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## AN EMPIRICAL STUDY ON CONSUMER AWARENESS TOWARDS BIODEGRADABLE SANITARY NAPKINS AMONG COLLEGE STUDENTS

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### ABSTRACT

Conventional sanitary napkins are widely used; however, they contribute significantly to environmental pollution due to their non-biodegradable nature. In recent years, biodegradable sanitary napkins have emerged as an eco-friendly alternative that helps reduce menstrual waste and promotes sustainable living. The present study titled “An Empirical Study on Consumer Awareness towards Biodegradable Sanitary Napkins among College Students” aims to analyse the level of awareness, perception, and usage of biodegradable sanitary napkins among college students.

**KEYWORDS:** Biodegradable sanitary napkins, Menstrual hygiene management, Consumer awareness, College students, Eco-friendly products, Sustainable living, Environmental sustainability, Purchase behaviour.

### INTRODUCTION

Menstrual hygiene management is a fundamental component of women’s health, personal dignity, and overall quality of life. Menstruation is a natural and recurring biological process that signifies reproductive maturity in adolescent girls and continues throughout a significant portion of a woman’s life.

## STATEMENT OF THE PROBLEM

Menstrual hygiene management is a critical aspect of women's health. Although biodegradable sanitary napkins offer an eco-friendly and health-conscious alternative to conventional sanitary products, their acceptance and usage remain limited. Many college students are unaware of the existence, benefits, and proper usage of biodegradable sanitary napkins.

## OBJECTIVES OF THE STUDY

- To know where consumers get information about biodegradable sanitary napkins.
- To know consumer's awareness about the environment benefits of biodegradable sanitary napkins.

## SCOPE OF THE STUDY

The scope of the present study is limited to examining the level of awareness regarding biodegradable sanitary napkins among college students. The research covers aspects such as knowledge of biodegradable products, perception towards eco-friendly menstrual hygiene options, and factors influencing purchase decisions.

## II. REVIEW OF LITERATURE

**1. Sommer (2010)** found limited menstrual hygiene awareness due to stigma and lack of knowledge. It highlighted that awareness influences product choices, including sustainable options like biodegradable sanitary napkins.

**2. Sumpter and Torondel (2013)** found low awareness of menstrual hygiene and highlighted the environmental impact of disposable products. The study emphasized the need for education and sustainable alternatives.

**3. Garg and Anand (2015)** found that menstrual hygiene awareness depends on education and socio-economic factors. Better awareness leads to higher use of sanitary napkins and supports adoption of biodegradable options.

## III. RESEARCH METHODOLOGY

### DATA COLLECTION

#### PRIMARY DATA:

Primary data is collected directly from college students using a structured questionnaire with multiple-choice and rating questions to assess awareness, perception, and attitude.

**SECONDARY DATA:**

Secondary data was collected from books, journals, reports, and online sources. It supported the study framework and analysis.

**SAMPLING METHOD:**

Convenience sampling was used based on availability and willingness.

**SAMPLE SIZE:**

The total sample size of the study consists of 110 respondents from selected colleges. The sample includes female college students from different courses and academic years.

**IV.TOOLS FOR ANALYSIS**

**1.PERCENTAGE ANALYSIS:**

Percentage analysis is used to present and interpret data in percentage form.

**Formula:** Percentage = (Number of Respondents / Total Respondents) × 100.

**2.RANK ANALYSIS:**

Rank analysis is used to identify important factors influencing purchase decisions.

**Formula:** Weighted Score =  $\Sigma (f \times w)$ .

f = Number of respondents

w = Weight (rank value)

**LIMITATION OF THE STUDY**

- The study is limited to a specific group of college students.
- Sample size may not represent the entire population.

**V.DATA ANALYSIS AND INTERPRETATIONS**

**PERCENTAGE ANALYSIS:**

Problems faced in using biodegradable sanitary napkins.

S.NO	PROBLEM	NO. OF RESPONDENTS	PERCENTAGE%
1	High cost	23	21.1%
2	Lack of availability	32	29.4%
3	Lack of awareness	43	35.8%
4	Comfort issues	6	5.5%
5	Not yet used	6	5.5%
<b>TOTAL</b>		<b>110</b>	<b>100%</b>

**INTERPRETATION**

The table indicates that lack of awareness (35.8%) is the primary issue faced by respondents, followed by lack of availability (29.4%) and high cost (21.1%), while only a small proportion reported comfort issues and non-usage (5.5% each).

**RANK ANALYSIS:**

**Rank the factors influencing purchase decision**

FACTORS	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT	TOTAL	RANK
Price	53	22	48	36	25	184	IV
Quality	17	86	81	112	90	386	II
Availability	11	60	120	100	165	456	I
Brand image	5	12	30	92	20	159	V
Eco-friendliness	5	6	18	32	125	186	III

**INTERPRETATION**

The table indicates that availability is the most important factor influencing purchase decisions, ranked first. It is followed by quality, eco-friendliness, and price. Brand image has the least influence and is ranked last. Overall, availability plays the key role in decision-making.

**VI.SUGGESTION**

Educational institutions should create awareness about biodegradable sanitary napkins and promote menstrual hygiene education. Companies can use social media and effective marketing strategies to increase awareness of eco-friendly products. Manufacturers should ensure wider availability and reduce the cost to make these products affordable. Government and institutions should support the adoption of biodegradable sanitary napkins through policies, awareness campaigns, and proper disposal facilities.

**VII.CONCLUSION**

The study concludes that although college students have basic awareness of biodegradable sanitary napkins, their usage is limited due to cost and availability. However, the positive attitude of students shows potential for future adoption. Increasing awareness and improving affordability can encourage wider use, thereby supporting better menstrual hygiene and environmental sustainability.

## VIII.REFERENCE

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