

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING TELEMEDICINE AMONG STAFF NURSES AT SELECTED HOSPITALS OF KANPUR UTTAR PRADESH.

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ABSTRACT

Although telemedicine has been used spottily in Indian health care so far, the 2020 Covid-19 pandemic provided the nation's health systems an unprecedented opportunity to make a concerted effort to increase access and coverage. Health-care providers can incorporate telemedicine systems to reduce doctor-patient visits and help in breaking the chain of transmission of infections. Anticipating the increased need of telemedicine by health-care providers, the Medical Council of India released practice guidelines in March 2020. In this article, the literature pertinent to telemedicine and its applications with special reference to recently released practice guidelines were reviewed and summarized in a historical and current context. **methods-** Investigator adopted quantitative research approach with pre-experimental one group pre-test-post-test research design. The subjects were 60 staff nurses and non-probability purposive sampling method was used for selection criteria. Data was collected using demographic data profile and self-structured knowledge questionnaire regarding Telemedicine. Data were analysed using descriptive. In pre-test knowledge regarding Telemedicine, In pre-test out of 60 of Staff Nurses 15 (25%) were having inadequate knowledge, 42 (70%) were having moderately adequate knowledge, 3 (5%) were having adequate knowledge in pre-test. While in post-test out of 60 of Staff Nurses 5 (8%) were having inadequate knowledge, 43 (72%) were having moderately adequate knowledge, 12 (20%) were having adequate knowledge in post-test. mean percentage of pre-test is 44% and post-test is 56%; standard deviation of pre-test is 5.5 and post-test is 4.7, mean difference is 4. Thus, it is showing that post-test mean score is higher than pre-test mean score.

INTRODUCTION

“Tele means ‘at a distance’ and the word ‘Medicine’ which derived from Latin word ‘Mederi’ means healing. Time magazine has defined Telemedicine as healing by wire. Information and communication technology has made revolution in health care system globally¹. Developing countries like India has 140 crores of the population and out of which two third of its population predominantly lives in rural area with immense health care needs has limited care facilities. And to tackle that the Indian government who is committed to strengthening the health care system of entire country lays a significant focus on the Telemedicine services². Goal of Telemedicine is to satisfy the requirement of today's health care customers and has the potential to revolutionize the delivery of healthcare services. It supports efforts to improve the standard of health care by increasing accessibility and potency through reducing the necessity to travel, providing clinical support, for long term management and patient satisfaction, overcoming geographical barriers, offering various types of communication devices (e.g. via e-mail an interactive chats or video or audio) and improving patient outcomes. It is a captivating tool to use for fulfilment in health domain³.

Keywords:

COVID-19, health
care, telemedicine

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On 13th April 2020, the union Health Ministry of India launched “e-Sanjeevani” OPD platform which has completed more than 5 lakhs Tel-consultation within 6 months, as of October 12, 2020 has completed the 6 lakhs consultation. In the midst of the COVID-19 pandemic, “e-Sanjeevani” OPD (Outpatient Department) services has enabled patient-to-doctor Telemedicine⁴. Initially in the Indian healthcare system recommended to provide speciality services like cardiology, Gynaecology, Pediatrics. The platforms of Telemedicine and Tele-Nursing is gradually shaping into a parallel stream. It is equally accepted by the patients and health care providers all across the nation⁵.

NEED FOR THE STUDY

Rising healthcare costs and a need for better treatment are motivating more hospitals to investigate the benefits of telemedicine. They want improved contact between physicians and far-off patients and better usage of healthcare facilities. Here telemedicine also promotes better connectivity, which has resulted in fewer hospital re-admissions and patients entirely adhering to their prescription care plans. Telemedicine's increased contact advantage extends to doctor-to-doctor communication as well. Doctors may use telemedicine to build support networks to exchange their skills and provide better healthcare services. Telemedicine is a way of delivering medical treatment over the internet, usually through video chat. This technology has several advantages for both patients and healthcare providers. Though there are still technical hurdles and critics, telemedicine can supplement and enhance the overall patient experience.

PROBLEM STATEMENT

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING TELEMEDICINE AMONG STAFF NURSES AT SELECTED HOSPITALS OF KANPUR UTTAR PRADESH.

OBJECTIVE

1. To Assess the levels of knowledge regarding telemedicine among the staff Nurses at selected hospitals of Kanpur Uttar Pradesh.
2. To evaluate the effectiveness of structured teaching programme on knowledge regarding telemedicine among the staff nurses at selected hospitals of Kanpur
3. To find out the association between the pre-test knowledge score of telemedicine among the staff nurses at selected hospitals Kanpur Uttar Pradesh.

HYPOTHESIS:

H01: There is no significant difference between knowledge regarding Telemedicine before and after structured teaching Programme among staff nurses at 0.05 level of significance.

H02: There is no association between preinterventional knowledge score regarding Telemedicine with selected demographic variables.

H1: there is a significant difference between pre - test & post - test knowledge score regarding telemedicine among staff nurses at selected hospital of Kanpur utter Pradesh.

H2: there is no significant association between pre-test & post- test knowledge score on telemedicine among staff nurses at selected hospital of Kanpur Uttar Pradesh.

METHODOLOGY

Research Approach

The research approach adopted for the study was quantitative Evaluation Research Approach.

Research Design

The research design was pre-experimental one group pre-test-post-test Research Design.

Setting Of the Study

The setting for this study is the staff Nurses at Selected hospitals of Kanpur Uttar Pradesh.

Population

The population for the study was staff Nurses

Sample

In this study, the sample was the staff Nurse at selected hospitals of Kanpur Uttar Pradesh.

Sample Size

In this study sample size was 60 staff Nurses.

Sampling technique:

Non-probability sampling method (purposive sampling technique) was used.

SAMPLING CRITERIA

Inclusion criteria 1. The staff Nurses those who are working at selected hospitals. The staff Nurses who are willing to participate in the study.

Exclusion criteria 1. Who are not present at the time of the data collection 2. Staff Nurses who have already attended session on Telemedicine

RESULTS:

Association Between the Level of Pre-Test Knowledge Score of staff Nurses with Their Selected Socio Demographic Variables

Table No. 15: Association between the level of pre-test knowledge score of staff Nurses with their selected Socio demographic variables

S.NO.	Demographic variables	Inadequate Level of Knowledge (0-10)	Moderately Adequate Knowledge (11-20)	Adequate Level of Knowledge (21-30)	Chi Square Value	Significant Or Non-significant
1.	Age in year				$\chi^2= 16.42$	S
	28-30year	0	7	0	df =6	
	24-25year	6	9	0	P=0.05	
	21-23year	6	16	0	T= 12.592	
	>20year	3	10	3		
2.	Education				$\chi^2=16.964$	S
	Primary class	2	8	2	df=6	
	A.N.M	2	9	0	P=0.05	
	G.N.M	3	20	1	T=12.592	
	B.Sc. Nursing	8	5	0		
3.	HEALTH STATUS				$\chi^2=1.407$	NS
	Healthy	11	35	3	df=2	
	Unhealthy	4	7	0	P=0.05	
					T=5.991	
4.	Family income				$\chi^2=7.5$	NS
	<10,000/-	2	10	0	df=6	
	10001/--20000/-	8	19	3	P=0.05	
	20001/--50000/-	4	11	0	T=12.592	
	50001/-&above	1	2	0		

5.	Type of family					
	Nuclear family	7	26	2	$\chi^2=2.285$	
	Joint family	6	10	1	df=6	NS
	Extended family	2	4	0	P=0.05	
	Other	0	2	0	T=12.592	

6.	Religion					
	Hindu	11	38	3	$\chi^2=5.883$	
	Muslim	3	1	0	df=6	NS
	Christian	1	3	0	P=0.05	
	Others	0	0	0	T=12.592	

Comparison of Pre-Test and Post-Test Level of Knowledge Regarding Telemedicine Among Staff Nurses
Table No. 13: Comparison of pre-test and post-test level of knowledge regarding Telemedicine Among Staff Nurses

n = 60					
S.NO.	KNOWLEDGE SCORE	MEAN	MEAN DIFFERENCE	MEAN PERCENTAGE	STANDARED DEVIATION
1.	PRE-TEST	12.5	4	44%	5.5
2.	POST-TEST	16.5		56%	4.7

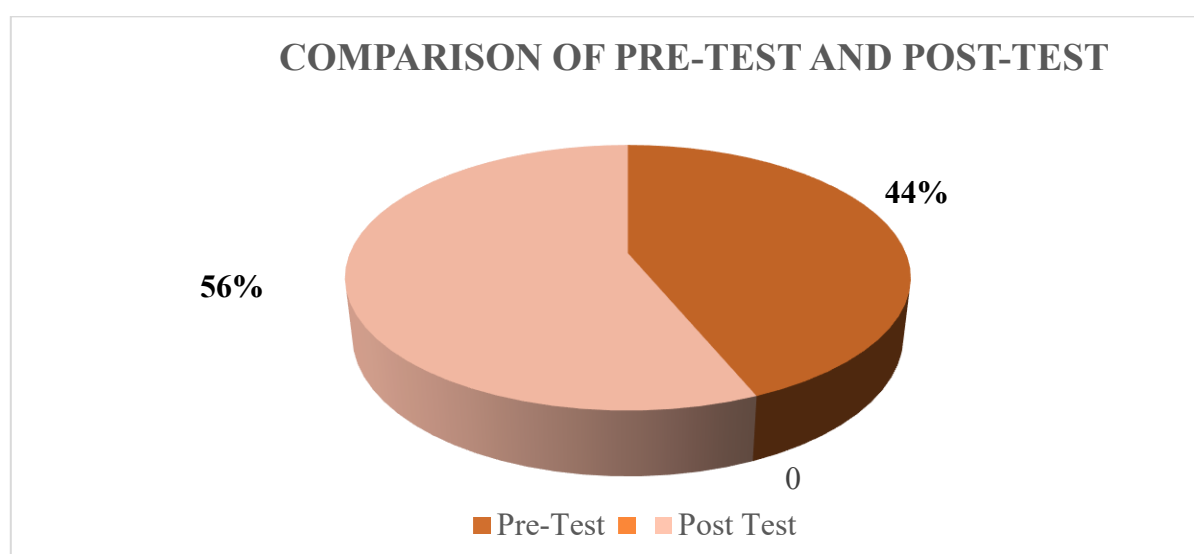


Fig No. 10: Pie diagram showing percentage wise distribution of pre-test and post-test level of knowledge telemedicine

Above (Table No. 13, Fig No.10) The column diagram shows that the mean of pre-test is 12.5 and post-test is 16.5; mean percentage of pre-test is 44% and post-test is 56%; standard deviation of pre-test is 5.5 and post-test is 4.7, mean difference is 4. Thus, it is showing that post-test mean score is higher than pre-test mean score.

DISCUSSION

The discussion chapter shows that after giving the structured teaching programme to 60, their knowledge regarding Telemedicine was increased than before. In pre-test majority of the sample was having moderate and inadequate knowledge and some were adequate knowledge too. But in post-test, very less participants was having inadequate knowledge and moderate knowledge was increased and adequate knowledge level also increased Telemedicine.

SUMMARY

The study was conducted “to assess the effectiveness of Structured Teaching Programme on knowledge regarding Telemedicine among the Staff Nurses at selected Hospitals of Kanpur Uttar Pradesh. “In this study quantitative evaluative research approach and -pre-experimental one group pre-test post-test research design was used. Based on the inclusion criteria the sample size was selected by using non-probability convenient sampling technique at Hospitals of Kanpur Uttar Pradesh.

As there were no standardized tools available, therefore based on the extensive review of literature, two research tools were developed for the data collection, one was a socio- demographic variable tool and second one was a knowledge assessment tool (self-structured knowledge questionnaire which consist 30 multiple choice questions regarding Telemedicine). The time taken to complete the questionnaire was 4-6 days. Language was clearly understandable and appropriate.

CONCLUSION

The present study was aimed to assess the effectiveness of Structured Teaching Programme on knowledge Regarding Telemedicine among Staff Nurses at selected Hospitals of Kanpur Uttar Pradesh. The relevant data was collected and analysed statistically based on the objectives of the study. Following conclusions were drawn. In pre-test knowledge regarding Telemedicine, In pre-test out of 60 of adolescent girls 15 (25%) were having inadequate knowledge, 42 (70%) were having moderately adequate knowledge, 3 (5%) were having adequate knowledge in pre-test. While in in post-test out of 60 of adolescent girl 5 (8%) were having inadequate knowledge, 43 (72%) were having moderately adequate knowledge, 12 (20%) were having adequate knowledge in post-test.

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