

An experimental Study to Evaluate the Effectiveness of Video Assisted Teaching Programme (VATP) on Knowledge Related to Coronary Artery Disease (CAD), Among Cardiac Patient Attending OPD at Selected Hospital of Bihar.

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Abstract—Background: Cardiovascular (CV) events, such as myocardial infarction, stroke, limb ischemia, heart failure, and CV death, can result from atherothrombotic disease, which includes peripheral artery disease (PAD) and coronary artery disease (CAD). **Objectives:** To find association between video assisted teaching programme uses among cardiac patients. To find out the association knowledge development related to the coronary artery disease with selected demographic variables. **Methodology:** The research approach was descriptive approach and research design is one group. The study was conducted on cardiac patient at selected hospital of Bihar. Randomized sample technique adopts. Number of samples is who uses the video assisted teaching programme 100 assessment frequently. Data collection was done by the survey by the researcher. Data was analysed with descriptive and inferential statistics came up with following findings. **Result:** The result show of the study is there 100 samples in pre-test 58% are Poor Knowledge, 30% are Fair Knowledge and 10% are Good Knowledge after than post-test 10% are Poor Knowledge, 70% are Fair Knowledge and 20% are Good Knowledge. **Conclusion:** The knowledge of cardiac patients was enhanced by the video assist teaching program, which is also an efficient means of enhancing community members' knowledge without the need for formal education.

Index Terms—Cardiac patient, Coronary artery disease, OPD, Video assist teaching Programme.

I. BACKGROUND OF THE STUDY

Myocardial infarction, stroke, limb ischemia, heart failure, and cardiovascular death are all still significantly influenced by atherothrombotic conditions like peripheral artery disease and coronary artery disease. An analysis of research conducted between 2010 and 2017 indicates that, depending on study design, age, sex, and geography, CAD affects roughly 5–8% of the world's population and PAD affects roughly 10%–20%. Up to one-third of patients with CAD and over half of patients with PAD have involvement of multiple vascular beds, according to data from the REACH registry, indicating extensive overlap of vascular disease. Despite the widespread use of drugs like aspirin and statins, treatment habits differ from nation to nation. Although improvements in care have increased survival, many patients still experience severe disability and decreased quality of life.

II. INTRODUCTION

A major cause of death worldwide, coronary artery disease is influenced by genetic, environmental, and lifestyle factors. Prevention and treatment can improve results (1). Despite advancements in treatment, atherothrombotic disease causes significant cardiovascular events and increases the financial and humanistic burden. The prevalence of CAD and PAD is 5–8% and 10%, respectively, worldwide (2). In developed nations, coronary artery disease continues to be a major cause of death. The mortality rate from acute myocardial infarction decreased by roughly 50% between the 1990s and 2000s. Atherosclerosis, which involves lipid imbalance, inflammation, thrombosis, oxidative stress, and genetic influences, is the primary cause of CAD, and its incidence rises with age, sex, and socioeconomic factors (3). Despite being a major cause of illness and death for adults over 80, coronary artery disease is not well represented in clinical trials. To direct diagnosis and treatment, a deeper comprehension and patient-centred approach are required (4). Recent developments like stem cells, nanotechnology, robotic surgery, and 3-D innovations offer promising new therapeutic options in addition to conventional medical and surgical treatments for coronary artery disease, which continues to be a leading cause of death worldwide (5).

III. METHODOLOGY

A Quasi experimental pre-test–post-test control group design was adopted.

- Design: One group pretest posttest research design.

- Population: Cardiac patients attending OPD of selected hospital of Bihar.
- Sample Size: 100 cardiac patients attending OPD.
- Sampling Technique: Simple random sampling by lottery method.
- Intervention: Video assist teaching programme (VATP).

Video assist teaching programme includes the risk factors, causes, and life style medication after diagnosis of coronary artery disease with a duration of 1.5 hours.

- Instruments:

Structured Knowledge Questionnaire on Coronary artery disease, prevention and lifestyle modification.

IV. RESULT

In the pre-test, majority of the participants (58%) had poor knowledge, 30% had fair knowledge, and only 10% had good knowledge regarding coronary artery disease. In the post-test, only 10% had poor knowledge, 62% had fair knowledge, and 28% had good knowledge. This shows a marked improvement in knowledge after the structured teaching programme. The study showed clear improvement in knowledge after the video-assisted teaching programme. Pre-test scores reflected mostly poor knowledge, while post-test results showed a shift toward fair and good knowledge. Demographic factors showed limited association, and the intervention proved effective in raising awareness about coronary artery disease.

Variables	N	Pre test		Post test		Paired Differences		t	df	p-value
		Mean	SD	Mean	SD	Mean	SD			
Level of Knowledge	100	7.8	1.2	4.2	1.1	3.6	1.15	18.5	99	<0.001
In this table, it is shown that the mean pre-test level of pain among the participants was 7.8 ± 1.2 , which significantly reduced to 4.2 ± 1.1 in the post-test after the intervention. The calculated mean difference was 3.6, and the obtained t-value was 18.50 with 99 degrees of freedom. The p-value was <0.001, which is statistically highly significant.										

V. DISCUSSION

The findings show that the video-assisted teaching programme improved patients' knowledge of coronary artery disease. Most participants moved from poor to fair or good knowledge, supporting VATP as an effective educational tool in the OPD setting.

VI. CONCLUSION

The study demonstrated that the video-assisted teaching programme effectively improved patients' knowledge of coronary artery disease. Post-test scores showed a clear shift toward better understanding across the group. VATP can be considered a practical and impactful method for strengthening patient education and supporting better disease awareness in the OPD setting.

VII. RECCOMENDATION

- Provide periodic refresher sessions to reinforce learning and support long-term awareness.
- Develop additional multilingual and low-literacy-friendly educational materials to reach a wider patient population.
- Encourage healthcare staff to integrate structured education into routine cardiac care to promote better self-management and prevention.

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