



Assessment and Intervention to Menstrual Health in Suttur Residential School-A Open Labeled Clinical Study

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ABSTRACT:

Introduction:

Menstruation is a physiological process for women of reproductive age. On an average a woman cumulatively menstruates for about five to seven years during her lifetime, thus menstrual health and hygiene constitutes a critical life event. Every woman has the right to healthy, safe and dignified menstruation.

Objectives: To assess the impact of a school-based menstrual education programme and effect of narikela greanuules on: (1) menstrual knowledge, beliefs and practices, (2) menstrual disorders

Design: Intervention study.

Study Setting- High school Students of Sutturu residential school.

Study Period - 90days

Study Population -50

Interventions: A school-based health education study conducted from between January 2023 to June 2024 The current study was a cross sectional study carried out between January 2023 to June 2024. The study was conducted in Sutturu residential scholl Mysuru. where a total of 25 adolescent girls aged 14 – 18 were selected after getting permission from their concerned authority. The data was collected by trained medical undergraduate and postgraduates by interviewing adolescent schoolgirls using a pre-designed pre-tested questionnaire.Each subjects are given with 5g of Narikela rasayana once in morning and night after food for 90 days.results analyzied based on Assessment criteria.

Results: After health education, participants reported a significant improvement ($p<0.001$) in 'high knowledge and beliefs' scores compared to baseline (51% vs 82.4%). Significant improvement was also observed in overall good menstrual practices (28.8% vs 88.9%), the drug Narikeela rasayana acts general health promoter and rsayana helps in rasa dhatu tarpan and inturns helps in normalizing the menstruation.

Conclusions: The study concludes that a majority of the girls had clinically obvious nutritional efficiency diseases. Problems related to menstruation are quite frequent and often result in the interruption of the daily routine of the adolescent girls, therefore it is important that school officials



and school health programme staff recognize these problems and need to be sensitive to their problems. Further studies should be performed to determine the reason for this trend, and newer strategies need to be employed.

INTRODUCTION

Adolescence is a period of rapid transition from girlhood to womanhood. The onset of menstruation is one of the most important changes that occur for girls during the adolescent years.¹ Menstrual health is defined as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity in relation to the menstrual cycle.² Achieving menstrual health means that girls, women, and all other people who experience a menstrual cycle throughout their life course can access timely, accurate, age-appropriate information about menstruation and changes experienced throughout the life course, as well as related to hygiene practices and self-care.² In adolescent girls, the onset of menstruation is the start of a new phase, posing various issues such as harassment, stigma, and social exclusion. In adolescent girls, the onset of menstruation is the start of a new phase, posing various issues such as harassment, stigma, and social exclusion. Menstrual health is imperative to improve global population health, achieve Sustainable Development Goals (SDGs), and attain gender equality and human rights by the year 2030.³

Learning about menstrual hygiene is a vital part of health education for adolescent girls so that they can continue to work and maintain hygienic habits throughout their adult life. The ideal menstrual health education curriculum would encourage students to think about the relationships between knowledge, choice, behaviors' and enhanced human health. It would also help to improve maternal health. Despite of need of awareness on menstrual health the study on any drug intervention is poorly done .hence in the present study along with education on menstruation Narikela granules were provide to know the efficacy of drug on menstrual hygiene.

Materials

Study design and participants

This intervention study was conducted in Suttur in the Mysore District in Karnataka. The suturu srikshetra is

renowned for his holiness and contribution towards social service. A foundation in Suttur runs a free residential school from lower grade school to higher grade education. Approximately more 1000 girls gets benefited from free hostel facilities and education. We selected 50 girls from an age group of 14 to 18 years complying of menstrual problems using a simple random

Ethical considerations: The Ethics Review Committee of the JSS Ayurveda Medical , reviewed and approved the study protocols and methods. All research participants were invited to fill out and sign an informed consent form after being briefed on the study

Data collection procedures

Before conducting each interview, the principal investigator visited all 8th standard to preuniversity college three schools and received permission to conduct the survey and to provide health education to the adolescent girls attending the school. After permission was received, we conducted a pilot survey of the questionnaire and revised it, as suggested for the final survey. In accordance with the general guidelines required for a full study, we selected 10% of the sample for a pilot test in one of the schools in the study area We also modified the questionnaire based on the results of the pre-test exercise to make it easier to understand and to answer. Finally The data was collected by trained medical undergraduate and postgraduates by interviewing adolescent schoolgirls using a pre-designed pre-tested questionnaire.

METHODOLOGY

The current study was a cross sectional study carried out between January 2023 to June 2014. The study was conducted in Suttur residential school Mysuru. where a total of 25 adolescent girls aged 14 – 18 were selected after getting permission from their concerned authority. The questionnaire consisted of age, residential address, fathers occupation and income, age of menarche, date of last menstrual period, details of menstrual cycle, including cycle length, number of days the period lasts,



menstrual flow (i.e. scanty, normal or heavy), presence or absence of dysmenorrhea, premenstrual symptoms such as headache, giddiness, leg cramps and abdominal cramps, and any other symptoms such as diarrhea or vaginal discharge were noted. Clinical examination was conducted at the same time by the trained medical staff. Examination included looking for signs of anemia, lymphadenopathy, checking the thyroid gland.

DRUG AND PREPARATION- The genuine raw drug will be obtained from convenient and available source and authentication was done at Department of Dravya guna and preparation was carried out at Department of Rasashastra and Bhaishajya Kalpana JSSAMCH Mysuru. Fresh juice extracted from coconut spike and boiled under low flame till it reaches to granule form and stored in air tight container

INCLUSION CRITERIA

1. Children between 14 years and 18 years, irrespective of caste, religion, , occupation etc. and those having irregular menstrual cycle, painful menstruation, decreased menstruation.

EXCLUSION CRITERIA

1. Childrens with hereditary disease
2. Iron deficiency Secondary to Menorrhagia
3. Intestinal malabsorption syndrome.
4. Children having any complications (e.g., HIV, hepatitis B, or other viral diseases) chronic illness
5. 3rd degree of malnutrition

OBSEVATION

Table 1-AGE OF MENARCHE

Sl no	Age	Number
1	<14 years	7
2	14-16 years	18

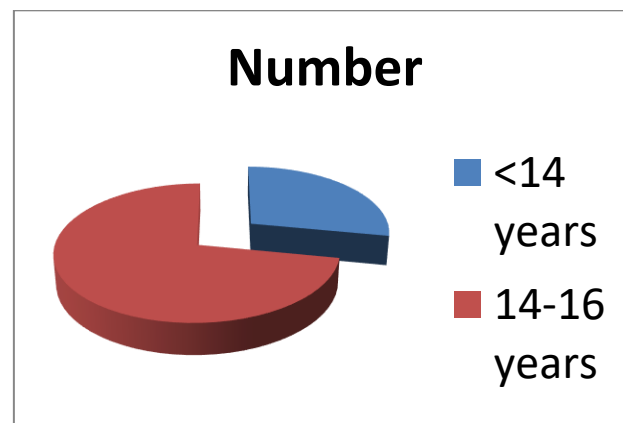


Table 2- Irregular Menstruation

Sl no	Irregular Menstruation	Number
1	With in 28 days	0
2	28-45 days	4
3	45-60 days	5
4	More than 60days	16

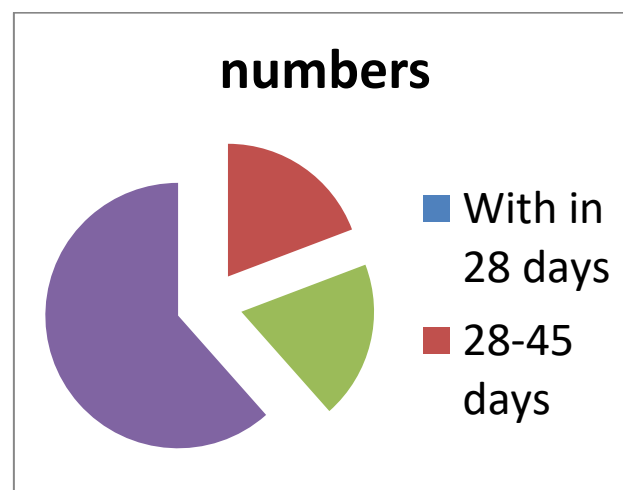


Table 3- Duration of bleeding & quantity of Menstrual blood

Sl no	Duration of bleeding	Number
1	1-2 days	20
2	1-5days	5
3	5-7 days	0
4	More than 7 days	0

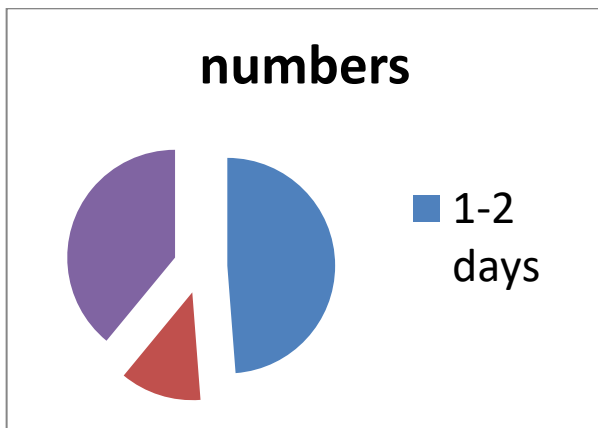


Table 4-Quantity of Menstrual blood

Sl no	Quantity of Menstrual blood	Number
1	more than 5 pad/day	0
2	3-5pad/day	3
3	2pad/day	5
4	1pad/day	20

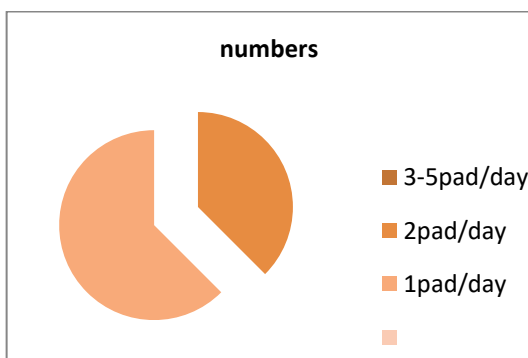
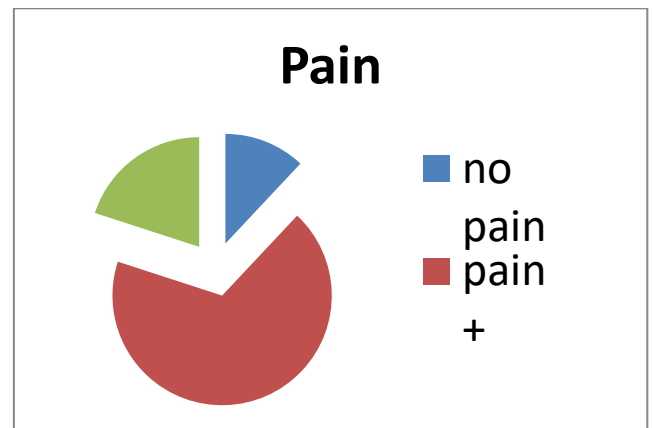


Table 5-PAIN

Sl no	PAIN	Number
1	No pain	3
2	Menstruation is painfull but daily activities are not affected	17
3	Menstruation is painfull but daily activities are affected need to take medication	5



RESULT

Table 6-Prognosis of the cardinal symptoms

SYMPTOM	NO	BT	AT	% OF RELIEF
Irregular menstruation	25	20	4	20%
Duration of bleeding	25	17	6	35%
Amount of Bleeding	25	14	5	30%
Dysmenorrhoea	25	25	14	50%

Results: After health education, participants reported a significant improvement ($p < 0.001$) in ‘high knowledge and beliefs’ scores compared to baseline (51% vs 82.4%). Significant improvement was also observed in overall good menstrual practices (28.8% vs 88.9%), the drug Narikeela rasayana acts general health promoter and rsayana helps in rasa dhatu tarpan and inturns helps in normalizing the menstruation

CONTRIBUTION AND ITS IMPLICATION

Our study concluded that there was a statistically significant relationship observed between BMI and menstrual pattern. All the adolescent girls in the present study attained menarche before the age of 16, In respect of regularity of menstrual cycle, all the 25 students started with irregularity of menstruation after joining residential school and after proper evaluation it reveled that maximum students are addicted for junk foods



All the students were given with education on menstrual hygiene many of them are not aware and link of nutrition towards proper menstruation. The study signifies there most need assessing menstrual health and nutritional status in all adolescent girls. The drug narikela granules with helps in correction of nutritional status and helps in achieving regular menstruation along regular dietary intake.

CONCLUSION

The study concludes that a majority of the girls had clinically obvious nutritional efficiency diseases. Problems related to menstruation are quite frequent and often result in the interruption of the daily routine of the adolescent girls, therefore it is important that school officials and school health programme staff recognize these problems and need to be sensitive to their problems. Further studies should be performed to determine the reason for this trend, and newer strategies need to be employed.

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