Dissertation: A study to assess the effectiveness of video teaching programme on knowledge regarding body mechanics among staff nurses in selected hospitals of district Kangra (H.P)".

Author –I
Rajani Bala

Author-II
Diksha Sharma

ABSTRACT

Background: Body mechanics can be both good and bad and can have direct effects on back pain. Jobs of healthcare team members require pushing, pulling, carrying and lifting during patient care activities. Body mechanics is directly related to the effective functioning of the body. The correct use of body mechanics should be evident in every activity and even during rest periods. The actions of walking, turning, lifting and carrying are essential components in nursing care. **Methodology:** A quantitative research approach and quasi-experimental research design was adopted to conduct study. The non- probability purposive sampling technique was used to select 60 staff nurses from the selected hospitals of district Kangra, Himachal Pradesh. Self-structured knowledge questionnaire was used to assess the level of knowledge of staff nurses regarding the body mechanics. Analysis of collected data was done according to the objectives of the study and data analyzed by using descriptive and inferential statistics. **Result:** The study shows that out of 60 staff nurses, about (33.34 %) belongs to the age group of 26-30 year, (50%) were unmarried, (70%) were GNM, (100%) were from private job, (50%) from general ward, (35%) from professional experience had 1-2 year experience, (85%) had no previous knowledge. In pre- test knowledge score (0%) had good knowledge, (70%) had average knowledge regarding the body mechanics. Post-test knowledge score about (63.33%) has good knowledge, (36.67%) had average knowledge regarding the body mechanics. Overall the mean value of pre-test was higher than mean post–test. The value of t was significant at p<0.05 level of significance study findings revealed that there was association between levels of knowledge body mechanics. **Conclusion** Video teaching program me was an effective strategy in improving the knowledge of staff nurses regarding the body mechanics.

Chapter -1: Background of the study

Introduction

Body mechanics is a two-word phrase used to describe the movements we make each day during normal activities, including lying in bed, sitting, standing, lifting, pulling, pushing and walking Good body mechanics will help remedy and prevent future back problems, while bad body mechanics contribute to back problems and other muscle and bone problems.[8] Body mechanics is the efficient use of the body as a machine and as a means of locomotion. And the body mechanics is directly related to the effective functioning of the body. The correct use of body mechanics should be evident in every activity and even

during rest periods. Hospital workers experience more low back pain than many other groups, the incidence varies among countries.[1]

Nearly 80% of all injuries are due to over exertion from lifting, pulling, pushing, carrying and turning motions. Totally there are more than 6,6500 injuries are resulted in days away from work where reported among nursing assistance.17% nursing home workers lost work time due to injury on the job that is at the rate of 216400 injuries and illness with untold pain and suffering.[2]

To reduce the risk of injury to the nurses when transferring a client, the nurses must know and practice proper body mechanics. This includes knowledge of the actions of the factors involved in the co-ordination of body movement, and familiarity with the integrated functioning of the skeletal, muscular systems.[3] Body mechanics can be both good and bad and can have direct effects on back pain. Jobs of healthcare team members require pushing, pulling, carrying and lifting during patient care activities. Prolonged performance of these actions leads to muscles injuring the patients as well as nurses.[2]

Nursing personals all over the world facing a significant problem of low back pain and it is mainly due to the manual lifting and handling the heavy objects and patients. Nurses are believed having knowledge about the risk factors and preventive measures and apply effectively into practice in order to prevent from musculoskeletal and back injuries. This indicates that nurses needs to be well informed about the risk factors and use of body mechanics technique in order to perform their duty safely. To practice the safe body alignment and techniques nurses should acquire knowledge and practices. Therefore, this study is aim to determine the knowledge and practices of nurses related to the body mechanics.[4]

The nurses working in intensive care unit and operational theatre experience low back pain more frequently due to bending forward for long durations, over-loading some body parts while repositioning patients and sparing more time for patient care. Low back pain can be treated by medications, mobilization, stretching exercise, stabilization exercise, ergonomic advice and postural advice and home remedies. Exercise play an important role in preventing and reducing low back pain by strengthening the back muscles and improving flexibility.[1]

Good body mechanics is safest and most efficient methods to lift and move patients or heavy items. Efficiency is more important than strength. Most of the nurses are aware when they bend or lift something, they should bend their knees. While it is important to bend the knees, mostly attention of the position of spine. In order to avoid injury, either at the moment of lifting something or, more likely, as a result of poor body mechanics over time, care must be taken to maintain the neutral spine.[5]

Nurses need to educate themselves on how and why patient lifting causes spinal injury. It has been also found that back injury is the part of job with which the nurses had to dealed with. Nurses need to know that manually lifting patients places them at tremendous risk of permanent spinal disability, not just at risk of muscle strain, which would be expected to heal in a matter of days or weeks. Injury is the predictable outcome from performing hazardous lifting.[24] Nurses are the persons play an important role in protecting, maintaining and improving individuals and community's health. Nurses should give importance to protective and improved actions for their own health, by that they can provide quality nursing care and be productive and administer patient care without interruption.[7]

However, there are very less number of studies are conducted in Himachal Pradesh (H.P) related to body mechanics due to the fact that improving the quality of nursing work. Life is one of the most effective method to motivate a help designing and enriching the nurses job. The student researcher with her experience working with staff nurses realized that nurses are at high risk for back injuries due to improper body mechanics during patient care. So the researcher decided to assess the knowledge and practices of staff nurses regarding body mechanics by use of a video teaching programme.

HYPOTHESES

H_1: There will be significant difference between pre-test and post-test knowledge score regarding prevention of body mechanics, among Nurses.

H_{01}: There will be no significant difference between pre-test and post-test knowledge score regarding prevention of body mechanics, among Nurses.

H_2: There will be significant association of post-test knowledge regarding prevention of body mechanics, among nurses with selected demographic variables.

H_{02}: There will be no significant association of post-test knowledge regarding prevention of body mechanics, among nurses with selected demographic variables.

OPERATIONAL DEFINITIONS: -

Effectiveness: refers to gain in knowledge as determined by significant difference in pre-test and post- test knowledge scores.

Knowledge: level of understanding of staff nurses regarding body mechanics in selected hospitals.

Assess: - It refers to the level of knowledge of staff nurses regarding the prevention of surgical site infections.

Practice: the performance of any act in the care of the ill or injured.

Video assisted teaching: it is a teaching strategy, where a moving picture is shown on screen regarding body mechanics for low back pain disability specially prepared by the investigator.

Body Mechanics: It is posture to be followed in standing, sitting lying and lifting in daily activities, which results in natural strengthening of the back, and refers to efficient use of the body as a machine.
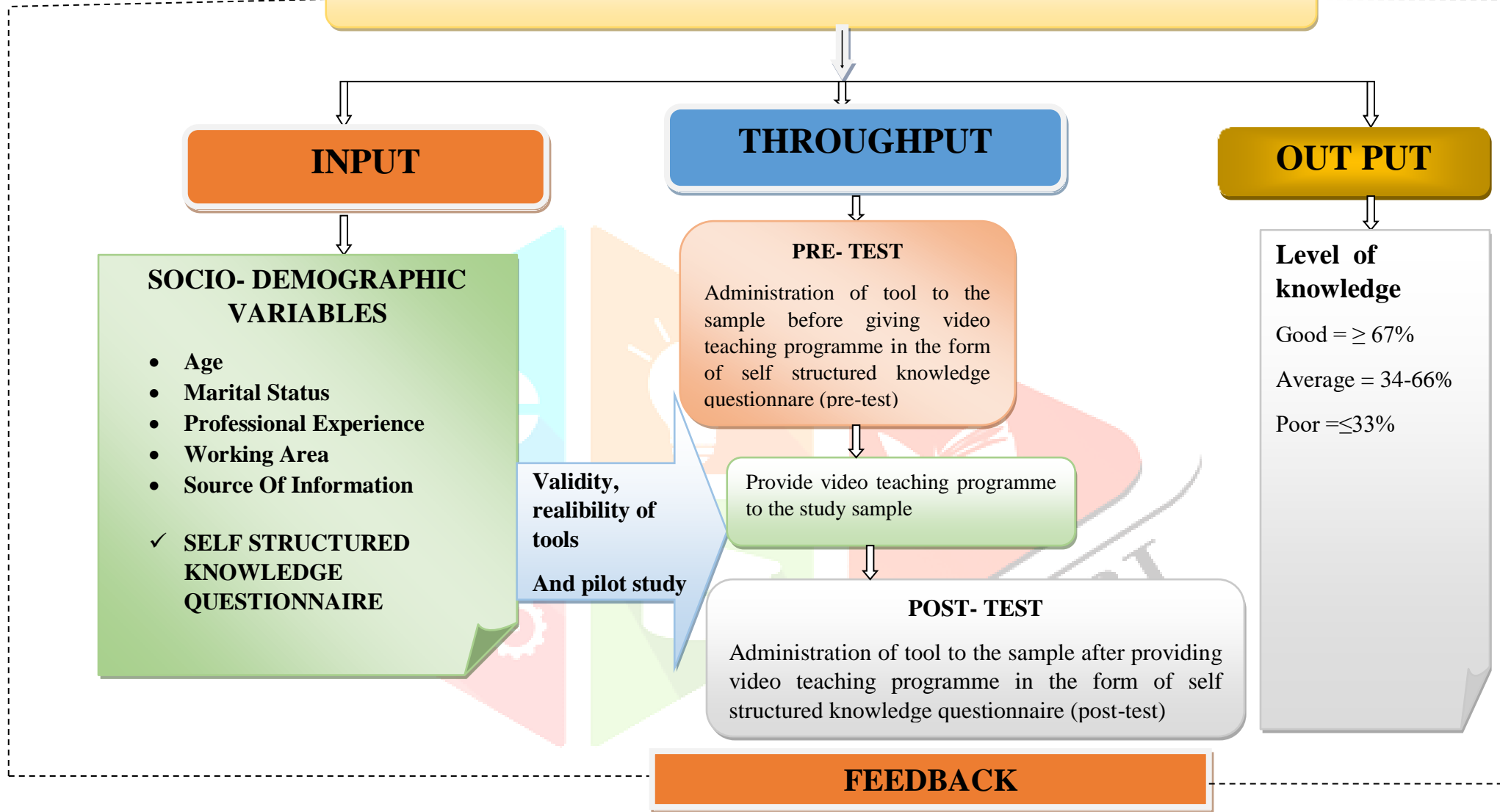
Delimitations:

The study is delimited to the staff nurses who

- are willing to participate in the study
- are working in selected hospitals in district Kangra (H.P)

CONCEPTUAL FRAMEWORK

A conceptual framework is an analytical tool with several variations and contexts. Ludwig Von Bertalanffy's general system model used in this study. According to this theory, a system is a group of element that interacts with one another in order to achieve the goal. An individual is a system because he/she receives input from the environment. The input when processed provided on output. All living systems are open. There is a continuous exchange of matter, energy and information. The system is cyclical in nature and continuous to be so, as long as the four points: - input, output, through put and feedback- keep interaction in all other parts. Feedback from within the system or from the environment provides information, which helps the system to determine the effectiveness.

STAFF NURSES

INPUT

THROUGHPUT

OUT PUT

SOCIO- DEMOGRAPHIC VARIABLES

- Age
- Marital Status
- Professional Experience
- Working Area
- Source Of Information

✓ SELF STRUCTURED KNOWLEDGE QUESTIONNAIRE

Validity, realibility of tools

And pilot study

PRE- TEST

Administration of tool to the sample before giving video teaching programme in the form of self structured knowledge questionnare (pre-test)

Provide video teaching programme to the study sample

POST- TEST

Administration of tool to the sample after providing video teaching programme in the form of self structured knowledge questionnaire (post-test)

Level of knowledge

Good = ≥ 67%

Average = 34-66%

Poor =≤33%

FEEDBACK

Figure 1: Conceptual Framework based on General System Model

Chapter -2 RESEARCH METHODOLOGY

Research methodology is the most important aspect of the research as it is the framework for conducting the study.

RESEARCH APPROCH

A quantitative research approach was used to assess the effectiveness of Video Teaching Programme on the knowledge regarding body mechanics among Staff Nurses selected Hospitals of district Kangra, Himachal Pradesh.

RESEARCH DESIGN

One group pre-test post-test pre- experimental research design was used to accomplish the state objectives.　A Quasi-experimental: One group pre-test-post-test design

A SCHEMATIC PLAN OF THE STUDY

GROUP	PRE TEST	INTERVENTION	POST TEST
Staff Nurses	O_1	X	O_2

KEY

O_1 = Pre-test assessment on knowledge scores of staff nurses regrading body mechanics.

X = Planned video teaching programme on knowledge of nurses regrading body mechanics.

O_2 =Post-test assessment on knowledge of nurses regrading body mechanics.

RESEARCH SETTING

The present study will be conducted in selected hospitals of District Kangra Himachal Pradesh.

- City Hospital Matour District Kangra
- Panchsheel Multispecialist Hospital Nagrota Bagwan District Kangra
- City Care Hospital Gagaal District Kangra

POPULATION

The population of the study was Staff nurses

Target population:

The target population was staff nurses worked in hospital of district kangra.

Accessible population:

Accessible population for the study was   staff nurses who was worked in selected hospital of district Kangra.

SAMPLE AND SAMPLING TECHNIQUE

Sample:

Sample was staff nurses in hospital of district Kangra Himachal Pradesh.

Sampling Technique:

Non-probability Purposive sampling technique was employed in the present study to select the sample.

SAMPLE SIZE

Sample of the present study consists of 60 staff nurses who satisfied the inclusive criteria.

CRITERIA FOR SELECTION OF SAMPLE

The criteria for sample selection are mainly depicted under two heading. Which includes the inclusion and exclusion criteria.

INCLUSION CRITERIA

The study includes the staff nurses those who were

- Staff nurses
- Who had 1 year or more than one year experience
- Age limitation: 18years to 50 years
- Nurses who are voluntarily interested to be part of study.
- Available at the time of data collection.

EXCLUSION CRITERIA

The study excludes those who were:

- Student nurses.
- Nurses who will refuse to participate in the study.
- Not available at the time of data collection.

VARIABLES

"A variable is a phenomenon or characteristic or attribute under study.

Independent variable:

In this study, the independent variable was video teaching programme on body mechanics.

Dependent variables:

In this study, the dependent variable was knowledge of staff nurses regarding the body mechanics.

SELECTION AND DEVELOPMENT OF THE TOOL

As the study is concerned with effectiveness of planned teaching programme on knowledge regarding body mechanics among staff nurses so, structured knowledge questionnaire was used to assess the knowledge of staff nurses.

DESCRIPTION OF TOOL

The tool was formulated after an extensive review of literature and discussion with the experts and guides.

The tool was consisting of two parts

Part- I: Socio demographic variables:

The socio demographic variables consist of items on background data of the participants. It includes age, marital status, qualification, occupation status, years of experiences, working area, source of information regarding the body mechanics.
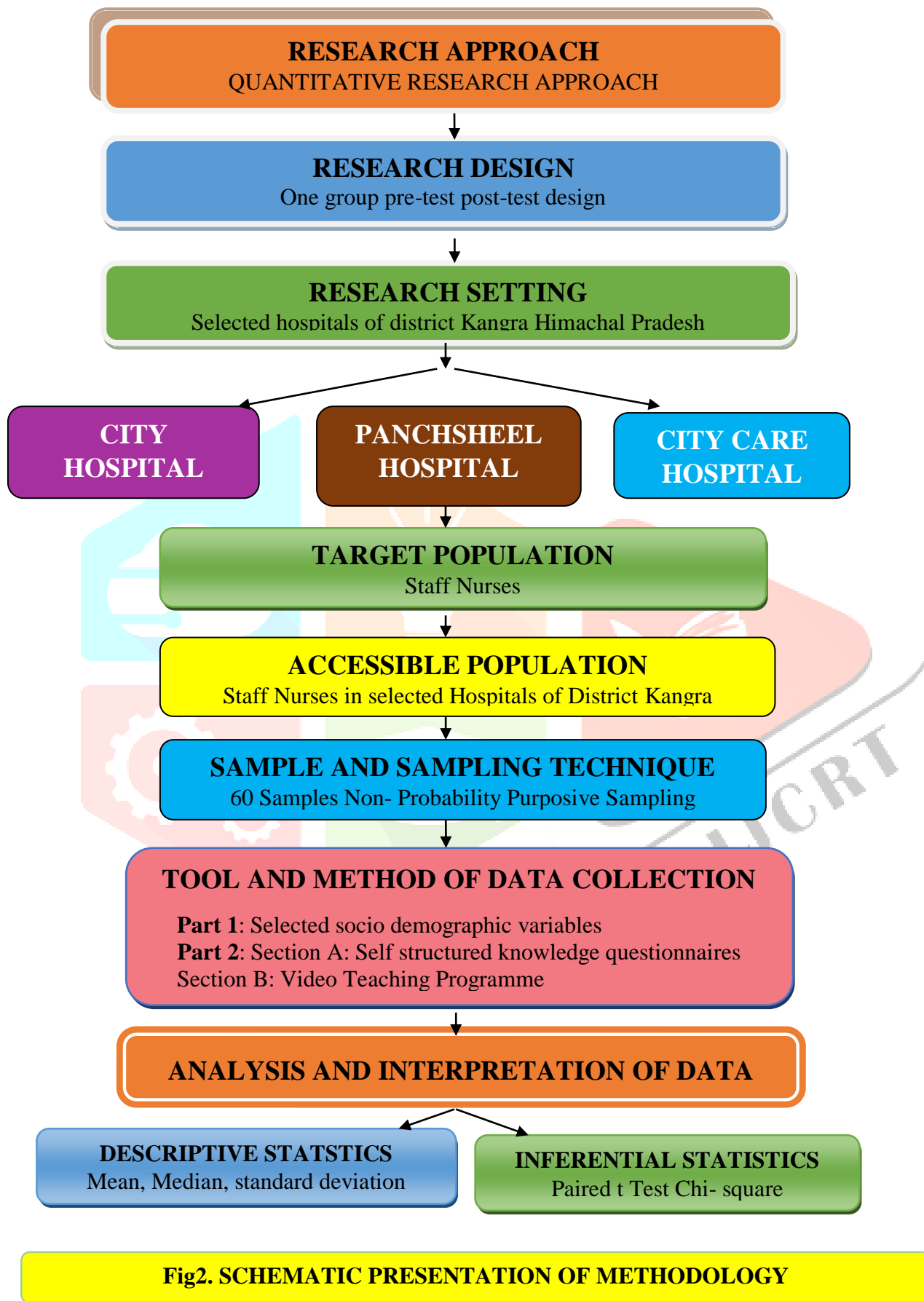
Part- II: It consists two sections:

Section-A: Self structured knowledge questionnaire was constructed for the nurse in the form multiple choice questions. It consisted of 30 questions to assess the knowledge regarding the body mechanics among staff nurses.

Section-B: Video teaching program was prepared regarding the body mechanics.

SCORING PATTERN

It structured knowledge questionnaire consist of 30 questions in which, right answer was documented as correct one mark and wrong were documented as a zero mark. The complete ranged from 0 to 30.

LEVELOF KNOWLEDGE	%	SCORE
Good	≥67%	21-30
Average	34-66%	11-20
Poor	≤33%	0-10

RESEARCH APPROACH
QUANTITATIVE RESEARCH APPROACH

RESEARCH DESIGN
One group pre-test post-test design

RESEARCH SETTING
Selected hospitals of district Kangra Himachal Pradesh

CITY HOSPITAL

PANCHSHEEL HOSPITAL

CITY CARE HOSPITAL

TARGET POPULATION
Staff Nurses

ACCESSIBLE POPULATION
Staff Nurses in selected Hospitals of District Kangra

SAMPLE AND SAMPLING TECHNIQUE
60 Samples Non- Probability Purposive Sampling

TOOL AND METHOD OF DATA COLLECTION

Part 1: Selected socio demographic variables
Part 2: Section A: Self structured knowledge questionnaires
Section B: Video Teaching Programme

ANALYSIS AND INTERPRETATION OF DATA

DESCRIPTIVE STATSTICS
Mean, Median, standard deviation

INFERENTIAL STATISTICS
Paired t Test Chi- square

Fig2. SCHEMATIC PRESENTATION OF METHODOLOGY

Chapter-3:   Analysis and interpretation of data

The analysis and interpretation of data was done according to the objectives laid down for study.

ORGANIZATION AND PRESENTATION OF DATA

Data was entered in master sheet, for tabulation and statistical processing in order to analyze and interpreted using descriptive and inferential statistics methods. The data is presented under the following headings-

Section-I

Distribution of socio demographic variables

- Frequency and percentage distribution of staff nurses according to their demographic variables

Section-II

- Mean, mean percentage, Range, median, mode, SD, SE mean of pre-test knowledge score regarding the body mechanics among staff nurses.
- Level of pre-test knowledge score regarding the body mechanics among staff nurses.

Section-III

- Mean, mean percentage, R, median, mode, SD, SE mean of post-test knowledge score regarding the body mechanics among staff nurses.
- Level of post-test knowledge score regarding the body mechanics among staff nurses

Section-IV

- Findings related to comparison of mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses.

Section-V

- Findings related to association of post-test knowledge score of staff nurses with selected demographic variables.

SECTION-1: Distribution of socio demographic variables

Table 1: Frequency (f) and percentage (%) distribution of staff nurses according to their socio demographic variables.

N=60

S. No.	Demographic variables	Frequency (f)	Percentage (%)
	Age (in years)		
	21-25	8	13.33
	26-30	20	33.34
	31-35	15	25
	36 and above	17	28.33
	Marital status		
	Married	26	43.33
	Unmarried	30	50
	Widow	4	6.67
	Professional qualification		
	G.N.M	42	70
	B.Sc. Nursing	10	16.67
	Post basic B.Sc. Nursing	5	8.33

M.Sc. Nursing	3	5
Occupation status		
Government job	0	0
Private job	60	100
Working area		
ICU	18	30
Emergency	12	20
General Ward	30	50
Professional Experience		
< 1 year	19	31. 67
1-5 years	21	35
6-10 years	10	16.66
>10 years	10	16. 67
Sources of information		
No	51	85
Yes	9	15
If yes, source of information		
Mass media	4	6.67
Peer group	5	8.33

Table 1: illicit the distribution of staff nurses according to the sample characteristics like age (in years), marital status, professional qualification, occupation status, professional experience, working area, source of information.

In the experimental group, it was depicted that according to age (In years), regarding age, the majority of the participants 20(33.34%) were belongs to 26-30 years of age, 17(28.33%) belongs to ≥36 year of age, 15(25%) belongs to 31-35 years of age and 8 (13.33%) belongs to 21-25 years of age. In accordance with marital status, result shows that 30 (50%) were unmarried, 26(43.33%) of staff nurses were married and 4(6.67%) were widow.

SECTION-II: Pre-test knowledge score regarding the body mechanics among staff nurses.
OBJECTIVE 1 To assess the pre-test knowledge score regarding the body mechanics among staff nurses.

Table 2: Mean, mean %age, median, mode, Range, SD, SE mean of pre-test knowledge score regarding the body mechanics among staff nurses.
          N=60

Groups	Mean	Mean %	Median	Mode	Range	SD	SE mean
Experimental Group	11.53	1153.33	11	11	12	2.29	0.29

Table2:
Data presented in the table 2 of pre-test knowledge score shows that mean was 11.53, mean % was 1153.33, median was 11, mode was 11, range was 12, SD was 2.29 and .29 was SE mean.

Table-2.1: Frequency and percentage distribution of level of pre-test knowledge score regarding the body mechanics among staff nurses.
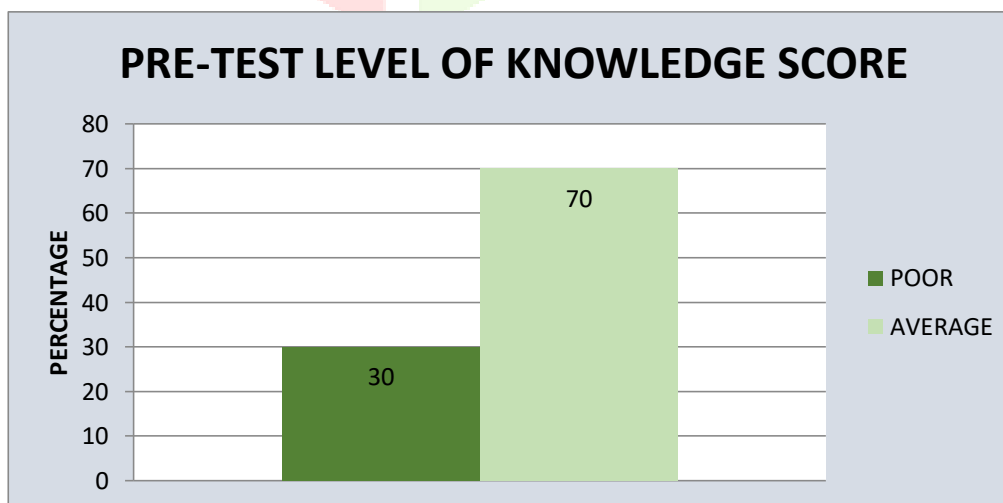
Level of pre-test knowledge score	Experimental Group N=60	
	(f)	(%)
Poor	18	30
Average	42	70

Maximum score-30
Minimum score-00
Data presented in the table 2.1 shows that pre-test knowledge score was categorized in poor, average and good. According to the score obtained by the staff nurses ≤33% (1-10), 34-66% (11-20) and ≥67% (21-30) respectively.
The pre-test knowledge score, 18 (30%) staff nurses had poor level of knowledge, 42 (70%) staff nurses had average level of knowledge, and there was no staff nurses who had good level of knowledge.

Figure 3: Bar graph shows level of pre-test level of knowledge score regarding the body mechanics among staff nurses.

SECTION-III: Post-test knowledge score regarding the body mechanics among staff nurses.
OBJECTIVE 3 To assess the post-test knowledge score regarding the body mechanics among staff nurses.

Table 3: Mean, mean %, median, mode, Range, SD, SE mean of post-test knowledge score regarding the body mechanics among staff nurses.
N=60

Groups	Mean	Mean %	Median	Mode	Range	SD	SE mean
Experimental Group	22	2200	22	25	11	2.92	.37

Data presented in the table 3 of post-test knowledge score shows that mean was 22, mean % was 2200, median was 22, mode was 25, range was 11, SD was 2.92 and .37 was SE mean.

Table 3.1: (f) and (%) distribution of post-test level of knowledge score regarding the body mechanics among staff nurses.
N=60

Level of knowledge score	Experimental Group	
	(f)	(%)
Average	2	36.67
Good	38	63.33

Maximum score-30
Minimum score-00

Data presented in the table 3.1 shows that post-test level of knowledge was categorized in good, average and poor. According to the score obtained by the staff nurses ≥67% (21-30), 34-66% (11-20) and ≤33% (1-10) respectively.

In experimental group, The post-test knowledge score 38 (63.33%) staff nurses had good level of knowledge, 22 (36.67%) staff nurses had average level of knowledge. There was no staff nurse who had poor level of knowledge.
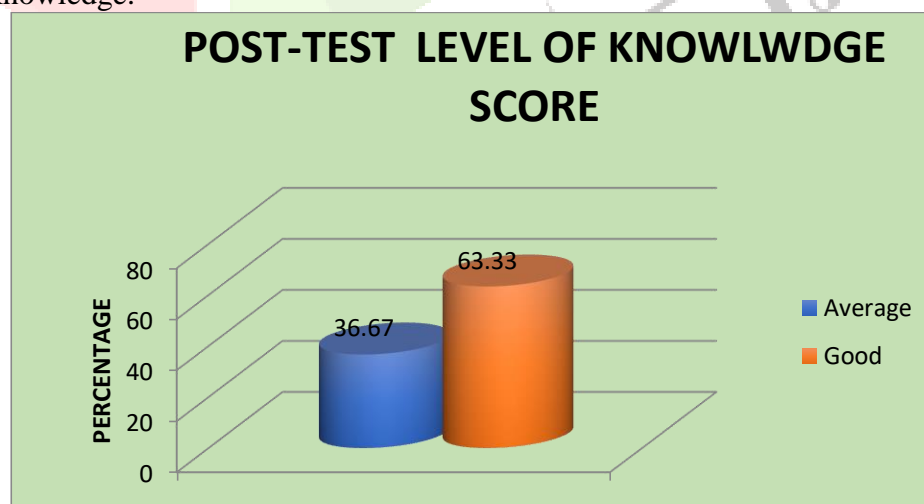
Figure 4: Cylindrical graph shows level of post-test knowledge score regarding the body mechanics among staff nurses.

SECTION-IV: Findings related to comparison of mean pre-test and post-test knowledge score the body mechanics among staff nurses.

OBJECTIVE 3 To compare the mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses.

Table 4: Findings related to comparison of mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses.

N=60

Experimental Group (N=60)	MEAN	SD	SE MEAN	df	t-VALUE
Pre-test	11.53	2.29	.29	59	4.68*
Post-test	22	2.92	.37		

**-significant at p<0.05

The analysis of table 4 shows the comparison of mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses. In the experimental group the mean post-test knowledge score was higher than the mean pre-test knowledge score i.e. the mean post-test was (22) and mean pre-test was (11.53).

Further, the paired t test was used to find the significant difference between the mean pre-test and post-test knowledge scores. The t value in the experimental group (4.68) at p<0.05 level of significance was tested. Result was highly significant in the experimental group.

Hence the research hypothesis (H_1) was accepted. It was concluded that the mean post-test knowledge score was high as compared to mean pre-test knowledge score and that difference is due to the exposure of video teaching programme to staff nurses regarding the body mechanics.
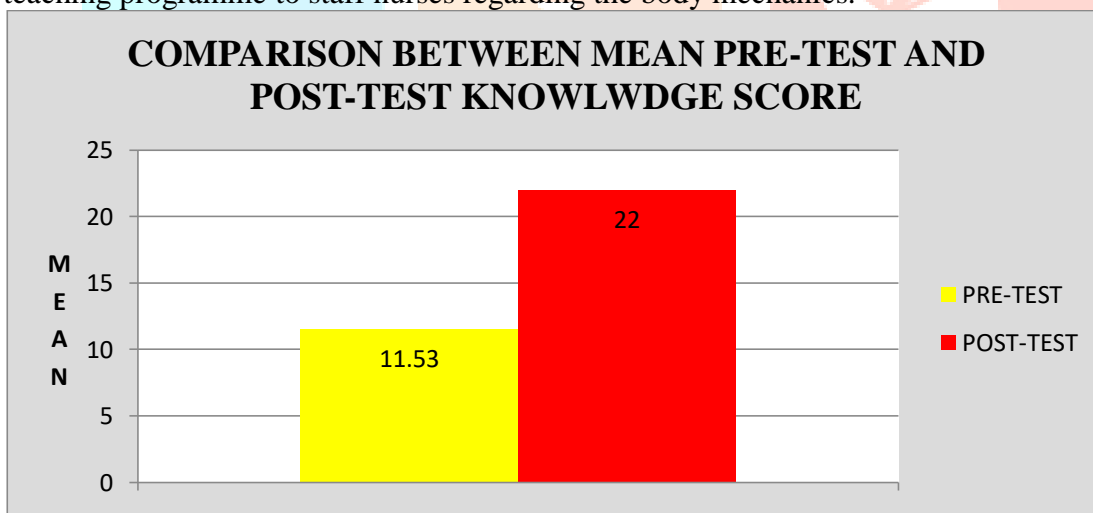
Figure 5: Bar graph shows comparison of mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses.

SECTION-V: Findings related to association of post-test knowledge score with selected demographic variables

OBJECTIVE 4 To determine the association of post test knowledge score of selected socio demographic variable.

Table 5: Findings related to association of post-test knowledge score with selected demographic variables.

S. no.	Demographic variables	Level		Total	χ^2	df	p value
		Average	Good				
1	**Age (in years)**						
	21-25	03	05	08	0.76	3	7.82 [NS]
	26-30	06	13	19			
	31-35	05	11	16			
	36 and above	08	09	17			
2	**Marital status**						
	Married	09	17	26	0.22	2	5.99[NS]
	Unmarried	11	19	30			
	Widow	02	02	4			
3	**Professional qualification**						
	G.N.M	15	27	42	0.06	3	7.82 [NS]
	B.Sc. Nursing	04	06	10			
	Post basic B.Sc. Nursing	02	03	05			
	M.Sc. Nursing	01	02	03			
4	**Occupation status**						
	Government job	00	00	00	2.92	1	3.84 [NS]
	Private job	22	38	60			
5	**Working area**						
	ICU	03	15	18	4.90	2	5.99[NS]
	Emergency	08	04	12			
	General Ward	11	19	30			
6	**Professional Experience**						
	< 1 year	**03**	**16**	**19**	**5.82**	**3**	**5.29** [**]
	1-5 years	07	14	21			
	6-10 years	07	04	10			
		05	04	10			
	>10 years						
7	**Sources of information**						
	No	18	33	51	0.39	1	3.84 [NS]
	Yes	04	05	09			
	If yes, source of information						
	Mass media	02	02	04	0.60	3	7.82 [NS]
	Peer group	01	04	05			

 NS- Not significant   ****-significant at p<0.05**

Table 5 shows association of demographic variables with post-test knowledge score. It was observed that among all the socio demographic variables such as age (in years), marital status, professional qualification, occupation status, professional experience, working area, source of information. There was only significant difference between the post-test knowledge score with professional experience. Hence, the research hypothesis (H_2) was partially accepted and null hypothesis (H_{02}) was rejected.

Summary

This chapter describes about analysis of data and interpretation of the findings of the study. The data obtained were summarized in the master data sheet and both description and inferential statistics were used for analysis. The analyses were organized in five sections. Frequency and percentage was used to analyses the socio demographic variables. Mean, standard deviation, t test were computed to compare the pre-test and post-test knowledge score regarding the body mechanics among staff nurses. Chi-square was used to find out association between the post-test knowledge score with selected demographic variables.

DISCUSSION

The purpose of the present study to assess the effectiveness of video teaching programme on the knowledge regarding body mechanics among staff nurses in selected hospitals of district Kangra Himachal Pradesh. This chapter relates the findings of the present study in accordance with the studies done earlier.

Analysis of the study indicated the significant effect of video teaching programme on body mechanics among staff Nurses. The present study shows that video teaching programme is effective in improving the knowledge level of staff nurses. i.e. from e mean pre-test score (11.53) to mean post-test knowledge score (22). These findings were consistent with the findings of "t" value obtained was (4.68) at P<0.05 level of significance) which was very highly significant. The post-test score was high as compare to pre-test score, which shows the effectiveness of video teaching programme.

A Quasi–experimental study was conducted at selected hospitals of district Kangra, assess the video teaching programme on knowledge regarding body mechanics among staff nurses. The sampling technique used was non – probability convenient sampling. Data was collected from 60 staff nurses from selected hospitals of district Kangra. A pre test was conducted and immediately after they were given a video teaching program on body mechanics including various aspects. After a week a post test was conducted and the results were compared and analyzed through descriptive and inferential statistics.

In the experimental group, it was depicted that according to age (In years), regarding age, the majority of the participants 20(33.34%) were belongs to 26-30 years of age, 17(28.33%) belongs to ≥36 year of age, 15(25%) belongs to 31-35 years of age and 8 (13.33%) belongs to 21-25% years of age. In accordance with marital status, result shows that 30 (50%) were unmarried, 26(43.33%) of staff nurses were married and 4(6.67%) were widow. As per professional qualification 42(70%) were G.N.M, 10(16.67%) were B.Sc. nursing, 5(8.33%) were post basic B.Sc. nursing, and 3(5%) were M.Sc. nursing. Distributions of staff nurses according to their occupation status (100%) were from private job and (0%) were government job. In relation to work area 30(50%) in general ward, 18(30%) were posted in ICU and 12(20%) in emergency and. According to professional experience, 21(35%) had 1-5 year experience, 19(31.67%) had 1 year experience, 10(16.66%) had 6-10 year experience. and out of these 10(16.67%) had more than 10 year experience. According to source of information 51(85%) had no previous knowledge and 9(15%) had previous knowledge. Out of (6.67%) source of information was mass media and (8.33%) source of knowledge was peer group.

Pre-test knowledge score shows that mean was 11.53, mean % was 1153.33, median was 11, mode was 11, range was 12, SD was 2.29 and .29 was SE mean. Pre-test knowledge score was categorized in poor, average and good. According to the score obtained by the staff nurse's ≤33% (1-10), 34-66% (11-20) and ≥67% (21-30) respectively. The pre-test knowledge score, 18 (30%) staff nurses had poor level of knowledge, 42 (70%) staff nurses had average level of knowledge, and there were no staff nurses who had good level of knowledge. Post-test knowledge score shows that mean was 22, mean % was 2200, median was 22, mode was 25, range was 11, SD was 2.92 and .37 was SE mean. Post-test level of knowledge was categorized in good, average and poor. According to the score obtained by the staff nurse's ≥ 67% (21-30), 34-66% (11-20) and ≤33% (1-10) respectively. In experimental group, the post-test knowledge score 38 (63.33%) staff nurses had good level of knowledge, 22 (36.67%) staff nurses had average level of knowledge. There was no staff nurse who had poor level of knowledge. The comparison of mean pre-test and post-test knowledge score regarding the body mechanics among staff nurses. In the experimental group

the mean post-test knowledge score was higher than the mean pre-test knowledge score i.e. the mean post-test was (22) and mean pre-test was (11.53), the paired t test was used to find the significant difference between the mean pre-test and post-test knowledge scores. The t value in the experimental group(4.68) at $p<0.05$ level of significance was tested. Result was highly significant in the experimental group.

Hence the research hypothesis (H_1) was accepted. It was concluded that the mean post-test knowledge score was high as compared to mean pre-test knowledge score and that difference is due to the exposure of video teaching programme to staff nurses regarding the body mechanics.

Summary of the findings

Frequency and percentage distribution of socio demographic variables

- According to age (In years), (13.33%) staff nurses belongs to the age group of 21-25 years, followed by (33.34%) belongs to the age group of 26-30 years, (25%) belongs to the 31-35 years and (28.33%) belongs to the age group of 36 years and above.
- In accordance with marital status, result shows that (43.33%) of staff nurses were married, (50%) were unmarried, (6.67%) were widow.
- As per professional qualification (70%) were G.N.M, (16.67%) were B.Sc. nursing, (8.33%) were post basic B.Sc. nursing, and (5%) were M.Sc. nursing.
- Distributions of staff nurses according to their occupation status (100%) were from private job and (0%) were government job.
- In relation to work area (30%) were posted in ICU and (20%) in emergency and (50%) in general ward.
- According to professional experience, (31.67%) had 1 year experience, (35%) had 1-5 year experience, (16.66%) had 6-10 year experience. and out of these (16.67%) had more than 10 year experience.
- According to source of information (85%) had no previous knowledge and (15%) had previous knowledge. Out of (6.67%) source of information was mass media and (8.33%) source of knowledge was peer group.
- **Findings related to pre-test knowledge score:**
  The pre-test knowledge score, 18 (30%) staff nurses had poor level of knowledge, 42 (70%) staff nurses had average level of knowledge, and there was no staff nurses who had good level of knowledge.
- **Findings related to post-test knowledge score:**
  The post-test knowledge score 38 (63.33%) staff nurses had good level of knowledge, 22 (36.67%) staff nurses had average level of knowledge. There was no staff nurse who had poor level of knowledge.
- **Comparison of pre-test and post-test knowledge**
  Mean knowledge score was significantly higher ($P<0.05$) following implementation of video teaching programme showing effectiveness of the tool to enhance the knowledge of body mechanics among staff nurses.
- **Association between the post-test knowledge with selected demographic variables**
  Association of demographic variables with post-test knowledge score. It was observed that among all the socio demographic variables such as age (in years), marital status, professional qualification, occupation status, professional experience, working area, source of information. There was only significant difference between the post-test knowledge score with professional experience. Hence, the research hypothesis (H_2) was partially accepted and null hypothesis (H_{02}) was rejected.

RECOMMEDATIONS

- Similar study may be replicated on large sample
- Similar study may be conducted on student nurses.

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