

## **Original Research Paper**

**Management** 

# TO STUDY THE EFFECTIVENESS OF VIDEO ASSISTED TRAINING PROGRAM IN EARLY DETECTION AND PREVENTION OF COMPARTMENT SYNDROME

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**ABSTRACT** 

**Introduction:** Compartment syndrome is a painful condition in which the perfusion pressure falls below the tissue pressure in a closed anatomical space, with subsequent compromise of tissue circulation and function.

**Aim:** To study to identify the effectiveness of video assisted training program for nurses regarding early detection and prevention of compartment syndrome.

Methods: Study was conducted in a tertiary care hospital. Non probability purposive sampling technique with one group pre test post test design was used.

**Results:** Study revealed that there was an enhancement of knowledge by 10.2 (post test=209, pretest=10.7) indicates the effectiveness of video assisted teaching programme.

**Conclusion:** Video assisted training program is very useful for nurses in prevention and detection of compartment syndrome. This enhance the knowledge of the nurses to identify patients at risk for compartment syndrome, allowing her provide early intervention

# **KEYWORDS**: Compartment syndrome, video assisted teaching, nursing

#### Introduction

Compartment syndrome is a painful condition that occurs when pressure within the muscles builds to dangerous levels. This pressure can decrease blood flow, which prevents nourishment and oxygen from reaching nerve and muscle cells. Compartment syndrome can be either acute or chronic. Awareness regarding prevention and early detection of compartment syndrome is important for the prevention of permanent disability. Acute and prompt nursing assessment skills are essential in order to identify the patient at high risk of compartment syndrome. Furthermore, evidence based nursing interventions are in its infancy. The nurse practitioner provides advanced nursing care across the continue of health care services to meet the needs of patients with complex acute critical and chronic health conditions. The nurses working in primary or acute care environment are exposed to patient who has sustained injuries or trauma massive intravenous infiltration increased abdominal pressure due to various reasons and complication of prolonged surgeries in lithotomic position. Increased knowledge about compartment syndrome, knowledge of the risk factors, clinical signs and symptoms can enable the nurse practitioner to appropriately identify patients at risk for compartment syndrome, allowing her provide early intervention that may reduce the morbidity and mortality associated with this syndrome and increases survival rate.

#### ΔΙΜ

To study to identify the effectiveness of video assisted training program for nurses regarding early detection and prevention of compartment syndrome.

#### **MATERIALS AND METHODS:**

This study was conducted in a tertiary care hospital. Anevaluatic research approach with one group pre test post test design was used. The sample comprise of 65 staff nurses working in orthopedic, medical surgical ward and ICUs staffs.

Non probability purposive sampling technique with one group pre test post test design was used. The instrument used for data collection was structured questionnaire with the help of video assisted teaching.

## RESULTS

The evaluative research approach was used in this study and population of the Study comprises of 65 staff nurses working in

orthopedic, medical, surgical ward and ICU. The data on knowledge of staff nurses regarding early detection and prevention of compartment syndrome was collected by means of structured questionnaire after validating the tool by the experts and testing the reliability on 65 staff nurses. The gathered data from 65 staff nurses analyzed and interpreted in terms of objectives. Descriptive and inferential statistics was used for data analyzes.

**Table 1:** Frequency and percentage distribution of staff nurses on pre test knowledge level scores on early detection and prevention of compartment syndrome

Knowledge	Category	Respondents	
Level		Frequency	Percentage
Inadequate	≤50% score	62	95%
Satisfactory	51-75%score	3	5%
Adequate	>75%score	0	0%

**Table 2:** Frequency and percentage distribution of staff nurses on post test knowledge level scores on early detection and prevention of compartment syndrome.

Knowledge level	Category	Staff Nurses	
		Frequency	Percentage
Inadequate	≤50%score	2	3%
Satisfactory	51-75%score	28	43%
Adequate	>75%score	35	54%

Nurses working in emergency, ICU and critical care units are exposed to patients who have sustained injury or trauma. This study helps them have careful observation and enable prompt and subsequence treatment which otherwise result in permanent defect. Nurses working in hospital have to realize their responsibility in giving health education to the patients regarding complications of tight bandages ,splints, dressing and cast does in helping them in early detection and prevention of compartment syndrome.

### **CONCLUSION**

Video assisted training program is very useful for nurses in prevention and detection of compartment syndrome. This enhance the knowledge of the nurses to identify patients at risk for compartment syndrome, allowing her provide early intervention

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