Summary
Myocardial infarction is as old as history itself, but unhappily there has always been attached to the implied stigma that either death or shortened life span was an inevitable consequence. This has led to the awful perception about the disease even today. The MI illness spells grief, despairs, bewilderment, fury, frustration and indeed the whole range of human emotions. A MI patient is not merely an individual with a diseased body; he is also a person with a throbbing heart, a thinking mind, a stirring soul and one who lives in a small world of his own, surrounded by his family and friends. He has a physical disease that can be treated by the doctor, but he also has attitudes and aptitudes, interests and instincts, hopes and dreams of the futures which are all affected by his malady.

Hence, it is imperative that all who have close contact with MI patients should have greater understanding of his stress, be sympathetic, caring, accepting and willing to help.

The patient will have to be made to understand his disease or disability, regain confidence and be inspired always making sure that fears and anxieties are dispelled and his coping strategies are strengthened. Cardiac rehabilitation for the
MI patient is a team effort and requires the outstretched arms of the family, friends, relatives, doctors, physiotherapists, social workers, nutritionists, nurses, counsellors and others to help and support him. It needs to be remembered that total patient care and understanding is the essence for providing a better psychological, emotional, empathetic care services to MI patients.

The functions of cardiac care nurses fall into four broad categories. Clinical practice, education, administration and research. Nurses traditionally have assisted patients in coping with the stresses of diagnosis, treatment, rehabilitation and terminal illness. For the last two and half decades, much importance is given to body-mind relationship in causation of illnesses in general hospital setting, seeking the psychiatric consultation and collaborative services to many illness conditions. Among them, the notable conditions affecting cardiovascular system that require mental health care services are hypertension and myocardial infarction. A nurse extends her psychosocial nursing intervention to MI patient in cardiac care centres. One of the major role of the nurse with MI patient is giving therapeutic counselling services. Here the primary goal of the nurse is to help patients and family members to adapt to the stresses of the diagnosis and treatment within today’s complex health care procedures. To achieve this goal, the nurse relies on a broad range of stress control measures, counselling modalities and therapeutic techniques; individual, group and family therapy, education, behaviour
modification, crisis intervention, supportive techniques and insight oriented interventions.

A nurse would be ill fit for this role unless he or she has the adequate knowledge about stressors, their sources, intensity, including the patients emotional state. These issues and stressors are different in gravity and quality in the various phases of the illness - from the stage of diagnosis through treatment induction, treatment side effects, treatment termination, survivorship, recurrence, terminal illness and bereavement.

The stress aroused from various factors have to be handled well. MI patients made use of coping skills which are sometimes effective and sometimes ineffective. Nurses can assist them to learn healthier coping mechanisms to overcome the stress with close observation and analysis of the various psychosocial issues such as death anxiety, family burden, decreased social support, poor quality of life and ineffective coping behaviour. Nurses can identify whether the MI patient has mild, moderate or severe stress and carry out psychosocial intervention accordingly. Nurses can also provide stress management guidelines to lead better quality of life and to produce significant positive changes in the patient and his/ her family.
Considering these issues, the researcher stated his problem of the study as

**STATEMENT OF THE PROBLEM**

A Study to assess the level of Stress and Coping Behaviour seen Among Patients with Myocardial Infarction at Sri Jayadeva Institute of Cardiology, Bangalore, India.

**AIMS OF THE STUDY:**

1. To identify the nature and source of stress seen among the patient with Myocardial Infarction patient.

2. To identify the pattern of coping behaviour seen among the Myocardial Infarction patient.

**OBJECTIVES:**

1. To describe the socio-demographic characteristics of study subjects diagnosed with Myocardial Infarction.

2. To assess the level of stress among the subjects.

3. To identify the level coping behaviour seen among subjects.

4. To identify the relationship between the stress and coping.

5. To find out the association between specific socio-demographic characteristics and level of stress and coping behaviour.
ASSUMPTIONS:

1. Patients with Myocardial Infarction face different levels of Stress.
2. Coping behaviour of Myocardial Infarction patients differ according to their level of stress.
3. Higher the perceived social support, better the coping behaviour, lesser will be the level of death anxiety, Lesser will be the level of family burden leading to higher quality of life among Myocardial Infarction patients.

HYPOTHESES:

- **H₁**. there will be statistically significant association between the level of stress and selected Socio-demographic variables such as age, sex, and domicile.

- **H₂**. there will be statistically significant association between the level of coping behaviour and selected Socio demographic variables such as age, sex, and domicile.

- **H₃**. there will be statistically significant association between the level of stress and coping behaviour and selected socio demographic variables such as age, sex and domicile.
6.1. MAJOR FINDINGS OF THE STUDY:

This chapter presents the major inferences drawn from the data analysis in the form of summary. It also depicts some practical, workable recommendations which have been derived based on the study inferences. Researcher made an attempt to identify the implications of research findings in nursing practice, education, administration and research along with strengths of the study as well as study limitations.

Descriptive statistics frequency, percentage, mean, standard deviation and inferential statistics (paired ‘t’ test, correlation coefficient, ANOVA and Multiple regression analysis) were used to meet the objectives of the study and to test the study hypotheses.

Findings were grouped under socio demographic profile and are summarized below; the researcher would like to initially present the socio-demographic factors of the respondents.

**General Information:**

With regard to identification data of the subjects it was found that the majority of subjects 271 (90.3%) were from the age group of 36-65 years (Middle adult) and majority of the subjects 234 (78%) were males.
A high percentage of subjects 271 (90.3%) were married and considering the educational status of the respondents, it is seen that majority of the subjects 210(70%) were literate.

While analyzing the occupation factor of the MI patients majority of subjects 100 (33.3%) were having business and majority of the subjects 222 (74%) were earning less than Rs. 45000 per annum.

Considering the residence of the respondents, it is seen that majority of the subjects130 (44.3%) were from urban community. With regard to number of earning members in the family, majority of the subjects 177(59%) were having one earning member in the family.

It is disheartening to note that majority of subjects 179 (59.7%) were having debts/ loans and majority of subjects 192(64%) had spend less than Rs.1500/- for treatment.

Religion

It was observed that majority of subjects 220 (73.3%) belonged to Hindu religion and majority of the subjects 214(71.3%) were from other than the caste of SC/ST, BC & OBC.
Clinical Profile:

Habits

While analyzing the habits of respondents, it was seen that majority of the subjects 157 (52.3%) were having history of smoking.

But majority of them 221 (73.7%) were not consuming alcohol.

Hobbies

It was noticed from the analysis that most of the subjects 189 (63%) were having the hobby of listening to music.

A high percentage of the subjects 254 (84.7%) were spending more time in watching TV/ movie.

Family History of MI

Majority of the subjects 251 (83.7%) were not having any family history of Myocardial Infarction.

Age of Onset of MI

Majority of the subjects 226 (75.4%) had the onset of MI from age of 31 to 60 years.
**Current Symptoms of MI**

While analyzing the current symptoms, majority of the subjects 220(73.3%) experienced chest pain as the current symptom of MI.

**Duration of Illness.**

With regard to duration of illness majority of the subjects 281(93.7%) were having less than 5 years.

**Hospitalization**

Majority of the subjects 284(94.7%) were hospitalized for the first time and with regard to duration of current hospitalization, majority of the subjects 240(80%) were having less than 3 days.

It was observed that majority of the subjects 291(97%) were expressing one week as the longest duration of hospitalization.

**Perceived stage of MI**

Considering perceived stage of disease, majority of the subjects 283(94.3%) perceived their disease stage as ‘early’.

**Investigations**

From the analysis, it was clearly seen that majority 296(98.7%) of subjects had undergone blood tests.
Most of the subjects 294(98%) had undergone ECG investigation.

It was quite interesting to note that majority of the subjects 204(68%) hadn’t undergone coronary angiogram although this investigation was specific to diagnose heart blocks.

_Treatment at Cardiac Centre_

Majority of the subjects 253 (84.3%) were on pharmacotherapy. It was also found that majority of the subjects 290(96.7%) were on symptomatic treatment.

_Alternative system of Medicine_

With regard to any other system of medicine tried, it was seen that all the subjects 300(100%) were not on either Unani or, others and none on any other alternative systems of treatment.

_Primary Effect of MI_

While analyzing the primary effects of MI, it was seen that majority of the subjects 297(99%) had chest pain.

With regard to other primary effects, majority of the subjects 267(89%) had sweating and, 234(78%) had tightness in the chest.

And 161(53.7%) had choking sensation.

Majority of the subjects 192(64%) had spent less than Rs.1500 per month for the treatment of prolonged symptoms of primary effect.
Secondary Effect of MI

To find out the secondary effects of MI the analysis was carried out and found that majority of the subjects 229(76.3%) were not having any anxiety or fear of impending death or nausea 184(61.3%). Whereas, majority of the subjects 171(57%) had breathlessness, and 196(65.3%) had sweating.

Consequence of MI

Majority of the subjects 155(51.7%) had no change in their occupational status; considering the change in habits, 217(72.3%) subjects had change in habits as a consequence of disease.

Majority of the subjects 192(64%) had change in their hobbies as a consequence of disease but majority of the subjects 251(83.7%) found that treatment was expensive on account of MI.

Ways treatment expenses met

Majority of the subjects 212(70.7%) did not receive any financial assistance from government and from voluntary organization (99%) instead majority of the subjects 181(60.3%) had past savings as financial assistance. 159(53%) took private loans for financial assistance and 166(55.3%) were depended on the income of other family members for financial assistance.
Treatment Preference

Majority of the subjects 234(78%) preferred treatment at hospital; 208(69.3%) preferred their spouses to accompany them to hospital.

View of patients about their families

Majority of the subjects 266(88.7%) felt other family members need to take responsibility and 185(61.7%) expressed that they were able to take care of personal self without expecting physical assistance from family members.

Majority of the subjects 207(69%) felt that spouses helped mostly,

Perception of burden

Feeling of being a burden to the family members while many subjects 203(67.7%) did not feel that they were burden to the family members and with regard to the apprehensive of social rejection, majority of the subjects 223 (74.3%) said that they were not apprehensive of social rejection.

Source of support from governmental and nongovernmental organizations

Majority of the subjects 299(99.7%) said that no voluntary organization/private body neither helped them nor extended physical assistance.
None of the subjects were emotionally assisted by voluntary organization/private body; considering the financial assistance majority of the subjects 298(99.3%) were not financially assisted by voluntary organization/private body.

By considering the attitude of spouse/parents/siblings after diagnosis, majority of the subjects 295(98.3%) felt that they showed more concern after diagnosis.

Majority of the subjects 235(78.3%) said they preferred to discuss their problems of disease to others where as with regard to preference, majority of the subjects 178(59.3%) preferred spouse/parent/sibling to be as usual while discussing their problems of disease.

Majority of the subjects 297(99%) felt spouse/parent/sibling were concerned. 290(96.7%) said that the family members were over worried because of ill health of the subject.

**Change in function of family members after illness;**

Majority of the subjects 250(83.3%) said that the family members had not given up education; and 249(83%) said they had not taken up any new job.
Majority of the subjects 201(67%) had seen no changes in family members in taking care of home after their disease and 259(86.3%) expressed that the family had not overworked.

Majority of the subjects 293(97.7%) did not perceive any change in function of family members after illness; considering any plans for family members to be fulfilled, majority of the subjects 166(55.3%) expressed that they did not have any plans pending.

Most of the subjects 183(61%) felt that the educational needs of the family members were yet to be met; considering the marriage of any of the family members majority of the subjects 153(51%) said ‘no’.

Majority of the subjects 242(80.7%) did not find any change in family members views with regard to medical treatment, 233(77.7%) said no change seen event in savings behaviour.

**Patient and spouse**

The data collected from married patients, having their spouses alive, were analysed and found that majority of the subjects 157(52.3%) perceived that their spouses reaction to conjugal life was very smooth.
164 (54.7%) never had coitus after the illness and 264 (88%) expressed that their spouses had fear of death.

**Patient and type of family system**

Majority of the subjects 222 (74%) were living in nuclear family. Majority of the subjects 205 (68.3%) had family composition of less than 5 members. Considering the utility of living in a joint family in a situation with illness, majority of the subjects 266 (88.7%) found it was helpful. 257 (85.7%) said they received physical aid, 276 (92%) received emotional support, and 225 (75%) received financial support.

Majority of the subjects 296 (98.7%) said they did not have any interference from members of joint family.

Majority of the subjects 293 (97.7%) said that they were not considered to be the burden for the family; Majority of the subjects 299 (99.7%) said that their disease was not considered by joint family members as curse of god.

Majority of the subjects 298 (99.3%) said that there was no impediment or hindrance to treatment.
Majority of the subjects 199(66.3%) said they themselves made decisions concerning their health and 271(90.3%) expressed that their opinion needed to be considered while making decisions.

**Support from relatives**

Perception of subjects about their friends and relatives support was analysed, Majority of the subjects 215(71.7%) felt that the frequency of relatives visit was ‘as usual’ and similarly considering frequency of friends visit, majority of the subjects 169(56.3%) said that it was ‘as usual’.

Majority of the subjects 199(66.3%) said that relatives render help and the type of help rendered was explored. It was found that majority of the subjects 215(71.7%) felt that relatives provided emotional support. 180 (60%) said that relatives assisted the family during hospitalization; 190(63.3%) said relatives facilitated treatment procedure.

**Support from Friends**

Similarly the support of friends was explored. Most of the subjects 226(75.3%) said friends did not provide financial support. 198(66%) said their friends did not help family to ventilate their concerns, needs and problems.
215(71.7%) said that friends did not offer themselves to stay with the patient during hospitalization. 241(80.3%) said friends did not facilitate financial assistance.

**Services expected from relatives and friends**

With regard to frequency of visit expected, majority of the subjects 213(71%) said that they expected relatives visiting ‘as usual’ and 159(53%) expected that their friends visiting them ‘as usual’.

With regard to kind of help, majority of the subjects 270(90%) felt that friends and relatives should provide emotional support and similarly 223(74.3%) said that they should provide financial assistance.

With regard to perceived order of dependency for support from relatives and friends, majority of the subjects 213(71%) expressed relatives assisting the family during hospitalization was their first priority, similarly with regard to facilitation of treatment procedure, majority of the subjects 186(62%) depended relatives to facilitate treatment procedures.

Although Majority of the subjects 290 (96.7%) expressed their greatest source of support was family members, but majority of the subjects 170 (56.7%) were with source of support from relatives.
Majority of the subjects 208(69.3%) considered their great source of support were friends and with regard to feel after the visit of friends and relatives, majority of the subjects 289(96.3%) felt that they were consoled by the visit of friends.

Effect of Relatives and Friends Visit

Majority of the subjects 279(93%) were relieved after the visit of their friends and relatives similarly majority of the subjects 271(90.3%) also expressed that they were not tensed after the visit of friends.

Majority of the subjects 283(94.3%) were not angry after the visit of relatives and friends similarly majority of the subjects 259(86.3%) felt encouraged after the visit of friends and relatives.

Majority of the subjects 235(78.3%) felt hopeful after the visit of friends and relatives whereas, majority of the subjects 286(95.3%) expressed that other MI patients were not the source of comfort.

Majority of the subjects 296(98.7%) were relieved when other tried to cheer them up similarly majority of the subjects 279(93%) were cheered up when others tried to cheer them.
Majority 261 (87%) subjects felt sad when others tried to cheer them up. With regard to dejected being sick, majority of the subjects 290(96.7%) felt that they were not dejected being sick.

*Expectation from employers and colleagues*

Majority of the subjects 72(24%) said that reaction of employers/ superiors was sympathetic similarly majority of the subjects 77(25.7%) wanted their employers/ superiors to react ‘normal’.

Majority of the subjects 127(42.3%) felt that the reaction of colleagues was co-operative; most of the subjects 98(32.7%) said their colleagues reacted normally.

*Religiosity*

Majority of the subjects 291(97%) were believing that there is god/ almighty power; majority of the subjects 237(79%) believed in some kind of after life.

Majority of the subjects 286 (95.3%) said prayer was helpful to them; majority of the subjects 220 (73.3.%) were attending special prayers/ poojas.
Majority of the subjects 244 (81.3%) were not attending any sessions for miraculous cure; but most of the subjects 232 (77.3%) had visited holy places/shrines.

Many subjects 276 (92%) expressed that they would like to visit holy places/shrines; majority of the subjects 169 (56.3%) felt that disease is not a result of past deeds.

Majority of the subjects 237 (79%) did not pray in other faiths; majority of the subjects 167 (55.7%) said that the disease was not a will of god.

Majority of the subjects 194 (64.7%) said disease was not to test them; majority of the subjects 258 (86%) said disease was not to punish them.

Majority of the subjects 283 (94.3%) said god did not love them more; majority of the subjects 218 (72.7%) were more religious.

Majority of the subjects 167 (55.7%) felt like giving up the battle for life; most of the subjects 201 (67%) were not having fear of death.

Majority of the subjects 300 (100%) did not get any rehabilitation support from voluntary agency and private body; majority of the subjects 218 (72.7%) did not like to obtain any help from the other sources.
Majority of the subjects 211(70.3%) were not in need of any monetary assistance for treatment; majority of the subjects 224(74.7%) did not wanted assistance in terms of physical aids / appliances.

Majority of the subjects 222(74%) said that they had no help in raising funds/ donations for treatment similarly majority of the subjects 298(99.3%) were not getting any voluntary help in terms of volunteers.

**Findings on the level of stress.**

The second objective of the study was “to assess the level of stress among study subjects”

Majority of the subjects 146 (48.7 %) had mild level of stress, 101(33.7%) subjects had moderate stress and 53 subjects (17.7%) had severe stress.

While examining the stress by analyzing the chosen psychological variables (death anxiety, family burden, social support and quality of life) in the study it was found that majority of the subjects 178(59.3%) had moderate level of death anxiety and only 33(11%) of subjects had severe death anxiety.
Majority of the subjects 115 (38.3%) had no family burden and only 83 (27.7%) subjects had mild family burden, whereas 102 (34%) subjects perceived severe family burden.

Majority of the subjects 188 (62.7%) had satisfactory social support appraisal and only 3 (1%) of subjects had good social support appraisal whereas 109 (36.3%) subjects had poor social support appraisal.

Majority of the subjects 241 (80.3%) had satisfactory quality of life and only 18 (6%) of subjects had poor quality of life. Whereas 41 (13.7%) subjects had good quality of life.

**Findings on the coping behaviour.**

The third objective of the study was “to identify the coping behaviour seen among subjects”.

Majority of the subjects 174 (58%) had moderately effective coping and only 14 (4.7%) of subjects had highly effective coping behaviour. Whereas 112 (37.3%) subjects had less effective coping.
Findings on correlation between stress and coping.

The fourth objective of the study was “to identify the relationship between stress and coping”.

Coping behaviour and stress were negatively correlated. The correlation was statistically significant at 99% level of confidence. When coping behaviour was better, the level of stress was less and vice versa.

Examining the correlation that existed between coping behaviour and individual scales like Death Anxiety Scale, Family Burden Interview Schedule, Perceived Social Support Appraisal and Quality of Life, it revealed that the coping behaviour and death anxiety were negatively correlated. This implied that as the coping behaviour increased, death anxiety decreased. The correlation was found significant at 99% level of confidence.

With regard to correlation between coping behaviour and family burden, it was found that coping behaviour and family burden were not correlated. Whereas coping behaviour and quality of life were positively correlated. From this it was inferred that as the coping behaviour increased, quality of life also improved. The correlation was seen to be highly significant at 99% level of confidence.
With regard to correlation between coping behaviour and social support, the observation was that they were negatively correlated. This meant that as the coping behaviour increased, the social support decreased. The correlation was seen to be highly significant at 99% level of confidence.

**Findings on association of level of stress and coping with socio demographic characteristics**

The fifth objective of the study was “to find out the association between specific socio-demographic characteristics and level of stress and coping behaviour”. Based on this objective, researcher had stated two hypotheses H₁ and H₂.

Findings revealed significant association between the selected socio-demographic variables such as marital status, income per annum and educational status with the levels of stress at 95% level of confidence and not with age, sex and domicile, hence, H₁ – “there will be statistically significant association between the level of stress and selected Socio-demographic variables such as age, sex, and domicile” was rejected.

Similarly, there was a significant association between the selected socio-demographic variables such as age with level of coping behaviour at 99% level of confidence and educational status with level of coping behaviour at 95% level of confidence. H₂ “there will be statistically significant association between the level
of coping and selected Socio demographic variables such as age, sex, and domicile” was rejected as only one variable ‘age’ had association and other two variables such as sex and domicile had no association.

**Splitting of Hypotheses:**

Since no association was found between age, sex, domicile and level of stress; as well as between sex, domicile and level of coping, an attempt was made to find out association between demographic variables and level of stress through individual scales. Subjects were classified into males and females; regarding domicile as rural, urban and semi urban; regarding age variable, below 40 years of age as young adult and above 61 years of age as young old. Accordingly the following hypotheses were formulated and tested.

1) **H₁** - there will be statistically significant difference between the scores obtained by younger age group and older age group of MI patients on death anxiety scale. It was retained, since older age group of MI patients had lesser death anxiety than younger age group.

2) **H₂** - there will be statistically significant difference between the scores obtained by younger age group and older age group of MI patients on family burden interview schedule. It was retained, since younger MI patients perceived higher level of family burden than older MI patients.

3) **H₃** - there will be statistically significant difference between the scores obtained by younger age group and older age group of MI patients on
perceived social support appraisal. It was retained, since older age group of MI patients had lesser perceived social support than younger age group.

4) $H_4$: there will be statistically significant difference between the scores obtained by younger age group and older age group of MI patients on quality of life. It was rejected, since there was no significant difference between different age groups of MI patients with regard to quality of life.

5) $H_5$: there will be statistically significant difference between the scores obtained by younger age group and older age group of MI patients on coping behaviour. It was rejected, since there was no significant difference between the different age groups of MI patients in the dimension of coping behaviour.

6) $H_6$: there will be statistically significant difference between the scores obtained by male and female MI patients on death anxiety scale. It was rejected since there was no significant difference between male and female MI patients with regard to death anxiety.

7) $H_7$: there will be statistically significant difference between the scores obtained by male and female MI patients on family burden interview schedule. It was retained since the family burden of male MI patients was more than the female MI patients.

8) $H_8$: there will be statistically significant difference between the scores obtained by male and female MI patients on perceived social support
appraisal. It was retained, since the social support of the female MI patients was better than the male MI patients.

9) \( H_9 \) -- there will be statistically significant difference between the scores obtained by male and female MI patients on quality of life. It was retained, since the quality of life of the male MI patients was more than female MI patients.

10) \( H_{10} \) -- there will be statistically significant difference between the scores obtained by male and female MI patients on coping behaviour. It was retained, since the coping behaviour score of male MI patients was found better than the female MI patients.

11) \( H_{11} \) -- there will be statistically significant difference between the scores obtained by rural and urban MI patients on death anxiety scale. It was rejected, since there was no significant difference in the level of anxiety based on place of residence.

12) \( H_{12} \) -- there will be statistically significant difference between the scores obtained by rural and urban MI patients on family burden interview schedule. It was retained since urban MI patients had higher level of family burden than rural MI patients.

13) \( H_{13} \) -- there will be statistically significant difference between the scores obtained by rural and urban MI patients on perceived social support appraisal. It was retained since rural MI patients had more social support than urban MI patients.
14) $H_{14}$- there will be statistically significant difference between the scores obtained by urban and rural MI patients on quality of life. It was rejected, since there no difference in quality of life based on their place of residence.

15) $H_{15}$- there will be statistically significant difference between the scores obtained by rural and urban MI patients on coping behaviour. It was retained, since semi-urban MI patients showed higher level of coping behaviour than urban and rural patients.

16) $H_{16}$- there will be statistically significant correlation between perceived social support and quality of life, coping behaviour and family burden among MI patients. It was retained since there was a negative correlation between coping behaviour and social support and also there was a negative correlation between social support and quality of life.

17) $H_{17}$- there will be statistically significant correlation between quality of life and perceived social support and the coping behaviour. It was retained since there was a positive correlation between coping behaviour and quality of life and also there was a negative correlation between social support and quality of life.
6.2. CONCLUSION

The present study, it is hoped, will add to the existing knowledge on the stress and coping of MI patients and prove beneficial to the nursing professionals in the field of psycho-cardiology.

MI was seen in more among middle adulthood (36-65 years) and married; business group, low income group, urban population, suffered with MI more, person with one earning member, having debts/loans, smoking habits, hobbies of listening and watching TV/Movies, lived in nuclear family developed MI. these socio-demographic characteristics to be considered as a high risk group by cardiac team.

Primary effect of MI was seen with chest pain, sweating and tightness in the chest. Mass health education program should use these symptoms for early recognition of MI.

Stress was present in all the subjects. Only the level of stress found varied like mild, moderate and severe.

Most of the MI patients had source of stress from death anxiety and family burden, but had shown moderately effective coping. However their coping behaviour decreased when the stress increased.
Therefore myocardial infarction patients need stress management programme. Nurses have to identify high risk group tool on the day of admission itself, considering the paucity of a tool, researcher had developed NSPSA to identify stressor and level of stress with generic and specific psycho social nursing intervention; Similarly MI patients require more knowledge about their illness and treatment.

Since many of the stressors identified in this study cannot be prevented, patients have to be taught to control stress through coping strategies and life style change. Relationship between stress and MI, and management of stress with effective coping strategies. Researcher prepared patient information booklet on stress management and coping for heart attack to help them. The tool and the information booklet will go a long way in helping cardiac rehabilitation team.
6.3. IMPLICATIONS OF THE STUDY

Some of the implications derived from the present study in various aspects like practice, administration, education and research arena settings of nursing are placed below:

NURSING PRACTICE:

Nurses trained in stress management can help patients identify and understand the causes of the particular stress emotion experience.

Nurses can assist patients in identifying self-generated stress inducing demands such as idealistic expectation of self, unrealistic goals, toxic thoughts, negative self talk, unrealistic expectations of others etc. by helping patients use positive thinking strategies, nurses can help them to get equipped with cognitive self care skills.

Similarly burdened family members and significant others can be equipped with cognitive self-care skills thus making holistic nursing a reality.

Nurses trained in stress management are in a better position to manage their own stress and deliver holistic patient care. Stress management of their own stress helps not only to prevent MI morbidity in them but many other stresses related psycho-physiological disorders and somatoform disorders in them.
Booklet on ways to cope with stress will not only help MI patients. It is also helpful to nurses to understand the aetiology of stress of MI patients and use of effective ways to reduce stress as early as possible some of the simple strategies given in booklet will help them if practiced regularly. The following remedial steps could be used:

- Timely counselling of the MI patients by nurses on problem solving, decision making, time management, taking time off, communication skills, assertiveness skills, responding to criticism, negotiation skills and humour will go a long way in managing stress.
- Giving freedom to patients to express their problems and concerns
- Adjustment in scheduling ward work to find time to spend with the patient for counselling.
- Positive attitude of the family members, mobilizing resources of friends, relatives, employers, colleagues and neighbours to share responsibilities at the time of need.
- Performa prepared by the researcher to assess stress level of MI patients and accordingly the appropriate therapeutic interventions to be implemented can be of use in day to day professional practice. It will also help nurses to generate newer stress reduction strategies in the hospital.
NURSING ADMINISTRATION:

Nurses may not always have direct influence over the stressors of MI patients. However, nurse administrator can advocate for appropriate resources, staffing and counselling program for stress management etc. administrative policies that provide support at both the institution and unit levels should be developed.

The nursing administration should encourage patient related social support networking in the organization, as this would decrease the impact of stress and life strain in MI patients. Family members of MI patients and staff members in cardiac rehabilitation programme could form a support group to patients which will have an influential role to play in alleviating some of the effects of life stress. However they need to be structured in such a way that minimizes negative communication within the family and encourages patient to discuss their life issues and concerns in a constructive way.

The social network can be further strengthened and supported by conducting “self help group meetings” among MI patients and their family members.

The nursing administration can conduct seminars, conferences, workshops etc., on clinical skill required to care patients with MI in general and helping process on stress and coping of MI patients in particular at regular intervals as well
as encourage and support the nurses financially to attend these educational programmes by making this mandatory, nurses knowledge can be updated and they can feel at par with other health team members. This would make them more confident, assertive and capable of guiding patients and their family members to handle stressors in a less stressful manner.

Appropriate and operationally feasible organizational interventions such as health education, counselling, respite care services, home care services, community care services etc which will allow nursing personnel to pursue an optimal approach to the expanded and extended role of the job. These are likely to produce substantial benefits in terms of reducing the level of stress in MI patients and consequently prevent MI recurrence, treatment non-compliance and poor follow up.

In-service training and continuing education programs on stress management can give a necessary boost to the quality of care a nurse provides, while at the same time strengthening therapeutic tie-up with the MI patient.

Nursing supervisors can encourage nurses to participate in self help group of MI patients, thus empowering them.
Nursing supervisors can conduct periodical discussions about professional roles and expectations with nurses. Which in turn enhances nurses interactions with MI patients to aid in ventilating suppressed feelings.

Nursing supervisors could encourage nurses for early recognition of high risk factors in MI patients and to suggest coping methods to prevent further stress.

Nursing administration could boost nurses morale by various measures such as offering best ward awards, best nurse awards etc.

Field visits/ observational visits to other cardiac centres could be organized where by nurses could exchange professional views and interact with other nurses, thus further broadening their social support system to help patient population.

Nursing administration can retain those nurses who are well equipped with knowledge and skill about management of MI patients with bio-psycho-social-spiritual approaches in the same work area at optimal periods can be of very help to MI patients to receive more meaningful services, working for long periods in one area with willingness can make the nurse to improve nursing care approaches in a holistic way and prevent job dissatisfaction culminating in burn out.
NURSING EDUCATION:

Ensuring that pre-registration education adequately prepares nurses for their roles as qualified practitioners might ensure the quality of services provided to MI patients with an understanding of body-mind relationship and the importance of teaching “stress Management” to them. Stress education during the training period may go a long way towards improving the preparation of student nurses and reducing the stress-related diseases in general population as a primary prevention measure.

Although a few hours are devoted to classes on mental hygiene in meeting stress, crisis intervention, psychosomatic disorders, immunodeficiency syndrome, psychosocial interventions for patients with cardio-vascular disorders during the basic nursing course, there could be more emphasis on ‘stress management and coping skills’ in the nursing curricula to address the lacuna in this regard.

Training on various coping strategies in order to help the student nurses will equip them to deal with the anxieties of nursing and anxieties of patients such training will provide them confidence to interact more profitably with other professionals in cardiac treatment team and reduce stress related to interpersonal conflicts.
Refresher courses on stress management could be conducted at frequent intervals for the nursing supervisors. Participating in these courses would enable the teachers not only to manage stressors effectively but also to impart this knowledge to the student nurses and in turn to patients.

NURSING RESEARCH:

There is ample scope for research in the field of stress and coping as seen by the result of this study thus further strengthening the nursing service.

Studies can be done to dwelve deeper into the area of stress and coping so that the suitable interventions can be developed.

The study findings will motivate the other researchers to conduct studies with different variables on large scale.

Research studies of theses kind will provide evidence-based practice.

Research studies on stress and coping can help to identify the existing knowledge gap in the nursing profession.

The evidence of stressors in MI patients can help to develop suitable interventional strategies.
The studies on testing the efficacy of stress management programme can help to identify the most suitable intervention and help in making “care bundles” for MI patients.

The studies may be conducted to standardize the research tool suitable to Indian population to explore stress and test the effectiveness of stress control measures.

6.4. STRENGTHS OF THE STUDY:
The researcher himself collected the data from all the subjects, therefore the data remained with high quality.

The researcher himself had been an expert in the field of mental health nursing could give emotional counselling, crisis counselling, psychosocial interventions to the MI patients, when he found them with mild to severe level of stress and with ineffective coping.

When the researcher found the general nurses working in cardiac hospital having lacunae in stress symptom recognition in MI patients, he had developed Nurses Scale for Psychological Stress Assessment of Acute Myocardial Infarction Patients (NSPSA) to identify the level of stress and implement stress intervention.
Another insight that researcher developed during this study was MI patients and their family members having inadequate knowledge about MI, diagnostic measures, and management. The study results also revealed the presence of stressors in MI patients. They needed information about stress management. Researcher thus prepared Information booklet on Stress management to patients diagnosed with Heart Attack.

6.5. LIMITATIONS:
Study was conducted in only one setting, that is, in cardiac centre. Hence the generalisation is possible only to the selected setting.

Due to time constraint, effectiveness of the handbook on stress management strategies for MI patients could not be tested out.

The study has design constraints in the form of threats to internal validity such as effect of history, maturation and instruction.

Spill-over of stress from the area of personal life to the hospitalisation area was not assessed since the main objective was to study the level of stress and stressors (death anxiety, perceived social support appraisal, alterations in quality of life as a consequence of MI) and the coping style.
Questions about coping elicited information about how an individual thinks he or she copes, rather than identifying how the individual actually copes in practice.

Follow up of the subjects after a longer period of time could not be carried out due to the high patients turn over and ensuring change of treatment protocol in MI patients.

6.6. RECOMMENDATIONS:

In the light of the findings of the present study, the researcher puts forward the following recommendations for conducting further researches.

- Similar study can be undertaken with a larger number of samples in different setting to strengthen the evidence-base.
- Similar study can be conducted with intervention to find out the benefit of intervention in bringing down the level of stress.
- An experimental study can be undertaken with control group design.
- A similar study can be repeated with stress specific tool to MI patients population.
- A comparative study can be done to find out a difference in level of stress between MI patients and patients with similar stress prone diseases like cancer, peptic ulcer, diabetes and arthritis etc…
• A follow up study of the subjects after one year or extended periods may be carried out to assess the long term effects.

• A study to assess the effectiveness of this handbook on stress management for MI patients on patients suffering from other illnesses could be conducted.

• Interventional studies could be carried out on cardiac patients diagnosed with different cardiovascular disorders in different units such as intensive care, outpatient, community health centre etc.

• Stress management programs could be conducted for nursing students, staff nurses and supervisors so as to equip them with sufficient expertise to deal with stressors when thrust into the clinical area.

• Interventional studies could be carried on for family members of MI Patients.

• Cross-cultural comparison of MI related stressors & ways of coping among MI Patients in different parts of India could be done.

• Research could be conducted to determine the extent to which stress levels in patient’s affect patient outcomes.

• Prospective studies on level of stress perception & use of coping strategies in MI patients following stress management learning could be conducted
• Stress assessment studies of this nature could be carried out on patients having various chronic illness such as psychiatric disorders, HIV, Cancer, Diabetes and tuberculosis etc.

• The same study can be replicated with longer sample size in different hospital settings and the “guide book on stress management for MI patients” can be standardised.

• The perceptions of stress, coping behaviour and quality of marital life of the MI patients and their spouses could be studied.

• Prospective studies on the aetiology, especially the psychological factors can be carried out on a large scale to throw more light on the systems view of aetiology of the illness.

• The impacts and emotional disturbances faced by the patient’s children and their subsequent behavioural patterns could form an important study.

• Standardised instruments, specifically for MI patients, should be developed.

6.7. PROBLEMS FACED

Problems related to subjects:

Due to number of questions to be answered by the MI patients were more, it might have taxed them. But researcher scheduled the data collection in such a way that was more suitable to subjects.
Problems related to the researcher:

All the data were collected by the researcher using several tools, it was taxing him. If the researcher would have deployed the responsibility of collecting data to others by giving training on data collection, the data collection procedure would have not been perceived as cumbersome.

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