# Effectiveness of planned teaching programme on knowledge regarding risk of coronary artery disease amongst patients with diabetes mellitus

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## Abstract

Investigator selected Quantitative, Comparative and evaluatory approach. The diabetes patients admitted in selected hospital were selected. The subjects consisted of 60 patients diagnosed with diabetes mellitus. The inclusion criteria were Patients willing to participate, Patients with diabetes mellitus and diagnosed as diabetics before one year, Patients who can read and write Marathi, Hindi and English, Patients who are admitted in hospitals.

The exclusion criteria were Patient who have associated complications like diabetic ketoacidosis, hypertension, diabetic nephropathy. Patients with sensory loss, Patient who have had previous sessions of Health education on Diabetes and its management through various Medias.

The sampling technique used in the study was non-probability Convenience sampling. The tool consisted of a semistructured questionnaire which includes 30 questions which was used to assess the effectiveness of planned teaching programme on knowledge regarding risk of coronary artery disease amongst patients with diabetes mellitus admitted in selected Hospital."

In order to obtain content validity, the tool was given to a total 13 experts 10 experts from Medical Surgical Nursing Department, 1 Doctor from Cardiology department and 1 to a Diabetologist and 1 to Statistitian. After



receiving the opinion from the experts some modifications were done in framing of the items and same were incorporated into the tool. Some of the questions were deleted.

The Pilot study was conducted in selected Hospital. As per the laid down criteria, 6 subjects were selected by non-probability convenient sampling who were available for the study.

The data gathering process for the main study was done. The Investigator introduced himself and the purpose of the study was explained to subjects and informed consent was obtained. Research was conducted properly on the subjects.

The pre-test was conducted using semistructured questionnaire assess to the knowledge regarding the risk of coronary artery disease among diabetes mellitus patients. The test was conducted once pre before administration of Planned Teaching Programme. Following the pretest subjects only from experimental group were given planned teaching on risk of coronary artery disease in diabetes mellitus.

Post test score was obtained after 6 days from pre test to evaluate the effectiveness of Planned teaching Programme on knowledge regarding risk of coronary artery disease amongst patients with diabetes mellitus.

Data was calculated and it was found that the Planned Teaching Programme significantly brought out improvement in the knowledge of patients regarding risk of coronary artery disease in patients with diabetes mellitus.

#### Introduction

Heart disease or cardiovascular disease are the class of diseases that involve the heart or blood vessels (arteries and veins),while the term technically refers to any disease that affects the cardiovascular system ,it is usually used to refer to those related to atherosclerosis (arterial disease).These conditions usually have similar causes, mechanism ,and treatments. These Diseases need to be prevented for the best prognosis.

#### Problem Statement

'Effectiveness of planned teaching programme on knowledge regarding risk of coronary artery disease amongst patients with diabetes mellitus admitted in selected hospitals.'

#### Objective

- To assess the knowledge regarding the risk of coronary artery disease amongst diabetes mellitus patients before administration of planned teaching programme.
- 2. To assess the effectiveness of planned teaching programme on knowledge regarding the risk of coronary artery disease amongst diabetes mellitus patients
- 3. To compare the knowledge scores amongst control group and experimental group before and after the administration of planned teaching programme.
- <sup>4.</sup> To associate the knowledge scores with selected demographic variables.

## Review of literature

A cross sectional study was conducted to examine a combination of healthy lifestyle behaviors associated with cardio metabolic risk reduction in Boston, USA. The analysis was based on 1454 participants from the population based lipid research clinics Princeton follow-up study. The result study revealed that combination of healthy lifestyle behaviors was strongly and negatively associated with the presence of cardio metabolic risk, as well as with a composite cardio metabolic risk score after adjustment for race ,age ,generation and sex. Healthy lifestyle behaviors including sufficient fruit and vegetable intake, less meat intake, less TV viewing time, abstinence from smoking, modest alcohol intake and regular exercise are associated with reduced cardio metabolic risk.

## Materials and methods

Investigator selected Quantitative, Comparative and evaluatory approach. The diabetes patients admitted in selected hospital were selected. The subjects consisted of 60 patients diagnosed with diabetes mellitus.

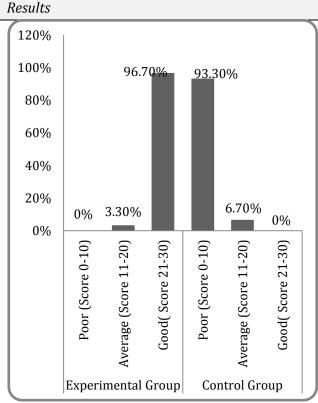
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convenient sampling who were available for the study.

The data gathering process for the main study was done. Informed consent was obtained. Research was conducted properly on the subjects.

The pre-test was conducted using semistructured questionnaire to assess the knowledge regarding the risk of coronary artery disease among diabetes mellitus patients. The before test was conducted once pre administration of Planned Teaching Programme. Following the pretest subjects only from experimental group were given planned teaching on risk of coronary artery disease in diabetes mellitus.

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A Bar dig. showing Effectiveness of planned health teaching program on knowledge of diabetes mellitus patients regarding coronary artery disease

	Mean	SD	t	df	p-value
Pretest	9.5	1.6	50.6	29	0.000
Posttest	25.0	1.9			

above Table investigator applied paired t-test for comparison of pretest and posttest knowledge scores of diabetes mellitus patients. T value was found to be 50.6 at 29 degrees of freedom. Since p-value is 0.000 which is small (less than 0.05), null hypothesis was rejected. This indicates that planned health teaching program improved knowledge of diabetes mellitus patients regarding risk of coronary artery disease. In other words, the planned health teaching program was highly effective in improving the knowledge of diabetes patients regarding risk of coronary artery disease.

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