract is effective in relieving the symptoms of Primary Dysmenorrhea among student

KEYWORDS : Effectiveness, Mint Extract, Dymenorrhea, Students

INTRODUCTION

The term dysmenorrhea is derived from Greek word Dys – Difficulty, Meno – Month, RrHeoe – flow. Normal menstruation requires integration of the hypothalamic pituitary ovarian axis with functional uterus of patent lower genital outflow tract and a normal genetic karyotype of 46xx.

Dysmenorrhea is a common gynaecological disorder affecting as many as 50% of menstruating women. It usually appears one to two years after menarche, when ovulatory cycles are established. This disorder affects younger women but may persist up to 40years of age. Three are the main prostaglandin concerned with menstruation are PGF2, PGE2,PGI2 causing dysmenorrhea. Every woman experiences it at some point during her reproductive years. It is a natural occurrence. The symptoms of dysmenorrhea, which occur before or during the menstrual cycle, is a painful or cramping sensation in the lower abdomen that is frequently accompanied by other biological symptoms like exhaustion, perspiration, headaches, nausea, vomiting, and diarrhoea .

Dysmenorrhea has been treated with pharmacological and non-pharmacological treatments, particularly for female college students. Such treatments include non-steroidal anti-inflammatory drugs (NSAIDs), herbs, nutritional therapy, Yoga, Acupuncture, and meditation. The management of dysmenorrhoea is multifaceted and depends on the severity of the problem and the individual response.

Mint or mentha belongs to the Lamiaceae family, which contains around 15–20 plant species, including peppermint and spearmint. It is a popular herb that people can use fresh or dried in many dishes and infusions. Manufacturers of toothpaste, gum, candy, and beauty products often use mint oil. Mint is a popular herb that may possess potential health benefits. This may include helping with digestive health, reducing allergic symptoms, and soothing common cold symptoms.

Need Of The Study

A Swedish study analyzing absenteeism due to dysmenorrhoea in young women found that one third to one half missed school or work at least once, and 5 to 14% were absent more frequently. Dysmenorrhea has a negative effect on health-related quality of life. It is a leading cause of school and college absenteeism. The prevalence of dysmenorrhoea among adolescent females ranges from 60 to 93%.

Research Methodology

Research Methodology includes the description of research approach, research design, population, sample, sampling technique, tools, validity and reliability of the tools, pilot study, data collection procedures and plan for data analysis. A Quasi experimental pretest-post test control group design was adopted for this study. The samples for the study were selected from students pursuing Basic B.Sc Nursing at LJM College of Nursing, Bhubaneswar. 40 number of sample taken to the study using non-probability purposive sampling technique out of which 20 were in experimental group and 20 in control group.

Pilot study was conducted at Royal College of science & Tech., Bhubaneswar, Odisha after obtaining proper approval and consent. The study was found feasible and practical with regard to time, availability and co-operation of students perusing Graduation in Royal College of Nursing, Bhubaneswar.

Data Collection

A structured questionnaire which includes close ended questionnaire in the form of multiple choice questions were developed in this study for data collection and WaLIDD scale used to assess the Dysmenorrhic symptoms in experimental group and control group, Mint extract was administered only to experimental group then post-test was conducted to both the group. The investigator collected data from LJM College of Nursing, Bhubaneswar, Odisha as per permitted schedule from competent authority.

Both the group was first undergone for a pretest for assessing dysmenorrhic symptoms. Mint extract was administered only to experimental group prior to 7 days of the onset of menstruation. After menstruation post test was conducted in both experimental and control group.

Data Analysis

The data collected were edited, tabulated, analyzed, interpreted and the findings obtained were presented in form of tables and figures which are presented under following sections:

Section-I Comparison of frequency and percentage distribution of assessment score of samples according to their pretest and post-test level of dysmenorrhea in both experimental and control group

Section-II Frequency and percentage distribution of samples according to pre-test and post-test level of Dysmenorrhea in experimental and control group

Section-III Frequency and percentage distribution of samples

with dysmenorrhea according to their selected demographic variables in experimental and control group.

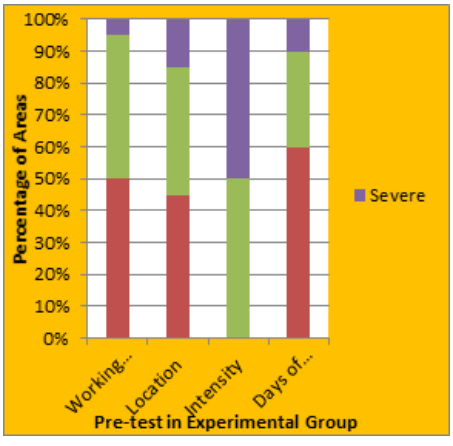
Section-IV Area wise comparison of pre-test and post-test score of level of Dysmenorrhea among students in experimental group using't' test.

Section-V Association between post-test levels of Dysmenorrhea among students with their selected demographic variable in experimental group.

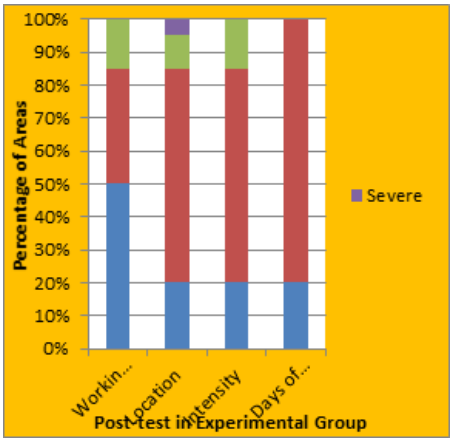
Section-1

The frequency and percentage distribution of assessment score in comparison to various areas under WaLID Scale it shows that in experimental group; 50%, 45% and5% of students reported with mild, moderate or severely affected working ability in pre-test whereas in post-test 50% of students reported without any interrupted working ability only 35% of them have mild and 15% have moderately affected working ability. Location of pain was reported with 45%, 40% and 15% mild, moderate and severe respectively in pre-test and 20% reported no pain in any sites, 65%, 10% and 5% with mild, moderate and severe under experimental group. Intensity of pain was reported under moderate and severe level with 50% and 50% respectively in pretest and in post-test 20% of students were free from menstrual pain and 65% reported with mild pain and only 15% reported with moderate level of pain under experimental group. Days of pain in pretest was 60%, 30% and 10% respectively with mild moderate and severe where as in post-test it was 20% with pain in any days of menstruation and 80% with pain only in first and second days of menstruation under experimental group.

Hence it interprets that after intervention majority of students were reported relief from Dysmenorrhea in experimental group.



(Fig-1)



(Fig-2)

Section-2

Data reveled that in experimental group majority of students were suffering with moderate dysmenorrhea (55%) and severe dysmenorrhea (45%) after intervention i.e, administration of mint extract it shows that in next menstrual cycle only 25% of girls were suffering with moderate dysmenorrhea and majority of student i.e, 60% of them were suffering with mild dysmenorrhea and 15% of students reported none of the Dysmenorrhic symptoms.

(Table-1)

EXPERIMENTAL GROUP					CONTROL GROUPCONTROL GROUP			
PRE-TEST			POST-TEST		PRE-TEST		POST-TEST	
CAT/f%	Frequency	Percentage [%]	Frequency	Percentage [%]	Frequency	Percentage [%]	Frequency	Percentage [%]
Without dysmenorrhea	_	_	3	15%	_	_	_	_
Mild dysmenorrhea	_	_	12	60%	2	10%	_	_
Moderate dysmenorrhea	11	55%	5	25%	13	35%	15	75%
Severe dysmenorrhea	9	45%	_	_	5	25%	5	25%

Hence, it can be interpreted that mint extract is effective in relieving Dysmenorrhic symptoms as post-test scores were reduced as compare to pre-test score of experimental group

Section-3

After careful observation of data it is found that all students belongs to 16-21year age there is more risk for Dysmenorrhea. 75% of students studying in second year and 25% of them studying in third year were in experimental group where as 40% of students studying in second year and 60% of them studying in third year were in control group respectively. Average age of menarche is between 13-15 years and it is considered as borderline age of Menarche.

Section 4

Paired 't' test was calculated to assess the significant difference between pre-test and post-test level of Dysmenorrhea. Data reveals that there is highly significant difference between area wise score of pre-test and post-test level of Dysmenorrhea.

(Table-2)

AREA	't' Value(Calculated Value)	Level of significance
Working Ability	5.60	Highly significant
Location	3.39	Highly significant
Intensity	9.14	Highly significant
Days of Pain	3.9	Highly Significant

Tab-2 suggest that Mint Extract was effective for relieving symptoms of Dysmenorrhea as there was a difference between pre-test and post-test level of Dysmenorrhea in experimental group.

SECTION 5

Chi Square was calculated to find out the association between post-test level of Dysmenorrhea with their selected demographic variables. The hypothesis was tested at 5% level of significance.

It was found that there was no significant association between post-test scores among students regarding level of Dysmenorrhea when compared with age of students, educational status and age of menarche at 5% level of

significance with the obtained chi square value.

CONCLUSION

This study was undertaken to assess the effectiveness of mint extract on dysmenorrhoea among students in a selected college, Bhubaneswar. The result of this study showed that mint extract was effective in reducing dysmenorrhoea among students. In experimental group there was no significant association between the pretest level of dysmenorrhoea and their selected demographic variables like age, educational studies and age at menarche.

After careful consideration of the findings the data suggested that level of Dysmenorrhea decreases with the administration of mint extract and it is one of the good herbal remedies that helps to reduce the level of Dysmenorrhea.

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