

# To Assess the Stress Level, Coping Strategies among Women Suffering from Chronic Diseases

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**Abstract:** Stress refers to the body's reaction to selected chronic diseases that requires a physical, mental or emotional adjustment or response as coping strategies. Coping strategy refers to activities and behavior of women suffering from chronic diseases which will help them in particular situation. **Purpose:** To assess the stress level, coping strategies among women suffering from chronic diseases Pune, India. **Objectives:** - To assess the stress level of women suffering from selected chronic diseases, to assess coping strategies of women suffering from selected chronic diseases, to correlate the stress level and coping strategies among women suffering from selected chronic diseases, to correlate the stress level and coping strategies with selected chronic disease, to find the association of the stress level and coping strategies among women with selected demographic variables. **Methods:** This was a quantitative descriptive survey study of 40 women aged between 30-60 years, completed 2 -6 years of disease duration with chronic diseases like chronic renal disease, breast cancer and osteoarthritis of selected hospitals of Pune during February 2015 to June 2015. The assessment of the stress level and coping strategies were done from the chronic disease patients by self reporting and semi structured interview and in depth information collected according data collection tool. **Results:-**87.5% of the women suffering from selected chronic diseases had severe stress (score 81-120) and 12.5% of them had moderate stress (score 41-80)., majority of 65% of the women suffering from selected chronic diseases had average coping strategies, 25% of them had good coping and 10% of them had poor coping. Therefore this study shows that there is increase in the stress and average to poor coping among woman suffering from chronic diseases. **Conclusion:** The assessment of the stress level will help to know current psychology and the stress level and how to cope with chronic diseases to reduce stress level of woman and will help to control and prevent complications.

**Keywords:** stress level, coping strategies, chronic diseases

## 1. Introduction

The important aspects of health are physical, mental, social, spiritual and sexual health as whole. If any one aspect is imbalance it affect on our normal psychology.

The stressful event, the body's way to respond to stress is by sympathetic nervous system activation which results in the fight -or-flight response. Stress typically describes a negative condition or a positive condition that can have an impact on a person's mental and physical wellbeing. Coping strategy is a behavior that helps us to function better in given situation

Stress hits us all in life, and while a little stress is good it keeps us focused and motivated too much of it and it can grind our lives to a complete halt. When you're feeling overwhelmed and stressed-out, you may become paralyzed and unable to do much of anything.

## 2. Review of Literature

Literary evidence suggests that kings and towns were destroyed because a single woman was wronged by the state and many more won just because of woman. To keep her healthy and free from stress leads to stress free family environment and harmony in the family. [6]

A chronic condition is a human health condition that is persistent long-lasting in its effects. The term chronic is usually applied when the course of the disease lasts for more than three months. As described by the Centers for Disease Control, chronic disease is the leading cause of death and disability in the United States. It accounts for 70% of all

deaths in the U.S., which is 1.7 million each year. Data from the WHO show that chronic disease is also the major cause of premature death around the world even in places where infectious disease are rampant. Although chronic diseases are among the most common and costly health problems, they are also among the most preventable and most can be effectively controlled. [3][7]

According to WHO chronic diseases among woman are anemia, maternal problems, breast cancer, osteoarthritis, diabetes, renal failure, communicable diseases, respiratory diseases. These chronic diseases leads to not only different physical but emotional, behavioral, mental symptoms. So it is very necessary to control and prevent the complications arising from the diseases.[3]

The results of the 2007-08 NHS indicates a high prevalence of chronic diseases among according to (WHO) including: cancer (2% of the population – up from 1.6% in 2001) diabetes (4% - up from 2.9% in 2001),asthma (10% - down from 12% in 2001),long-term mental or behavioural conditions (11% - up from fewer than 10% in 2001),arthritis (15% - up from 14% in 2001),conditions of the circulatory system (16% - down from 17% in 2001). [5]

The three are major diseases among woman like breast cancer, chronic renal failure and osteoarthritis which are chronic and requires long term treatment.

Breast cancer cases have doubled in India in the last two decades. The number of women estimated to be dying of breast cancer every year has also been steadily raising. As against an estimated 48,170 women who died of breast cancer in 2007, the number breached the 50,000 mark in

2010. Uttar Pradesh recorded the highest number of breast cancer deaths among states in 2010 followed by Maharashtra (5,064), Bihar (4,518), West Bengal (4,095), Andhra Pradesh (3,863), Madhya Pradesh (3,179). [5][7]

According to WHO Global Burden of Disease Project, disease of the kidney and urinary tract contribute to approximately 8,50,000 deaths every year of which Chronic Kidney Disease (CKD) is the 12th leading cause of death and 17th leading cause of disability in the world CKD is associated with increased cardiovascular mortality and a loss of disability-adjusted life years. The global increase in CKD is being driven by the global increase in of diabetes mellitus, hypertension, obesity, and aging. [7]

Recent research suggests that 1 in 10 of the population may have CKD, but it is less common in young adults, being present in 1 in 50 people. In those aged over 75 years, CKD is present in 1 out of 2 people. However, many of the elderly people with CKD may not have 'diseased' kidneys, but have normal ageing of their kidneys. [7]

An estimated 52.5 million adults in the United States reported that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. One in five (22.7%) adults diagnosed arthritis. In 2010-2012, 49.7% of adults 65 years or older reported an arthritis diagnosis. By 2030, an estimated 67 million Americans ages 18 years or older are projected to have arthritis. Osteoarthritis & Rheumatism 2006; an estimated 294,000 children under age 18 have some form of osteoarthritis or rheumatic condition; this represents approximately 1 in every 250 children in the U.S. [7]

### 3. Materials and Methods

From February 2015 to June 2015, 40 woman suffering from chronic diseases like chronic renal disemmas, breast cancer and osteoarthritis of selected hospitals of Pune participated in present study. The study population was determined by based on inclusion criteria were patient with chronic renal disease, breast cancer and osteoarthritis, on treatment, age group 30-60years. Data were recorded in a questionnaire divided in to three parts.

The first part covered with demographic information including age, education, , occupation place of residence, marital status, type of family, marital status, expenses for treatment, duration of disease and treatment and hospitalization, second part consisted of assessment of Physical, Mental, Emotional and Behavioral symptoms stress level with scoring o f no stress, mild stress, moderate stress and severe stress. Third part consisted of assessment of coping with very poor coping, poor coping, average coping, good coping and excellent coping. Data were statistically analyzed using Item analysis to evaluate stress level and coping and Fishers extract test to evaluate the correlation with stress and coping, and chronic diseases and relation to demographic data, a P value of less than 0.05 was considered significant.

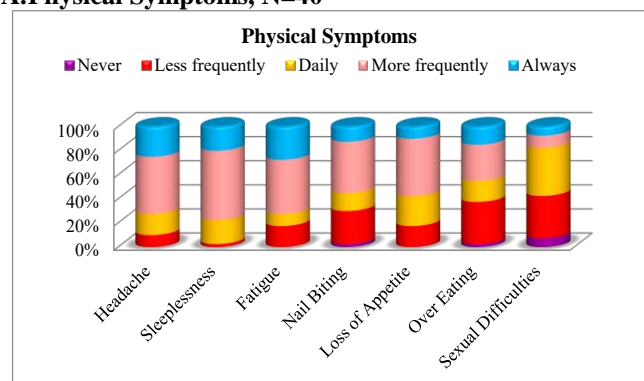
### 4. Result

The women suffering from Chronic diseases had age 41-50 yrs(45%) , 51-60 yrs (37.5%) and 31-40 yrs( 17.5%) . education range of secondary education 30%, higher secondary education, 22.5%, 15% of them were graduates, and another 15.% of them were post graduates, 10% of them had primary education and 7.5% of them were illiterates. 37.5% of them had private service, 32.5% housewives, 17.5% self-employed, 7.5% government service and 5% of them were labourers. 50% from suburban place, 42.5% from urban place and 7.5% of them were residing in rural place. majority of 77.5% of them were married, 12.5% widow and 10% of them were divorced. 80% of them had joint family and 20% of them had nuclear family. Income Rs.10001-15000, 22.5% of had monthly income Rs.5001-10000, 17.5% of them had income below Rs.5000, 5% of them had income Rs.25001-30000. 40% of them had three dependents, 37.5% had two dependents, 17.5% had one dependent and 5% had four dependents at home. 50% of them had Rs.2001-4000 expense, 25% of Rs.2000, 17.5% Rs.4001-6000 and 7.5% of them had monthly expense for treatment Rs.6001-8000.

52.5% were suffering from chronic disorders for 4-5 years, 32.5% of them had disorders for 3-4 years and 15% of them had chronic disorders for 2-3 years. 97.5% were takes treatment for their disease, 30% of them go for health check up whenever they have some health complaint, 27.5% of them go for health checkup once in six months, and 75% of them had been hospitalized whenever they had some health complaint related to their current disease

### 5. Assessment of the Stress Level

#### A. Physical Symptoms, N=40

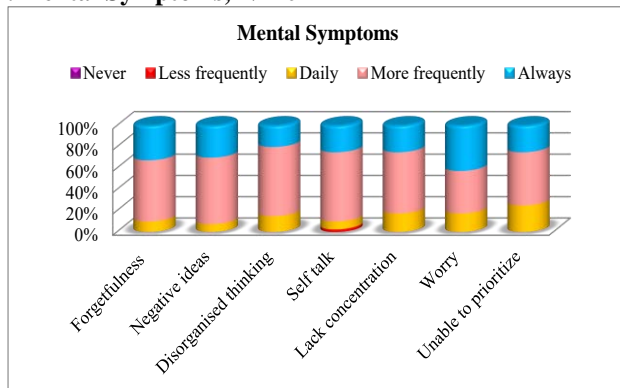


**Figure 1:** Showing Physical Symptoms

Above figure shows that, 47.5% of the women had more frequent headache, 25% of them always had headache, 17.5% of them had daily headache and 10% of them had less frequent headache. More than half (57.5%) of them had more frequent sleeplessness, 20% of them always had sleeplessness, 20% of them had daily sleeplessness and 2.5% of them had less frequent sleeplessness. 45% of them had more frequent fatigue, 27.5% of them always had fatigue, 17.5% of them had less frequent fatigue and 10% of them had daily fatigue. 42.5% of them had more frequent nail biting, 27.5% of them had less frequent nail biting, 15% of them had daily nail biting, 12.5% of them always had nail

biting and 2.5% of them never had nail biting. 47.5% of them had more frequent loss of appetite, 25% of them had daily loss of appetite, 17.5% of them had less frequent loss of appetite and 10% of them always had loss of appetite. 35% of them had less frequent over eating, 30% of them had more frequent over eating, 17.5% of them had daily over eating, 15% of them always had over eating and 2.5% never had over eating. 40% of them daily had sexual difficulties, 35% of them had less frequent sexual difficulties, 10% of them more frequently had sexual difficulties, 7.5% of them always had sexual difficulties and 7.5% of them never had sexual difficulties.

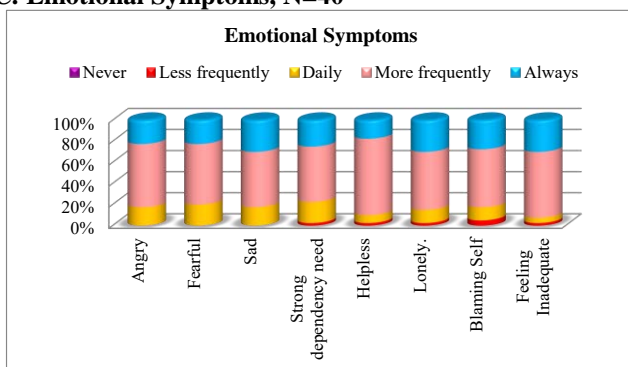
**B. Mental Symptoms, N=40**



**Figure 2:** Showing Mental Symptoms

Above figure shows that, 57.5% of them more frequently had forgetfulness, 32.5% of them always had forgetfulness and 10% of them had daily forgetfulness. 62.5% of them more frequently had negative ideas, 30% of them always had negative ideas and 7.5% of them daily had negative ideas. 65% of them more frequently had disorganized thinking, 20% of them always had disorganized thinking and 15% of them daily had disorganized thinking. 65% of them more frequently had self-talk, 25% of them always had self-talk, 7.5% of them daily had self-talk and 2.5% of them less frequently self-talk. 57.5% of them more frequently lack concentration, 25% of them always had lack concentration and 17.5% of them had daily lack concentration. 42.5% of them always worry, 40% of them more frequently worry and 17.5% of them daily worry. Half (50%) of them more frequently were unable to prioritize, 25% of them always were unable to prioritize and 25% of them were daily unable to prioritize.

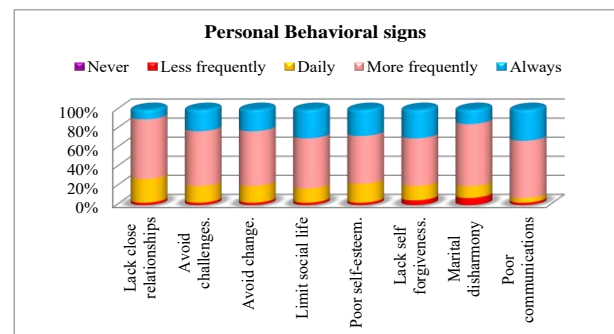
**C. Emotional Symptoms, N=40**



**Figure 3:** Showing Emotional Symptoms

Above figure shows that, 60% of them more frequently were angry, 22.5% of them always were angry and 17.5% of them were daily angry. 57.5% of them more frequently were fearful, 22.5% of them always were fearful and 20% of them were daily fearful. 52.5% of them were more frequently sad, 30% of them always were sad and 17.5% of them were daily sad. 52.5% of them were more frequently had Strong dependency need, 25% of them always were had Strong dependency need, 20% of them had daily Strong dependency need and 2.5% of them less frequently had Strong dependency need. 72.5% of them more frequently were helpless, 17.5% of them always were helpless, 7.5% of them daily were helpless and 2.5% of them were less frequently helpless. 55% of them were more frequently lonely, 30% of them always were lonely, 12.5% of them were daily lonely and 2.5% of them were less frequently lonely. 55% of them were more frequently blaming self, 27.5% of them were always blaming self, 12.5% of them were daily blaming self and 5% of them were blaming themselves less frequently. 62.5% of them were more frequently feeling inadequate, 30% of them always were feeling inadequate, 5% of them were daily feeling inadequate and 2.5% of them were less frequently feeling inadequate.

**D. Personal Behavioral signs, N=40**



**Table 4:** Showing Personal Behavioral Signs

Above figure shows that, 62.5% of them more frequently had Lack of close relationships, 10% of them always had Lack of close relationships, 25% of them daily had Lack of close relationships and 2.5% of them less frequently had Lack of close relationships. 57.5% of them more frequently avoid challenges, 22.5% of them always avoid challenges, 17.5% of them daily avoid challenges and 2.5% of them less frequently avoid challenges. 57.5% of them more frequently avoid change, 22.5% of them always avoid change, 17.5% of them daily avoid change and 2.5% of them less frequently avoid change. 52.5% of them more frequently limit social life, 30% of them always limit social life, 15% of them daily limit social life and 2.5% of them less frequently limit social life. Half (50%) of them more frequently had Poor self-esteem, 27.5% of them always had Poor self-esteem, 20% of them daily had Poor self-esteem and 2.5% of them less frequently had Poor self-esteem. Half (50%) of them more frequently had Lack of self-forgiveness, 30% of them always had Lack of self-forgiveness, 15% of them daily had Lack of self-forgiveness and 5% of them less frequently had Lack of self-forgiveness. 65% of them more frequently had Marital disharmony, 15% of them always had Marital disharmony, 12.5% of them daily had Marital disharmony and 7.5% of

them less frequently had Marital disharmony. 60% of them more frequently had Poor communications, 32.5% of them always had Poor communications, 5% of them daily had Poor communications and 2.5% of them less frequently had Poor communications.

**Table 1:** Severity of Stress the Level of Women, N=40

| Stress level           | Frequency | percentage |
|------------------------|-----------|------------|
| No stress (Score 0)    | 0         | 0.0%       |
| Mild (Score 1-40)      | 0         | 0.0%       |
| Moderate (Score 41-80) | 5         | 12.5%      |
| Severe (Score 81-120)  | 35        | 87.5%      |

Above table shows that, 87.5% of the women suffering from selected chronic diseases had severe stress (score 81-120) and 12.5% of them had moderate stress (score 41-80).

**Table 2:** Assessment of coping strategies N=40

| Coping    | Frequency | %     |
|-----------|-----------|-------|
| Poor      | 4         | 10.0% |
| Average   | 26        | 65.0% |
| Good      | 10        | 25.0% |
| Excellent | 0         | 0.0%  |

A above table shows, majority of 65% of the women suffering from selected chronic diseases had average coping strategies, 25% of them had good coping and 10% of them had poor coping.

**Table 3:** Correlation of the stress level, coping strategies among women N=40

| Stress          | Coping |         |      | p-value |
|-----------------|--------|---------|------|---------|
|                 | Poor   | Average | Good |         |
| Moderate Stress | 0      | 4       | 1    | 1       |
| Severe Stress   | 4      | 22      | 9    |         |

The above table shows that, p-value was large (greater than 0.05), so stress and coping among women suffering from selected chronic diseases were not found to have significant correlation.

**Table 4:** Correlation of the stress level, coping strategies with selected chronic diseases, N=40

| Aspect |          | Disorder      |     |    | p-value |
|--------|----------|---------------|-----|----|---------|
|        |          | Breast cancer | CRF | OA |         |
| Stress | Moderate | 0             | 0   | 5  | 0.016   |
|        | Severe   | 6             | 18  | 11 |         |
| Coping | Poor     | 3             | 1   | 0  | 0.023   |
|        | Average  | 3             | 13  | 10 |         |
|        | Good     | 0             | 4   | 6  |         |

Since p-values corresponding to the stress, coping are small (less than 0.05), the chronic diseases were found to have significant correlation with stress and coping. All the women having Breast and Chronic renal failure were found to have severe stress. Women having breast cancer were found to have poor to average coping, whereas those with osteoarthritis were found to have average to good coping.

## 6. Discussion

The result of the study showed that, 87.5% of the women suffering from chronic diseases had severe stress (score 81-120) and 12.5% of them had moderate stress (score 41-80). Majority of 65% of the women suffering from chronic diseases had average coping strategies, 25% of them had good coping and 10% of them had poor coping. A 2012-14 the study fact sheet shows the chronic diseases increases the stress level, if coping is good will help to reduce the stress and directly shows reduction in complications of chronic diseases. The above findings support the findings of the present study, which indicates that assessing stress level and coping can help to further complications with chronic diseases of woman.

## 7. Conclusion

The result of this study confirmed the stress level and coping among woman suffering from chronic diseases like breast cancer, osteoarthritis. In conclusion it is thought that the current information of stress level and coping will assist in plan to decrease stress and improve quality of life. Furthermore, it is also thought that it can add to the literature and increase understanding of woman's stress with chronic diseases on prevention of complications.

## 8. Scope of the Study

So finding suggests that, this type of study will helpful not only for the breast cancer, osteoarthritis and chronic renal failure patients but we can plan for other patients like, post myocardial infarction, chronic obstructive pulmonary disease, congestive heart failure for promotion health and prevention of diseases. It will also helpful for any individual who feels somewhere deviation of normal physical, emotional, and psychological health.

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## Author Profile



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