

Research to Analyze the Impact of a Video-Assisted Education Program on Hospital Waste Management Knowledge and Practice among Staff Nurses in Selected Hospitals in Hisar, Haryana

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Abstract:- Hospital handling of waste is critical for overall health and well-being throughout life and is a reflection of overall health status. Research and other improvements in hospital waste management assist us in ensuring safe and effective waste disposal. This goal can be achieved with the help of the state committee, healthcare providers, and all individuals. The goal of the study was to increase understanding of hospital waste management through a video instructional program. Methodology- The influence of a video-assisted education program on staff nurses' complete biomedical waste management was evaluated using a quasi-experimental before intervention and after intervention approach. Study's intended population was staff nurses. The data was analyzed with the sample size 100 statistical tool EZR-Software version 2.4, with the research purpose and assumptions serving as the basis. Result the before intervention and after intervention knowledge scores of the staff nurse were 14.593.28 and 22.284.07, respectively. The pre-intervention and post-intervention practice scores of the staff nurses were. The study concluded that knowing hospital waste management is crucial for hospital staff nurses trying to prevent and control disease transmission.

I. INTRODUCTION

Biomedical trash is any garbage that is generated by the hospital, wards, and other departments, and includes waste from patients, labs, and other departments. If not managed appropriately, biomedical waste can be dangerous to the people/staff and patients receiving treatment in the hospital.¹

The hospital produces around 2 kilograms per bed every day.[2] of healthcare waste or medical waste,, including wastes like waste products containing human (or animal) tissue, blood, or body parts, cytotoxic wastes, and sharps, which when not properly disposed of can have a

dangerous effect on the natural environment as well as human health [3,4], as well as disturbance in the environment and an negative effects on the ecological equilibrium. Profound knowledge regarding the waste management is important to the populations and also among the health care worker in order to prevent the spread of more hazardous disease to the environment.^[5 6]

➤ Objectives

- To assess staff nurses' expertise of Bio Medical waste management..
- To determine impact of video assisted teaching programme on hospital waste managing among staff nurses.
- To investigate relationship between demographic knowledge and practice.

➤ Hypothesis

- **H₁**: There will be a significant difference between pre and post knowledge score.
- **H₂**: There will be a substantial relationship between knowledge score and the demographic variables chosen.

II. METHODOLOGY

A quasi-experimental two-group pre-intervention and post-intervention design was used to examine the impact of a video-assisted education program on staff nursing knowledge. Staff nurses from Sarvodaya Hospital in Hisar, Haryana, were included in the study's population. The research was carried out in June and July of 2016. The research sample size was 100 (using the independent t-test calculation) utilizing the judgmental sampling approach.

➤ Consideration for Ethical Issues:

- Confidentiality and anonymity of the subject will be obtained.

- Permission will be obtained from the staff nurses who are involved in the study before collecting the data
- Ethical clearance will be obtained from the concerned authority

- *The following tools was adapted in the present study*
- Tool 1. The demographic information
- Tool 2: Self-structured information assessment and checklist to assess staff nurses' practice of Bio Medical Waste Management.

➤ *Mathematical Analysis*
 Inference and descriptive analysis were used the information is according with the objectives and hypothesis, using the statistical tool EZR-version2.4.

III. RESULT

More than half of the staff nurses (55%) in the age group of 30-40 years, most the staff nurses (66%) were Female. Most of the staff nurses (60%) were G.N.M. Most of the staff nurses (73%) were married Majority of the staff nurses (41%) were Sikh. Most of the staff nurses (57%) were from Urban Area. Majority of the staff nurse (60%) were from Join family most of the staff nurses (50%) were having knowledge from T.V or Internet. Majority of the staff nurses (47%) were having more than 7 years of work experience. Majority of the staff nurses (47%).

Table 1: Comparison of pre -intervention and post-intervention knowledge (K) scores regarding Hospital waste management (100)

Components	score Max.	Range	Mean	SD	Tcal	df
Pretest scores (K)	30	22-8 = 14	14.59	3.28	14.71*	99
Post test scores (K)	30	28-12 =16	22.28	4.07		

Table-1 revealed that the mean pre-intervention knowledge score was (14.59), whereas the mean post-intervention knowledge score was (22.28). The estimated't' Value is greater than the tabulated 't' Value. As a result, there was a * important difference in knowledge level between pre-intervention and post-intervention among staff nurses about hospital waste management. As a result, the video-assisted teaching approach was discovered to be successful.

Table-2: Comparison of pre-intervention and post-intervention practice (P) scores regarding Hospital waste management (100)

Components	Score Max.	Range	Mean	SD	Tcal	df
Pre-Test scores (P)	20	14-7 = 7	9.93	1.9	13.02*	99
Post test scores (P)	20	18-7 = 11	14.21	2.68		

Table 2 – revealed that the mean pre-intervention practice score was (9.93), while the mean post-intervention practice score was (14.21). The estimated 't' Value is greater than the tabulated 't' Value. As a result, there was a * important difference in practice level between pre-intervention and post-intervention score among staff nurses regarding hospital waste management. As a result, the video-assisted teaching approach was discovered to be successful.

IV. DISCUSSION

This study found that the video-assisted teaching program was helpful in increasing the post-test knowledge score of staff nurses to 22.28, which was statistically significant. Another study, conducted by Ms. Mimi Lalmuanpuii and Mr. Tukaram B. Zagade, provided support for the study, revealing that the intervention is effective of biomedical waste management amongst staffs and was statistically significant.

V. CONCLUSION

It is critical for staff nurses to adapt to new developments in biological waste management and stay up to speed on the most recent guidelines in order to prevent disease transmission to patients and the environment. As a

result, healthcare staff must be better informed about the safety procedures that must be followed at the hospital.

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