



ORIGINAL RESEARCH PAPER

Health Science (Nursing)

A STUDY TO ASSESS THE ATTITUDE AND PRACTICES REGARDING PLASTIC USE AMONG ADULTS IN SELECTED RURAL AREA OF GOINDWAL SAHIB, DISTRICT TARN TARAN, PUNJAB.

KEY WORDS: Attitude, Practice, Plastic Use, Adult

Ms. Supreet Kaur*

Lecturer Obstetrical and Gynecological Nursing*Corresponding Author

Dr. Prabhjot Kaur

Nursing Tutor Medical-Surgical Nursing

Mr. Kulwinder Singh

Demonstrator Medical Surgical Nursing

Ms. Gurwinder Kaur

Demonstrator Medical Surgical Nursing

ABSTRACT

Introduction: Plastics have become deeply embedded in modern life, and India is no exception to this reality. This fleeting utility has long-term consequences, contributing significantly to the pollution of our land, air, and water resources and also linked to serious health risks. **Aim:** The aim of the study is to assess the level of attitude and practices related to plastic use among adults. The study also seeks to find out the correlation between the attitude regarding plastic use and their related practices. **Material and Methods:** A descriptive non-experimental research design, a non-probability convenience sampling technique was utilized to select a sample of 100 adults, facilitating an assessment of the attitude and practice levels. The self-structured attitude scale and practice scale were employed. **Results:** The findings reveal that most of the demographic variables, including age, gender, education, occupation, income, family type, marital status and religion, showed no statistically significant association with practice levels (as $p > 0.05$); however, a significant association was found between the source of information and the level of practice regarding plastic use, with a chi-square value of $\chi^2 = 26.598$, degrees of freedom (df) = 16, and a p-value of 0.046, indicating statistical significance at the 0.05 level. **Conclusion:** The findings of the study highlight a predominantly positive attitude among adults towards reducing plastic use, with a considerable portion also demonstrating good to excellent practices. However, the gap between attitude and actual practice indicates the need for more targeted awareness programs and practical interventions. The statistically significant association between practice and source of income, underscores the importance of socio-economic context in shaping environmental behaviour. Furthermore, the weak positive correlation between attitude and practice suggests that while awareness exists, consistent behavioral change still requires.

OBJECTIVES:

1. To assess the attitude regarding plastic use among adults.
2. To find out the practices regarding plastic use among adults.
3. To examine the correlation between attitude toward plastic use and practices of plastic use.
4. To find out the association of attitude with selected socio demographic variables of adults.
5. To find out the association of practices with selected socio demographic variables of adults.

REVIEW OF LITERATURE

Section 1: Literature related to the attitude towards plastic use:-

Tanima Ferdous, Tapash Das et al. conducted a study about the attitude of grade eight students towards the use of plastic in Gwarko, Balkumari, Lalitpur district, (Nepal). Around 70 % of students understand the negative impact of plastic. The female students show a more positive attitude than the male students. The conclusion was made that the grade eight students have adequate knowledge about how to protect land from plastic products. The ratio of knowledge to attitude and behaviour was fairly good.¹

Arseto Yekti Bagasto, Anita Dwi Anggrainy, Mega Sally Maharani Winguna Hidayat Liang et al. Conducted a study regarding assessment of attitude and participation level among the households and local merchants towards single-use plastic waste management. The percentage of plastic bags in Balikpapan was slightly lower than that in Nang(south china).²

Section 2: Literature related to practice of plastic use :-

Joshua O'Brien and Gladman Thondhlana conducted a study to assess the perceptions, practices and potential intervention

strategies related to plastic bag use in South Africa. Finding of this study was that some people use plastic bags for shopping due to their convenience, easy availability, and affordability.³

Legesse Adane and Diriba Muleta conducted a survey in Jimma City, south-western Ethiopia, focusing on the usage of plastic bags, their disposal, and the adverse impacts on the environment. The survey results indicated that regardless of sex, educational level, age group, and occupation, the majority of city residents widely use plastic bags in their daily activities. Some of the main reasons attributed to the widespread usage were low price (159, 69.13 per cent), easy availability (152, 66.08 per cent) and light weight (95, 41.30 per cent).⁴

Part-A

Table 1: Findings related to Frequency and Percentage Distribution of Socio-demographic Profile of Adults Regarding Plastic Use

N=100

S. No.	Variables	f (%)
1.	Age (in years)	
	>40	32 (32%)
2.	Gender	
	Female	65 (65%)
3.	Occupation	
	Housemaker	37 (37%)
4.	Education	
	10th pass	37 (37%)
5.	Monthly Income (in rupees)	
	10,001-20,000	36 (36%)
6.	Family Type	
	Joint family	58 (58%)
7.	Marital status	
	Married	66 (66%)

8.	Religion	
	Sikh	76 (76%)
9.	Source of Information	
	Personal experience	39 (39%)

Table 3 :-

The study sample composed of adults mostly belonging to age group >40 years, female, housemaker, 10th pass, earning between 10,001-20,000, joint family, married, Sikh, and acquire knowledge from personal experience.

Part-B

Table 2: Findings related to Frequency and Percentage Distribution of Adults According to Their Level of Attitude Regarding Plastic Use
N=100

S. No.	Level of Attitude	Scores	f (%)
1.	Very Positive Attitude	61-75	74 (74%)
2.	Positive Attitude	46-60	25 (25%)
4.	Low Positive Attitude	16-30	01 (1%)

Table 2:-

It can be concluded that most adults had a favorable attitude towards reducing plastic use, while fewer adults exhibited neutral or unfavorable attitudes.

Table 3: Findings related to Frequency and Percentage Distribution of Adults According to Their Level of Practices Regarding Plastic Use in Selected Rural Area
N=100

S. No.	Level of Practice	Scores	f (%)
1.	Excellent Practice	53-65	22 (22%)
2.	Good Practice	40-52	51 (51%)
3.	Moderate Practice	27-39	27 (27%)

Table 3:-It can be concluded that most adults demonstrated good to excellent practices related to reducing plastic use.

Part-C

Table 4: Finding Related to Correlation Between Attitude and Practices Regarding Plastic Use Among Adult in Selected Rural Areas

Variables Compared	Correlation Coefficient (r)	Coefficient determination (R ² value) of	Inference
Attitude scores and Practice scores of adults regarding plastic use	0.391	0.153	15.3% of the variation in practice is determined by attitude regarding plastic use

Table 4 show a weak positive correlation between attitude and practices. Only 15.3% variation explained by attitude.

Part-D

Table 5: Finding Related to Mean, Median and Standard Deviation of Attitude and Practice Scores Regarding Plastic Use Among Adults
N=100

Score Type	Mean	Median	Standard Deviation
For attitude scores	63.8	65.8	7.672
For practice scores	45.35	45.86	9.076

Table 5 :- The consistent responses have less variability, suggesting a relatively symmetrical distribution.

Table 6: Mean difference, Standard Error of Difference scores, t value, p value and Interpretation of Attitude and Practice Scores Regarding Plastic Use
N=100

Variable s	Mean Differenc e	Standard Error	t valu e	df	P value	Interpr etation
Attitude Scores Vs Practice Scores	19.29	0.936	20.6	99	<0.001	Significa nt

Table 6 presents the comparison between the attitude and practice scores of adults using the paired t-test. The table shows that t-value (20.6) was significantly higher than the table value at 99 degrees of freedom, with a p-value less than 0.001. This indicates a highly significant difference between the two scores, demonstrating that the attitude of adults toward reducing plastic use was more favorable than their actual practices.

KEY STATISTICAL FINDINGS :-

1. Significant difference between attitude and practice (p<0.001)
2. Practice significantly associated with income.
3. No significant association with other variables.

DISCUSSION

Objective 1: To assess the attitude towards plastic use among adults

The findings revealed that about 74 percent of adults were having a very positive attitude, 25 percent were having a positive attitude and 1 percent had low concern regarding plastic use.

Objective 2: To assess the practices related to plastic use.

The present study revealed that among 100 study samples, 22 percent had excellent practice, 51 percent had good practice, 27 percent had poor practices and 1 percent had a low concern.

Objective 3: To determine the relationship between the attitude towards plastic use and the practices of plastic use.

In the present study there was significant correlation (r=0.387) between attitude and practice scores, indicating that as attitude improves, practice tends to improve as well, though the relationship is not strong. The study found a significant correlation (r=0.487) between the attitude and practices.

Objective 4: To find out the association of the attitude of adults towards plastic use and selected socio demographic variables.

The findings revealed that there was no statistically significant association between the attitude scores and selected socio-demographic variables. This indicates that the attitude towards plastic use are relatively consistent across various demographic groups.

Objective 5: To find out association between the practices of adults regarding plastic use and selected socio-demographic variables.

The present study shows a significant association between the source of information (personal experience) and the level of practices as p<0.05, however other variables such as gender, age, income, religion, marital status, occupation, educational level did not show a significant association with the level of practices. This suggests that the source through which the individual received information about plastic use may influence their practical behaviour about plastic use.

REFERENCES

1. Ferdous T, Das T. A Study about the Attitude of Grade Eight Students for the Use of Plastic in Gwarko, Balkumari, Lalitpur District. 2014. Available from: <https://www.sciencedirect.com/science/article/pii/S1877042814008532>
2. Bagastyo AY, Anggrainy AD, Maharani Wiguna Hidayat Liang MS. Assessment of attitude and participation level among the households and local merchants toward singleuse plastic waste management: a case study in Balikpapan Municipality, Indonesia. Case Studies in Chemical and Environmental Engineering. 2023 Jun;7:100361. Available from: <https://www.sciencedirect.com/science/article/pii/S266601642300066X>
3. O'Brien J, Thondhlana G. Plastic bag use in South Africa: Perceptions, practices and potential intervention strategies. Waste Management. 2019 Feb; 84:320–328. Available from: <https://www.sciencedirect.com/science/article/pii/S09506053X18307414>
4. Adane L, Muleta D. Survey on the usage of plastic bags, their disposal and adverse impacts on environment: a case study in Jimma City, Southwestern Ethiopia. Journal of Toxicology and Environmental Health Sciences. 2011 Aug;3(8):234–248. Available from: https://www.academia.edu/download/89589754/article1379595494_Adane_20and_20