

# A Study to Assess the Effectiveness of Video Assisted Teaching Programme on Knowledge about Safety Measures Regarding Handling of Chemotherapy Drugs among Undergraduate Nursing Student from Selected Colleges of Chandrapur

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## Abstract:-

### ➤ *Introduction*

Chemotherapy drugs are hazardous to health care fraternity who come into contact of them. Handling of this drugs is high risk process for human as well as for environmental health and therefore it's required special precautions to follow. It is a main responsibility of nurses to deliver chemotherapy and hence they should well aware and knowledgeable about preparation and administration of chemotherapy while providing attention on safety measures.

### ➤ *Material and Method:*

40 undergraduate nursing students were selected by using simple random technique. One group pre test post test designed used and data get collected by using questionnaires on handling of chemotherapy drugs. Reliability , practicability and feasibility of tool assessed by conducting pilot study. Effectiveness of video assisted teaching programme was assessed by using t- test and association of post test knowledge score with selected demographic variables were get found by using one way ANOVA.

### ➤ *Result:*

Calculated t-value was found to be 10.25 for overall knowledge regarding handling of chemotherapy drugs, which is greater than table 't' value at 0.05 level of significance. Post test knowledge score has shown significant association with selected demographic variable.

### ➤ *Conclusion :*

The study was concluded that video assisted teaching programme on knowledge about safety measures regarding handling of chemotherapy drugs among undergraduate nursing students from selected colleges of Chandrapur was effective method to improve knowledge regarding safety measures of chemotherapy drugs.

## I. INTRODUCTION

According to recent report of world health organization, cancer is one of the most prevalent diseases all around the world and also the incidence may get increase in future decades. It is expected to be the second most common cause of mortality throughout the entire world.<sup>1</sup>

Chemotherapy drugs are considered as a lifesaving drugs for cancer patient because of their property to target and inhibit growth of rapidly dividing cancer cells.<sup>2</sup> On the other hand, these drugs are toxic and hazardous specially for health care workers. Many health care workers directly came into contact of chemotherapy drugs without using any protective measures.<sup>3</sup>

There are variety of form to occur Chemotherapy exposure and contamination of work place. Direct dermal contact with drugs, drug inhalation, indirect contact via contaminated surfaces or body fluids are some of the routes to expose chemotherapeutic drugs.<sup>4</sup>

Handling of chemotherapy drugs is a very high risk process and procedure for not only human health but also environmental health. Hence, it is crucial to use special precautions while handling chemotherapy drugs.<sup>5</sup>

Preparation of chemotherapy and administration of chemotherapeutic drugs is a vital role and responsibility of oncology nurse and even small negligence or mistake may turn up into adverse health hazards to staff , patients and environment.<sup>6</sup>

## II. OBJECTIVES

- To compare pre and post test knowledge score about safety measures regarding handling of chemotherapy drugs among undergraduate nursing students from selected colleges of Chandrapur.

- To find out association between pre test knowledge score about safety measures regarding handling of chemotherapy drugs among undergraduate nursing students with selected demographic variables.

- Exclusion criteria : ANM , GNM, and post graduate nursing students and the samples who are not willing to participate in study

**III. MATERIAL AND METHOD**

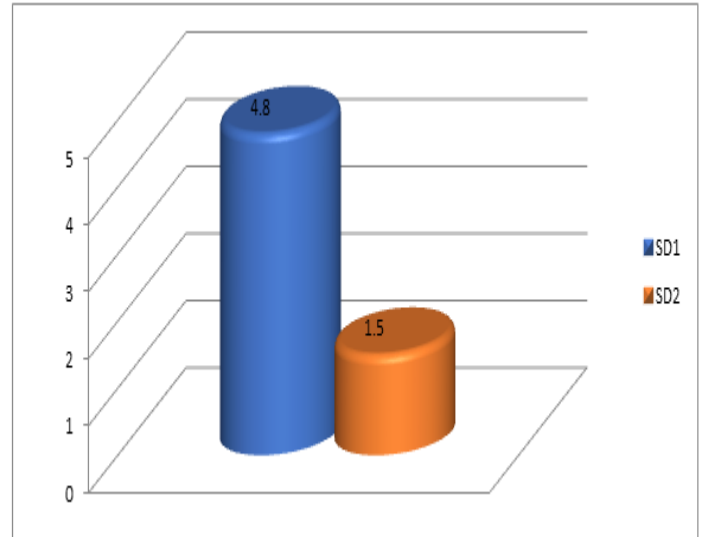
40 undergraduate nursing students were get involved into study by using probability simple random technique. One group pre test post test design was adopted . The study was conducted in 2023 after obtaining approval from ethical committee and concern authority of institution. Informed consent had been taken form 40 study samples. Structured questionnaires of 20 items used to collect pre test data from samples about safety measures regarding handling of chemotherapy drugs. Followed by video assisted teaching programme and post test conducted on same questionnaire on same sample after 7 days. Students ‘t’ test used to compare difference between pre-test and post test knowledge score regarding safety measures while handling of chemotherapy drugs. One way analysis of variance (ANOVA) used to figure out association of post test knowledge with selected demographic variables.

➤ *Sample Selection Criteria*

- Inclusion criteria : Undergraduate nursing student who are available during data collection

**IV. RESULT**

**Graph no 1: Distribution of sample based on overall knowledge level regarding safety measures regarding handling of chemotherapy drugs**



**Table 1.: Distribution of Sample based on Overall Knowledge Level Regarding Safety Measures Regarding Handling of Chemotherapy drugs N= 40**

Comparison of knowledge	Mean	S.D.	M.D.	SEMD	t value	P value	Significance at 5%
Overall knowledge	Pre test	10.4	4.8	7.9	0.77	10.25	<0.00
	Post test	18.3	1.5				

Table no. 1 and graph no. 1 explain the effect of video assisted teaching programme on overall knowledge of samples about safety measures regarding handling of chemotherapy drugs. The ‘t’ value was found to be 10.25 for overall knowledge, the table ‘t’ value (2.02) is less than calculated ‘t’ value (10.25) at 0.05 level and for degree of freedom 39. It makes clear that there is significant mean difference between pre-test and post test knowledge score regarding safety measures while handling of chemotherapy drugs. Pre test mean score (10.4) is less than post test mean score (18.3). The mean difference had found to be 7.9.

ANOVA used to figure out association between post test knowledge score and selected demographic variables. The calculated ‘F’ value for Pre video assisted teaching programme on knowledge score for, age was 3.48, gender: 0.14, academic year: 7.24 and previous knowledge regarding topic was 3.13. The pre-test knowledge score had no significant association with age, gender and previous knowledge but it had significant association with academic year.

**V. RECOMMENDATION**

- The study can get conducted on healthcare workers in cancer hospitals and clinics.
- Practice can be observed directly.
- The study can get conducted on post graduate nursing students who possessed medical surgical nursing speciality in oncology.

**VI. CONCLUSION**

The study was conducted to assess the effectiveness of video assisted teaching programme on knowledge about safety measures regarding handling of chemotherapy drugs among undergraduate nursing students from selected colleges of Chandrapur.

The study revealed the undergraduate nursing students had somewhat knowledge about safety measures regarding handling of chemotherapy drugs but after video assisted teaching programme on the same topic their knowledge

improved in some extent. They became aware enough about safety measures regarding handling of chemotherapy drugs

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