

# A Study to Assess the Effectiveness of Ginger Preparation for Reducing Pain in Primary Dysmenorrhoea among Adolescent Girls of Selected College Hostel, Bangalore

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**Abstract:** *Statement of the problem: "A study to assess the effectiveness of ginger preparation for reducing pain in primary dysmenorrhea among adolescent girls of a selected college hostel Bangalore". Objective of the study: To assess the severity of pain in primary dysmenorrhea among adolescent girls to be measured. To find out assess the effectiveness of ginger preparation for reducing pain in primary dysmenorrhea among adolescent girls of a selected college hostel to be measured by Wong Baker facial pain rating scale. To find out the association between pretest level of dysmenorrhea a pain among adolescent girls and selected demographic variables. Methods- Pre experimental one group pretest and post test design was used to assess the effectiveness of ginger preparation for reducing pain in primary dysmenorrhea among adolescent girls of a selected college hostel Bangalore. Reliability of the tool was tested and validity was ensured in consultation with guide and experts in the field of nursing. The study was carried selected school, Bangalore. The samples were selected by using non probability convenient sampling technique. Collecting data was analysed by using descriptive and inferential statistics.*

**Keywords:** Hypothesis, Assumptions, Delimitation, Conceptual framework

## 1. Introduction

Adolescent is the period of transition from childhood to adulthood. WHO has defined adolescence as the age group of 10 to 19 years. Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. This transitional period marked with the onset of menarche, an important milestone. One of the major physiological changes that take place in the adolescent girls is the onset of menarche, which is often associated with problems of irregular menstruation, excessive bleeding and dysmenorrhoea. Dysmenorrhoea or painful menstruation is one of the most common gynaecologic problems in woman of all ages. Usually dysmenorrhoea is differentiated as primary or secondary. Home remedies for the treatment of dysmenorrhoea are known to help ease off the pain during painful menstrual periods. They are simple ways to obtain relief from the symptoms. Some of the home remedies for painful menstrual periods are warm bath, hot water bottle, massage, vitamins, exercise, yoga and ginger tea. Ginger is an herb. Dysmenorrhea was reported in 76% of the participants. Poor concentration at school (59.9%) and refusal of participation in social events (58.6%) have been most affected. Multivariate analysis shows that being in upper secondary level was the strongest predictor for poor concentration absenteeism and poor school grade due to dysmenorrhea (Wong, 2011). More than one alternative therapies for alleviating menstrual discomfort and dysmenorrhea can be offered. Massaging the lower back can reduce pain by relaxing par vertebral muscles and increasing pelvic blood supply. Soft rhythmic rubbing of the abdomen (effleurage) may be useful because it provides distraction and an alternative focal point.

## 2. Objectives of the study

- 1) To assess the severity of pain in primary dysmenorrhoea among adolescent girls to be measured.

- 2) To find out the effectiveness of ginger preparation for reducing pain in primary dysmenorrhoea among adolescent girls of selected hostels to be measured by Wong-Baker Facial pain rating scale.
- 3) To find out the association between pre-test level of dysmenorrhea pain among adolescent girls and selected demographic variables.

## 3. Methods

Pre experimental one group pre-test and post-test design was used to assess the effectiveness of ginger preparation for reducing pain in primary dysmenorrhea among adolescent girls of a selected college hostel Bangalore. Reliability of the tool was tested and validity was ensured in consultation with guide and experts in the field of nursing. The study was carried selected school, Bangalore. The samples were selected by using non probability convenient sampling technique. Collecting data we analysed by using descriptive and inferential statistics.

**Hypotheses:** There is significant reduction of intensity of pain during menstruation after treatment. There is significant association between the pain before treatment among adolescent girls and their selected demographic variables.

**Delimitation:** The study is delimited to Primary dysmenorrhoea among adolescent girls, No efforts will be made to extraneous factors such as position, Water bathing, Duration of study is 4-6 weeks.

**Conceptual Framework:** Conceptual Frame Work Based on Rosen stock's Health Belief Model. 1. Individual perception 2. Modifying factors 3. Likelihood of action.

**Research Methodology:** Research approach, Research design, Variables under the study, Dependent Variable, Independent variable, Demographic variables, Setting of the

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study, Sample size, Sampling technique, Sampling criteria, Inclusion criteria, Exclusion criteria, Data collection instruments, Tools, Population, Sample, Content validity, Reliability, Pilot study, Data collection process, Plan of data analysis, Descriptive statistics, Inferential Statistics and Ethical consideration.

**Variable Under Study:** Dependent variable, Independent variable and Demographic variables.

**Dependent Variable:** It is the response, behaviour or outcome that is predicted or explained in research. Changes in the dependent variable are presumed to be caused by the independent variable. In this study the dependent variable was level of pain of dysmenorrhea.

**Independent Variable:** It is the one believed to cause or influence the dependent variable which is manipulative. In this study the independent variable was Ginger tea therapy.

**Demographic Variables:** Characteristics, properties or attributes of the sample is called demographic variables. The demographic variables in the study were age, Religion, educational status, Age at Menarche, No of days of Menstrual Flow, Duration Of pain And Type of Pain.

**Sample:** Sample is the subset of the population selected to participate in the research study. In this study sample consists Adolescent girls with primary dysmenorrhoea, Bangalore

**Sample Size:** Sample consists of the subject of the population selected to participate in a research study.2 In the present study the sample size consists of 60 Adolescent girls who is having dysmenorrhoea were selected as 30 each in experimental group and control group.

**Sampling Techniques:** Sampling refers to the process of selecting the proportion of population to represent the entire population. According to the sampling criteria non probability convenient sampling technique was adopted and 60 Adolescent girls who is having dysmenorrhoea were selected as 30 each in both the experimental and control group.

**Data Collection Instruments:** Method of data collection includes development of tool, testing of validity and reliability and data collection procedure. The instrument selected in a research should as far as possible be the vehicle that would best elicit data for drawing conclusion pertinent to the study and at the same time added to the knowledge in the discipline.

**Content Validity:** Validity refers to a complex concept which broadly concerns the soundness of the study's evidence that is whether the findings are cogent and convincing and well grounded. The content validity is the degree to which the question or items in an instrument can adequately study or measure the phenomenon being researched. The content validity of the tool was established by requesting experts to go through the tool and give their valuable suggestions, based on the enclosed criteria checklist which was prepared to evaluate the tool.

**Reliability:** Reliability of the tool is the degree of consistency with which it measures the attributes that it suppose to measure. It refers to the extent to which the same results are obtained on repeated administration of the instrument.

**Pilot Study:** Pilot study is a small scale version or trial run, done in the preparation for a main study. This study was conducted to obtain information for improving the main project or for assessing the feasibility of the study, to determine the flaws in the design and also plan of statistical analysis.

**Plan of Data Analysis:** The obtained data was analysed in terms of the objectives and hypotheses of the study by both descriptive and inferential statistics. Assessment of primary dysmenorrhoea Pain level in both experimental and control group was analysed.

## 4. Results

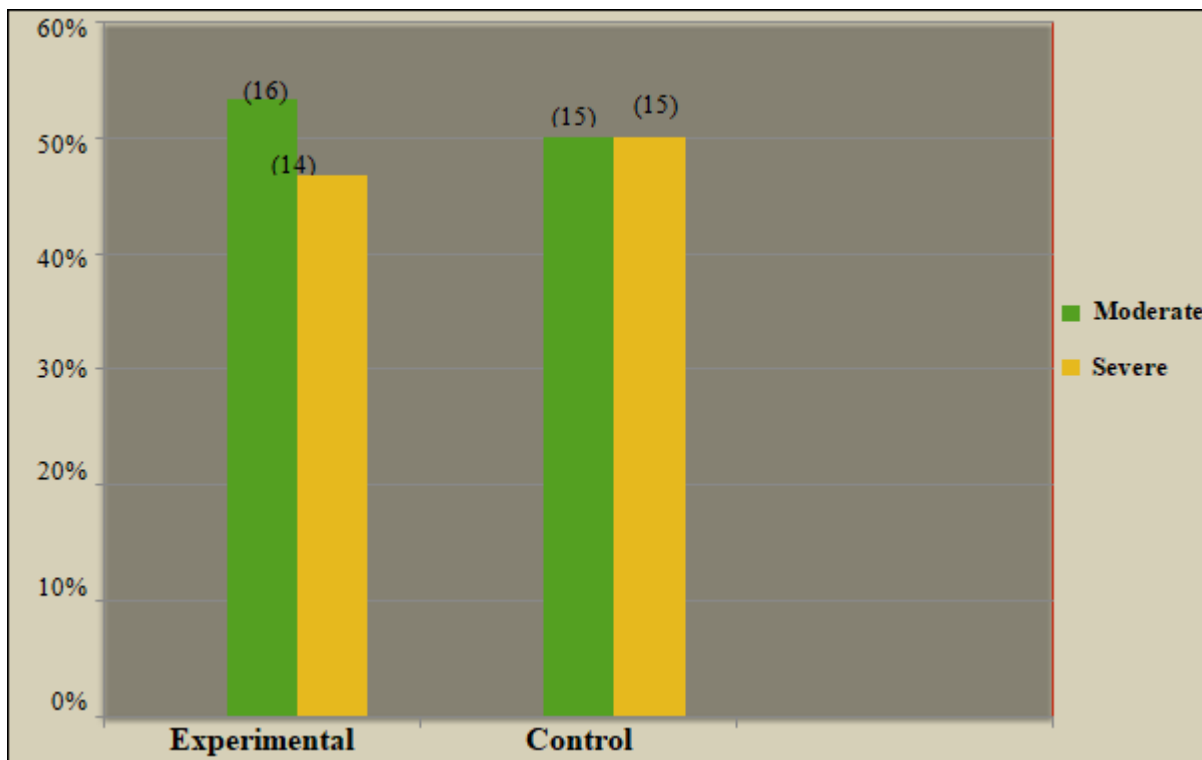
Analysis is the categorizing, ordering, manipulating and summarizing of the data to obtain answer to research questions.44 The purpose of analysis is to reduce data to an intelligible and interpretable form, so that the relations of research problems can be studied and tested.

## 5. Organization of Findings

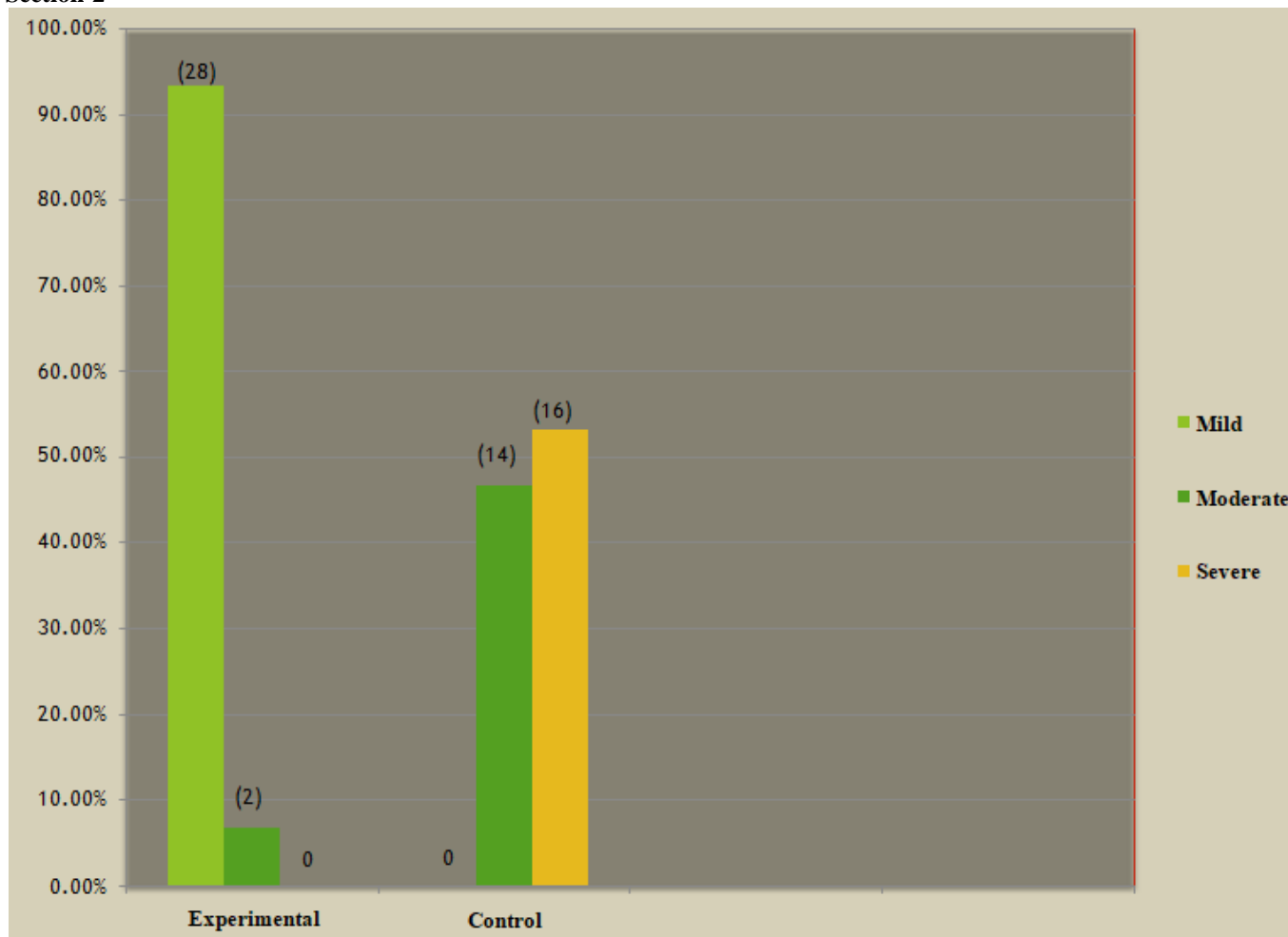
Section1: Sample characteristics. Section2: Evaluation of level of Dysmenorrhoea. Section3: Effectiveness of Ginger Preparation for reducing pain in primary Dysmenorrhoea. Section4: Association between demographic variables and pre-interventional level of Primary Dysmenorrhoea.

### Section 1

Characteristics	Category	Samples	
		Number	Percentage (%)
Age (in years)	13-14	12	20
	15-16	22	36.67
	17-18	26	43.33
Religion	Hindu	21	35
	Muslim	35	58.33
	Christian	4	6.67
Educational Status	9 <sup>th</sup>	7	11.67
	10 <sup>th</sup>	53	88.33
	11 <sup>th</sup>	5	16.67
	12 <sup>th</sup>	6	20
Age at Menarche	Less than 12 years	9	30
	13-14	9	30
	15-16	6	20
	17-18	6	20
Duration of Menstrual flow Per Month	Less than 3 days	7	8.33
	4-5 days	17	91.67
	6-7 days	6	20
Duration of Pain	One day before menstruation	2	6.67
	1 <sup>st</sup> day	10	33.33
	1 <sup>st</sup> and 2 <sup>nd</sup> day	11	36.77
	Throughout the menstruation	7	23.33
Type of Pain	Radiating pain	9	30
	Colicky pain	10	33.33
	Spasmodic Pain	11	36.67



Section-2



## Section-3

Groups	Sample size	Number of positive differences	Zcal	Ztab	Remarks
Experimental	30	30	5.477	+ 1.96	S
Control	30	12	-1.0954	- 1.96	NS

## Section-4

Demographic variables	Category	No. of samples	Dysmenorrhea				$\chi^2$ table	df	$\chi^2$ Value
			Moderate		Severe				
			F	%	f	%			
Age (in years)	13-14	12	7	58.33	5	41.67	5.99	2df	4.33 NS
	15-16	22	11	50	11	50			
	17-18	26	7	26.93	19	73.07			
Religion	Hindu	21	11	52.38	10	47.62	3.84	1df	1.53 NS
	Muslim	39	14	35.89	25	64.11			
	Christian	4	14	35.2	11	50			
Educational status	10th	53	2	88.33	5	71.43	3.84	1df	0.12 NS
	11th	5	23	16.67	30	56.61			
Age at menarche	15-16	6	2	40	3	60	3.84	1df	0.16 NS
	17-18	6	23	41.82	32	58.18			
Duration of menstrual flow	4-5 days	17	24	41.38	34	58.62	3.84	1df	0.24 NS
	6-7 days	10	1	50	1	50			
Duration of Pain	1 <sup>st</sup> day	11	19	36.54	33	63.46	3.84	1df	2.79 NS
	1 <sup>st</sup> and 2 <sup>nd</sup> day	8	6	75	2	25			
Type of pain	Colicky pain	10	24	40.68	35	59.32	3.84	1df	0.03 NS
	Spasmodic pain	11	1	100	0	0			

## 6. Conclusion

Dysmenorrhea is the medical term for menstrual cramps, which are caused by uterine contractions. Primary dysmenorrhea refers to common menstrual cramps, while secondary dysmenorrhea results from a disorder in the reproductive organs. Both types can be treated. The present study was conducted to assess the effectiveness of Ginger preparation for reducing pain in primary Dysmenorrhoea among adolescent girls. Oral administration of Ginger preparation was effective in decreasing the level primary dysmenorrhea among Adolescent girls.

## References

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