

Research Article



INTERNATIONAL RESEARCH JOURNAL OF PHARMACY

www.irjponline.com

ISSN 2230-8407 [LINKING]

Effectiveness of innovative teaching techniques among nursing officers regarding Transformational leadership in clinical nursing and evaluate job performance among nursing officers and patient satisfaction: a pilot study

Linda Laltanpuui Phd Scholar, Co-Author: Dr. Poonam Sharma

Supervisor SGT University Gurugram Haryana, Department of Nursing

Email: lpachau30@gmail.com

How to cite: Linda Laltanpuui, Dr. Poonam Sharma, Effectiveness of innovative teaching techniques among nursing officers regarding Transformational leadership in clinical nursing and evaluate job performance among nursing officers and patient satisfaction: a pilot study. International Research Journal of Pharmacy, 2025,16:7:29-60

Doi: <http://doi.org/10.56802/irjp.2025.v16.i07.pp29-60>

ABSTRACT

Background: There has been an increase in the benefits pertaining to salary and money but they are not the required methods for resolving shortages of nurses in hospitals. Motivation among nursing staff in organizations should be brought about by factors that are non-monetary. Leadership has been known as a crucial component focusing on employee development, among various non-monetary factors. Among many important leadership styles, transformational leadership has come up as an impactful one, leading to enhanced levels of commitment among employees.

Objective: Evaluation of the effectiveness of innovative teaching techniques associated with transformational leadership skills among nursing officers. In clinical nursing, it is to be done through making comparisons between post test and pretest knowledge scores.

Methodology: Research design was quasi experimental along with ‘Control Group’ design. Participants from both groups were chosen through ‘purposive sampling technique’. Lunglei Civil hospital, Mizoram was chosen for the conduction of the study.

Results: Regarding the pretest knowledge scores from the Experimental Group, 10% of nursing officers had lower limits of knowledge, whereas average level was possessed by nursing officers accounting for 65% and ultimately, enhanced knowledge levels was possessed by remaining 25%, about transformational leadership skills. In the period of the post test, 40% of the participants had a good amount of knowledge and the remaining 60% projected excellent knowledge levels.

While the pre-test was continuing, the Control Group had scores like 25% of nursing officers exhibited lower limits of knowledge, average quantity of knowledge was possessed by 75% nursing officers regarding Transformational leadership skills.

After comparison between scores of two groups, (‘t’ value was significant, $p < 0.001$) while quantifying the posttest and pretest differences in scores among Experimental Group. Among nursing officers, differences were not present in significant manner in the value of t ($p=0.38$), existent in the Control group, in reference to the post and pretest mean scores.

Conclusion: Innovative teaching techniques such as use of AI videos as medium of teaching, the use of questioning and case scenarios are found to be effective means of increasing knowledge.

KEY WORDS: Transformational leadership skills, nursing officers, job performance, patient satisfaction.

Introduction: All around the globe, nursing has been viewed as a vital component in the sector of healthcare. Chief goal of any organization in healthcare is the enhancement of patient care quality. Commitment of nurses to their respective hospitals is crucial for the constant maintenance of top-notch safety and environment of healthcare. Patients and nurses are in close association in all hospitals and committing to the hospital provides quality assurance. There has been an increase in the benefits pertaining to salary and money but they are not the required methods for resolving shortages of nurses in hospitals. Motivation among nursing staff in organizations should be brought about by factors that are non-monetary. Leadership has been known as a crucial component focusing on employee development, among various non-monetary factors.

Leadership, pertaining to nursing, has a straight impact on the performance, drive and people of any organization. Patient care is greatly impacted through nurses and the kind of leadership they show has the potential to impact patient outcomes negatively or positively. Employees are urged to search through their own individual path through the empowerment provided by transformational leadership. Motivation of teams for owning their roles and taking initiative is then done by these leaders. Inspiration and motivation are characteristics of this leadership style, allowing employees to look for the best way for achievement of goals. Work can be efficiently completed by the mobilization of groups, done by nurses who can adopt this kind of leadership. Morale raising and facilitation of open communication are also displayed by these individuals. In case of new organizations, transformational leaders might fall ineffective in the role of inspiring. A work structure that has already been established are the best environments where this style can be executed, making use of opportunities to develop improvements and efficiencies.

Transformational leadership has been found to be a leadership style of utmost importance, where prolevel commitment is fostered in employees. There are multiple traits of transformational leaders, like seeking followers for potential motives, wanting to meet higher needs and engaging the followers highly. Employees of such leaders are led by inspiration, motivation and inculcating changes that are positive and valuable, in their workers. Individuals are inspired by them to execute tasks to an unexpected degree and generate outcomes that are exceptional. Change is brought about into attitudes of employees, impacting their motivation levels and achieving aims of the organization.

When the idea of transformational leadership is applied to the situations of hospitals, it might lead to gathering of insights through which leadership can impact patient outcomes.

Need of the study : Followers receive resources from their leaders, who act as a vital source. When the association between followers and leaders is of good quality, it leads to outcomes for employees being resourceful. Using the conception of COR, support, inspiration, motivation and personal consideration is provided by the transformational leader to their followers. This leads to the followers being more resourceful, in context to well-being and empowerment, resulting in organizational outcomes that are positive, known as organizational commitment. Feelings such as psychological independence and attributes among employees enhanced levels of meaning to

their work, leading to greater involvement in activities of the organization. Well-being among employees psychologically at work which is of value and it leads to the enhancement of retention capacity and feel attached to the organization. Important elements of the healthcare organizations of the world consider patient care quality and patient outcomes as vital elements.

Carlota G L and Monica VC (2021) executed a study to recognize the interventions that are most effective, allowing clinical leadership among nurses in a setting of hospital. Literature gap has been highlighted by the investigator related to measurement and identification of barriers in the development of leadership skill, for hospital's clinical nurses. Competencies like cognitive, intrinsic and interpersonal ones should be addressed by multicomponent programmes, along with skills pertaining to psychological empowerment, critical reflexivity and emotional intelligence. It has also been concluded that need has been specified for gradual development of clinical leadership instruments among nurses, for evaluating and understanding these programmes.

Investigation through a study was done to find out the relation between transformational leadership and work outcomes related to it, among healthcare professionals in Africa. A structured literature review was used and nine studies were identified, related to the research question. Narrative synthesis was used and the data extracted was 'synthesized, summarized and correlated'. Job satisfaction, intent to stay, teamwork, job satisfaction are interlinked to transformational leadership style.

Statement of the problem:

Nowadays, assessment of effectiveness of innovative teaching techniques through a study on nursing officers. It is also associated with transformational leadership skills in fields of clinical nursing. Job performance is also evaluated among nursing officers and satisfaction among patients in Mizoram's selected hospitals.

Objectives of the Research study:

1. To evaluate the pre existing knowledge regarding transformational leadership skills in clinical nursing among nursing officers.

2. To examine the importance of innovative teaching techniques regarding transformational leadership skills in clinical nursing among nursing officers by comparing pretest and post test knowledge scores.
3. To understand the correlation between pretest knowledge scores regarding transformational leadership skills in clinical nursing among nursing officers with their selected demographic variables.
4. To evaluate job performance among nursing officers
5. To evaluate patient satisfaction in the hospital .

LITERATURE REVIEW:

The literature review is divided under the headings as mentioned:

(1) TRANSFORMATIONAL LEADERSHIP SKILLS IN HOSPITALS & HEALTH CARE SETTINGS

(II) LEADERSHIP SKILLS AMONG NURSES AND NURSES JOB PERFORMANCE

(III) LEADERSHIP SKILLS AMONG NURSES AND PATIENT SATISFACTION

(IV) INNOVATIVE TEACHING TECHNIQUES FOR NURSES IN CLINICAL SETTING

(1) TRANSFORMATIONAL LEADERSHIP SKILLS IN HOSPITALS & HEALTH CARE SETTINGS

Atef Raoush (2023) Executed a study to examine the effect of transformational leadership on innovative behaviour of healthcare professionals in private hospitals of Jordan. Cross sectional study design was the research design, making use of quantitative ways of data collection. 412 healthcare workers were samples from private hospitals of Jordan. Linear regression analysis was used and findings revealed that transformational leadership

significantly impacts innovative behaviour among healthcare professionals. Percentages and frequency depending on demographic statistics was included in descriptive statistics of the study. Female respondents comprised more than half of the samples; 58.3% and 41.7% were males. The findings showed the significance of hospital leaders needed to adopt a style of transformational leadership. This leadership style has been revealed to be essential for healthcare employees motivation for engaging in innovation. Development of a workplace should be focused by hospital leaders for encouraging innovation and promoting motivation for obtaining skills and new knowledge.(4)

Ahmad K, et a (2021) studied the impact of laissez faire and transformational leadership in relation to their outcomes on the health care organizations, showing improved quality and safety in patient care. Laissez faire leadership did not apply for healthcare scenarios. Maximizing stress levels, rates of staff turnover and anxiety was brought about by this leadership. Staff had a higher amount of stress, leading to errors, increased staff turnover rate and patients receiving suboptimal care. It was concluded that all leadership kinds had pros and cons but specific leadership style needs to be applied by leaders. Results of these strategies are improved quality of healthcare, teamwork, patient safety and staff motivation.

(II) LEADERSHIP SKILLS AMONG NURSES AND NURSES JOB PERFORMANCE

[Nadia Saleh](#) , [Magda Al- Fattah](#) (2022) A study was conducted to look for the impact of ethical leadership on job performance of nurses. Ethical leadership is known to affect willingness to work, motivation and ability among employees, making them more productive. This leads to the achievement of lowering levels of burnout, job satisfaction and creating an environment that enhances job performance. Sohag University Hospital, Egypt was chosen for the study. Subjects were nurses (N=240) and nursing supervisors (N=25) and data collection used three tools, namely demographic data sheet for nurses and supervisors, questionnaire on Nurses Work Performance and Ethical Leadership Questionnaire. 66.7% had poor limits of people orientation and 63.3% had greater limits of fairness about ethical leadership behavior. 83.37% among nurses exhibited maximized job performance level, for counterproductive behavior of work. It was concluded that nursing supervisors larger than half had poor limits of ethical leadership behavior. Nurses, larger than three quadrants, had

elevated levels of job performance. Statistical differences were significantly high, between job performance among nurses and ethical leadership ($P=0.000$). Training programs conduction was recommended and boosting nurses' level of awareness regarding benefit, context and outcomes of ethical leadership.

Fetti Arisa¹, et al (2018) A study was executed which targeted to understand the influence of the head nurse of transformational leadership in relation to performance of nurses, intervened by job satisfaction. The study had 140 participants, all nurses and employed at a patient room in North Jakarta, Indonesia's hospital. Use of a questionnaire was done and 'Structural Equation Model (SEM) Lisrel program' was used as a method. Head nurse exhibiting transformational leadership style would lead to job satisfaction increment and impact nurse performances. Leaders supporting or paying attention to subordinates usually have a greater job satisfaction level, compared to those who have no support for their subordinates. High job satisfaction impacts performance of nurses, contrasting those who are not satisfied. (14)

(III) LEADERSHIP SKILLS AMONG NURSES AND PATIENT SATISFACTION

Bahadori A. et al (2016) studied the correlation in nursing care patient satisfaction and ward-level leadership, particularly in 'Iran University of Medical Sciences' hospitals. The sample had 34 head nurses in this cross-sectional study. Selection was done on the foundation of census sampling, along with 102 staff nurses and 170 patients, picked by random sampling. 34 wards were used for choosing samples, consisting of 5 intensive care wards , 4 emergency wards, 15 general surgery wards and 10 internal medicine wards, related to all teaching hospitals of the aforementioned University. Multifactor leadership questionnaire was used for data collection and patient satisfaction instruments. Revelation through findings Important statistical did not exist between patient satisfaction and 'ward-level leadership'. Wards that were under head nurses exhibiting transformational leadership style had maximum mean scores of patient satisfaction. (16

Elisabete Maria Garcia Teles Nunesa , et al (2016) mentions various qualities of leadership-relationship, as viewed from the lens of a nurse and a chief nurse distinctly. It also examined patient satisfaction and 'Quality for relationship of Leadership' from the perspective of the chief nurse and separately by the Nurse perspective. The approach of the study was transverse, quantitative and correlational. 342 nurses, 15 chief nurses and 273 patients were part of a non-probabilistic convenience sample. Data was collected between January and March 2013 from the Central Lisbon Hospital Center, Portugal. SPSS ® Statistics 19 was used for statistical analysis and it was revealed it was considered by Chief Nurses that leadership- relationship quality was Good, whereas nurses took it as Satisfactory and patients are perceived to be satisfied with nursing care. A important statistical correlation was found at the same time between 'quality of the leadership relationship' from the angle of chief nurses and satisfaction among the relevant patients. No important correlation statistically was found between the 'quality of the leadership relationship' and the angle of nurses and satisfaction. A major role played by the chief nurse in patient satisfaction was found as a conclusion.(17)

(IV) INNOVATIVE TEACHING TECHNIQUES FOR NURSES IN CLINICAL SETTING

Rajesh Kumar Sharma (2017) States that innovative teaching is very important for nurses in India Social media and technologies are combined and it plays a crucial role in promotion of incorporation of technologies, virtual technologies humanization and customization of learning. Emergence of new technologies can reform the modern day education system. The investigator states that there has been a shift from teacher centric to an approach that is learner centric, in nursing education. Emerging technologies that are innovative have a lack of support from research regarding their effectiveness in supporting nursing students' achievement and learning. Most of them (new technologies) have not been fully evaluation by research work, and is still less and that showed the presence of new challenges. Finally they concluded that instructors must be trained fully and incentives to be given for using new technologies. (22)

Anitha K, S C Dhanya (2022) successful application of innovative teaching and learning methods used by academicians. They made an attempt to learn about the innovative tools and

ideas employed by teachers of the present generation for increasing the effectiveness of learning. Examination of challenges faced by teachers was also taken in the study through digital technology. 'Self-administered questionnaire' was circulated for the survey, in the forms of Google Forms to reach teachers in India. 150 students were taken as samples from schools to upper levels. SPSS Version 25 was used and statistical analysis was done on the data. In conclusion, the study found that curriculum design needs to change, along with teaching methods, demanding for it to be engaging and interactive. Upgradation of knowledge of technology among teachers has to be done in order to be innovative and satisfy the needs of students in the current generation.(24)

Challa K, et al (2021) Arranged a study to explain and evaluate other methods of learning and teaching, which can be alternative or supplementive to traditional methods. These traditional methods are in the context of promoting active participation among students and information flowing smoothly. Literature review was executed on PubMed and EBSCO., at Galway university, Ireland. After searching databases, 200 studies were selected out of 500 and further screening was done on the criteria of inclusion and exclusion. Surveying of articles was done on their significance and relevance to the objectives of the study, along with use of both qualitative and quantitative studies. It was shown as a result that evidence-based medicine, problem-based learning, team based learning, case-based learning, e-learning, peer assisted learning, simulation-based learning, observational learning and flipped classroom were some of the methodologies of modern learning. Discussion about the different learning methods address the learning differences that are individual. These allow the students to widen their thinking and knowledge professionally through improving critical and logical thinking, time management and clinical reasoning. The investigators found that timely integration of approaches that develop competency and leadership among students and equipping them for a smoother transition into practice clinically. It was concluded that the study exhibits the significance and barriers of systems of modern learning. With progression in technology and larger implications of medical data, students must have skills of innovation via 'inter-professional learning'. (26)

RESEARCH METHODOLOGY

Research approach & Research Design:

The current study was executed to evaluate the limit of knowledge of nursing officers & satisfaction level of patients at Lunglei Civil hospital, Mizoram.

RESEARCH APPROACH:

The choice of research approach is a primary method for the conduct of research enquiry due to the type of the problem chosen for the study

Descriptive study approach was selected to execute the study. The main aim of descriptive study is to describe objectively the nature of situation under study.

RESEARCH DESIGN:

The research design is the planning, structuring and strategy forming of investigation for responding to the research question.

According to Kerlinger , the design has two purposes:

1. To respond to research question.
2. Control variance

The chosen approach is quantitative approach for this study and the research design for these study is given in the following.

GROUP	TOOLS	METHOD OF DATA COLLECTION	DATA ANALYSIS
Nursing officers for Job performance & Patients for patient satisfaction	Questionnaire, demographic data, questions regarding Transformational Leadership skills	Administration of the tools	-Data analysis using frequency and percentages. 1) Nursing officers to assess them:- -Calculate the percentage, mean, median, and SD to evaluate the score. -Level of knowledge of the nursing officers are assessed. -Association test by using inferencial statistics

assessment			such as Fisher Exact Test 2) Likert scales to assess- Job performance of the nursing officers & Likert scale to assess Patient satisfaction
------------	--	--	--

Variable under study

The variable was the knowledge of new nursing officers regarding Transformational leadership skills.

Setting of the study

Conduction of study was done at Lunglei Civil hospital, Mizoram

Population

The population targetted is the entire nursing officers in which the Research is interested to generalized the outcome of the study.

In this study, the target population was the nursing officers of Lunglei Civil Hospital, Lunglei.

Sample and sampling technique

In the present study, 20 samples for experimental group and 20 samples for control group as nursing officers were selected as sample of the study & 20 patients for assessment of patient satisfaction.

Purposive sampling via 'non probability sampling' technique was used.

CRITERIA for selection of study

Sampling criteria

For The Nursing Officers:

Inclusive Criteria :

1. Government hospitals in Mizoram
2. Only Nursing officers working in hospitals
3. Both male and female included
4. Age 18 to 59 years who are being employed in hospital
5. Present during the time of data collection

Exclusion Criteria :

1. Not eager to contribute in the study
2. Who are not able to understand proper English

For the Patients:--

Inclusive Criteria :

1. Who are admitted at the same hospital where nursing officers are working
2. Adults who are able to communicate in local language, who can read and write Mizo language
3. Who have had experienced some days of nursing care at the hospital at the hospitalized days.

Exclusion Criteria :

1. Who are not eager to contribute in the study
2. Who are willing to give consent for data collection
3. Who do not gain full conscious state and concentrate on data collection time

Hypotheses of the study:

Research Hypothesis

H1 : There is stark difference between post test and pretest marks in relation to transformational leadership skills in clinical ,among nursing officers.

H2 : There is prominent relation between pretest knowledge scores of the nursing officers regarding transformational leadership skills in clinical nursing, with the chosen demographic variables.

Null Hypothesis

Ho-1 : There is important distinction between post test and pretest knowledge scores regarding transformational leadership skills in clinical ,among nursing officers.

Ho -2 : There is important association between pretest knowledge scores of the nursing officers regarding transformational leadership skills in clinical nursing, with the chosen demographic variables.

DELIMITATIONS: The study is delimited to

- Nurses (nursing officers) working in same type of hospital/ organisations.
- Only Nursing officers who are present during the study & patients
- Both males and females included

Study Design : Experimental Research design

Population : Nursing officers working in hospital of Mizoram

Setting : Lunglei civil hospital, Mizoram technique

Variables : In the present study :

-- Independent variable : Innovative teaching techniques regarding transformational leadership skills in clinical nursing .

---Dependent variable : Knowledge of Nursing officers.

---Extraneous variables : Are the socio demographic variables about the subjects which help in collecting base line information .

TOOL:

Sampling Technique : Purposive sampling

(I) TRANSFORMATIONAL LEADERSHIP SKILLS QUESTIONNAIRE

Section -1 : Demographic data of the Nursing officers

Section-2 : Comprised of structured knowledge questionnaire consisting of 30 questions based on the extensive review of literature, and validity and reliability is being done by the expert of nursing faculties . It consisted of 30 questions, and the right/ correct responses carry one mark and wrong answer carry zero mark . The grading of the knowledge score is based on the Four range scale -- poor (0-7) , average (8-15), good (16-22) , and excellent (23-30)

(II) LIKERT SCALES:

(1) Likert scales for Job performance scale to evaluate Job performance of the nursing officers with having five- point scale, namely – Extremely disagree (1) , Disagree (2) , Neutral (3) , Agree (4) and Extremely agree (5)

(2) Likert scales for Patient satisfaction scale having five point scales , namely Poor (1) , Fair (2) , Good (3) , Very good (4) , Excellent (5) .

Likert scales to evaluate patient satisfaction level & Job performance scale to evaluate Job performance of the nursing officers . Scales are developed and validated , to be used.

Data collection:

A pilot study was executed in the month of 18th & 19th November , 2024 for the Pre test among some nursing officers at Civil hospital Lunglei. Administrative approval was received from the Medical superintendent of Civil Hospital Lunglei to conduct the study.

Administration of intervention was done at the pre-test day. Post test was done after one month 16th and 17th December 2024, analysis was also done the following day.

The aim of the Pilot study was to:

- Evaluate the effectiveness of the tools.
- Check the feasibility of conducting the main study.
- Determine the method of statistical analysis.

Data Analysis

Descriptive and inferential statistics

Data analysis and interpretation

RESULTS

The results of the study to find effectiveness of innovative teaching techniques in clinical nursing among the nursing officers . Job performance of the nursing officers and patients satisfaction are assessed

The analysis are done and results are arranged according to the objectives of the study:

(A)Socio demographic data of the Nursing officers

(B) Preexisting knowledge of the Nursing officers

(C) Effectiveness of the intervention, innovative teaching techniques

(D) Association test of knowledge level (pre-test) of nursing officers and selected socio-demographic variables

(E) Job performance level of the nursing officers

(F) Patient satisfaction level of the patients of the hospital.

SECTION –A

TABLE: 1 SOCIO DEMOGRAPHIC DATA OF THE RESPONDENTS O F THE NURSING OFFICERS

(N = 20)

Respondents characteristics (Nursing officers both of Civil Hospital Lunglei)	Experimental group		Control Group	
	Freq	percentages	Freq	Percentages
1)AGE				
a) 20-29	10	50%	8	40%
b)30-39	6	30	6	30%
c)40-49	4	20	6	30%
d) 50-59 yrs	0	0	0	
2) GENDER				
Male	0	0	0	
Female	20	100%	20	100%
3) MARITAL STATUS				
Unmarried	12	60%	8	40%
Married	8	40	12	60%
Divorced		0	0	
Widow/widower		0	0	
4) PRESENT RESIDENCE				
a)Urban	20	100%	20	100%
b) Rural	0	0	0	0
5) EDUCATIONAL QUALIFICATION				
GNM	10	50%	12	70%
BSc . N	8	40	6	30%

Pb. BSc.N	2	10	2	10%
MSc.N	0	0	0	
6)PRESENT STATUS OF EMPLOYMENT				
a)Regular Employment	8	40%	10	50%
b)Contract basis	12	60	10	50%
c)Part time employment	0	0	0	
7) YEARS OF CLINICAL EXPERIENCE				
a)Below 1 yr	0		0	
b) 1 to 10	10	50%	8	40%
c) 11 to 20	6	30	6	30%
d) 21-30	4	20	6	30%
e) 31- 40	0		0	
8) PRESENT NATURE OF WORK				
a) Beside patient pt care	20	100%	20	100%
b)Supervision	0	0	0	
c)Clerical/ records	0	0	0	
9) HOURS OF DUTY				
A) Day shift	5hrs		5hrs	
b) Night shift	15 hrs		15hrs	
10) AREA OF DUTY AT PRESENT SITUATION				

a) Medicine Wards	10	50%	2	10%
b) Surgery wards	0	0%	4	20%
c) Orthopedic ward	0	0%	4	20%
d) Obs & gynae	8	30%	6	30%
e) Emer& casualty	2	20	4	20%
11). PRESENCE OF ANY TRAINING OF TRANSFORMATIONAL LEADERSHIP				
a) Yes	0	0%	0	
b) no	20	100%	20	100%
12) PREVIOUS TRAINING DURATION OF TRANSFORMATIONAL LEADERSHIP				
a)1-3 days	0	0		
b)4-7 days	0	0		
c)2 weeks to 1 month		0		
d)More than 1 month		0		

All of the nursing officers, are of the gender group female nursing officers, both of experimental group and the control group.

About half of the respondents , the nursing officers 50% are of the age groups 29 years and below years , among the experimental group ; whereas the nursing officers among the control group consisted of 40% of the total sample group .

Majority (60%) of the experimental group- nursing officers are unmarried , whereas 40% of the Control group –nursing officer are unmarried.

In calculating The educational qualification of the nursing officers , 50% of them are of GNM passed groups; 40% of the respondents are having BSc nursing qualification among the respondents of the experimental groups.

In calculating The educational qualification of the nursing officers , 70% of them are of GNM passed groups; 30% of the respondents are having BSc nursing qualification among the respondents of the Control groups.

About half 50% of the respondents of the experiment group had 1- 10 years of clinical experiences ; whereas 40 % of the respondents of the control group had 1- 10 years of clinical experiences.

Since all the respondents are working in the same hospitals, they have 5 hours of clinical bedside duty and 15 hours of clinical night duty per one time duty, with 3 nights duty per person turn.

Among the respondents of experimental group , half of them 50% have present posting of the Medicine ward ; while among the respondents of the control group , most of the nursing officers are distributed in all the five wards of medicine, surgery, orthopedic , obstetric and emergency wards .

SECTION-B

PRE-EXISTING KNOWLEDGE OF THE NURSING OFFICERS

Table- 2 : PRE- EXISTING LEVELS OF KNOWLEDGE AMONG THE EXPERIMENTAL GROUP & CONTROL GROUP (N = 20 each)

LEVELS OF KNOWLEDGE OF THE RESPONDENTS	Experimental Group	Control Group

	Frequency	Percentage	Frequency	Percentage
0-7 (Poor Level)	2	10 %	5	25 %
8-15 (Average level)	13	65 %	15	75 %
16-22 (Good level)	5	25 %	0	
23-30 (Excellent level)	0		0	

Majority of the nursing officers of the Experimental group , that is 65% of all the samples had scores of Average level score.

Majority of the nursing officers of the Control group , that is 75% of them , had scores of Average level score.

Table-3 : Showing Comparison of scores of both the groups Pre –Existing knowledge

GROUP	MAX SCORES	Respondents scores	Percentage of scores	Mean	SD
Experimental group	600	265	44.16 %	13.3	3.4
Control Group	600	188	31.33 %	9.5	2.1

The table shows that overall Experimental group scores regarding Transformational leadership skills are 44.16 %, with a mean score of 13.3 in the pretest assessment ; whereas the overall – pre existing Control group score marks are 31.33% with a mean score of 9.5.

SECTION –C

EFFECTIVENESS OF INNOVATIVE TEACHING TECHNIQUES

Table- 4 : comparison of mean pre test and post test knowledge scores of **Experimental group** regarding Transformational leadership skills

Group TEST	Max scores	Respondents Total scores	Mean	SD	SE mean	df	Paired t-test	P
Pre-test	600	265	13.3	3.4	0.76	19	10.2	0.001
Post –test	600	462	23.1	2.8	0.62	19		

Tab;le-5 : Comparison of mean pre test and post test knowledge scores of **Control group** regarding Transformational leadership skills

Group TEST	Max scores	Respondents Total scores	Mean	SD	SE mean	df	Paired t-test	P
Pre-test	600	188	9.5	2.1	0.46	19	0.9	0.38
Post –test	600	192	9.6	2.6	0.58	19		

The experimental group scores comparing pretest and post test scores have significant differences of t- test value 10. 2 and p value of 0.001 which signify the usefulness of the Intervention- innovative teaching techniques .

The control group scores comparing pretest and post test scores have no significant differences of t- test value 0.9 and p value of 0.38.

SECTION -D

(D) Association test scores of knowledge level of Nursing officers and their selected socio-demographic variables

Table – 6 : Fisher’s exact test for finding association between demographic variables and test score

Table 1: Outcome of Fisher’s exact test for demographic variables and test score level.	Poor	Average	Good	Excellent								
Age group												
29 years & below									1	8	1	-
30 - 39 years									1	2	3	-
40 - 49 years	-	3	1	-	4.563	5.991	2	2.89				
Gender												
Female	2	13	5	-	-	-	-	-				
Male	-	-	-	-								
Marital status												
Unmarried	1	9	2	-	1.658	5.991	2	0.523				
Married	1	4	3	-								
Present residence												
Urban	2	13	5	-	-	-	-	-				
Rural	-	-	-	-								
Educational qualification												
Post basic BSc Nursing	1	1	0	-	5.065	9.4877	4	0.286				
GNM passed	0	8	2	-								
BSc Nursing passed	1	4	3	-								
Present status of employment												
Contract basis employment	1	9	2	-	1.658	5.991	2	0.523				

Regular employment	1	4	3	-				
Years of clinical experiences								
1 yr to 10 years	1	8	1	-	4.563	9.4877	4	0.289
11 to 20 years	1	2	3	-				
21 to 30 years	0	3	1	-				
Present nature of work								
Supervision work	2	13	5	-	-	-	-	-
Bedside Patient care	-	-	-	-				
Out Patient (OPD) clinic at the hospital	-	-	-	-				
Area of clinical duty at present								
Medicine ward	1	8	1	-	5.065	9.4877	4	0.286
Obstretic & Gynae wards	1	3	4	-				
Emergency ward	0	2	0	-				

Fisher's exact test showed that computed p values are greater than 0.05, none of the demographic variables are statistically significant at 5% level of significance.

Hence we may conclude that for the samples, the demographic variables such as age group, gender, marital status, present residence, educational qualification, present nature of work and area of clinical duty at present do not show association with test score levels (poor, average, good and excellent).

SECTION- E

JOB PERFORMANCE LEVELS OF EXPERIMENTAL & CONTROL GROUPS AMONG THE NURSING OFFICERS

Table -7 : Paired t-test for testing mean difference between job performance scores, of the respondents / Experimental group

(N= 20)

Job performance score	Range	Mean	Std deviation	T	P
Pre test	77-89	82.1	2.88	-8.93	<.001
Post test	84-92	88.3	2.72		

In both the tests (i.e. Pre test and Post test) the nursing officers had a score in the interval (77-89) and (84- 92) respectively . However, assessment of Job performance among the nursing officers with Pre test scores were found to have lesser mean (82.1) compared to Post test scores (88.3). This difference was revealed to be statistically major ($p < .001$).

Table -8 : Paired t-test for testing mean difference between job performance scores, among the Control group

(N = 20)

Job performance score of the Nursing officers	Range	Mean	Std deviation	T	P
Pre test scores	72-85	79.5	3.4	1.48	< 0 . 155
Post test scores	74- 85	80 .3	3.2		

In both the tests (i.e. Pre test and Post test) the nursing officers had a score in the interval (72-85) and (74- 85) respectively . However, Pre test scores were found to have lesser mean (79.5) compared to Post test scores (80. 3). This difference was found, not to be statistically significant ($p = 0.155$).

SECTION –F

PATIENTS SATISFACTION LEVEL OF THE PATIENTS AT THE HOSPITAL

Table- 9 : Showing respondents scores, the Experimental and Control groups

(N = 20)

PATIENT SATISFACTION	Range scores	Maximum Scores	Total scores	Scores Percentage	Mean	SD
Experimental group	53-61	1600	1140	71.25 %	57	2.03
Control group	49- 60	1600	1105	69.06%	55.25	2.84

The patient satisfaction level of the experimental group can be summarized to be having score of 71.25% which means at the Very Good level score range.

The patient satisfaction level of the patients can be summarized to be having score of 69 .06 % which means at the Good level score .

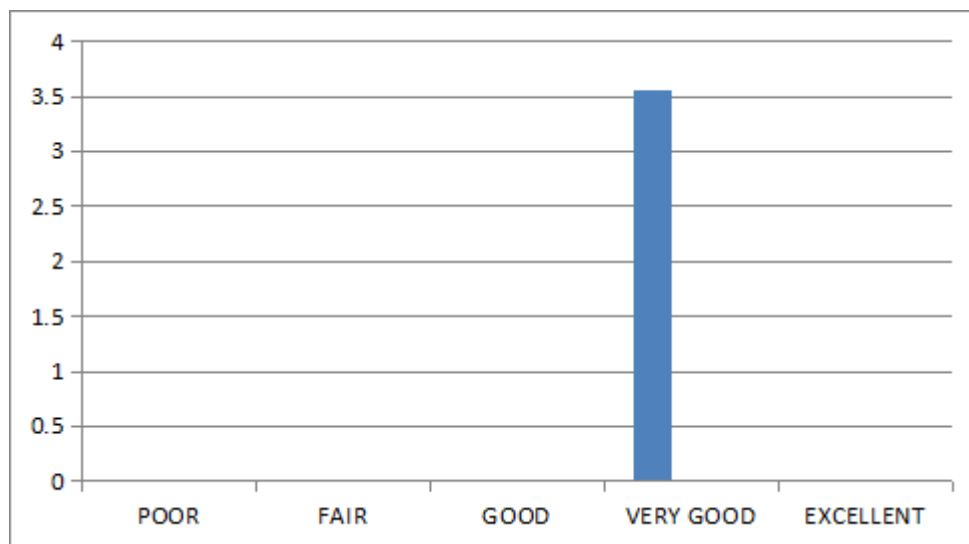


Fig : Bar diagram showing Scores of Experimental group

The above diagram show the patient satisfaction level , and summarizing the respondents scores of the Experimental group , being at the Very Good level score

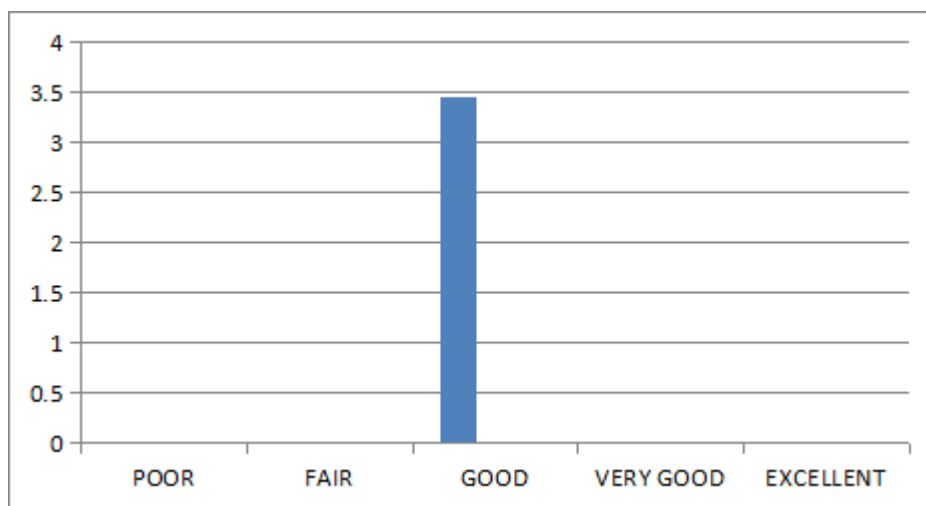


Fig : Bar diagram showing Scores of Control group

The above diagram show the patient satisfaction level , and summarizing the respondents scores of the Control group , being at the Good level score .

Discussion: The outcome of the current study shows that innovative teaching technique is impactful in enhancing the limits of knowledge of nursing officers regarding Transformational leadership in clinical nursing , the mean scores of pretest of The Experimental group , for the pre-test knowledge scores, 10 % nursing officers Poor limits of knowledge , 65% nursing officers had average limits of knowledge and 25% of them had Good level of knowledge. During the Pre-Test , The Control group , for the pre-test knowledge scores, 25 % nursing officers Poor limits of knowledge , 75% nursing officers had Average level of knowledge, regarding Transformational leadership skills. The study was supported by the knowledge limits that was pre existing, of adolescents of secondary school at “Panipat Haryana” , regarding knowledge of adverse effects of alcohol consumption. Experimental group knowledge scores were that 80% of the respondents had moderate knowledge and the Control group 20% of the respondents had insufficient knowledge . (12)

The outcome of the current study displays that innovative teaching technique is effective in enhancing the limits of knowledge in nursing officers regarding Transformational leadership skills in clinical nursing ,that is from mean pre-test knowledge score (13.4) to mean post test knowledge score (23.1), by the experimental group . The t value received was 10.2 at 0.001 was important. Hence it showed that the mean post test was larger than mean pre-test score, with calculated significant differences. The findings were persistent with the outcomes of similar study of effectiveness of integrated mental health nursing intervention on knowledge ,attitude, perception, social support system regarding mental illness among caregivers . Ten caregivers scored knowledge of 27.63 by the experimental group, with significant value of p being 0. 001 (13)

The present study displayed that the relation with the knowledge scores of the nursing officers and their selected socio demographic data, being Age group, marital status, Educational qualification , Present status of employment , Years of clinical experience had no significant association , all variables being greater than “0.05”. The current study was supported by a study of outcome of organized educational campaigns on understanding the needle stick injuries and related post exposure “HIV / AIDS prophylaxis”. Most of the variables that were socio

demographic like Age group, residential status , previous knowledge of the topic ,previous sources of information have no significant relationship with the respondents knowledge scores, except only with educational status (significant at “0.05 level”) (14)

Job performance: The study showed that job performance of the nursing officers had Good job performance result with P value being 0.001 (in between the post test and pre-test), in comparison between the scores of the experimental group. In comparison of the marks between the post test and pre-test of job performance result being p value being 0.155 being non significant , among the marks of the control group .

The study result was supported by a study about Job performance and related factors among nurses working in departments of adult emergency at chosen public hospitals in Ethiopia: a cross-sectional study that is facility-based. A facility-based cross-sectional study , was conducted from ”March 25 to April 25, 2023”, among “172 nurses” working in the departments of adult emergency in chosen public hospitals in “Addis Ababa, Ethiopia”. A simple random sampling technique was used to choose the study participants. Data were gathered using pretested, self-administered structured questionnaires. The majority of nurses, “70.5%” of them “(95% CI: 63.7–77.3)”, rated their performance in job as good. (15)

Patient satisfaction: The present study showed that patient satisfaction scores was mean score being of 57, classified as Very Good level scored by the patients of the experimental group and the control group mean scores was 55.25, having the level of Good- level scores by the patients . The study was supported by another study of performance in organizations impacting patient satisfaction in Ontario hospitals, a analysis that is multilevel. The results found were in the areas of eight satisfaction factors, with satisfactory levels of good level of reliability and loadings. (16)

Conclusion : The study gave a clear information about the effectiveness of the intervention-innovative teaching techniques to the experimental group knowledge of the nursing officers . In giving the intervention to the nursing officers, we can believe that it enhanced in gaining new knowledge regarding transformational leadership in clinical nursing . The nursing officers were assessed regarding the job performance by answering the questions given to them. In assessing

the patient satisfaction of the patients where the nursing officers were the nurses who gave direct care to the patients.

The result show a significant difference before and after administration of the intervention.

In searching the association of the knowledge of the nursing officers and their demographic data , all variables had no separate influences on their knowledge about the transformational leadership. Job performance level as answered by the nursing officers themselves showed a satisfying performance . The patients gave answer that they were satisfied ; the experimental group scored Very good level while the control group scored Good level of satisfaction score.

The nursing officers can enriched their knowledge regarding transformational leadership skills in clinical nursing, where they would learn the importance of better leadership relevant to their working places. Nursing officers are a group of people who often need to practice leadership to the younger colleagues, and to nurses aids. After increasing the knowledge and skills , the new knowledge would surely enhanced the nurses performance and patients care.

Conflict of interest : No

Source of Funding : Self

Ethical Clearance: Obtained From the ethical committee of Medical superintendent , Lunglei Civil Hospital , Mizoram.

REFERENCES:

- 1) Six Leadership Styles in Nursing, St Catherine University ; April 16, 2021, <https://www.stkate.edu/academics/healthcare-degrees/leadership-styles-in-nursing>
- 2) Carlota Guibert-Lacasa and Mónica Vázquez-Calatayud, Nurses' clinical leadership in the hospital setting: A systematic review. J Nurs Manag. 2022 May; 30(4): 913–925.
- 3) 5). Olateju Jumoke Ajanaku ., Welma Lubbe, Iyanuoluwa Adufe, Transformational Leadership Style and Work Outcomes of Healthcare Professionals: A Review of Literature. · September 2022 African Renaissance . Africa. ISSN: 1744-2532 (Print) ISSN: 2516-5305 Vol. 19, (No. 3), September 2022 pp 57–79 . <https://www.researchgate.net/publication/364278016>.
- 4) Atef Raoush. Transformational leadership impact on innovative behaviour as perceived by healthcare workers in private hospitals in Jordan. Cogent Business & Management. Volume 10, 2023- issue -3. Jordan <http://www.tandfonline.com>.
- 5) Ahmad Khan Dr. Melanie M. Tidman Impacts of Transformational and Laissez-Faire Leadership in Health International journal of medical science Vol. 8 No. 09 (2021) | Page No.: 5605-5609 | <https://doi.org/10.18535/ijmsci/v8i09.04>
- 6) Nadia Saleh, Magda Al- Fattah .Effect of ethical leadership on nurses job performance, Nursing Administration, Faculty of Nursing, Sohag University, Egypt .Sohal Journal of Nursing science. . Volume 1, Issue 1 - Serial Number 1 July 2022, Pages 11-20
- 7) Fetti Arisa¹, Tantri Yanuar Rahmat Syah² Magister Management Esa Unggul .How Transformational Leadership Style Of Head Nurse The Influence On Performance Of Nurses By Mediated Job Satisfaction : A Case Study In Hospital Industry Indonesia University Jakarta . IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 20, Issue 8. Ver. V (August. 2018), PP 62-69 www.iosrjournals.org DOI: 10.9790/487X-2008056269 www.iosrjournals.org 62 | Page

- 8) Bahadori A., Peyrovi H., Ashghali-Farahani M , Hajibabae F. and Haghani H.
The relationship between nursing leadership and patient satisfaction . International Journal of Medical Research & Health Sciences, Iran, 2016, 5, 10:134-141

- 9) Elisabete Maria Garcia Teles Nunesa . Maria Filomena Mendes Gaspar. Leadership in nursing and patient satisfaction in hospital context. Portugal. **Rev Gaúcha Enferm.** 2016 **jun;37(2):e55726** DOI: <http://dx.doi.org/10.1590/1983-1447.2016.02.55726>)
- 10) Rakesh Kumar Sharma. Emerging Innovative teaching strategies. JOJ Nursing & Healthcare. Swami Rama Himalayan University ,Dehradun , Uttarakhand. India , April , 2017 & April 2019)

- 11) Anitha Kaluvoya . Sree C Dhanya. A Survey on the Effectiveness of Innovative Teaching-Learning Methods Adopted by Academicians . [Proceedings of the International Conference on Best Innovative Teaching Strategies \(ICON-BITS 2021\)](#) India . 8 Feb 2022

- 12) Anju, Sathish Rajamani . A true experimental study to evaluate the effectiveness of structured teaching program on knowledge regarding ill effects of alcohol consumption among adolescents in selected senior secondary school at Panipat Haryana. International Journal of Nursing education , October – December 2019, Vol.11,No 4

- 13) Maheswari S , Hemavathy J, Ciby J, Kanchana S, Celina D. Pilot study on effectiveness of integrated mental health nursing intervention on knowledge , attitude, perception and social support system regarding mental illness among caregivers, ICCRJNR,Jul-Dec 2023, 8(2): 33-48.

- 14) Ram Kumar Garg , Pooja Koundal , Poonam Sharma , Yogesh Kumar , Ram Niwas1, Jitendra Singh. The impact of organised educational campaigns on understanding of needle sticks injuries and related post-exposure HIV/AIDS prophylaxis

- 15) Lema Daba, Lemlem Beza, Merahi Kefyalew, Tilahun Teshager, Fenta Wondimneh, Ashenu Bidiru ,Indeshaw Ketema . Job performance and associated factors

among nurses working in adult emergency departments at selected public hospitals in Ethiopia: a facility-based cross-sectional study; BMC Nursing volume 23, Article number: 312 (2024)

16) Anna J Koné Péfoyo , Walter P Wodchis Organizational performance impacting patient satisfaction in Ontario hospitals: a multilevel analysis . BMC Research Notes volume 6, Article number: 509 (2013)