# A Study To Evaluate The Effectiveness Of Planned Teaching Program On Knowledge Regarding Health Hazards Of Plastic Use Among Nursing Staff Staying In Selected Nursing Hostels, Belagavi

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## Abstract

**Objective:** To assess the effectiveness of the planned teaching programme on knowledge regarding health hazards of plastic use among staff nurses in a selected hostels at Belagavi.

**Methods:** pre experimental one group pre-test post- test design was carried over a period of 3 months on 50 staff nurses in a selected hostels at Belagavi Karnataka. All 50 staff nurses enrolled in study.

**Results:** In our study, Analysis of the data reveals that the pretest 12(24%) had poor knowledge where as in post test only 5(10%) samples had poor Knowledge. In the pre test 31(62%) Average knowledge and in the post test 62% had average knowledge. In the pre test 7(14%) had good knowledge and in the post test 15(30%) had good knowledge, calculated paired 't' value 44 is greater than tabulated 't' value 0.002.

This indicates that the gain in knowledge score is statistically significant at <0.05 level. Therefore PTP on health hazards of plastic among staff nurses is effective to improve the knowledge.

**Conclusion:** planned teaching programme improves the knowledge regarding health hazards of plastic use among staff nurses.

Key words: Health hazards, Evaluate, knowledge, Plastic use, Nursing staff.

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## I. Introduction

Plastics are used on a daily basis throughout the world. The word plastic is a common term that is used for many materials of a synthetic or semi-synthetic nature. The term was derived from the Greek Plastikos, which means "fit for molding." "Plastics" derived their name from their properties to be molded, cast, extruded or processed into a variety of forms, including solid objects, films and filaments. These properties arise from their molecular structure. Plastics are polymers, very long chain molecules that consist of subunits (monomers) linked together by chemical bonds. The monomers of petrochemical plastics are inorganic materials (such as styrene) and are not biodegradable.

Plastics are a wide variety of combinations of properties when viewed as a whole. They are used for shellac, cellulose, rubber, and asphalt. We also synthetically manufacture items such as clothing, packaging, automobiles, electronics, aircrafts, medical supplies, and recreational items. The list could go on and on and it is obvious that much of what we have today would not be possible without plastics.

One way plastics changed the world was in cost. It was so much cheaper to manufacture than other materials and the various ways it could be used was staggering. Plastics are synthetic substances produced by chemical reactions. Almost all plastics are made from petroleum, except a few experimental resins derived from corn and other organic substances. Plastic has many properties which has made it a raw material of choice for manufactures of plastic Bags and packing materials. Cost of production, light weight, strength, easy process of manufacture, and availability are few of the properties. There is nothing wrong with plastic as a material. Man has simply not put the plastic to the right use / or using it without taking proper care of other related norms.

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## II. Materials And Methods

This was pre experimental one group pre test-post test design was carried over a period of 3 months. The study was approved by the institutional research committee..

The tool used forthe data collection consisted of: The self administered structured questionnaire to assess the knowledge regarding health hazards of plastic use among staff nurses.

Tool was divided into two parts section I & section II

Section I - Demographic data

Section II – Self administered structured questionnaire

## RESEARCH DESIGN:

A pre experimental one group pre test-post test design was adopted for the study.

## MAJOR FINDINGS OF THE STUDYWERE:

Descriptive and inferential statistics had been used for data analysis. The data was presented in the form of tables and diagrams. Data was analyzed by computing mean, standard deviation, t value and chi - square.

## ${\bf SIGNIFICANT\ FINDINGS\ OF\ THE\ STUDYDEMOGRAPHIC\ DATAOF THE\ RESPONDENT}$

#### **Marital status:**

Majority 48(96%) samples status are married and 2(4%) samples status are unmarried.

#### Age group:

Majority 35 (70%) of were in the age group 20-25yrs,15 (30%) were in the age group.

## **Religion:**

Majority reveals 98% (48) Hindus, 4%, Christian, 0% Muslim religion.

#### Income:

Majority (48%) were having Income of Rs.10,000-12,000/month,(34%) having Income of Rs.8,000-10,000/month,(14%) were having income of Rs.12,000-14,000/month and remaining (4%)were having income of rs14,000-16,000/month.

## III. Results:

In our study, Analysis of the data reveals that the pretest 12(24%) had poor knowledge where as in post test only 5(10%) samples had poor Knowledge. In the pre test 31(62%) Average knowledge and in the post test 62% had average knowledge. In the pre test 7(14%) had good knowledge and in the post test 15(30%) had good knowledge, calculated paired 't' value 44 is greater than tabulated 't' value 0.002.

This indicates that the gain in knowledge score is statistically significant at <0.05 level. Therefore PTP on health hazards of plastic among staff nurses is effective to improve the knowledge.

## Frequency and Percentage distribution of pretest and post test knowledge level:

Analysis reveals that in the pretest 12(24%) had poor knowledge where as in post test only

5(10%) samples had poor Knowledge. In the pre test 31(62%) Average knowledge and in the post test 62% had average knowledge. In the pre test 7(14%) had good knowledge and in the post test 15(30%) had Good knowledge.

Knowledge level	Pre-Test	Pre-Test		Post-Test	
_	Frequency	Percentage	Frequency	Percentage	
Good	7	14%	15	30%	
Average	31	62%	30	60%	
Poor	12	24%	05	10%	

## IV. Discussion

The present study is undertaken to assess the effectiveness of the planned teaching programme on knowledge regarding health hazards of plastic use among staff nurses in a selected hostels at Belagavi Demographic variables: • Majority 35 (70%) of were in the age group 20-25yrs,15 (30%) were in the age group. majority all the samples 50(100%) were females. majority 1-2yr, 24(48%) of were in the experience of 0-1yr,15(30%) were in the experience of 2-3yr,12(12%) were in the experience of 3-4yr,3(6%) were in the experience of 4-5yr,2(4%)..Majority reveals 98% (48),Hindus, 4%(2) Christian, 0%Muslim religion. Majority (48%) were having Income of Rs.10,000-12,000/month,(34%) having Income of Rs.8,000-10,000/month, (14%) were having income of Rs.12,000-14,000/month and remaining (4%)were having income of rs14,000-16,000/month. Majority 48(96%) samples status are married and 2(4%) samples status are unmarried. calculated paired 't' value 44 is greater than tabulated 't' value 0.002. Hence H1 is accepted. This indicates that the gain in knowledge score is statistically significant at <0.05 level. Therefore STP on health hazards of plastic among staff nurses is effective to improve the knowledge. Mean difference is 06,Median difference is 3.39, mode is

3.66, Standard deviation 0.16 and range difference equal, the pretest 12(24%) had poor knowledge where as in post test only 5(10%) samples had poor Knowledge. In the pre test 31(62%) Average knowledge and in the post test 62% had average knowledge. In the pre test 7(14%) had good knowledge and in the post test 15(30%) had good knowledge, calculated paired 't' value 44 is greater than tabulated 't' value 0.002. Hence H1 is accepted. This indicates that the gain in knowledge score is statistically significant at <0.05 level. Therefore PTP on health hazards of plastic staff nurses is effective to improve the knowledge.

## Conclusion

The findings of final study revealed that there was a significant difference in pre-test and post-test knowledge scores among nursing staff. Therefore planned teaching programme improves knowledge regarding health hazards of plastic use among staff nurses.

## **References:**

- [1]. URL Http://En.Wikipedia.Org/Wiki/Plastic
- [2]. Elias, Hans - Georg. An Introduction To Plastics.4th Edition. Wiley & Weinheim Publishers; 2003.
- Wiberg S. Consumer Hazards Of Plastics. Environmental Health Perspectives; 2001 [3].
- URL: Http://En.Wikipedia.Org/Wiki/Plastic [4].
- Galvez M. Plastic Exposure in Childhood. American Journal Of Public Health.1970; 797. population-based investigation. Trop Doct [5]. 2007;37(2):98-100.
- [6]. [7]. Dingle P. Pediatric Exposure and Potential Toxicity Of BPA Plasticizers. 2003.
- Agnihothra V. Guidelines For Recycling Of Plastics. Indian Journal On Medicine. 2009; 26[6]: 52-61.
- [8]. Lofquist B. Home Hazards Residential Plastics Pose Threats To Children's Health. Alternatives Journal. 2002; 25-26.
- American Academy Of Pediatrics Technical Report. Pediatric Exposure And Potential Toxicity Of Phthalate Plasticizers. 2003 [9].
- [10]. National Health Survey. Plastics And Its Possible III Health. JNHS. 2004; 92[33]: 318-391

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