

# “A Study To Assess The Effectiveness Of Video Teaching Program On Knowledge Regarding Osteopathy Among Nurses In Selected Hospitals Of Pune City.”

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## **ABSTRACT:**

**Introduction:** Osteopathy is a form of alternative medicine that teaches the use of the body's muscles and bones. Doctors of osteopathic medicine are called osteopaths. The name is derived from the ancient Greek words *osteon* “bone” and (*pathos*) “pain, suffering”. The main principle behind the osteopathic treatment is that the body is an inseparable and nonspecific whole and has its own healing mechanisms that can be used as part of the treatment. No part of the body functions and cannot be considered in isolation. Psychological and social factors are also part of the patient's diagnosis. As osteopathy is the older treatment modality to treat and cure various cases related to bone hence the nurse can be educated regarding this treatment option and she can help the patient to overcome the issue of bone.

**Material and method:** A quantitative research strategy was used for the investigation. A sample size of 100 was used for this investigation and was reviewed seven days after the intervention. The target population was the staff nurse and the study was conducted in selected hospitals of Pune city. The tool had two sections: Demographic variables and a self-structured questionnaire on knowledge regarding osteopathy.

**Result:** The knowledge scores increased significantly after the video-assisted teaching program. It is evident that the video tutorial program is significantly effective in increasing knowledge among nurses. The mean knowledge score increased from 10.12, to 17.33 in the study. The T-value for this test is 24.95 and the p-value is 0.0001, which is considered extremely statistically significant.

**Conclusion:** The study concluded that osteopathy knowledge increased substantially after video learning as confirmed by a "t" test at a p-value below the 0.05 level of significance.

**Key words:** assess, effectiveness, video teaching program, knowledge, osteopathy, nurses

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## **I. Introduction:**

Osteopathy is practiced since ancient times. It is based on the concept that if muscle, bones, and adjacent structures are strong body and its micro organs will become healthy. Physicians since ancient times have pieces of advice on physical exercises to all the patients coming for musculoskeletal injuries and strains.(1) Physiotherapy, diet therapy, and yoga therapy are based on the principles of osteopathy. The human body is made of musculoskeletal, neurological, and circulatory systems, etc. For the smooth functioning of the body, all systems of the body should work in harmony.(2) Osteopathy is a patient-centered treatment modality in which the evaluation, treatment, and rehabilitation of various patient conditions. It is widely practiced across the globe. There are multiple studies conducted on this concept but the nurses working in general hospitals need to know the basic concept of this type of therapy so the patient will be benefitted as nurses can practice osteopathy in their clinical practices.

Osteopathy uses a holistic, whole-body approach to treatment. Uses manual “hand-on” techniques to improve circulation and correct biomechanics without the use of drugs. It not only focuses on problem areas, but also use manual techniques to balance the entire body and promote health and wellness in general. The use of these techniques to diagnose and treat disease is called as Osteopathic manipulative medicine. Using these therapy can reduce and cure many ailments such as neck pain, foot, ankle, hip and knee pain, back pain, headache, etc.(3)

## **Objectives:**

1. To assess the pre-existing knowledge regarding Osteopathy among nurses in selected hospitals of Pune city.
2. To assess the knowledge after a video teaching program regarding osteopathy among nurses in selected hospitals of Pune city.
3. To determine the effectiveness of a video teaching program on osteopathy among nurses in selected hospitals of Pune city.

4. To find the association between demographic variables and knowledge about osteopathy among nurses in selected hospitals of Pune City.

### II. Materials and method:

The researcher is interested to conduct a study using one group pre-test and post-test method which is classified under pre-experimental design. The participant included in this study was 100 nurses recruited by means of the convenient sampling method. The target population was the staff nurses. This study was conducted in selected hospitals of Pune city. The tool had two sections: Demographic variables and a self-structured questionnaire on knowledge regarding osteopathy.

### III. Result and analysis:

The analysis and interpretation of the observations are presented in the following section:

#### Section- A

**Table 1. Distribution of staff nurses according to their characteristics.**

1. Age	Frequency	Percentage
A. 21-30	67	67%
B. 31-40	19	19%
C. 41-50	10	10%
D. 51-60	4	4%
2. Marital status	Frequency	Percentage
A. Married	65	65%
B. Unmarried	24	24%
C. Divorced	4	4%
D. Widowed	7	7%
<b>Kuppu swami scale</b>		
3. Socioeconomic status	Frequency	Percentage
A.26-29	7	7%
B.16-25	70	70%
C.11-15	23	23%
D.5-10	0	0%
E. <5	0	0%
4. Gender	Frequency	Percentage
A. Male	25	25%
B. Female	75	75%
5. Employment	Frequency	Percentage
A. Private employee	19	19%
B. Govt employee	81	81%
6. Years of experience	Frequency	Percentage
A. 1 to 5 Years	62	62%
B. 6 to 10 Years	26	26%
C. 11 to 15 Years	3	3%
D. >15 Years	9	9%
7. Area of living	Frequency	Percentage
A. Rural	16	16%
B. Urban	84	84%
8. Area of work	Frequency	Percentage
A. OBGY DEPT	24	24%
B. General ward	34	34%
C. ICU	12	12%
D. Casualty	30	30%
9. Previous knowledge	Frequency	Percentage
A. Yes	0	0%
B. No	81	81%
C. Can't say	12	12%
D. None of above	7	7%

10. Attended any CNE	Frequency	Percentage
A. Yes	0	0%
B. No	93	93%
C. Can't say	2	2%
D. None of above	5	5%

**Section-B**

**Table 2. Assessment of level of pre-test knowledge**

n=100

Key score table			
Level of pre-test knowledge	Score	Frequency	%
Poor knowledge	0-7	10	10%
Average knowledge	8-14	90	90%
Good knowledge	15-22	0	0%
Minimum score		4	
Maximum score		14	
Mean		10.12	
SD		2.4	

The table above shows that in the pre-test 10% of the staff nurses had poor knowledge of osteopathy, 90% of the staff nurses had average knowledge of osteopathy. The minimum score is 4 and the maximum score is 14 for knowledge. The mean and standard deviation are 9.8 and 2.57, respectively.

**Assessment of level of post-test knowledge**

n=100

Level of post-test knowledge	Score	Frequency	%
Poor knowledge	0-7	0	0%
Average knowledge	8-14	20	20%
Good knowledge	15-22	80	80%
Minimum score		11	
Maximum score		21	
Mean		17.33	
SD		2.51	

The table above shows that in the post-test, 20% of the nurses had an average knowledge of osteopathy and 80% of them had a good knowledge score.

**Section – C**

The purpose of this section is to investigate the efficacy of a video-assisted training programme on osteopathy knowledge among staff nurses at a specific hospital in Pune. The hypothesis is statistically tested using posttest and posttest scores

**Evaluation of pre-test and post-test**

Group	Mean	SD	SEM	N	t value	df	Standard error of difference	P value
Pre test	10.12	2.4	0.24	100	24.95	99	0.289	0.0001
Post test	17.33	2.51	2.51	100				

In these tables, the results of the paired t test show that the statistical significance of P and two P values is less than 0.0001 and this difference is considered statistically significant.

The confidence interval for the pre-test and post-test average is -7.21 and the 95% confidence interval for this difference is -7.78 to -6.64.

Median values used in calculations: t value 24.9521, df (degree of freedom) 99, standard error of difference 0.289, confidence value 0.75.

Considering the above, it can be interpreted that teaching knowledge about osteopathy to staff nurses through video has been effective. Therefore, H1 is accepted.

**Section-D**

This section presents the relationship between the pretest knowledge scores of employees about osteopathy and selected demographic variables.

Sample Characteristic	Poor (0-7)	Average (8-14)	df	t	p
<b>1. Age</b>					
A. 21-30	7	60	3	1.7508	0.1783
B. 31-40	1	18			
C. 41-50	1	9			
D. 51-60	1	3			
<b>2. Marital status</b>					
A. Married	8	57	3	1.9472	0.1467
B. Unmarried	2	22			
C. Divorced	0	4			
D. Widowed	0	7			
<b>3. Socioeconomic Status</b>					
A.26-29	1	6	3	1.46	0.2403
B.16-25	5	65			
C.11-15	4	19			
D.5-10	0	0			
<b>4. Gender</b>					
A. Male	3	21	1	1.6667	0.334
B. Female	7	69			
<b>5. Employment</b>					
A. Private employee	5	15	1	1.333	0.4097
B. Govt employee	5	75			
<b>6. Years of experience</b>					
A. 1-5 Years	8	54	3	2.0152	0.1373
B. 6-10 Years	0	25			
C.11-15 Years	0	4			
D. >15 Years	2	7			
<b>7. Area of living</b>					
A. Rural	2	14	1	1.4286	0.388
B. Urban	8	76			
<b>8. AREA OF WORK</b>					
A. All ICU	3	21	3	3.7796	0.0325
B. Obstetric and gynaec dept	2	32			
C. Emergency dept	3	9			
D. Surgical/Medicine ward	2	28			
<b>9. PREVIOUS KNOWLEDGE</b>					
A. Yes	0	0	3	1.2653	0.2951
B. No	7	74			
C. Can't say	1	11			
D. None of above	2	5			
<b>10. Attended any CNE</b>					
A. Yes	0	0	3	1.052	0.3699
B. No	8	85			
C. Can't say	0	2			
D. None of above	2	3			

Area of work as found to have significant association with pre-test knowledge score among nurses.

#### **IV. Discussion:**

This study shows that there is a statistical improvement in knowledge scores after a video-assisted teaching program. It is clear that video teaching programs are very effective in increasing the knowledge of nurses. The average knowledge score increased to 10.12 in the pre-test and 17.33 in the post-test. This test has a T value of 24.95 and a p value of 0.0001, which is considered statistically significant.

The current findings are consistent with the research conducted by **Baluchi, A., et al. (2016)**. This study was a cross-sectional study to evaluate the knowledge, attitude and use of complementary and integrated health (CIH) among Iranian nurses, and most of the nurses had no knowledge of CIH strategies and it is moderate, and most people have a positive attitude towards its use. However, the majority of nurses have never applied the CIH Act. When CIH was used, massage was often used clinically and was mostly believed to help treat the condition. Nurses had positive attitudes about CIH, but knowledge was generally poor. They advised that training programs need to pay close attention to CIH methods.(4)

This study is also supported by the findings of **Chang, H. Y., and Chang, H. L. (2015)** research. The inclusion criteria for this review were met by 15 papers, including the frequency with which nurses employ complementary and alternative medicine in their practise. They discovered that 66.4% of nurses were favorable about complementary and alternative medicine. However, the majority of them did not have a thorough understanding of the risks and advantages associated. Furthermore, nearly half of the respondents said they felt uneasy discussing complementary and alternative medicine with their patients. Concerns have been raised concerning nurses' lack of awareness of complementary and alternative medicine, especially given its widespread use. (5)

#### **V. Conclusion:**

A study concluded that osteopathic knowledge increased significantly among nurses after video teaching program, as confirmed by a 't' test with a p value less than the 0.05 significance level.

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