# **EAS Journal of Nursing and Midwifery**

Abbreviated Key Title: EAS J Nurs Midwifery ISSN: 2663-0966 (Print) & ISSN: 2663-6735 (Online) Published By East African Scholars Publisher, Kenya

Volume-6 | Issue-5 | Nov-Dec -2024 |

# **Original Research Article**

DOI: https://doi.org/10.36349/easjnm.2024.v06i05.003

OPEN ACCESS

# **Efficacy of Reproductive Health Awareness Program and Health Status of Adolescent Girls in Bangalore**

Miss Shahida Bano<sup>1\*</sup>, Mr Zubair Nisar<sup>2</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology Nursing, Smt. Nagarathnamma College of Nursing, Bangalore, Karnataka, India <sup>2</sup>Department of Radiology, Rayat Bahra University Mohali, Chandigarh, India

**Article History** Received: 01.10.2024 Accepted: 10.11.2024 Published: 16.11.2024

Journal homepage: https://www.easpublisher.com



Abstract: Adolescence is a phase of transition from childhood to adulthood. During this period that the adolescents acquire sexual and reproductive maturity. Health education given to adolescent girls helps build their knowledge, motivates them to improve and maintain their health, prevent diseases and reduce risky behaviours among them hence the study was done to assess the effectiveness of health education among rural adolescent girls. This study evaluated the efficacy of a reproductive health awareness program for adolescent girls in Bangalore, addressing critical topics like menstrual health, hygiene, and reproductive wellness. Using a pre-experimental one-group pre-test post-test design, the research involved 100 college-going girls selected through non-probability convenient sampling. Preand post-test assessments were conducted using a validated knowledge questionnaire. Results showed a significant improvement in knowledge scores, with mean scores increasing by 23.1 (t = 33, p < 0.001), indicating a shift from inadequate to adequate understanding. Demographic factors, such as class, religion, and menstrual regularity, were correlated with knowledge levels. The study concluded that the awareness program effectively enhanced the knowledge of adolescent girls, underscoring the need for continued health education initiatives. These findings suggest that such programs are vital for empowering young women and improving their reproductive health awareness, ultimately contributing to better health outcomes in this demographic.

Keywords: Knowledge; reproductive health; Awareness programme.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

# 1. INTRODUCTION BACKGROUND

World Health Organization (WHO) defines college girls as the period of life between 16 to 24 years of age. The girls experiences not only physical growth and change but also emotional, psychological, social, and mental change and growth. Physiological changes lead to sexual maturity usually occurs during this period.

The world's college girls population -7 billion persons, 16-24 years of age, or about 19% of the total population-faces a series of serious challenges not only affecting their growth and development but also their livelihood as adults. Yet college girls remain a largely neglected, difficult-to-measure, and hard-to-reach population, in which the needs of girls in particular are often ignored (NACO, 2012).

Reproductive health is a universal concern, but is of special importance for girls particularly during

reproductive years. Majority of girls still do not have access to information and education on sexuality, reproduction and reproductive health and rights, nor do they have access to preventive and curative service.

Thus, in order to lead healthy, responsible and fulfilling lives, and protect themselves from reproductive health problems, young people need to be knowledgeable about themselves and the people they related to and need sound information about the physical, psychological and social changes that take place child hood and adolescence.

The first menses is known as "menarche". Menarche is the signal that sexual maturation of the female has occurred and the body is capable of supporting pregnancy. Menarche is the signal that sexual maturation of the female has occurred and the body is capable of supporting pregnancy. Menstruation is the monthly elimination through a bloody vaginal discharge of an endometrium which is also called as menses, and a period of monthly flow. Menstruation may create inconvenient and troublesome, but it is the normal reproductive function.

Menstruation occurs periodically throughout child bearing years, except during pregnancy and breast feeding. The onset of menarche will begin between 9-16 year and termination will be between 45-60 years. It differs from person to person also affected by heredity, racial background and nutrition. The termination of menses is known as menopause and takes place between 45 and 60 yrs. In most women, menstruation occurs approximately every 28 days and it lasts for 3-5 days. Menstrual flow consists of blood, mucus and tissue particles. The average blood loss is about 4 ounces during each menstruation also individuals may vary from the average length and amount of blood loss from cycle to cycle. During menstrual period the women may experience lower abdominal pain or discomfort at ovulation and also there will be breast fullness or tenderness, weight gain of 3 pounds, fluid retention, irritability and depression [1].

It is essential to maintain strict hand-washing practices before and after changing sanitary products. Any bacteria on the hands and fingers prior to fitting a sanitary product can be transferred to the vaginal canal and cause infection. Likewise, any bacteria on the fingers following the changing of a product can be transferred to other items. Menstrual protection products fall into two basic categories: those that are worn externally, outside the body, and those that are worn internally, in the vagina. Girls need to pay extra attention to personal hygiene once they begin menstruating.

#### Need for the study:

The need for this study arises from the critical gaps in reproductive health education among adolescent girls, particularly in rural settings where access to accurate information may be limited. Adolescents are at a pivotal stage of development, facing numerous physical and emotional changes, and they require comprehensive knowledge to make informed decisions regarding their health. Many young girls lack essential information about puberty, menstruation, contraception, and sexually transmitted infections, which can lead to misconceptions and risky behaviours. Furthermore, the stigma surrounding reproductive health discussions often prevents open dialogue, exacerbating the issue. This study aims to address these challenges by evaluating the effectiveness of an awareness program designed specifically for adolescent girls. By assessing changes in knowledge before and after the intervention, the study underscores the importance of educational initiatives in empowering young women and fostering a supportive environment for discussions about reproductive health. Ultimately, this research is essential for promoting informed decision-making and improving health outcomes in this vulnerable population.

#### **Review of Literature:**

A cross sectional study was conducted on to find out the menstrual pattern, and awareness of the abnormalities in menstrual pattern among school going pubertal age group girls. The samples were 96 girls of two different schools, the age group ranging from 11 years to 17 years. The median age of menarche was 12 years. There were 6.9% cases of oligomennorhea and 10.0% of hypo menorrhea. Menorrhagia was seen in 6.2% of the girls. Spasmodic dysmenorrhea was seen in 67.0% of the girls [9].

A descriptive study was conducted on knowledge of slum adolescent girls about changes of secondary sexual characters. Results showed that regarding female pubertal changes, only 60% of females knew menstruation as a sign of puberty 40% knew about pubic hair as signs of puberty. Teaching regarding reproductive health provides information on management of menstrual fluid, personal hygiene and provides materials to enhance utilization of available sanitary facilities in the schools, while exploring more sustainable options [3].

A descriptive study was conducted on knowledge and health of adolescent girls School girls. The subjects were 800 adolescent girls in rural and urban field areas of Jipmer, Pondicherry. The results showed that the adolescent girl's knowledge of Anatomy, particularly their knowledge regarding menstruation was very poor. Old girls had better anatomical knowledge than young girls. He concluded that reproductive health education was essential to maintain good health in school girls [4].

A descriptive study was conducted on awareness and behavior change of rural adolescent girls regarding their management of reproductive health in 23 villages in Anji, Maharashtra state. Study subjects were unmarried rural adolescent girls (12-19 years). They conducted a needs assessment for health messages with this target audience, using a triangulated research design of quantitative (survey) and qualitative (focus group discussions) methods. Adolescent girls (55%) were aware of menstruation before its initiation compared with baseline (35%). They concluded that the present community health education intervention strategy could bring significant changes in the awareness and behaviour of rural adolescent girls regarding management of their reproductive health [5].

**Problem Statement**: Efficacy of Reproductive Health Awareness Program and Health Status of Adolescent Girls in Bangalore.

#### **Objectives of the study**

1. Assess the pre-test level of knowledge of college going girls about reproductive health.

- 2. Assess post-test knowledge score of college going girls regarding the reproductive health status.
- 3. Assess the effectiveness of awareness programme by comparing the pre-test knowledge score and post-test knowledge score.
- 4. To determine association between pre-test and post-test knowledge score with selected demographic variables

#### Assumptions

Adolescent girls may have less than adequate knowledge regarding reproductive health. Awareness programme may improve the knowledge of adolescent girls regarding reproductive health. Selected variables such as class, religion, and source of information, may influence the adolescent girl's knowledge on reproductive health. Nurse plays an important role as an educator to public. Adolescent girls will be expressing willingness to learn and understand about care of reproductive health.

#### **Proposed approach**

Proposed approach includes a literature review on reproductive health awareness programs. A mixedmethods design will assess adolescent girls' knowledge via surveys and interviews. An interactive awareness program will be implemented. Data will be analysed for effectiveness, leading to recommendations, key insights, and dissemination through publications and community presentations.

#### Value of Research

The value of research enhances adolescent girls' understanding of reproductive health, leading to improved health outcomes and empowered decisionmaking. It addresses cultural barriers, informs local health policies, fosters community support, and contributes valuable insights to the existing literature, promoting effective reproductive health initiatives tailored to adolescent needs in Bangalore.

#### Hypotheses

**H**<sub>1</sub>-There is a significant difference between the Mean pre-test and Mean post-test knowledge of the adolescent girls regarding reproductive health.

 $H_2$ -There is a significant association between the post-test level of knowledge of the adolescent girls with selected demographic variables

#### Aim:

This study aims to assess the effectiveness of a reproductive health awareness program on the health status of adolescent girls at a specific Pre-University (PU) college in Bangalore. By measuring changes in knowledge, attitudes, and health behaviours before and after the program, the evaluation will provide insights into its impact on participants' understanding of reproductive health issues. Additionally, the study will examine health indicators such as menstrual health, access to resources, and overall well-being among the adolescent girls. The findings will help inform future interventions and improve reproductive health education in similar settings.

# 2. METHODS AND MATERIALS Design

An evaluative research approach was considered appropriate to determine the effectiveness of the Awareness programme. Research design is a set of logical steps taken by the researcher to assess the research problem. The research design selected for the study was pre experimental one group pre-test post-test. In this design the effect of the independent variable) the Awareness programme on reproductive health was measured on the dependent variable i.e.) the knowledge level of adolescent girls (which performance on the pretest mand post-test).

#### Setting and Participants:

The study was conducted in the PU Collage, Bangalore. It is a Govt. Approved school which is situated rural south at Bangalore. In this study the population comprised of adolescent girls, who are studying in the PU Collage, Bangalore. Sample size was 100 adolescent girls were selected among 136 girls depends on the inclusion criteria from 9<sup>th</sup> and 2nd PU. The sample is a small portion of the population selected for observation and analysis. Adolescent girls who are studying in selected PU Collage, Bangalore and who fulfil the inclusion criteria are the sample. Sample size was 100 adolescent girls who belongs to PU Collage, Bangalore.

#### Sampling Technique:

The investigator planned randomly to take 100 adolescent girls who are studying in PU Collage, Bangalore and who are available at the time of data collection and fulfil the inclusion criteria by using a non-probability convenient sampling was used to select the adolescent girls.

#### Sampling Criteria

Inclusion Criteria: The study includes adolescent girls,

- Aged between 14-16 years and studying in the PU Collage, Bangalore.
- Are willing to participate in the study.

**Exclusion criteria:** The study excludes the adolescent girls who,

- Are not available at the time of data collection
- Are not attained menarche
- Have psychological problems such as anxiety, depression etc.

#### Data collection process/procedure

A pre-experimental one-group pre-test post-test design was employed to evaluate the effectiveness of an Awareness Programme on reproductive health knowledge among 100 adolescent girls at PU College in Bangalore. A modified structured questionnaire was developed, validated by experts, and tested for reliability through a pilot study. Data collection began after obtaining consent from the Headmaster. Initially, a pretest assessed existing knowledge, followed by an Awareness Programme delivered via lecture and audiovisual aids for 45 minutes. One week later, a post-test using the same questionnaire was conducted to measure knowledge improvement. The analysis utilized descriptive and inferential statistics. Participants were cooperative and expressed eagerness to learn more about reproductive health, indicating the programme's relevance and impact. This structured approach highlights the importance of targeted education in enhancing adolescent awareness of reproductive health issues.

**Instruments:** n this study, a structured knowledge questionnaire was developed to assess adolescent girls' understanding of reproductive health. This tool was chosen to facilitate prompt responses and gather comprehensive data.

## **Development of Tool:**

The questionnaire comprised two sections:

Section A collected demographic data, including age, class, religion, age at menarche, menstrual cycle regularity, sanitation methods, daily pad usage, and information sources. It also gathered family details like the mother's educational status, occupation, and family income.

**Section B** focused on reproductive health knowledge, covering anatomy and physiology of female reproductive organs, menarche,

menstruation, menstrual cycles, and personal hygiene practices during menstruation.

**Analysis Strategies:** Analysis involves systematically organizing and synthesizing research data to test hypotheses. In this study, data were analysed according to the research objectives using both descriptive and inferential statistics. A master data sheet was created by the investigator for this purpose.

#### **Descriptive Statistics:**

- Frequency and percentage distributions were employed to examine demographic variables, including age, class, religion, age at menarche, number of pads used daily, sanitation methods, menstrual cycle regularity, information sources, and details regarding the mother's occupation, education, and family income.
- Mean and standard deviation (SD) were calculated for pre-test and post-test scores to assess the knowledge levels of adolescent girls
- The distribution of knowledge scores was categorized into three levels: inadequate, moderate, and adequate.

## Inferential Statistics:

- A paired t-test was utilized to evaluate the effectiveness of the Awareness Programme on the knowledge of reproductive health among adolescent girls.
- The chi-square test was applied to investigate the association between post-test knowledge levels and selected demographic variables.

#### 1.1 Tables

| Table 1                      |           |           |           |    |  |  |  |  |
|------------------------------|-----------|-----------|-----------|----|--|--|--|--|
| Level of knowledge           | Pre-test  | Post test |           |    |  |  |  |  |
|                              | frequency | %         | Frequency | %  |  |  |  |  |
| Adequate knowledge (> 75 %)  | -         | -         | 44        | 44 |  |  |  |  |
| Moderate knowledge (51-75%)  | 52        | 52        | 56        | 56 |  |  |  |  |
| Inadequate knowledge (<50 %) | 48        | 48        | -         | -  |  |  |  |  |

The above Table 1 shows in the pre-test majority of them 52(52%) had moderate knowledge, 48(48%) had inadequate knowledge and no one had adequate knowledge. In the post-test majority of them

had 56(56%) had moderate knowledge, 44(44%) had adequate knowledge and no one had inadequate knowledge.

| No  | Knowledge Variable             | Maximum score | Pre test |      | Post te | st   | Mean%   |           |  |
|-----|--------------------------------|---------------|----------|------|---------|------|---------|-----------|--|
|     |                                |               | Mean SD  |      | Mean    | SD   | Pretest | Post test |  |
| Ι   | Anatomy & Physiology           | 7             | 3        | 16.7 | 5.25    | 12.6 | 42.7    | 75        |  |
| Π   | Menarche                       | 3             | 1.63     | 24.9 | 2.35    | 18.6 | 54.3    | 78.3      |  |
| III | Menstruation & menstrual cycle | 10            | 4.92     | 15.9 | 7.10    | 11.9 | 49.2    | 71.0      |  |
| IV  | Reproductive health            | 10            | 5.47     | 13.7 | 7.24    | 11.8 | 54.7    | 72.4      |  |
|     | Over all                       | 30            | 15.01    | 9.5  | 21.94   | 8.1  | 50.0    | 73.1      |  |

The Table 2 shows that the post-test Mean score was higher than pre-test Mean score in all the aspects of

knowledge such as Anatomy and physiology Mean score was (5.25, 3) with SD (16.7, 12.6), menarche, Mean score

was (2.35,1.63) with SD 24.9,18.6, menstruation and menstrual cycle Mean score was (7.10.4.92) with SD (15.9, 11.9), reproductive health Mean score was (7.24,

5.47) with SD (13.7,11.8) The overall Mean score was higher in the post-test 21.94 with SD 8.1 than the pre-test Mean 15.1 and with SD 9.5.

| Table 3   |       |      |     |             |                |          |  |  |  |  |
|-----------|-------|------|-----|-------------|----------------|----------|--|--|--|--|
| Group     | Range | Mean | SD  | Enhancement | Paired 't'test | P- value |  |  |  |  |
| Pre test  | 10-22 | 50.0 | 9.5 | 23.1        | t=33           | < 0.001  |  |  |  |  |
| Post test | 18-28 | 73.1 | 8.1 |             |                |          |  |  |  |  |

The above Table 3 reveals the Range, Mean, SD, Enhancement and paired 't' test value of knowledge score on reproductive health in the pre-test and post-test. The obtained post-test Mean value 73.1 was higher than the pre-test 50.0. The enhancement between pre-test and

post-test was 23.1 and obtained paired 't' test value was 33, it was highly significant at 1% level P<0.001. Hence it is inferred that there is significant increase in the knowledge level of the adolescent girls on reproductive health after the Awareness programme.

|        | Table 4                        |                      |    |    |     |        |          |      |                |
|--------|--------------------------------|----------------------|----|----|-----|--------|----------|------|----------------|
| Sl. No | Variable                       | Category Total No    |    | %  | Mod | lerate | Adequate |      | $\chi^2$ Value |
|        |                                |                      |    |    | No  | %      | No       | %    |                |
| 1      | Age                            | a)14 yrs             | 53 | 53 | 29  | 54.7   | 24       | 45.3 | 3.54           |
|        | _                              | b)15 yrs             | 36 | 36 | 18  | 50     | 18       | 50   | df 2           |
|        |                                | c)16 yrs             | 11 | 11 | 9   | 81.8   | 2        | 18.2 | NS             |
| 2      | Class                          | a)1 <sup>st</sup> pu | 28 | 28 | 11  | 39.3   | 17       | 60.7 | 4.41           |
|        |                                | b)2 <sup>nd</sup> pu | 72 | 72 | 45  | 62.5   | 27       | 37.5 | df 1           |
|        |                                |                      |    |    |     |        |          |      | S              |
| 3      | Religion                       | a) Hindu             | 81 | 81 | 49  | 60.5   | 32       | 39.5 | 7.19           |
|        | _                              | b) Muslim            | 8  | 8  | 5   | 62.5   | 3        | 37.5 | df 2           |
|        |                                | c) Christian         | 11 | 11 | 2   | 18.2   | 9        | 81.8 | S              |
| 4      | Age at menarche                | a) 12-13yrs          | 66 | 66 | 38  | 57.6   | 28       | 42.4 | 0.20           |
|        | _                              | b)14-15 yrs          | 34 | 34 | 18  | 52.9   | 16       | 46.1 | df 1           |
|        |                                | _                    |    |    |     |        |          |      | NS             |
| 5      | Duration of menstrual cycle    | a)2-3 days           | 35 | 35 | 20  | 57.1   | 15       | 42.9 | 0.04           |
|        |                                | b)4-5 days           | 52 | 52 | 29  | 55.8   | 23       | 44.2 | df 1           |
|        |                                | c)6-7 days           | 13 | 13 | 7   | 53.8   | 6        | 46.2 | NS             |
| 6      | Regularity of menstrual cycles | a)Regular            | 90 | 90 | 54  | 60     | 36       | 40   | 5.84           |
|        |                                | b)Irregular          | 10 | 10 | 2   | 20     | 8        | 80   | df 1           |
|        |                                | _                    |    |    |     |        |          |      | S              |
| 7      | Method of sanitation           | a)Cloth              | 32 | 32 | 20  | 62.5   | 12       | 37.5 | 2.15           |
|        |                                | b)Sanitary pads      | 64 | 64 | 35  | 54.7   | 29       | 45.3 | df 2           |
|        |                                | c)Tampoons           | 4  | 4  | 1   | 25     | 3        | 44   | NS             |
| 8      | Number of pads used per day    | a)1-2 pads           | 75 | 75 | 43  | 57.3   | 32       | 42.7 | 2.38           |
|        |                                | b)3-4 pads           | 18 | 18 | 11  | 61.1   | 7        | 38.9 | df 2           |
|        |                                | c)5-6 pads           | 7  | 7  | 2   | 28.6   | 5        | 71.4 | NS             |
| 9      | Source of information          | a)Mass media         | 54 | 54 | 34  | 63     | 20       | 37   | 8.75           |
|        |                                | b)Parents&           | 29 | 29 | 12  | 41.4   | 17       | 58.6 | df 3           |
|        |                                | Relatives            |    |    |     |        |          |      | S              |
|        |                                | c)Friends&           |    |    |     |        |          |      |                |
|        |                                | Relatives            | 14 | 14 | 10  | 71.4   | 4        | 28.6 |                |
|        |                                | d)Health             |    |    |     |        |          |      |                |
|        |                                | Professional         | 3  | 3  | 0   | 0      | 3        | 100  |                |

#### Table 5

| Sl. No | Variable                         | Category         | Total no | l no 🧏 Moderate |    | lerate | Ade | quate | $\chi^2$ Value |
|--------|----------------------------------|------------------|----------|-----------------|----|--------|-----|-------|----------------|
|        |                                  |                  |          |                 | No | %      | No  | %     |                |
| 10     | Educational status of the mother | a)Illiterate     | 24       | 24              | 15 | 62.5   | 9   | 37.5  | 1.11 df2       |
|        |                                  | b)Primary school | 27       | 27              | 13 | 48.2   | 14  | 51.8  | NS             |
|        |                                  | c)High school    | 49       | 49              | 28 | 57.1   | 21  | 42.9  |                |
| 11     | Occupation of mother             | a)Employed       | 29       | 29              | 14 | 48.3   | 15  | 51.7  | 1.01           |
|        |                                  | b)Unemployed     | 35       | 35              | 21 | 60     | 14  | 40    | df 2           |

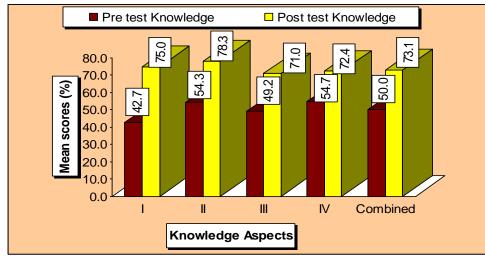
Shahida Bano & Zubair Nisar, EAS J Nurs Midwifery; Vol-6, Iss-5 (Nov-Dec -2024): 110-117

|    |               | c)Self employed     | 36 | 36 | 21 | 58.2 | 15 | 41.8 | NS   |
|----|---------------|---------------------|----|----|----|------|----|------|------|
| 12 | Family income | a)Less than Rs.2000 | 69 | 69 | 41 | 59.4 | 28 | 40.6 | 1.84 |
|    |               | b)Rs. 2001-5000     | 19 | 19 | 8  | 42.1 | 11 | 57.9 | df 2 |
|    |               | c)Rs. 5001 & above  | 12 | 12 | 7  | 58.3 | 5  | 41.7 | NS   |

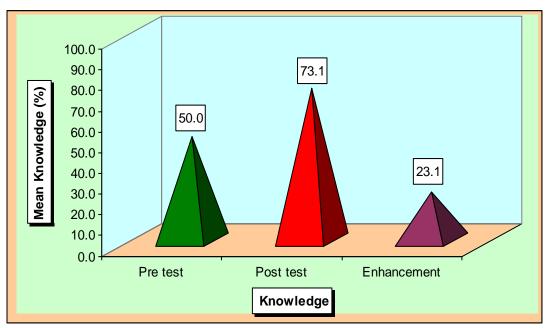
Note: S-Significant, NS-Non significant at 5% (P < 0.05) level.

The Table 4 represents association of post-test level of knowledge of adolescent girls with their educational status of the mother, occupation of mother and family income. The chi square value of demographic variables such as educational status of the mother, occupation of mother and family income shows that there is no statistically significant association with the posttest level of knowledge at 5% level of significance.

#### 1.2 Figure and graphics



Graph 1: Mean, SD, and Mean percentage for the level of knowledge variables of adolescent girls on reproductive health in pre-test and post-test



Graph 2: Distribution of improvement score with Range, Mean and SD for overall level of knowledge among adolescent girls on reproductive health

# 4. RESULTS AND DISCUSSION

The descriptive study was done on to evaluate the knowledge and practice on different aspects of reproductive health among adolescents. The samples were 100 adolescent girls of age 13-15 years from schools were involved in this study. Altogether 27 questions were asked to each of them. They found that adolescent girls were not properly maintaining the reproductive health. Only 6.0% of girls knew that menstruation is a physiologic process, 36.7% knew that it is caused by hormones. Ninety-four percentages of them use the pads during the period but only 11.3% dispose it. Overall knowledge and practice were 40.6% and 12.9% respectively. They concluded that knowledge was better than practice. They recommended health teaching for the adolescent girls

The frequency and percentage distribution of adolescent girls based on demographic variables. Key findings show that 53% of participants were 14 years old, with a majority (72%) in 2nd PU. Regarding religion, 81% identified as Hindus. The age at menarche was primarily between 12-13 years for 66% of girls, and 90% reported regular menstrual cycles. For sanitation methods, 64% used sanitary pads, while 75% used 1-2 pads daily. Information sources varied, with 54% obtaining knowledge from mass media.

Assesses pre-test and post-test knowledge levels. The pre-test revealed that 52% had moderate knowledge, with no one demonstrating adequate knowledge. Post-test results indicated a shift, with 44% achieving adequate knowledge. Mean scores improved significantly from pre-test to post-test, indicating the effectiveness of the awareness program.

# **5. CONCLUSION**

The study emphasizes the urgent need to address reproductive health issues and negative attitudes among adolescent girls, who often lack essential information about menstruation and puberty due to societal taboos. It evaluated an awareness program in PU colleges in Bangalore, using a structured questionnaire with 100 participants. The intervention significantly increased knowledge (p < 0.001) and showed associations with class, religion, and menstrual regularity. Findings highlight the necessity for targeted education and inform recommendations for nursing practice and further research to enhance reproductive health awareness among adolescent girls. Hypotheses H1 and H2 were confirmed, demonstrating the program's success.

# ACKNOWLEDGEMENTS

First of all we would like to thank the Almighty Aallah who showed the blessings, which alone enabled me to complete this project successfully. We would like to express our sincere gratitude to all those who contributed to the completion of this study. First and foremost, we thank my research supervisor Prof. Sathiya Sheela, Assoc. Professor and H.O.D Obstetrics and Gynecology Nursing Dept., New Sri Shanthini college of Nursing Bangalore for their invaluable guidance, support, and encouragement throughout this process.

#### **Declaration:**

I hereby declare that the project titled "Efficacy of Reproductive Health Awareness Program and Health

Status of Adolescent Girls in Bangalore" is my original work. This research aims to assess the impact of reproductive health awareness programs on the health status of adolescent girls in Bangalore, focusing on their knowledge, attitudes, and practices regarding reproductive health.

The findings and interpretations presented in this project are based on thorough research and analysis conducted with integrity and adherence to ethical standards. I acknowledge the contributions of all individuals and institutions that supported me during this study.

#### Author Contribution

Author <sup>1</sup> Conceptualization of the study, formulation of report, and information.

**Author** <sup>2</sup> Data collection, and administration of the knowledge regarding assessment & care.

Author <sup>1</sup> Writing of the manuscript draft, literature review, and manuscript editing.

**Author**<sup>2</sup> Final review of the manuscript, approval of the final version for submission, and supervision of the overall project.

**Funding statement:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit.

**Competing interest:** Authors declare that there are no competing interests related to the project titled "Efficacy of Reproductive Health Awareness Program and Health Status of Adolescent Girls in Bangalore. I confirm that I have no financial, personal, or professional relationships that could be perceived to influence the outcomes of this research. This declaration ensures transparency and integrity in the research process.

**Ethical Clearance:** The study was approved by the Institutional Ethics Committee.

# REFERENCES

- World Health Organization. (n.d.). *Adolescent health*. Retrieved August 5, 2018, from https://www.who.int/topics/adolescent\_health/en/
- Ministry of Health and Family Welfare. (2006). Implementation guide on RCH II adolescent reproductive sexual health strategy. National Rural Health Mission. Retrieved August 21, 2018, from http://www.jknhm.com/ARSH%20Guidelines.pdf
- Dutta, D. C. (2003). *Textbook of synecology* (4th ed.). New Central Book Agency.
- Marlow, D. R., & Redding, B. A. (2002). *Textbook* of pediatric nursing (6th ed.). Harcourt India Private Limited.
- Basheer, S. P. (n.d.). A concise textbook of advanced nursing practice (1st ed.).
- Stanhope, M., & Lancaster, J. (1996). *Community health nursing* (4th ed.). Mosby.

- Potter, P. A., & Perry, A. G. (n.d.). *Basic nursing: Essentials for practice* (6th ed.). Mosby.
- Delaune, S. C. (n.d.). *Fundamentals of nursing: Standards & practice* (3rd ed.).
- Adams Hillard, P. J. (2006). Adolescent menstrual health. *Pediatric Endocrinology Reviews*, *3*(Supple 1), 138-145.
- Cheng, C. Y., Yang, K., & Liou, S. R. (2007). Adolescents' gender differences in knowledge and attitude towards menstruation. *Nursing & Health Sciences*, 9(2), 127-134.
- Fernandes, M., Khurana, I., & Mahapatra, R. (2008). Women unprepared for menstruation. Info Change

India. Retrieved from http://infochangeindia.org/200811207499/Health/N ews/41-of-women-unprepared-for-menstruation

- Rajeesh, S. (n.d.). Reproductive health and the girl child. Retrieved from http://www.unicef.org/india/health\_4047.htm
- 655-662.
- Ben Noun, L. (2003). Biblical attitudes towards personal hygiene during vaginal bleeding. *European Journal of Obstetrics & Gynecology and Reproductive Biology, 107*(1), 107.

**Cite This Article:** Shahida Bano & Zubair Nisar (2024). Efficacy of Reproductive Health Awareness Program and Health Status of Adolescent Girls in Bangalore. *EAS J Nurs Midwifery*, 6(5), 110-117.