Original Article

A Study to Assess the Knowledge and Attitude Regarding Care After Coronary Angioplasty and its Importance Among Care Givers of Coronary Angioplasty Patients at Mamata Super Specialty Hospital, Khammam, Telangana, India

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ABSTRACT

Background: *A study to assess the knowledge and attitude regarding care after coronary angioplasty and its importance among care givers of coronary angioplasty patients at Mamata super specialty hospital, Khammam, Telangana". The objectives were to describe the socio demographic variables of care givers, to assess the levels of knowledge and attitude regarding care after coronary angioplasty and its importance among care givers, to find out the association between the levels of knowledge and attitude scores of care givers with their selected socio demographic variables, to develop and distribute an information booklet regarding care after coronary angioplasty and its importance.*

Methodology: *The study was conducted with survey research approach for a sample of 50 care givers of coronary angioplasty patients at Mamata super specialty hospital, Khammam, Telangana. Sample was selected by Nonprobability Convenience Sampling technique. The data was collected by Structured Interview schedule. The collected data analyzed by using descriptive and inferential statistics.*

Result*s: The study results revealed that levels of knowledge of care givers regarding care after coronary angioplasty and its importance among 50, majority of care givers 33 (66%) had moderately adequate knowledge 14(28%) had inadequate knowledge and 3(6%) adequate knowledge. Regarding attitude scores among 50, Majority of care givers 28 (56%) had favorable attitude and 22(44%) had moderately favorable attitude.*

Conclusion*: The study concluded that majority of the care givers had moderately adequate knowledge and favorable attitude. So, it is indicated that there is a need to increase the knowledge of care givers regarding care after coronary angioplasty and its importance.*

Keywords: *Assess; Knowledge, Attitude; Coronary angioplasty; Care after coronary angioplasty*

Introduction

Andreas Gruentzig first developed PCTA in 1977, and the procedure was performed in Zurich, Switzerland that same year. By the mid-1980s many leading institutions adopted this procedure throughout the world as a treatment for coronary artery disease. The term angioplasty means using a balloon to stretch open a narrowed or blocked artery. most modern angioplasty procedures also involve inserting a short wire mesh

tube, called stent, into the artery during the procedure. The stent is left in place permanently to allow blood to flow more freely [1].

Percutaneous transluminal coronary angioplasty (PTCA) also called percutaneous coronary intervention (PCI) is a minimally invasive procedure to open blocked or stenosed coronary arteries allowing unobstructed blood flow to the myocardium. The blockages occur because of lipid-rich plaque within the arteries, diminishing blood flow to the myocardium [2].

Care after coronary angioplasty very important to observations of blood pressure (BP), heart rate, respirations and temperature should be recorded at a frequency recommended by local policy and according to the patient's condition. Initially this usually involves the measurement of BP, pulse and respirations every 30 minutes, and temperature every four hours [3]. The limb that has been used for the procedure needs to be closely monitored for signs of poor arterial circulation. Colour and warmth of the limb should be checked. Pulses, distal to the puncture site, should be monitored at regular intervals to ensure adequate blood flow. For example, foot pulses should be checked if a femoral approach is used. The nurses also need to observe the puncture site itself for signs of hematoma or bleeding [4]. Patients may experience pain from the puncture site and discomfort from their prolonged period of immobility, so analgesia may be required [5].

Discharge and ongoing care following PTCA: The patient and his or her family should receive written advice on what to do following a PTCA and they should also be provided with the telephone number of the cardiology ward so that they have a point of contact. Nurses should ensure the patient understands the risks associated with coronary heart disease [6-10] and strategies to reduce them. The patient should also know about any prescribed medicines. The patient requires a combination of 300mg of aspirin and 75mg of clopidogrel for 28 days, which has an antithrombotic effect. This is in addition to any other cardiac drugs that he or she may be prescribed. After 28 days, clopidogrel can be discontinued and the aspirin dose reduced to 75mg daily. The patient will then be followed up in the outpatient's department [11-15]

Patients are encouraged to avoid drinking alcohol, cessation of smoking, should not be swim and drive till 8 weeks, Patient also educated for simple exercise such as yoga, mild walk, explain importance of diet like fat restricted diet [16-20].

Need for the Study

Coronary Disease Surveillance in March 2020 the Community Angiography and Revascularization. Researchers analyzed all coronary angiographic diagnostic procedures and revascularizations performed in Olmsted County, MN from 2000 to 2018. A total of 12981 invasive angiograms were performed among 9049 individuals (64% men; 55% aged ≥65 years). Adjusted angiography rates decreased by 30% (95% CI, 25%–34%) between 2000 and 2009 and leveled off thereafter including computed tomography, angiography uncovered an increase in angiography use in recent years (risk ratio=1.15 [95% CI, 1.07–1.23] for 2018 versus 2014) and a decline in the prevalence of anatomic CAD from 2000 to 2018. CAD severity declined substantially from 2000 to 2009, followed by a plateau. Among 6570 revascularizations (72% men; 57% aged ≥65 years), 77% were percutaneous coronary interventions and 23% coronary artery bypass graft surgeries. The adjusted revascularization rates declined by 34% (95% CI, 27%–39%) from 2000 to 2009, followed by a plateau (risk ratio=1.10 [95% CI, 1.00–1.22]). study concluded that Between 2000 and 2018 in the community, coronary angiography use declined initially, leveled off, and then increased. Trends in CAD severity and revascularization use decreased then plateaued. The most recent trends are concerning as they suggest the burden of coronary disease is no longer declining. These warrants reinvigorated primary prevention and population surveillance.

Prevalence of coronary artery disease and its risk factors in Kerala, South India. A community-based cross-sectional study, we selected 5167 adults (mean age 51 years, men 40.1 %) using a multistage cluster sampling method. Information on socio-demographics, smoking, alcohol use, physical activity, dietary habits and personal history of hypertension, diabetes, and CAD was collected using a structured interview schedule. Anthropometry, blood pressure, electrocardiogram, and biochemical investigations were done using standard protocols. CAD and its risk factors were defined using standard criteria. Comparisons of age adjusted prevalence were done using two tailed proportion tests. the results of the study were overall age-adjusted prevalence of definite CAD was 3.5 %: men 4.8 %, women 2.6 % ($p < 0.001$). Prevalence of any CAD was 12.5 %: men 9.8 %, women 14.3 % ($p < 0.001$). There was no difference in definite CAD between urban and rural population. Physical inactivity was reported by 17.5 and 18 % reported family history of CAD. Other CAD risk factors detected in the study

were: overweight or obese 59 %, abdominal obesity 57 %, hypertension 28 %, diabetes 15 %, high total cholesterol 52 % and low level of high-density lipoprotein cholesterol 39 %. Current smoking was reported only be men (28 %).

Methodology

Approach is Survey approach Descriptive research design used to assess the knowledge and attitude of care givers after coronary angioplasty. The study was conducted at Mamata super specialty Hospital, Khammam, Telangana. Study sample were **50** Care givers of coronary angioplasty patients who are in the age group between 21 – 50 years admitted in Mamata super specialty Hospital, Khammam, Telangana. Selected by using Non-Probability Convenience Sampling Technique.

Method of data collection: Interview technique

Tool used for data collection: Structured Interview schedule.

Criteria for Sample Selection

Inclusion criteria: The study includes the care givers.

1. Who are in the age group between 21 – 50 years.
2. Who are willing to participate in the study.

3. Who are available at the time of data collection.
4. Who can understand Telugu or English languages.
5. Who are admitted in Mamata super specialty Hospital, Khammam, Telangana.

Exclusion criteria: The study excludes the care givers.

1. Who are not willing to participate in the study.
2. Who are not available at the time of data collection.
3. Who are not admitted at Mamata super specialty Hospital, Khammam, Telangana.

Variables of the Study

Research Variables

Knowledge and attitude of care givers of coronary angioplasty patients regarding care after coronary angioplasty and its importance [21].

Socio demographic variables

Base line information of care givers of who underwent coronary angioplasty patients such as Age in years, Gender, Religion, Educational status, occupational status, Family income per month, Regular health checkups and treatment after coronary angioplasty and source of information regarding care after coronary angioplasty and its importance [22].
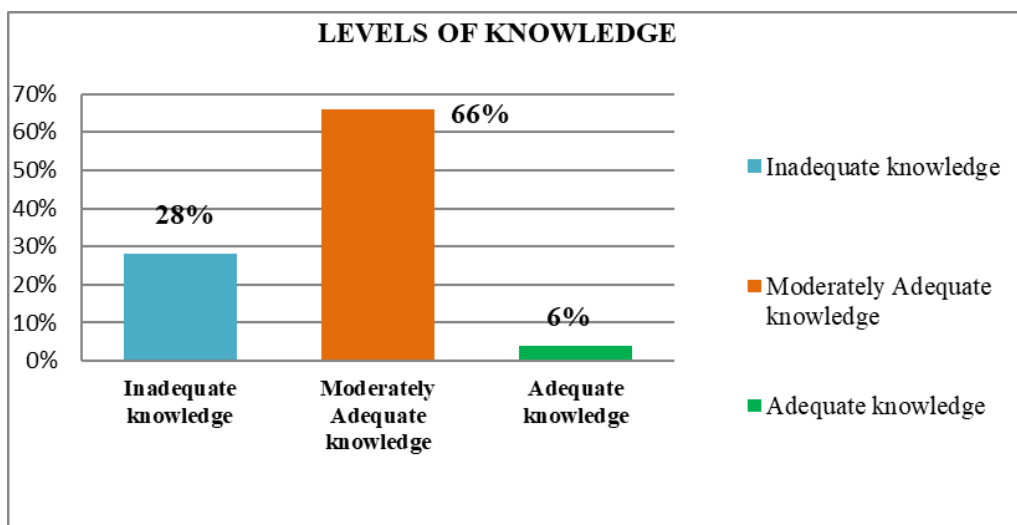

Figure 1: Frequency and percentage distribution of levels of knowledge of care givers regarding care after coronary angioplasty and its importance.

The above bar graph shows the distribution of levels of knowledge of care givers regarding care after coronary angioplasty and its importance among 50, majority of care givers 33 (66%) had moderately adequate knowledge 14(28%) had inadequate knowledge and 3(6%) adequate knowledge [23].

Development and Description of the Tool

The research tool was developed after doing extensive literature review from primary and secondary Sources.

The experts' suggestions were incorporated, and the research tool was organized into 3 sections:

- **Section-A:** Deals with socio demographic data.
- **Section-B:** Deals with questions on knowledge levels regarding care after coronary angioplasty and its importance.
- **Section-C:** Deals with attitude scores related to care after coronary angioplasty and its importance.
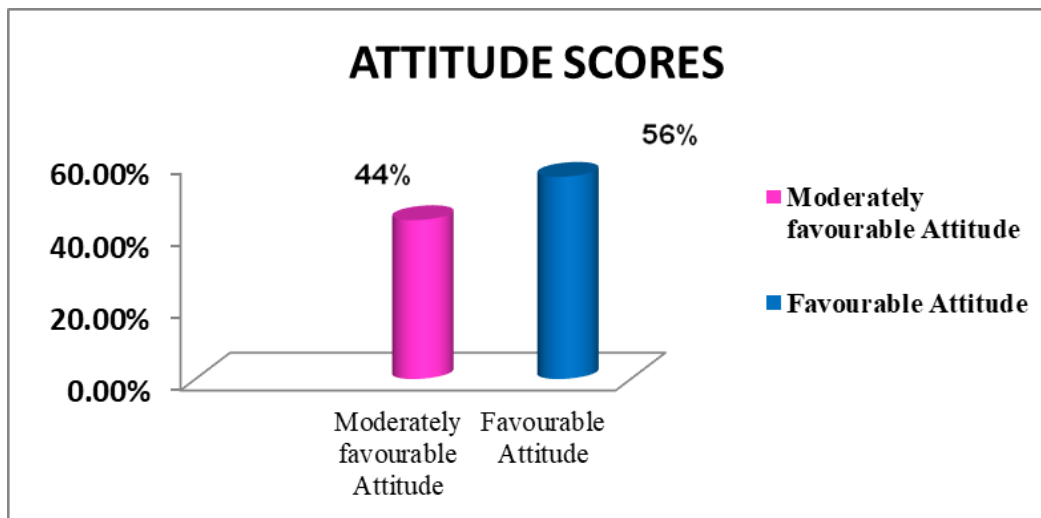

Figure 2: Frequency and percentage distribution of attitude scores of care givers regarding care after coronary angioplasty and its importance.

The above bar graph shows the distribution of attitude scores of care givers regarding care after coronary angioplasty and its importance among 50, Majority of care givers 28(56%) had favorable attitude and 22(44%) had moderately favorable attitude.

Results

The study findings shows that levels of knowledge of care givers regarding care after coronary angioplasty and its importance among 50, majority of care givers 33 (66%) had moderately adequate knowledge 14(28%) had inadequate knowledge and 3(6%) adequate knowledge [24-26].

The study findings shows that attitude scores of care givers regarding care after coronary angioplasty and its importance among 50, Majority of care givers 28(56%) had favorable attitude and 22(44%) had moderately favorable attitude and none of them belongs to Unfavorable attitude [27-28].

Conclusion

The study concluded that majority of the care givers had moderately adequate knowledge and had favorable attitude which indicates that there is a need to increase the knowledge of care givers regarding care after coronary angioplasty and its importance.

Recommendations

- The study can be replicated in different setting in community with larger samples.
- A similar study can be conducted among staff nurses.
- A similar study can be conducted by using quasi experimental designs.
- The similar study can be conducted by using comparative descriptive design.
- The study can be conducted with large population.

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