



**A STUDY TO DETERMINE THE EFFECTIVENESS OF VIDEO
ASSISTED TEACHING VS LECTURE METHOD ON KNOWLEDGE
OF STAFF NURSES REGARDING IMMEDIATE MANAGEMENT OF
PATIENTS WITH MYOCARDIAL INFARCTION, AT A SELECTED
HOSPITAL, IN VISAKHAPATNAM DISTRICT**

Adduri Sarika*

Gangasheel School of Nursing, Bareilly, Uttar Pradesh, India

Article history:

Received: 4th May 2018

Received in revised form:

9th May 2018

Accepted: 9th May 2018

Available online:

30th June 2018

***Corresponding author:**

Sarika Adduri

Email Id:

sarikaadduri@gmail.com

Address:

Gangasheel School of
Nursing, Bareilly
Uttar Pradesh, India

The authors have no
conflict of interest to
declare.

Copyright © 2012

All rights reserved

Abstract

The Heart is having a superb mechanism, with a great wisdom in its construction. It is the central organ of the circulatory system' acting as a force and suction pump in relation to the blood vessels. The integrity of the coronary arteries is an important determinant of oxygen supply to the heart muscle. Any disorder that reduces the lumen of one of the coronary arteries may cause a decreased in blood flow and oxygen delivery to the area of the myocardium supplied by that vessels and leads to acute coronary syndromes of Angina pectoris, myocardial infarction and sudden cardiac death. Worldwide 32.4 million people are suffering from cardiovascular diseases. In India 30 million suffer from cardiovascular disease.

Methodology:-An quantitative research approach with pre-experimental one group pretest post-test design was used for the study. The subjects were 60 staff nurses selected by non- probability convenience sampling technique. Video assisted teaching and Lecture was administered after the assessment of pre-test knowledge on immediate management of patient with Myocardial infarction. Post intervention knowledge was assessed on the 7 day of the administration of Video assisted teaching and Lecture through the same structured knowledge questionnaire.

Results: - The study revealed that out of 60 samples pretest knowledge of staff nurses 9 (96.67%) in video assisted teaching and 27(90.0%) in lecture method had moderate knowledge. Pre-test mean score was 17.766 for video assisted teaching and 17.3 for lecture method. After intervention the Knowledge level of staff nurses were increased from moderate knowledge to adequate knowledge level 29 (96.67%) in video assisted teaching and 9(30.0%) in lecture method had adequate knowledge. The mean post test knowledge score of Video assisted teaching 25.4 was greater than the mean post test score of lecture 19.36, showed that there is a significant difference between the post test knowledge scores of staff nurses. The obtained 't' Value 10.7869 is greater than table value 2.001 at 58 DF at 0.05 level of significance. Therefore the obtained 't' value is found to be significant. Hence, we have sufficient evidence to conclude that video assisted teaching gives more knowledge than lecture method. The chi- square test revealed that there was no significant association between the demographic characteristic and their knowledge regarding immediate management of patient with myocardial infarction. **Conclusion:-** This study concluded that intervention programme played an important role in enhancing the knowledge level of respondents.

Keywords:-Effectiveness; Staff nurses; Knowledge; Video Assisted teaching(VAT) , Lecture method.

INTRODUCTION

The Human body is a wonderful creation of God, and is composed of numerous cells. The heart is a free and fetterless thing, like a wave of the ocean. All these are merely literary expressions and not far away from physiological truth. In fact the heart is the nonstop pump which maintains circulation to every part of body especially the essential organs of heart, brain, liver and kidney thus maintaining life.

The heart is supplied with arterial blood by the right and left coronary artery which is a direct branch from the aorta. Myocardial infarction (MI) or acute myocardial infarction (AMI), commonly known as a heart attack, results, if the coronary artery either right or left becomes occluded, which results in the partial interruption of blood supply to any part of the heart, causing heart cells to die. This most commonly occurs due to the rupture of a vulnerable atherosclerotic plaque, which is an unstable collection of lipids (cholesterol and fatty acids) and white blood cells (especially macrophages) in the wall of an artery.

The cause of death in Myocardial infarction is due to insufficient coronary blood flow, resulting in a decreased oxygen supply when there is increased myocardial demand for oxygen in response to physical exertion or emotional stress.

Globally about 4,00,000 patients go to their doctors with new onsets of Myocardial infarction each year. Among them about 174,000 people had new onset Myocardial infarction over a two years period. Indian statistics show that in a total average of 8.8% for Myocardial infarction.

According to World Health Organization (WHO) forecast the annual number of deaths from cardiovascular diseases rise from 17.5 million in 2012 to 22.2 million by 2030. Approximately one million Americans suffer a heart attack each year of them 400,000 of them die as a result of their heart attack.

As Myocardial infarction is a major medical problem faced in our country, the researcher felt the need to conduct a study on the subjects which would help to gather good information on the best method of teaching the subjects which would help practicing nurses to identify the patient suffering from myocardial infarction and to perform the life saving emergency measures competently.

RESEARCH METHODOLOGY:

A quantitative approach with pre-experimental design (One group pre- test post-test design) was used for the study to assess the knowledge of staff nurses regarding immediate management of patient with myocardial infarction..The study was conducted in care hospital, Ram Nagar, Visakhapatnam and the staff nurses who were willing to give consent and participate in the study were included the study. The staff nurses were selected by non -probability convenient sampling techniques and 60 staff nurses were selected for the study. The tools used for conducting the study were a set of demographic variables and structured questionnaire. Video assisted teaching and lecture given on immediate management of patient with myocardial infarction. The subjects were administered structured questionnaire on immediate management of patient with myocardial infarction with pre-test and post-test assessment of structured questionnaire was done. Data was analyzed with the help of descriptive and inferential statistics.

RESULTS AND DISCUSSION

SECTION 1

TABLE – 1

FREQUENCY AND PERCENTAGE DISTRIBUTION OF VIDEO ASSISTED TEACHING AND LECTURE METHOD ON LEVEL OF KNOWLEDGE AMONG STAFF NURSES WITH SELECTED DEMOGRAPHIC VARIABLES.

| S.NO | Demographic Variables | video assisted teaching | | Lecture method | |
|----------|--------------------------------|-------------------------|------------|----------------|------------|
| | | Frequency | Percentage | Frequency | Percentage |
| 1 | AGE | | | | |
| | a. Below 22 years | 6 | 20.0% | 8 | 26.7% |
| | b. 22-25 years | 20 | 66.67% | 22 | 73.3% |
| | a. 26-29 years | 2 | 6.67% | 0 | 0% |
| | b. Above 30 years | 2 | 6.67% | 0 | 0% |
| 2 | Gender | | | | |
| | a. Male | 1 | 3.3% | 1 | 3.3% |
| | b. Female | 29 | 96.7% | 29 | 96.7% |
| 3 | Professional education | | | | |
| | a. General nursing & midwifery | 10 | 33.33% | 2 | 6.67% |
| | b. B.Sc. nursing | 11 | 36.66% | 13 | 43.33% |
| | c. Post basic nursing | 9 | 30.00% | 15 | 50.0% |
| 4 | Working area of nurses | | | | |
| | a. Emergency areas | 6 | 20.0% | 2 | 6.7% |
| | b. Medical and surgical wards | 8 | 26.7% | 10 | 33.3% |
| | c. General wards | 12 | 40% | 13 | 43.3% |
| | d. Other Areas | 4 | 13.3% | 5 | 16.7% |
| 5 | Years of Experience | | | | |
| | a. 0-3 years | 26 | 86.7% | 30 | 100% |
| | b. 4-6 years | 3 | 10.0% | 0 | 0% |
| | c. Above 7 years | 1 | 3.3% | 0 | 0% |
| 6 | In service education | | | | |
| | a. Yes | 30 | 100% | 30 | 100% |
| | b. No | 0 | 0 | 0 | 0 |

TABLE- 2

Frequency And Percentage Distribution Of Levels of Knowledge Among Staff Nurses According To Their Knowledge Scores Before And After Giving Video Assisted Teaching And Lecture Method

N = 30

| | Level | Pre-test | | Post-Test | |
|--------------------------------|----------------------|----------|--------|-----------|--------|
| | | F | % | F | % |
| Video Assisted Teaching | Inadequate knowledge | 0 | 0.00% | 0 | 0.00% |
| | Moderate knowledge | 29 | 96.67% | 1 | 3.33% |
| | Adequate knowledge | 1 | 3.33% | 29 | 96.67% |
| Lecture method | Inadequate knowledge | 0 | 0.00% | 0 | 0.00% |
| | Moderate knowledge | 27 | 90.00% | 21 | 70.00% |
| | Adequate knowledge | 3 | 10.00% | 9 | 30.00% |

*F-Frequency %-Percentage

TABLE 3

EVALUATION OF THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON LEVEL OF KNOWLEDGE AMONG STAFF NURSES REGARDING IMMEDIATE MANAGEMENT OF MYOCARDIAL INFARCTION

N=30

| Aspects | Scores | Mean | Standard deviation | Paired t value | Table value | DF | P Value |
|------------------|--------|--------|--------------------|----------------|-------------|----|---------|
| Pre test | 533 | 17.766 | 2.5688 | 15.961 | 2.05 | 29 | 0.05 |
| Post test | 762 | 25.4 | 2.1591 | | | | |

TABLE 4

EVALUATION OF THE EFFECTIVENESS OF LECTURE ON KNOWLEDGE LEVELS OF STAFF NURSES REGARDING IMMEDIATE MANAGEMENT OF MYOCARDIAL INFARCTION

N =30

| Aspects | Scores | Mean | Standard deviation | Paired t value | Table value | DF | P Value |
|-----------|--------|--------|--------------------|----------------|-------------|----|---------|
| Pre test | 519 | 17.3 | 2.4795 | 6.9080 | 2.05 | 29 | 0.05 |
| Post test | 581 | 19.366 | 2.1732 | | | | |

TABLE-5

EVALUATION THE EFFECTIVENESS OF THE VIDEO ASSISTED TEACHING Vs LECTURE METHOD POST TEST SCORES AMONG STAFF NURSES REGARDING IMMEDIATE MANAGEMENT OF MYOCARDIAL INFARCTION

N =60

| Aspects | | Standard Deviation | Calculated value | Tabulated Value | DF | P Value |
|--------------------------------------|---|--------------------|------------------|-----------------|----|---------|
| Video assisted teaching Post test | 4 | 2.1591 | 10.7869 | 2.001 | 58 | 0.05 |
| Lecture Post test | 6 | 2.1732 | | | | |

TABLE 7

Association between the Post Test knowledge scores of staff nurses attended video assisted teaching with their selected demographic variables.

| Items | Variables | Inadequate Knowledge | Moderate Knowledge | Adequate Knowledge | X ² | DF | Table value | P – value (0.05) level & Significance |
|-------------------------------|-----------------------------|----------------------|--------------------|--------------------|----------------|----|-------------|---------------------------------------|
| Age | Below 22 Years | 0 | 0 | 6 | 0.517 | 6 | 12.59 | NS |
| | 22-25 Years | 0 | 1 | 19 | | | | |
| | 26-29 years | 0 | 0 | 2 | | | | |
| | Above 30 | 0 | 0 | 2 | | | | |
| Gender | Male | 0 | 0 | 1 | 0.036 | 2 | 5.99 | NS |
| | Female | 0 | 1 | 28 | | | | |
| Professional Education | General nursing & midwifery | 0 | 0 | 10 | 1.787 | 4 | 9.49 | NS |
| | B.Sc. nursing | 0 | 1 | 10 | | | | |
| | Post basic B.Sc. nursing | 0 | 0 | 9 | | | | |
| Working Area of nurses | Emergency | 0 | 0 | 6 | 2.845 | 6 | 12.59 | NS |
| | Medical and surgical wards | 0 | 1 | 7 | | | | |
| | General Wards | 0 | 0 | 12 | | | | |
| | Other areas | 0 | 0 | 4 | | | | |
| Years of experience | 0-3 years | 0 | 1 | 25 | 0.159 | 4 | 9.49 | NS |
| | 4-6 years | 0 | 0 | 3 | | | | |
| | Above 7 years | 0 | 0 | 1 | | | | |

** Significant at 5% level, the result is not significant at $p < 0.05$*

Table 7 portrays that the Association between the Post Test knowledge scores staff nurse attended video assisted teaching with their selected demographic variables.

CONCLUSION

The study reveals that the comparison of pre test knowledge scores among staff nurses attended video assisted teaching none of them had (Inadequate level of knowledge), 96.67% (Moderate level of knowledge), 3.33% (Adequate level of knowledge); in post test, none of them had (Inadequate level of knowledge), 3.33% (Moderate level of knowledge), 96.67% (Adequate level of knowledge); where as in Lecture method pre test none of them had (Inadequate level of knowledge), 90.0% (Moderate level of knowledge), 10.0% (Adequate level of knowledge); in post test none of them had (Inadequate level of knowledge), 70.0% (Moderate level of knowledge), 30.0% (Adequate level of knowledge).

The findings of the study showed the mean post test knowledge score of Video assisted teaching 25.4 was greater than the mean post test score of lecture method 19.36, showed that there was a significant difference between the post test knowledge scores of staff nurses attended video assisted teaching Vs lecture.

The obtained 't' Value 10.7869 is greater than table value 2.001 at 58 DF in 0.05 level of significance. Therefore the obtained 't' value is found to be significant. Hence, we have sufficient evidence to conclude that video assisted teaching gives more knowledge than lecture method.

This study concluded that intervention programme played an important role in enhancing the knowledge level of respondents.

There is no statistical association between the posttest knowledge scores of staff nurses the selected demographic variables at p value 0.05 level such as age , Gender, Professional Education, Working area of nurses, Years of experience, Underwent in service education .

Ethical Clearance: Ethical committee permission was obtained from the ethical committee of Manisha college of nursing, Visakhapatnam.

Source of Funding: Self

Conflict of Interest: Nil

REFERENCES

BOOK REFERERCE

1. Brunner & Suddhartha's, "Text book of Medical Surgical Nursing", (2004). 12th edition, Lippincott Williams & willikins, Publishers(P) Ltd. 762-768.
2. BT Basvanthappa (2007), "Nursing Research", Second edition, New Delhi, Jaypee Brothers Medical Publishers(P) Ltd.
3. BT Basvanthappa (2007), "Nursing Theories", First Edition, New Delhi, Jaypee Brothers Medical Publishers(P) Ltd. 130-146.
4. Cardiac nursing text book, J.B Lippincott company, 3rd edition, page no 477.
5. Chaurasia's "Text Book Of Human Anatomy" fourth edition, Cbs publishers and distributors, new delhi,, 237-240.
6. Joyce M Black, (2007) Hokinson Jane text book of "Medical Surgical Nursing", 17th edition, Saunders, Missouri, P-1063, 1701-1707.
7. Lewis SM, Heitkemper MM, Dirken SR(2000), "Medical and Surgical nursing Assessment and management of clinical problems", 5th edition. Mosby. London, page no: 796 -803.

NET REFERENCES:

1. Abildstrom SZ "Trends in incidence and case fatality rates of acute myocardial infarction in Denmark .
2. Ahmadi A, " Predictive Factors of Hospital Mortality Due to Myocardial Infarction". Int J Prev Med. 2015, 19, 6: 112
3. AlHabib KF, "Patient and System-Related Delays of Emergency Medical Services Use in Acute ST-Elevation Myocardial Infarction", Plos one, 2016, 25, 11 (1).

WEB REFERENCES:

1. www.google.com.
2. www.pubmed.com.
3. www.nursingtimes.com.
4. www.oxfordjournal.com.
5. www.indiadaily.com.

International Journal of Nursing and Medical Science 2018; 7 (2), 771-781

How to cite this article:

Adduri Sarika, A study to determine the effectiveness of video assisted teaching vs lecture method on knowledge of staff nurses regarding immediate management of patients with myocardial infarction, at a selected hospital, in Visakhapatnam district, *International Journal of Nursing and Medical Science 2018; 7 (2), 771-781.*