



KNOWLEDGE, ATTITUDE, AND PRACTICES REGARDING POLYTHENE BAG USAGE AMONG THE RESIDENTS OF PUNJAB WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET ON ITS ILL EFFECTS

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ABSTRACT

Background: Now-a-days, the management of plastic waste and pollution of polythene bags are more challenging issue. Non-compostable polythene bags can take up to thousand years to decompose. Improper waste disposal and polythene bags may severely endangered public health and the environment. In order to reduce plastic pollution, awareness is most important. As awareness improve the knowledge and change the attitude of people towards polythene bag usage and also reduces their practices of using polythene bags.

Objective: To assess the knowledge, attitude and practices regarding polythene bag usage among the residents of Punjab and to develop and distribute an information booklet on its ill effect.

Methodology: A Quantitative non-experimental, descriptive research approach and design were used to assess the knowledge, attitude, and practices regarding the usage of polythene bags among 150 residents of a selected village of district Sri Muktsar Sahib, Punjab by using self-structured questionnaires using a purposive sampling technique.

Results: The collected data was analyzed through descriptive and inferential statistics which revealed that out of 150 residents, 40.67% have excellent 32% have good, 22% average and 5.33% have below average level of knowledge regarding polythene bag usage. Majority of residents i.e., 74% have favorable attitude means in the favor of not using polythene bags and 26% have neutral attitude and on other hand regarding practices, 4% residents have good, 54.66% have an average and 41.33% have below average practice regarding polythene bag usage. The correlation coefficient value for knowledge and attitude comes out +1, which indicates a positive relationship, and attitude and practice comes out -1 which indicates a negative relationship, which all resulted in unfavorable & very less usage of polythene bags by the public in the present scenario.

Conclusion: The general population has excellent level of knowledge, a favorable attitude, and very average practices regarding polythene bag usage.

Keywords: Knowledge, Attitude, Practices, Polythene bag usage, General public

INTRODUCTION

Plastic is widely used in daily life especially as food and drink containers. Some chemicals from plastic may accumulate in the human body and impair organ function of body.¹In developing economic, about a third of a plastic is used in packaging worldwide, about 50kg of plastic is produced annually per person with production doubling every ten year. Plastic have many usage in the medical field and other medical devices.¹

In India, 80.28% of total plastic consumption is discarded as waste and official statistics say the country generates 25,940 tones of waste daily, according to CPCB. A list 40% of this is uncollected.³ Much of the growth in plastic production is driven by single use or disposable application. Nearly 50% of plastic used are single use products such as bottles, polythene bags, packaging, straws, spoons and forks and are thrown out immediately after use. Around the world, one million plastic drinking bottles are purchased every minute. Every year, we use up to five trillion disposable polythene bags.⁴

The most common plastic found in our environment are bottles, cups, straws, food, drink containers, and single use polythene bags. Pollution is not going anywhere it will still be here when COVID-19 is long gone so we need to reduce our use or find non plastic alternatives like glass or metal straws, reusable bags and refillable bottles.⁵

The usage of polythene bags not only causes environmental hazards as more polythene bags are not biodegradable but also creates hygiene and wastage issues as polythene bags can be seen littered all across our Habitat. The rapid urbanization and economic growth in different countries have led to a drastic increase in the plastic production and consumption around the globe. Owing to the low recycling value of plastic and the lack of Technological support the recovery rate of plastic waste remains very low. In India, 2002, banned the manufacture of polythene bags below 20 μ m in thickness to prevent polythene bags from blocking the municipal drainage system.⁶ Tamil Nadu, Maharashtra, Himachal Pradesh, Karnataka become the first four states in India to implement ban on single use plastic. Bihar govt. also imposed ban on use of polythene bag, its manufacturer, import and distribution. There is almost not any Indian state that has not banned use of polythene bag.⁷

RESEARCH PROBLEM

A descriptive study to assess the knowledge, attitude and practice regarding polythene bag usage among the residents of Punjab with a view to develop an information booklet on its ill effects.

OBJECTIVES

1. To assess the knowledge regarding polythene bag usage among residents of Punjab.
2. To assess the attitude regarding polythene bag usage among residents of Punjab.
3. To assess the practice regarding polythene bag usage among residents of Punjab.
4. To assess the relationship of knowledge, attitude, and practices regarding polythene bag usage among residents of Punjab.
5. To provide an information booklet on the ill effects of polythene bag usage among residents of Punjab

Assumptions

- People may have some knowledge regarding polythene bag usage.
- People may have fewer practices of using of polythene bags.
- People may show a favorable attitude towards polythene bag usage

Delimitations: The study is delimited to:-

- People in the age group 20 to 50 years.
- People of rural areas only.

RESEARCH METHODOLOGY (MATERIAL AND METHODS)

Research Approach and Design: - Quantitative non experimental descriptive approach and design

Variables Of Study: Knowledge, attitude, and practices regarding the usage of polythene

Research Setting: -This study was conducted in the Lambi area of the district Muktsar sahib.

Sample, Size, And Sample Techniques: A sample of 150 people were selected from the residential area of Lambi by using a nonprobability purposive sampling technique.

Inclusion Criteria

- Those Present at the time of data collection.
- Who was willing to participate in the research study

Exclusion Criteria

- Below the age group of 18 years and above 50 years of age.

Development and Description of Tool: After reviewing lots of literature a specific tool was developed for the study by consulting with experts from different fields. It has been divided into four sections:

Section-A: Description of Socio-Demographic Variables

Section-B: Self-structured questionnaire is used for assessing knowledge regarding polythene bag usage, contains 12 M.C.Q.s having four options.

Section-C: Self Structured afive-point rating scale is developed to assess the attitude regarding polythene bag usage consisting of 12 questions

Section D: - A self-structured checklist is developed in order to assess the practices regarding polythene bag usage. It consists of 10 items.

Validity of The Tool: The content validity of the tool was established by submitting the tool to the research guide, Co guide, and research as well as the ethical committee (IEC).

Reliability of tool: It was checked by using appropriate statistical formulas after conducting a pilot study. The reliability of different tools was Knowledge 0.8 Attitude 0.7 Practices 0.72, which all were highly reliable.

Data collection for our study is performed on 31/03/2021 in the selected area of village Lambi on 150 samples. Before collecting data, information regarding the study and its purpose was given to the Sarpanch and a written permission was taken from them. For enhancement of their knowledge regarding polythene bag usage an information booklet was also provided to them. After reviewing literature and consulting with experts the tool is developed. Analysis was done by using descriptive and inferential statistics such as mean, percentage, standard deviation, correlation coefficient and ANOVA test and Z test. Pie charts and bar diagrams were used to depict the findings of the study.

RESULTS

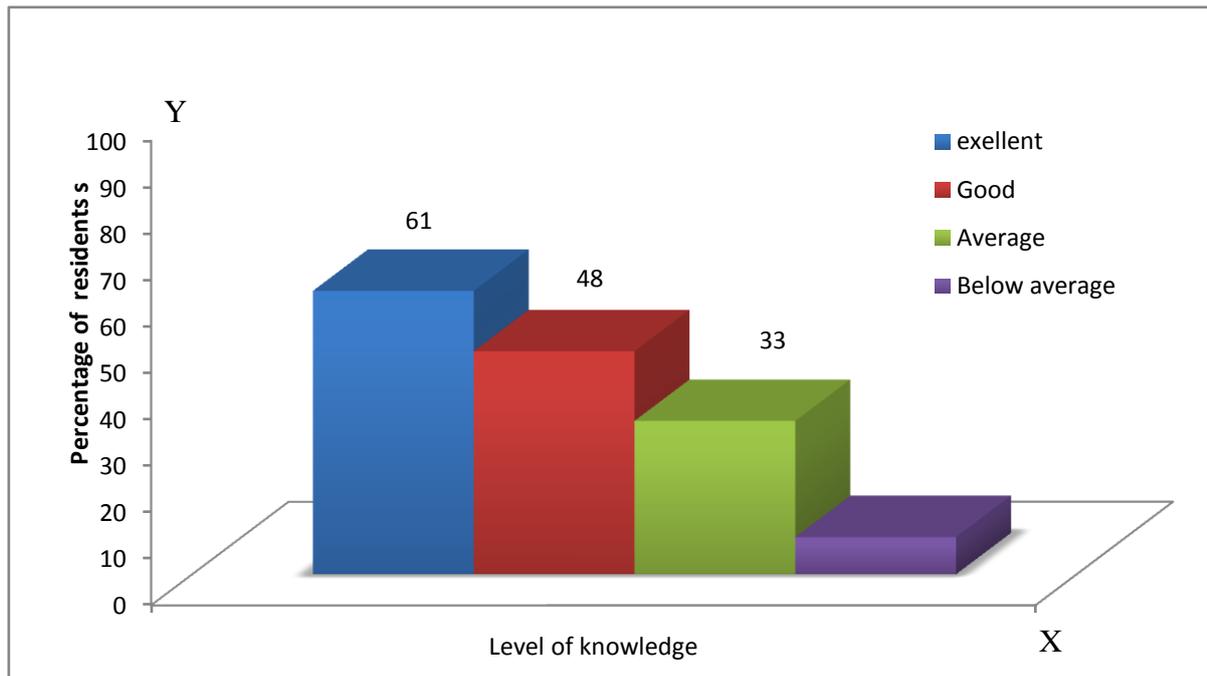


Figure 1: Percentage distribution of residents of Punjab depending upon their level of Knowledge regarding polythene bag usage.

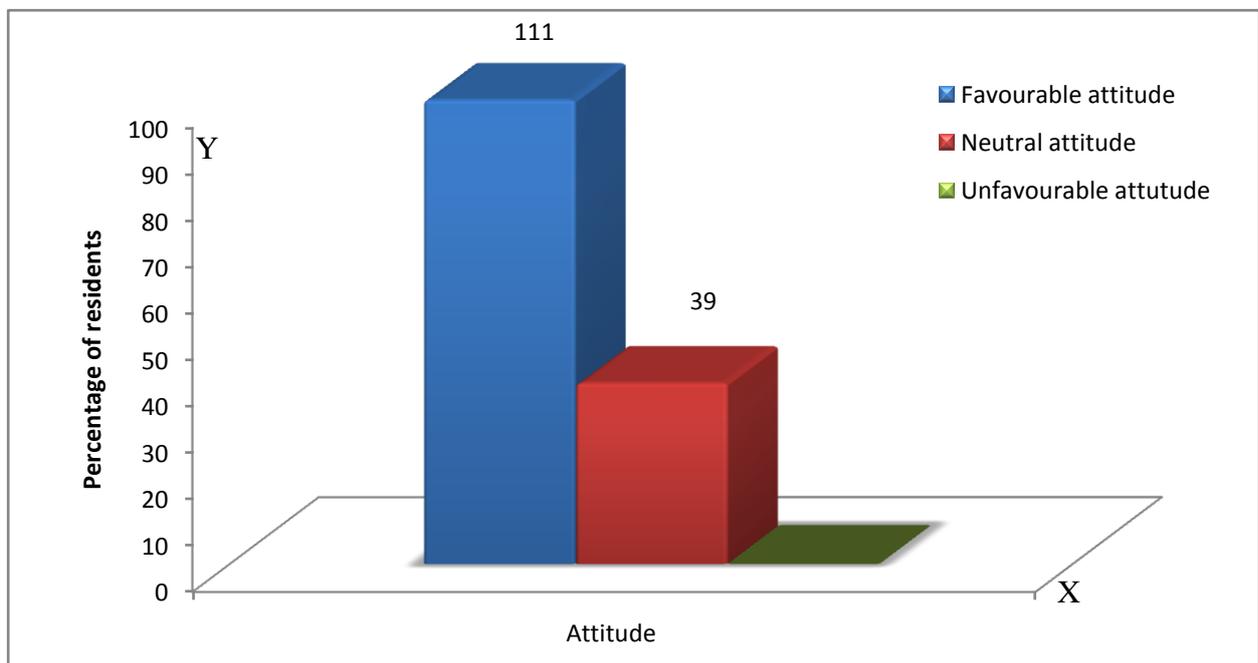


Figure 2: Percentage distribution of residents of Punjab depending upon their level of attitude regarding polythene bag usage.

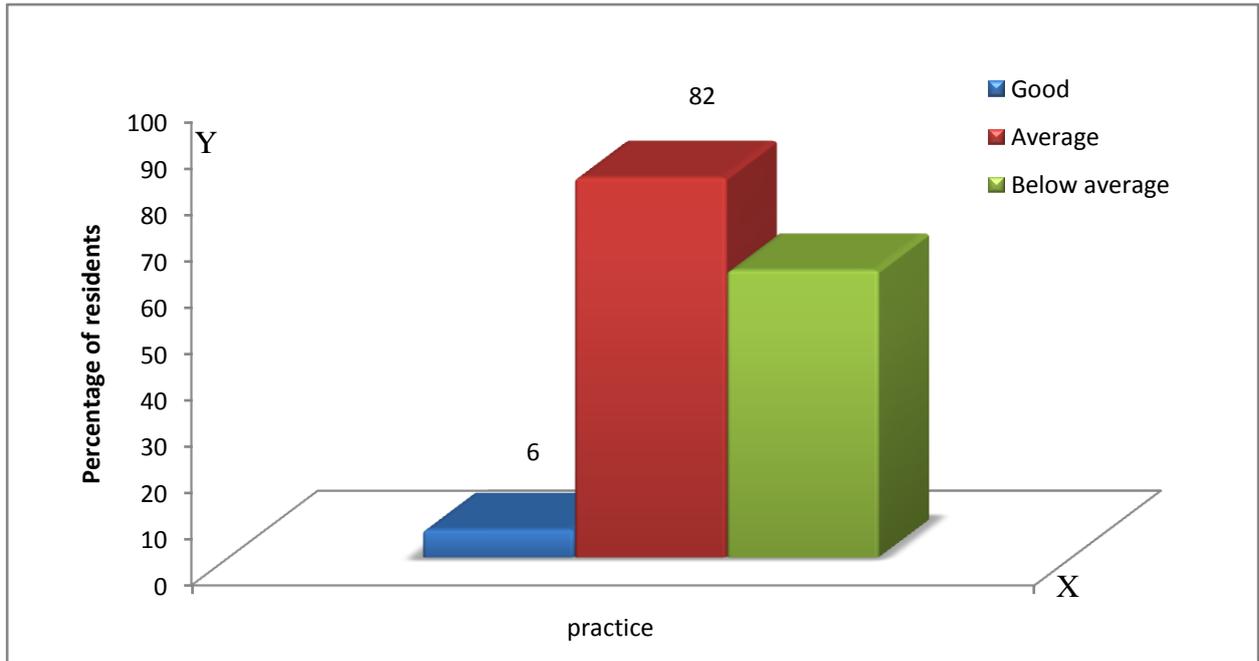


Figure 3. Percentage distribution of residents depending upon their level of Practice regarding polythene bag usage.

Table no.1- Relationship between knowledge and Attitude and practices regarding polythene bag usage among residents of Punjab

TABLE 1(a): Relationship between level of knowledge and attitude towards polythene bag usage among residents of Punjab.

Aspects	Mean	S.D.	r
Level of knowledge	8.24	2.24	+1
Level of Attitude	47.84	11.84	

The above table reveals that the correlation value is +1 which shows that there is positive relationship with level of knowledge and attitude of residents of Punjab regarding polythene bag usage . It indicates that with the increase in knowledge the attitude become favorable.

TABLE 1(b): Relationship between level of knowledge and Practice towards polythene bag usage among residents of Punjab.

Aspects	Mean	S.D.	r
Level of knowledge	8.24	2.24	-1
Level of Practice	3.97	1.03	

The above table reveals that the correlation value is -1 which shows that there is negative relationship between level of knowledge and practice of residents of Punjab regarding polythene bag usage .

TABLE 1(c): Relationship between level of Attitude and Practice towards polythene bag usage among general population.

Aspects	Mean	S.D.	r
Level of Attitude	47.84	11.84	-1
Level of Practice	3.97	1.03	

The above table reveals that the correlation value is -1 which shows that there is negative relationship between level of Attitude and practice of residents of Punjab regarding polythene bag usage.

DISCUSSION

The present study reveals that that out of 150 residents, 61 (40.67 %) have excellent level of knowledge, 48 (32%) have good level of knowledge, 33 (22%) have average level of knowledge and 8(5.33%) have below average level of knowledge regarding polythene bag usage. Similar study was conducted by Henna malik et al, to assess the Knowledge and attitude of adolescents regarding mismanagement of plastic waste. The study findings revealed that 61.6% were having inadequate knowledge, 38.3% were having moderately adequate knowledge and 0 % has adequate knowledge.

To assess the attitude regarding polythene bag usage among residents of Punjab results indicates that 74% of general population have favorable attitude that is in the favor of not using polythene bags and 26% have neutral attitude and nobody is having unfavorable attitude that is in the favor of using polythene bags. Similar study was conducted by Henna malik et al. The study findings revealed that 0 % were having unfavorable attitude, 25% were having neutral attitude and 75% having favorable attitude.

The analysis of practices regarding polythene bag usage among residents of Punjab, data reveals that 4% residents have good practice regarding polythene bag usage, 54.66% have average practice and 41.33% have below average practice regarding polythene bag usage.

Similar study was conducted by Shrinavasam N., Swarnapriya V. et al (2019) to assess the practice regarding plastic usage among the professional course students of Annamalai University, Tamil Nadu, Results shows that 33.7% students have moderate level of practice and 22.7% have good practice. However one third of student subject have reported poor level of practice.

CONCLUSION

Today, The management of plastic waste and pollution of polythene bags are more challenging issue .In order to reduce plastic pollution, awareness is most important. As awareness improve the knowledge and change attitude of people toward polythene bags usage. Thus the above research identify that general population have excellent level of knowledge, favorable attitude and average practices regarding the polythene bag usage. As well as it created an insight in the researchers mind that the knowledge, practices and attitude towards polythene bag usage among residents will contribute to the understanding on all aspects of polythene bag usage , which will ultimately leads to the favorable changes in them. So information booklet regarding polythene bag usage is also provided to participants that help to fill the gap of knowledge among them.

Nursing implications

1. **Nursing education**-Nursing students must understand about the polythene bags and their ill effects and educate general public.
2. **Nursing research**- Researches provides credibility to nurses that influence decision making regarding policy and protocol formulation about polythene bags, its usage and disposal.

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