



## EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND INTERPRETATION OF ECG AMONG THE STAFF NURSES

\*Ansy Laby, M.Sc (N), \*\*Manju Joshi, M.Sc (N), \*\*\*Dr. Sagheer Ahmed, Consultant cardiologist.

\* Lecturer, S.D.P.S. College of Nursing, Indore Email: ansylaby@gmail.com..

### Abstract

Electrocardiography introduced in 1902 by Willem Einthoven, continues to be the most commonly used procedure for the diagnosis of heart disease. Basic cardiac rhythm interpretation for critical care nurses, upgrades the skills in determining cardiac dysrhythmias. Thus, a pre experimental study to assess the effectiveness of structured teaching programme on knowledge and interpretation regarding the ECG among staff nurses in selected hospitals of Indore was selected. A total of 45 samples, working in open heart unit, step down ICU, and ICU were selected by using purposive sampling technique. Pretest was taken followed by structured teaching program. And after 7 days post test was taken. The findings showed that mean of post-test score (12.8) was higher than pretest score (7.2) and computed 't' value ( $t_{44} = 13.73$ ) which was found significant at the level of  $p \leq 0.001$  which indicated the effectiveness of structured teaching programme in increasing the knowledge of staff nurses regarding ECG. Mean post-test Interpretation score (10.9) was apparently higher than the mean pretest Interpretation score (3.2) and the computed 't' value  $t_{44} = 18.14$ , was found significant at the level of  $p \leq 0.001$  which revealed the effectiveness of structured teaching programme in increasing the knowledge and interpretation of ECG among staff nurses.

**Key words:** Electrocardiography (ECG), Knowledge, Interpretation, Structured Teaching Programme.

### Introduction

World wide, cardiovascular disease is estimated to be the leading cause of death. There is a large and increasing global burden of cardiovascular disease. Approximately 14 million individuals died of cardiovascular disease in 1990, and this is projected to rise to about 25 million by 2020 (B. Neal, Institute for International Health, Sydney, Australia, 2002)<sup>2</sup>

According to WHO estimates, 16.7 million people around the globe die of cardiovascular diseases each year, and by 2020, WHO estimates nearly 25 million CVD deaths worldwide (International Cardiovascular Disease Statistics, AHA, 2004)<sup>3</sup>.

The ECG is a graphic recording of change in voltage, produced by depolarization and repolarization, which is plotted on graph paper against the time over which they

occur. (Black, J. M. (2009)<sup>1</sup>. Nurses taking care of admitted patients with cardiovascular diseases should be able to detect abnormalities occurring in the ECG pattern and take appropriate action to save patient's lives.

### Need of the Study

Electrocardiography continues to be the most commonly used procedure for the diagnosis of heart disease, introduced in 1902 by Willem Einthoven, the procedure reflects electrical changes associated with primary or secondary myocardial processes for example coronary artery disease, hypertension and electrolyte abnormalities. (Susan L.Patterson, (2010)<sup>8</sup>. In India, according to recent estimates cases of cardiovascular disease may increase from about 2.9 crore in 2000 to as many as 6.4 crore in 2015. (Naresh Trehan, Burden of