

Lifestyle Interventions to Reduce Coronary Artery Disease Among The High Risk Group

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Abstract—Over the past two centuries, the industrial and technological revolutions and their associated economic and social transformations have resulted in dramatic shifts in the diseases responsible for illness and death. Cardio Vascular Disorder has emerged as the dominant chronic disease in many parts of the world. Improper diet, lack of exercise, excessive stress, smoking, high cholesterol, triglycerides, high blood pressure, diabetes and overweight/obesity, are the major causes of heart problems. In some cases, heart problems could be hereditary².

The purpose of the study is to assess the pre test level of knowledge regarding prevention of coronary artery disease among high risk group living in the selected community Greater Noida. To assess the effectiveness of information booklets regarding prevention of coronary artery disease among high risk group living in the selected community Greater Noida

A PRE Experimental evaluatory approach was used for this study. The study was carried out in the selected community of Greater Noida. The research design was pre-experimental one group pre-test post-test design. The sample comprised of 40 high risk subjects. The data was analyzed using descriptive and inferential statistics. Paired 't' test was used to find the effectiveness of SIM and chi-square was used to find the association of pre-test knowledge score with The results of this study showed that participants in general lacked knowledge on CAD and especially on prevention aspect. The mean knowledge score was 10.56. There was a marked gain in mean knowledge score after administration of SIM (23.54). The difference in mean knowledge score was statistically significant at 0.05 level 't' $(t_{49}) = 23.35$. There was no significant association between pre-test knowledge score and selected demographic variables such as age ($\chi^2_1 = 0.260$), gender ($\chi^2_1 = 1.212$), educational qualification ($\chi^2_1 = 0.0035$), frequency of exercise performed per week ($\chi^2_4 = 7.860$), type of exercise performed ($\chi^2_4 = 3.100$), personal habits ($\chi^2_3 = 5.007$), and dietary habits ($\chi^2_3 = 2.237$) at 0.05 level of significance.

The findings of this study support the need for conducting health camps and awareness programme on CAD and its prevention in the selected community. The study proved that the subjects had poor knowledge on CAD and its prevention before the administration of SIM. Their knowledge improved to a remarkable extent after the utilization of SIM. The findings of this study shows that the SIM was effective in terms of gaining knowledge on CAD and its prevention among the high risk subjects ($t_{49} = 23.35$, $P < 0.05$).

1. INTRODUCTION

Heart disease has become a major killer of mankind. With vast changes in the lifestyles of people, cardiac problems are increasing day by day in our country. Coronary artery disease is no longer be perceived as the disease of the elite and elderly⁶. Cardiovascular diseases are becoming a leading cause of morbidity and mortality in industrialized countries and they are also emerging as prominent national health problem in developing countries, where communicable diseases are being brought under control. Among them coronary artery disease has become the most important cause of premature death and disability in the population⁷.

2. RESEARCH METHODOLOGY

A PRE Experimental evaluatory approach was used for this study. The study was carried out in the selected community of Greater Noida. The research design was pre-experimental one group pre-test post-test design. The sample comprised of 40 high risk subjects. The community area was selected by convenience sampling technique and high risk subjects were selected by purposive sampling technique. The data collection was done from 01/02/14 to 23/02/14. Formal written permission was obtained from the authorities to conduct the study and informed consent was obtained from subjects prior to the data collection process. Data was collected by administering a structured knowledge questionnaire before and after the administration of SIM. Post-test was conducted on 7th day using the same structured knowledge questionnaire. The data was analyzed using descriptive and inferential statistics. Paired 't' test was used to find the effectiveness of SIM and chi-square was used to find the association of pre-test knowledge score with selected demographic variables.

3. RESULT OF THE STUDY

The results of this study showed that participants in general lacked knowledge on CAD and especially on prevention aspect. The mean knowledge score was 10.56. There was a marked gain in mean knowledge score after administration of

SIM (23.54). The difference in mean knowledge score was statistically significant at 0.05 level 't' $(_{49}) = 23.35$. There was no significant association between pre-test knowledge score and selected demographic variables such as age ($\chi^2_1=0.260$), gender ($\chi^2_1=1.212$), educational qualification ($\chi^2_1=0.0035$), frequency of exercise performed per week ($\chi^2_4=7.860$), type of exercise performed ($\chi^2_4=3.100$), personal habits ($\chi^2_3=5.007$), and dietary habits ($\chi^2_3=2.237$) at 0.05 level of significance.

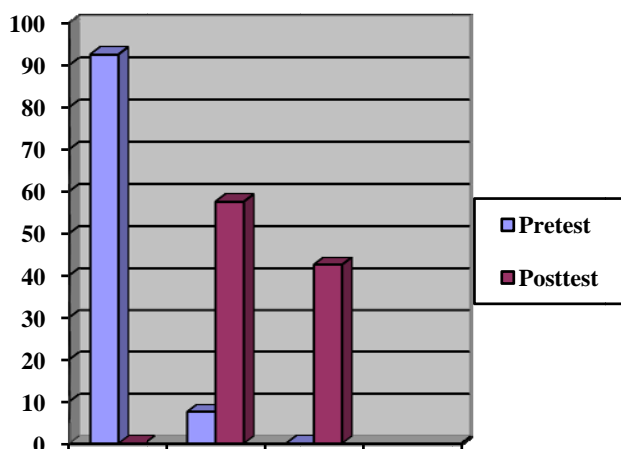


Fig. 1 Percentage distributions of Respondents on pre & Post test knowledge level

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