



# International Journal of Midwifery and Nursing Practice

E-ISSN: 2663-0435  
P-ISSN: 2663-0427  
[www.nursingpractice.net](http://www.nursingpractice.net)  
IJMNP 2023; 6(1): 06-08  
Received: 04-10-2022  
Accepted: 10-11-2022

**A Priyasahaya Kaviya**  
Professor, CSI Jeyaraj  
Annapackiam College of  
Nursing, The Tamil Nadu  
Dr. MGR Medical University,  
Chennai, Tamil Nadu, India

**Dr. Merlin Jeyapal**  
Vice Principal, CSI Jeyaraj  
Annapackiam College of  
Nursing, The Tamil Nadu Dr.  
MGR Medical University,  
Chennai, Tamil Nadu, India

**Dr. P Shanthi,**  
Ph.D., Department of OG, CSI  
Jeyaraj Annapackiam College  
of Nursing, The Tamil Nadu  
Dr. MGR Medical University,  
Chennai, Tamil Nadu, India

**Corresponding Author:**  
**A Priyasahaya Kaviya**  
Professor, CSI Jeyaraj  
Annapackiam College of  
Nursing, The Tamil Nadu  
Dr. MGR Medical University,  
Chennai, Tamil Nadu, India

## A descriptive study to assess the knowledge and practice regarding usage of biodegradable sanitary napkins among adolescent girls in selected schools, at Madurai

**A Priyasahaya Kaviya, Dr. Merlin Jeyapal and Dr. P Shanthi**

**DOI:** <https://doi.org/10.33545/26630427.2023.v6.i1.a.127>

### Abstract

The study is carried out to assess the level of knowledge and practice on biodegradable sanitary napkins among adolescent girls, to determine the correlation between the knowledge and practice and to find out the association between the knowledge and practice with the selected demographic variables. There is a significant relationship between the level of knowledge and practice. There is a significant association between the knowledge and practice with selected demographic variables. The quantitative and non-experimental descriptive research design was adapted. Purposive sampling technique was used. Results shows that, 22% of them had adequate knowledge, 40% of them had moderate level of knowledge, 38% of them had inadequate knowledge and 16.6% of them had adequate level of practice, 66.6%, of them had moderate level of practice and 16.6% of them had inadequate level of practice. There is a positive correlation between knowledge and practice ( $r^2$  value= 0.80)

**Keywords:** Assess, Knowledge, Practice, Biodegradable Sanitary Napkins and Adolescent girls

### Introduction

Sanitary napkins are technical textile products which are used by the women during menstruation to collect menstrual fluids hygienically. Sanitary napkins are layered structures, as they have to fulfill different end-use properties at the same time. The most frequent problems were leakage, odor and the need of frequent changes. Long term usage of plastic based sanitary napkins will increase the chances of cancer, infection and skin problems. A sanitary napkin, sanitary towel, feminine napkin, sanitary pad, menstrual pad, or pad is an absorbent item worn by women in their underwear when menstruating, bleeding after giving birth, recovering from gynecologic surgery, experiencing a miscarriage or abortion, or in any other situation where it is necessary to absorb a flow of blood from the vagina. A menstrual pad is a type of menstrual hygienic product that is worn externally, tampons and menstrual cups, which are worn inside the vagina. Pads are generally changed by being stripped off the pants and panties, taking out the old pad, sticking the new one on the inside of the panties and pulling them back on. Pads are recommended to be changed every 3-6 hours to avoid certain bacteria that can fester in blood this time also may differ depending on the kind worn, flow, and the time it is worn.

### Significance and need for the study

Sanitary napkins are a major source of plastic pollution, which is greatly overlooked. Disposable napkins are used by about one-tenth of adolescents (Rural- 10%, Urban- 21%) and one quarter of adult women (Rural-10%, Urban-33%) in Bangladesh. Together they roughly consume 37000tons of disposable sanitary product annually. Majority of this vast sanitary waste is either dumped in landfills and river banks, or is incinerated.

Nepal and T.K. Wangmo (2021)., conducted study on to assess Knowledge on Sanitary Practices and Waste Management Among Sherbets College Girls under Royal University of Bhutan has a total of 787 girls from 1582 students. They suffer from menstrual and menstrual cramps every month and they use napkins to stay clean and healthy. College girls were educated on the norms and use of sanitary napkins because the proper management of the waste generated is lacking.

The disposal of used sanitary napkins and management is a challenge to the college management. This small research aims to investigate on how girls in college campus manage the menstrual waste and the amount of sanitary napkins used. The lack of proper dumping areas leads to the improper sanitary waste management and sometimes the waste generated from the sanitary napkins are toxic and unhealthy. It is also important to come up with different solution and management of these wastes for sustainable environment.

**Assumptions**

- Menstrual unhygiene is a common problem among school going girls.
- Urinary and reproductive tract infection is common due to poor personal hygiene.
- The knowledge and practice of adolescent girls regarding biodegradable sanitary napkins will vary according to socio-demographic factors.

**Conceptual frame work**

Health promotion model was proposed by Nola. J. Pender.,1996) was design to be a complementary counterpart to models of health promotion. It is directed at increasing a client’s level of well-being. Describes the multi-dimensional nature of person as they interact with in their environment to pursue health. Health promotion is the science and art of helping and change their lifestyle to move towards a state of optimal health.

**Research Approach and Design**

A quantitative research approach with non-experimental descriptive research design was used in this study to assess the knowledge and practice.

**Setting of the Study**

The main study was conducted at selected Government Girls Higher Secondary School, Madurai. The target population of this study is school going adolescents girls. The accessible population was adolescent girls from 9<sup>th</sup> and 10<sup>th</sup> standard with usage of biodegradable sanitary napkins.

Sample size was 30.

**Criteria for Sample Selection**

The study samples were selected based on the following inclusion and exclusion criteria.

**Inclusion Criteria**

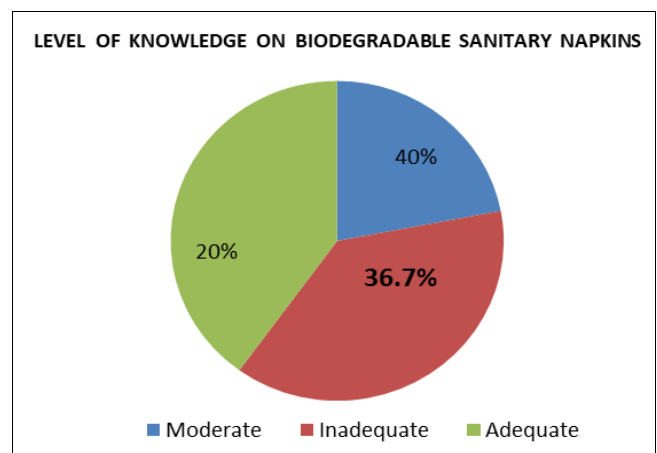
1. Who are using the biodegradable sanitary napkins
2. Girls who are willing to participate.

**Exclusion Criteria**

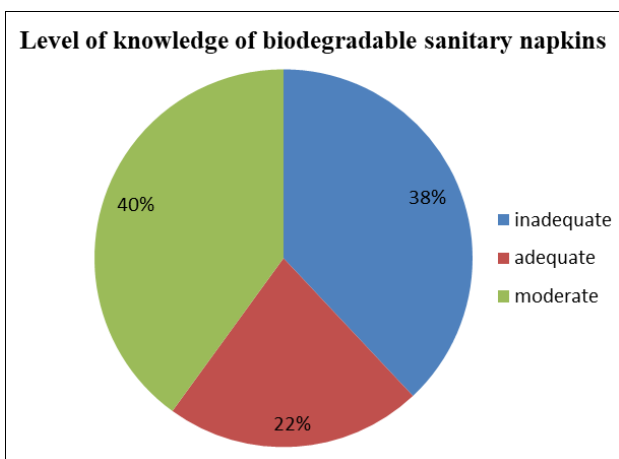
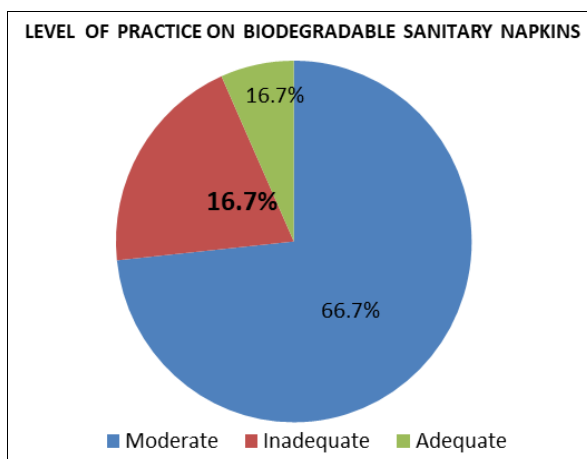
Girls who are not attained puberty from the same class.

**Findings and Discussions**

Demographic variables were based on frequency and percentage, 5(16.6%) samples were between 12-13years of age, 25(83.3) majority of the samples were age between 14-15years, Most of the samples 15 yrs (50%) were belong to 9<sup>th</sup>and10<sup>th</sup> standard. 11(36.6%) samples were attained puberty between 9-12 years, Majority 18(60%) of the samples were attained puberty at the age between 13-14 years.



**Fig 1:** Pie diagram on the level of knowledge in percentage of the adolescents girls.



**Fig 2:** Pie diagram on the level of practice in percentage of the adolescents girls.

**Table 1:** Correlation between knowledge and practice on biodegradable sanitary napkins

| Variables | Mean Score | Standard Deviation | r'-Value |
|-----------|------------|--------------------|----------|
| Knowledge | 31.8       | 0.19               | 0.80     |
| Practice  | 37.2       | 0.21               |          |

Above table shows that, obtained knowledge mean score was 31.8 with a standard deviation of 0.19 the obtained practice mean score was 37.2 with standard deviation of 0.21. The obtained r' value was 0.80, which is positive correlation between knowledge and practice on biodegradable sanitary napkins among adolescent girls.

### Association Between the Level of Knowledge and Practice

The findings revealed that there was a significant association between demographic variables such as age (25.9), class (23.9), types of family (25.9), education of mother (30.2), age at puberty (22.36) and drainage system (29.64).

### Conclusions

The obtained mean score on knowledge was 31.8 with standard deviation of 0.19. The obtained mean score on practice was 37.2 with standard deviation of 0.21. The obtained  $r'$  value between knowledge and practice was 0.80, which is positive. There is significant positive correlation relationship between knowledge and practice, when knowledge increases resulting to increase practice on usage of biodegradable sanitary napkins among adolescent girls.

### Conflict of Interest

Not available

### Financial Support

Not available

### References

1. George. Knowledge, on biodegradable sanitary napkins, 3<sup>rd</sup> edition, Theme Medical and Scientific Publishers private limited; c2020. p. 34-45.
2. Poliet and Beck. Nursing Research and Methods, 7<sup>th</sup> edition, Philadelphia, Lippincott Williams & Wilkins Company; c2004. p. 78-87.
3. <https://doi.org/10.1371/journal.pone.0242587>.
4. [https:// WWW.Researchgate.net](https://WWW.Researchgate.net).
5. <https://worldwidescience.org>.
6. <https://www.who.int>
7. <https://www.google scholar.Com>

#### How to Cite This Article

Kaviya AP, Jeyapal M, Shanthi P. A descriptive study to assess the knowledge and practice regarding usage of biodegradable sanitary napkins among adolescent girls in selected schools, at Madurai. International Journal of Midwifery and Nursing Practice. 2023;6(1):06-08.

#### Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.