

To Assess the Association Between Selected Demographic Variables with Knowledge Regarding Self-care Activities among the Clients of Myocardial Infarction

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ABSTRACT

Health is the most valued and sought virtue with human beings “WHO” in 1948 stated “Health is a state of complete physical mental and social well-being and not merely absence of any disease or infirmity. WHO sees health as a process of continuous adjustments to changing meanings we give to life. It is a dynamic concept. Demographic variables have some influence on health. Heart disease is the largest killer disease over the globe. In recent years, education has come to be considered as an integral component of health care. The modern trend of health care in every society is considering physical exercises, diet, psychological socio-environment culture, stress management through alternative therapies such as yoga, meditation and another mean of relaxation. Cardiovascular disease is the leading cause of death in the United States for men and women of all racial and ethnic group and more people die of cardiovascular disease than of all the type of cancers combined. Myocardial infarction is a chronic life long illness. An earlier study has put forward health guidelines on self-care of myocardial infarction patients. Emphasis was laid on medication, diet, muscles stretching exercise and stress reduction technique. This was done with a view to assessing the effectiveness of health guidelines on health teachings, regular follow up to maintain a healthy active life and successful readjustment by careful planning.

Self-care is a critical component of therapy for persons with myocardial infarction (M.I.). The patient needs to manage his medication, diet, exercise, stress reduction, maintenance of body weight to detect early sign of fluid retention. Those who do not follow the treatment plan & initiate self-care remedies for early sign and symptoms are more likely to be hospitalized for an acute exacerbation 4. The need was felt in the light of this information to see the association with demographic variables on self-care teaching in Myocardial infarction clients. The study found that regarding knowledge, Age, educational status, gender, place of living, source of information, duration of illness had a significant association. Whereas Occupational status, marital status, nutritional status, history of illness and religion did not have a

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To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction

significant association on the self-care activities on myocardial infarction clients. For further research it is purposed that a study can be undertaken on a larger population.

Keywords: Association, Demographic Variables, Self-care activities, Structured teaching Programme

Health is a state of complete physical mental and social well-being and not merely the absence of any disease or infirmity. WHO sees health as a process of continuous adjustments to changing meanings we give to life. Nollen et al 2009 emphasised that health is a dynamic concept. Demographic variables have some influence on health. NRCampbell 2015 and K. Tibazarwa 2009 have reported that heart disease is first of the largest killer disease over the globe. Since there has been sharp increase in risk factors for cardiovascular diseases such as obesity, hypertension, and diabetes. In recent years, education has come to be considered as an integral component of health care. Adam et al 2009 expressed the opinion that the modern trend of health care in every society is considering physical exercises, diet, psychological socio-environment culture, stress management through alternative therapies such as yoga, meditation and another mean of relaxation. Dunlay et al in 2009 wrote that Myocardial infarction is a chronic life long illness. An earlier study has put forward health guidelines on self-care of myocardial infarction patients. Studies laid emphasis on medication, diet, muscles stretching exercise and stress reduction technique. This was done with a view to assessing the effectiveness of health guidelines on health teaching, regular follow up to maintain a healthy active life and successful readjustment by careful planning.

MacMurray et al 2009 are of the opinion Self-care is a critical component of therapy for persons with myocardial infarction (M.I.). Patient needs to manage his medication, diet, exercise, stress reduction, maintenance of body weight to detect early sign of fluid retention. Those who do not follow the treatment plan & initiate self-care remedies for early sign and symptoms are more likely to be hospitalized for an acute exacerbation.

MATERIAL AND METHODS

Study Setting:

The study was conducted in the medical ward, cardiac ward OPD and intensive unit of selected hospitals. Shridevi Hospital and District Hospital of Tumkur, Karnataka.

Population:

Population for this study includes all the myocardial infarction clients admitted in selected hospital of Tumkur.

Sampling Technique And Size

The sample of the study comprises of 60 myocardial infarction clients, subjects to a maximum of 30 clients from Shridevi Hospital and 30 clients from district hospital Tumkur.

Purposive sampling technique was used for the study.

Criteria For Selection Of Sample.

- a) The client who is suffering from myocardial infarction, willing to participate in the study and those who could read and write Kannada and English.
- b) A client who are critically ill, unable to respond and below 30 years of age were excluded.

To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction

Selection Of The Tool:

A structured questionnaire was selected for the study to assess the knowledge of MI clients. It was considered the most appropriate tool to elicit a response from the patients.

Description Of The Tool:

The instruments used for the study was questionnaire to assess the knowledge which consists of the following three parts.

Part I .Demographic Data. Part II - Knowledge questionnaire of 30 multiple choice questions.

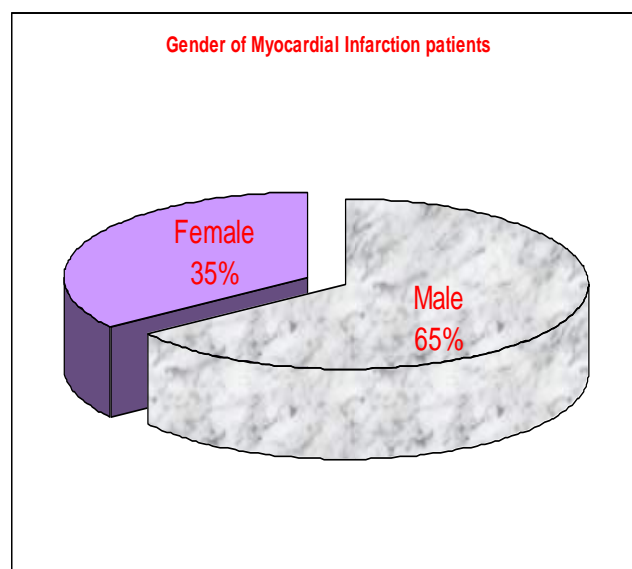
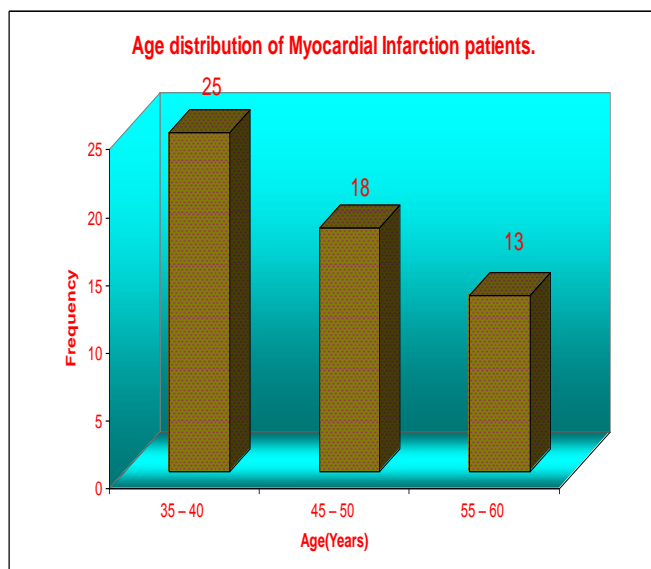
Data Collection Procedure:

After obtaining formal permission from the hospital authorities and from the clients, data was collected from 60 clients selected by nonprobability purposive sampling technique. A structured teaching program questionnaire was administered to educate the clients on self-care activities

It took about 50 minutes per sample to collect the data. The responses were recorded in the space provided in the questionnaire

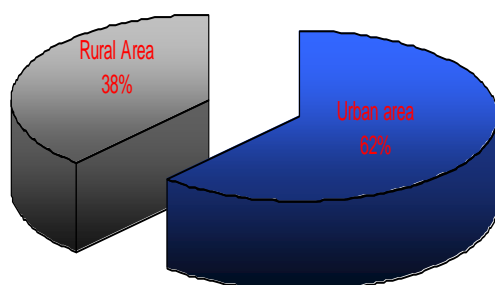
RESULTS

A total of 60 MI clients participated in the study. participated and their sociodemographic features are summarized in Table given below The majority of clients 42 % were in the age group of 35-40 years, 65 % were males, most of the clients were Hindus 51.6 % followed by Muslims 26.6% and Christians 20.0% respectively. 62 % lived in urban areas, 48.3% were married. And 35 % were graduates in education. Results are depicted in figures.

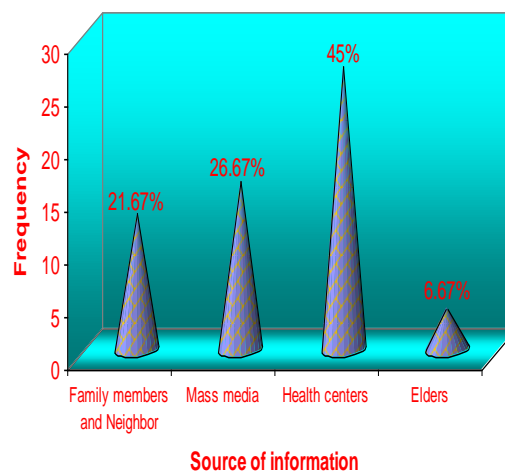


To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction

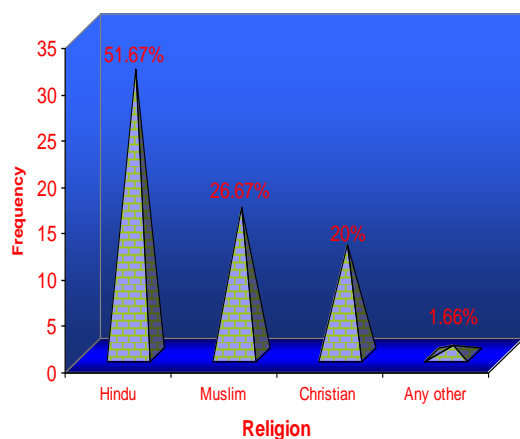
Place of Living of Myocardial Infarction patients



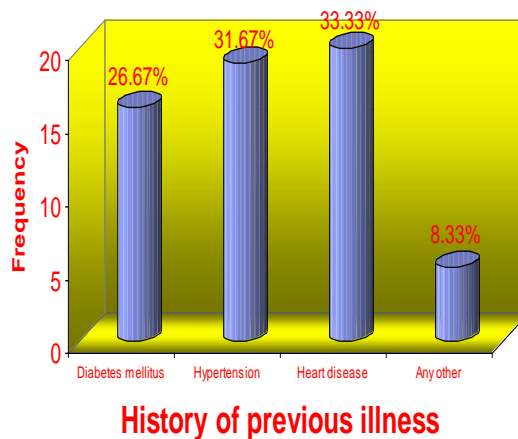
Source of information for Myocardial Infarction patients



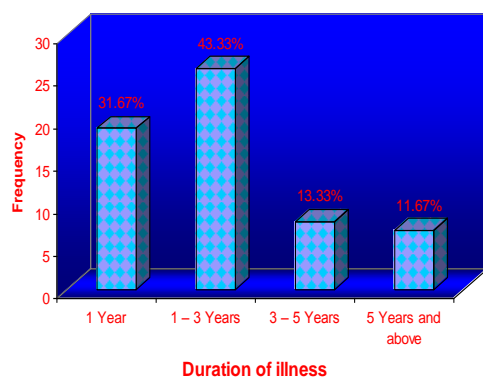
Religion of Myocardial Infarction patients



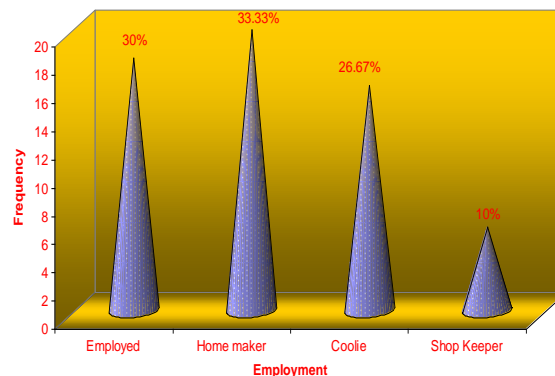
History of previous illness of Myocardial Infarction patients



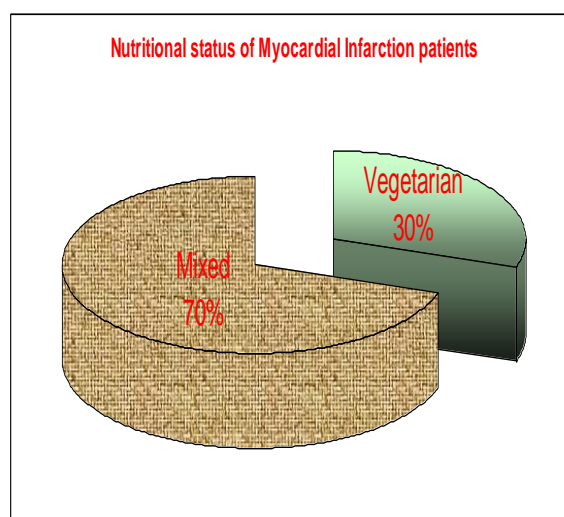
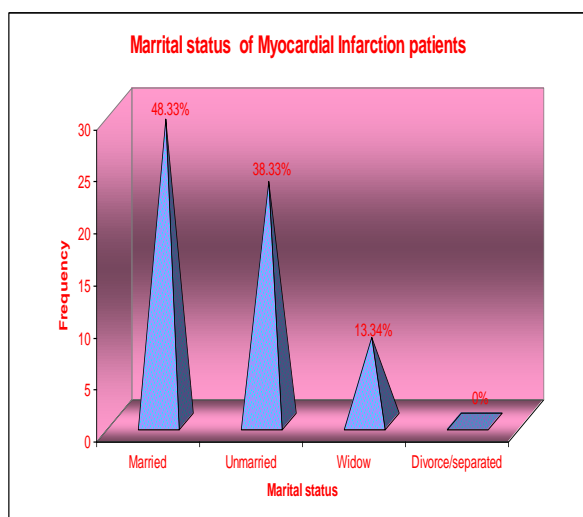
Duration of illness of Myocardial Infarction patients



Occupational status of Myocardial Infarction patients



To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction



Abstract of chi-square results of socio-demographic characteristics and Knowledge regarding self-care activities among myocardial infarction clients in pre-test score

Sl. No	Characteristics	Chi-square value	Df	Result	P-value
1	Age,	15.28	3	Sig	0.02
2	Educational status	9.27	3	Sig	0.025
3	Occupational status	3.3	3	NS	0.35
4	Marital status	3.29	3	NS	0.32
5	Nutritional status	2.7	1	NS	0.1
6	History of previous illness	6.32	3	NS	0.097
7	Gender	0.02	1	HS	0.003
8	Place of Living	11.49	1	Sig	0.0007
9	Source of information	11.21	3	Sig	0.01
10	Religion	3.37	1	NS	0.34
11	Duration of illness information	13.25	3	Sig	0.004

From the above table Age, Educational status, Religion is Significant whereas Occupational status, Marital status, Nutritional status, History of previous illness, Gender, Place of Living are not significant. Source of information is highly significant.

To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction

Abstract of chi-square results of socio-demographic characteristics and Knowledge regarding self-care activities among myocardial infarction clients in a post test score.

Sl. No	Characteristics	Chi-square value	Df	Result	P-value
1	Age,	7.48	3	Sig	0.05
2	Educational status	9.07	3	Sig	0.03
3	Occupational status	0.54	3	NS	0.91
4	Marital status	0.66	3	NS	0.72
5	Nutritional status	1.16	1	NS	0.28
6	History of previous	2.75	3	NS	0.43
7	illness Gender	1.53	1	HS	0.0006
8	Place of Living	11.92	1	Sig	0.02
9	Source of information	9.7	3	Sig	0.02
10	Religion	1.55	1	NS	0.67
11	Duration of illness information	10.24	3	Sig	0.02

From the above table Age, Educational status, Religion is Significant Where as Occupational status, Marital status, Nutritional status, History of previous illness, Gender, Place of Living are not significant. Source of information is highly significant.

Summary of Chi-square test P-Value

Association of knowledge with selected demographic variable:

- Age has a significant association with knowledge score
- Educational status association with knowledge score
- Gender has a significant association with knowledge score
- Place of living has a significant association with knowledge score
- Source of information has a significant association with knowledge score
- Duration of illness has a significant association with knowledge score
- Occupational status has no significant association with knowledge score
- Marital status has no significant association with knowledge score
- Nutritional status has no significant association with knowledge score
- History of previous illness has no significant association with knowledge score
- Religion has no significant association with knowledge score

Testing of Hypotheses

H: There will be a significant difference between pre-test and posttest knowledge and practice among myocardial infarction clients regarding self-care activity.

Based on the study findings the comparison between pre-test and post test score revealed that there was a significant difference between pre-test and posttest knowledge and practice of myocardial infarction clients. Hence research hypotheses (H) are accepted.

DISCUSSIONS

Of the 60 clients who took part in the study about 42 % of the clients belong to the age group of 30-40 years of age. And 65 % of subjects were found to be male. It seems that heart disease is occurring in the young and predominately in males, it could be that this age group has more of stress due to various reasons. Work pressure at the workplace could be one of the reason.

The study revealed that 35 % of the clients were graduation. The knowledge of myocardial infarction clients was influenced by educational status. The stress of acquiring a job if they were unemployed could be one of the trigger factors. The majority lived in cities. There are no factors which affect living in cities. The study showed that the knowledge regarding self-care activities in myocardial infarction clients was inadequate in the pre test. Since the majority of the people with myocardial infarction have inadequate knowledge about the disease process trigger factors and management of MI. After the administration of a structured teaching program, the knowledge improved. The overall mean score percentage of knowledge in pre-test was 35.06 % and in post, test is 87.06 %. If patients do not recognize symptoms of acute myocardial infarctions or do not perceive themselves to be at risk for ischemic heart disease, they may not seek care that would result in appropriate diagnosis. **R. BeLue, T.A. Okoror, J. Iwelunmor, et al 2009** reported that, patient knowledge and beliefs may be important drivers of under-recognition of cardiovascular disease. Indeed, socio-cultural perceptions of cardiovascular risk factors such as diabetes and obesity have already been shown to affect healthcare utilization. The structured teaching program on management of self-care activity administered to the clients provided knowledge to the clients on identification and avoiding trigger factors, self-monitoring of pulse exercise and regular use of medication and thereby enabling the client to lead a normal active life. The limitation of this study is that it was conducted during day time so the representation of males may be not realistic due to their preoccupation with their work.

CONCLUSIONS

The following conclusions were drawn from “A study to assess the effectiveness of structured teaching program of knowledge regarding self-care activities among the clients with myocardial infarction” in a selected hospital in Tumkur”.

On the basis of the findings of the study. Majority of myocardial infarction clients belongs to the age group 35-40 i.e., 41.67% and 65% of myocardial infarction clients were male. Most of them 35% had graduation. A sizable no of clients was homemaker 33.33% and the majority lived in urban areas 61.67%.

After the administration of a structured teaching program, the knowledge improved. The overall mean score percentage of knowledge in pre-test was 35.06 % and in post, test is 87.06 % and. The study revealed that the knowledge regarding self-care activities in myocardial infarction clients was inadequate in the pre test. The knowledge of myocardial infarction clients was influenced by educational status. The calculated chi-square value for association of knowledge with education in the pre-test was 0.025 significant and in the post-test was 0.03 significant. Since the majority of the people with myocardial infarction have inadequate knowledge about the disease process, trigger factors, and management, education of the

To Assess the Association Between Selected Demographic Variables With Knowledge Regarding Self Care Activities Among the Clients of Myocardial Infarction

patient in these aspects is very essential for proper management of myocardial infarction. Hence structured teaching program on management of self-care activity was developed and administered to the clients which were aimed to provide knowledge to the clients on identification and avoiding trigger factors, self-monitoring of pulse exercise and regular use of medication and thereby enabling the client to lead a normal active life. For further research, a study can be done on larger sample size.

More research is needed on a larger sample size on myocardial infarction and to develop effective educational interventions regarding this life-threatening condition.

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Conflict of Interest

The authors carefully declare this paper to bear not a conflict of interests

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