

Effectiveness of Pacemaker Care Protocol on Knowledge and Skill Regarding Care of Client Undergoing Pacemaker Implantation Among Nurses

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ABSTRACT

Non Communicable Diseases (NCDs) also known as chronic diseases, which includes cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes. NCDs result in rapid deaths as seen in certain diseases like autoimmune diseases, heart diseases, stroke, cancers, diabetes, chronic kidney disease, osteoporosis, Alzheimer's disease, cataracts, and others. Cardiovascular diseases are one of the major incidence of non-communicable diseases and leading causes of deaths in India. The heart is endowed with a specialized system for generating rhythmic electrical impulses and for conducting these impulses rapidly throughout the heart to cause contraction of the heart muscle. When this system functions normally, the atria contract about one-sixth of a second ahead of the ventricles. This orderly electrical activity must precede contraction to provide adequate cardiac output for perfusion of all body organs and tissues. Aim and objective: To assess the effectiveness of pacemaker care protocol on knowledge and skill regarding care of client undergoing pacemaker implantation among nurses at selected hospital. Methodology: A quasi-experimental non equivalent control group design was chosen to conduct the study among 60 Nurses, who were selected using purposive sampling technique. Immediately after pretest assessment, intervention was given in experimental group and hospital routine was carried out in control group. After seven days post test was collected in both the groups. The comparison of post test level of knowledge between experimental and control group revealed that t of 12.002, was statistically significant at $p < 0.001$ level. The comparison of the post test level of skill, revealed t value of 9.577, which was highly statistically significant at $p < 0.001$ level.

Keywords: Pacemaker care protocol, Knowledge, Skill, Nurses, Pacemaker implantation site dressing.

INTRODUCTION

Cardio Vascular Disease (CVD) is a diseases that involve the heart or blood vessels. Cardiovascular disease includes Coronary Artery Diseases (CAD) such as angina and myocardial infarction (commonly known as a heart attack). Other CVDs are stroke, hypertensive heart disease, rheumatic heart disease, cardiomyopathy, atria fibrillation, congenital heart disease, endocarditis, aortic aneurysms, peripheral artery disease and venous thrombosis. Arrhythmias can affect all age groups, but atrial fibrillation is more common in older people. Today, pacemaker therapy is synonymous for managing all arrhythmias

(abnormal slow or fast heart rate) or heart rhythm-related disease. "Newer technologies in past few years have emerged as device therapy of arrhythmias Implantable Cardioverter Defibrillator (ICDs), Device therapy for heart failure Cardiac Resynchronization Therapy, (CRT), and device therapy in combination for arrhythmias and heart failure (combo-device). These implantable medical devices which are prescribed for controlling fast abnormal heart rhythms. The risk factors of cardiovascular disease include lack of exercise, poor diet, and smoking. According to the study, the Indian subcontinent (including India, Pakistan, Bangladesh, Sri Lanka, and Nepal) has the highest rates of cardiovascular disease globally. The emerging field of environmental cardiology addresses exposures to chemicals and other environmental substances also have profound impact on heart health (WHO, 2013).

OBJECTIVES

1. To assess and compare the pre test and post test level of knowledge regarding pacemaker care protocol among experimental and control group.
2. To assess the post test level of skill regarding pacemaker care protocol in experimental and control group.
3. To determine the effectiveness of pacemaker care protocol on knowledge and skill among nurses in experimental and control group.
4. To correlate the post test level of knowledge with skill regarding pacemaker care protocol in experimental group and control group.
5. To associate the selected demographic variables with the mean differed knowledge score and post test skill score regarding pacemaker care protocol in the experimental group.

METHODOLOGY

A quasi experimental, non-equivalent, with control group design was chosen to conduct the study among 60 nurses. Each in experimental group GMC Hospital, Reaw. Who satisfied the inclusion criteria and selected by purposive sampling technique. The demographic variables and level of knowledge was assessed using structured questionnaire and administered pacemaker care protocol. The post test level of knowledge and skill was assessed using structured questionnaire and observational checklist..

FINDINGS AND DISCUSSION

The comparison of the pre and post test level of knowledge scores regarding pacemaker care protocol among nurses in experimental group. Which indicates that the pacemaker care protocol administered to the nurses in the experimental group had improved their level of knowledge than the nurses in the control group. The comparison of post test skill scores regarding pacemaker care protocol among nurses between experimental and control group, The comparison of post test level of knowledge between experimental and control group revealed that t of 12.002, was statistically significant at $p < 0.001$ level. The comparison of the post test level of skill, revealed t value of 9.577, which was highly statistically significant at $p < 0.001$ level and clearly proves that there was significant difference between the post test skill score among the nurses between the experimental and control group.

CONCLUSION

The study findings revealed that Pacemaker Care Protocol was effective in assessing knowledge and skill, bring about awareness about Pacemaker care protocol influencing a positive behavior and aided in

developing knowledge and skill of pacemaker care protocol. The pamphlet developed by the investigator proved to be an effective aid in providing insight on pacemaker care protocol. The present study was conducted to assess the effectiveness of pacemaker care protocol on knowledge and skill regarding care of client undergoing pacemaker implantation among nurses at selected hospital. The study findings revealed that pacemaker care protocol was effective in improving knowledge and skill among nurses. Hence various continuous education training can be given to all nurses to implement pacemaker care protocol.

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