A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF ONLINE STRUCTURED TEACHING PROGRAM REGARDING KNOWLEDGE OF LEUKEMIA AMONG STUDENT NURSES IN MOHAN DAI OSWAL COLLEGE OF NURSING, LUDHIANA.

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ABSTRACT

Background of the study: Nursing students had some knowledge about online structured teaching program regarding leukemia. Aim: The aim of the study was to assess the effectiveness of online structured teaching program regarding leukemia. Method: Pre-experimental research design was used. Study was conducted on nursing students of Mohan Dai Oswal College of Nursing, Ludhiana, Punjab. 50 subjects were selected for the study. Result – collected data was analyzed by inferential statistics and presented through tables and figures. Present study findings revealed that mean pre-test score of knowledge regarding leukemia was 12.76 with standard deviation 3.25. The post-test mean score of knowledge regarding leukemia was 16.02 with standard deviation 5.43 and t value 3.64. It reveals that students who had studied by online structured teaching program regarding leukemia had an increase knowledge in their post-test mean as compare to pre-test mean.

Conclusion: The study findings implied that the implementation of online structured teaching program has improve the knowledge of student nurses regarding leukemia.
Keywords: Leukemia, Knowledge, Structured Teaching Program

INTRODUCTION
Online learning is education that takes place over the Internet. It is often referred to as “e learning” among other terms. However, online learning is just one type of “distance learning” - the umbrella term for any learning that takes place across distance and not in a traditional classroom.

Distance learning meets the needs of an ever-growing population of students who cannot or prefer not to participate in traditional classroom settings. These learners include those unable to attend traditional classes, who cannot find a particular class at their chosen institution, who live in remote locations, who work full-time and can only study at or after work, and those who simply prefer to learn independently.

E-learning courses provide an excellent method of course delivery unbound by time or location allowing for accessibility to instruction at anytime from anywhere. Learners find the online environment a convenient way to fit education into their busy lives. The ability to access a course from any computer with Internet access, 24 hours a day, seven days a week is a tremendous incentive for many of today’s students.

The online teaching is different from classroom teaching because the online model emphasizes an interactive learning environment, designed to stimulate dialogue between instructor and students and among students themselves.

The virtual learning requires both instructor and students to take active roles. The instructor will often act as a facilitator, organizing activities that engage students directly rather than relying too heavily on lectures and memorization.

NEED OF STUDY
The need of study was to assess the knowledge of students regarding leukemia. In the lockdown due to COVID-19 colleges were closed so the online teaching was the need to continue the classes to build an online structured program regarding leukemia. Online learning offers enhanced discussion element, It permits deep analytical summaries of students’ progress.

As a result, education has changed dramatically, with the distinctive rise of online teaching, where by teaching is undertaken remotely and on digital platforms. After this study we will be able to conclude the benefits of online structured teaching programs among nursing students.
REVIEW LITERATURE

Muntajeeb Ali Baig (2011) from Marathwada College of Education, Aurangabad conduct a critical study to assess the effectiveness of online learning on student's achievement by using random sampling technique on 40 students in equal proportion of boys and girls. Experimental group 20 students and control group 20 students. The researcher conduct pre-test after that teaching is given to experimental group by face to face method and to control group by online method. Then post-test was taken and. The results reveal that there was no significant difference in the level of achievement among boys and girls when taught through online.

Chauhan et.al (2019) conduct a self-designated semi-structured questionnaire for the data collection. The study was conducted on 3rd year students of Adesh medical college, Shahabad, Kurukshetra. In which out of total 150 students, 142 students are participated in study. The students received both methods equivalent. The result shows that high proportion of students agreed that online teaching was more convenient, more time consuming as compared to traditional teaching while a higher more interesting, more satisfying and provides for more understanding.

RESEARCH METHODOLOGY

The methodology of research organized all components of study in a way i.e. most likely to lead a valid answer to the problem that had been proposed. This chapter deals with the description of different steps which were undertaken for collecting and organizing data for investigation.

It includes following:

- 1. Research approach
- 2. Research design
- 3. Research setting
- 4. Population
- 5. Sample and sampling techniques
- 6. Pilot study
- 7. Reliability
- 8. Data collection
- 9. Ethical considerations
- 10. Difficulty faced by investigators
- 11. Plan for data analysis
- 12. Summary

RESEARCH APPROACH

The quantitative approach was adopted for this study. This type of approach was adopted because it was helpful in the fulfilment of research objective of this study and also to assess the effectiveness of online structured teaching program among the nursing students in Mohan Dai Oswal, College of Nursing, Ludhiana, and Punjab.
RESEARCH DESIGN
For fulfilment of objective of present study, pre experimental research design was utilized for collection and analysis of data.

TARGET POPULATION
Nursing students in Mohan Dai Oswal College of Nursing, Ludhiana, and Punjab.

VARIABLES
(a) Independent variable
Online structured teaching program
(b) Dependent variable
Knowledge of nursing students.

RESEARCH SETTING
The present study was conducted in Mohan Dai Oswal College of nursing, Ludhiana, Punjab.

FIGURE 1: RESEARCH DESIGN

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>MARKS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>21 - 30</td>
<td>70 – 100%</td>
</tr>
<tr>
<td>Average</td>
<td>11 - 20</td>
<td>36.6 – 66.6%</td>
</tr>
<tr>
<td>Below average</td>
<td>0 - 10</td>
<td>33.3%</td>
</tr>
</tbody>
</table>
SAMPLE AND SAMPLING TECHNIQUE:--
The sample of study consisted of 50 nursing students in Mohan Dai Oswal College Ludhiana, and Punjab. They were selected by using purposive sampling technique (non-probability) sampling technique.

CRITERIA FOR SAMPLE SELECTION:--

*Inclusion criteria:*  
Only Bsc and GNM nursing students were chosen for study sample.

*Exclusion Criteria:*  
Students who was not willing.

VALIDITY:--
To establish content validity of online structured teaching program, the tool was given to experts from field of community health nursing, department of medical surgical nursing, pediatric nursing, obstetric and gynaecological nursing.

PILOT STUDY:--
Pilot study was conducted from 7 June, 2021 - 14 June, 2021. 6 subjects were taken from nursing college as a sample for pilot study. Pilot study was done to ensure reliability and feasibility of study. Prior permission to conduct the study was taken from Principal of Mohan Dai Oswal College of Nursing, Ludhiana, and Punjab. Data was collected by investigator with the help of Pre-test score. Participants were explained regarding the study and its purposes. The time taken for pilot study was 7 days.

RELIABILITY
Reliability was checked by using split half method and it was found 0.9 i.e., highly reliable.

METHOD OF DATA COLLECTION
The data collection procedure was started from 28 August to 5 September 2021. We took 50 Nursing students of BSc Nursing from Mohan Dai Oswal College of nursing.

The investigator took 8 days for completing the relevant data. The investigator first introduces themselves to samples and explains the purpose of gathering information and took the permission from samples for pre and post-test. Then the pre-test regarding leukemia was taken by questionnaire (MCQs) method. Then we provide online structured teaching program to subjects. After that post-test was taken. They were assured that their responses would be kept confidential and used only for research purposes.
ETHICAL CONSIDERATION

Permission from Principal of Mohan Dai Oswal College of Nursing was taken. Confidentiality of information was maintained.

DIFFICULTY FACED BY INVESTIGATORS

The investigators faced difficulty during data collection due to difficulty in collecting subjects at same time.

- Time consuming
- It was difficult to gather all the subjects at the same time.
- Subjects were not cooperative.
- Network issues during structured teaching program.

PLAN OF DATA ANALYSIS

Analysis of data was done in accordance with objective laid down for study data was obtain from 50 samples that was taken from Mohan Dai Oswal college of nursing. It was done using descriptive and inferential statistics i.e., calculating mean, standard deviation, T-test, to assess the effectiveness of online teaching.

SUMMARY

This chapter deals with introduction Research Approach, Research design, variables, Research setting, Sample and Sampling techniques, Criteria for sample selection, validity, Pilot study, Reliability, Method of data collection, Ethical consideration, Difficulty faced by investigators, Plan of data analysis.
RESULT AND DISCUSSION

Objective 1. To assess the baseline knowledge regarding Leukemia by pre-test among student nurses of Mohan Dai Oswal College of Nursing, Ludhiana, and Punjab.

**TABLE 1**  
Frequency and percentage distribution of knowledge regarding leukaemia among student nurses according to their pre-test.

<table>
<thead>
<tr>
<th>Remarks</th>
<th>Value</th>
<th>Pretest</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below average</td>
<td>0-10</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td>Average</td>
<td>11-20</td>
<td>38</td>
<td>76%</td>
</tr>
<tr>
<td>Good</td>
<td>21-30</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1. It depicts that majority of the students 38 (76%) had average knowledge followed by 12 (24%) who had below average knowledge.

Hence, it was concluded that majority of the students had average knowledge.

Objective 2 – To assess the post-test knowledge of leukaemia among students of Mohan Dai Oswal College of nursing, Ludhiana, Punjab.

**Table-2**  
Frequency and distribution of knowledge regarding leukaemia among student nurses according to their post-test performance.

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Value</th>
<th>Post test</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below average</td>
<td>0-10</td>
<td>12</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>11-20</td>
<td>25</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>21-30</td>
<td>13</td>
<td>26%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. It depicts that post-test knowledge of majority of students was average 25(50%) followed by the students who had good knowledge i.e. 13(26%)
Hence, it was concluded that post-test knowledge of majority of students became average.

**Objective 3.** To compare the effectiveness of pre and post-test knowledge of online structured teaching program regarding Leukemia among student nurses in Mohan Dai Oswal College of Nursing, Ludhiana, Punjab.

**Table 3**

**Comparison of pre-test and post-test - mean level of knowledge regarding leukaemia among student nurses.**

\[ N = 50 \]

<table>
<thead>
<tr>
<th>GROUP</th>
<th>MEAN</th>
<th>SD</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>12.76</td>
<td>3.25</td>
<td>3.64**</td>
</tr>
<tr>
<td>Post-Test</td>
<td>16.02</td>
<td>5.43</td>
<td></td>
</tr>
</tbody>
</table>

*SIGNIFICANT

Table 3 – it reveals the mean and standard deviation of effectiveness of online structured teaching program among 50 students. The pre-test mean value was 12.76 with standard deviation of 3.25. The post-test mean value was 16.02 with standard deviation 5.43 and t-value was calculated 3.64 (p<0.10). The difference was found to be statistically significant.

According to third objective that to compare the knowledge regarding leukemia among the student nurses before and after online structured teaching program. It was concluded that pretest mean of knowledge was 12.76 and posttest mean of knowledge was 16.02.

According to fourth objective that is to find out association of knowledge regarding leukemia among student nurses with their selected demographic variables i.e. Age, Gender, Education, Marital status, Religion, Source of information No significant association has been found.
ACNOWLEDGEMENT

But those who hope in the LORD will renew their strength

I am thankful to the God Almighty for his abundance grace and blessings upon me. Thank you for being my strength in the times of trouble, despair and commotion throughout this journey. I will always be beholden for your utmost love for me.

A research project and thesis writing is always found to be a joint venture with assistance, encouragement, moral support and guidance needed for completing the task, I am blessed for having all of these in my part.

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