PREDICTORS OF QUALITY OF LIFE AND RESILIENCE AMONG OUTPATIENTS WITH HEART DISEASES

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# ABSTRACT



**OBJECTIVES**

The purpose of this study was to explore the factors which affect the quality of life among patients with heart disease. The role of resilience and gender differences in patients with heart disease were also investigated.

# STUDY DESIGN

Survey Research design

# PLACE&DURATIONOFSTUDY

Present study was conducted in the outpatient of the cardiac wards of three major hospitals of Lahore. Data wascollected from March to May 2015.

# SUBJECTS AND METHOD

A total of 461 outpatients with heart disease from three major hospitals of Lahore were assessed by using purposive convenience sampling technique. Quality of life was assessed through World Health Organization Quality Of Life- brief (WHOQOL-BRIEF) scale. To assess resilience, Conner-Davidson Resilience Scale 10 (CD-RISC-10) was used.

# RESULTS

Among the significant predictors for Quality of life of patients with heart disease were resilience, education, income and age. Further analysis proved male heart patients to be more resilient than female heart patients.

# CONCLUSION

It is concluded that Quality of life of patients with heart disease can be improved by increasing education and resilience. Providing better educational facilities, enhancing resilience and a supportive income structure will ensure improved health outcomes.

# KEYWORDS

Quality of Life, Resilience,Heart Disease,Education

# INTRODUCTION

Heart disease affect millions of people world wide, among these Coronary Heart Disease (CHD) is the commonest'.CHO and stroke isthe leading cause of death in developing countries'·'. Population of India and Pakistan is at the highest risk of developing Coronary Artery Disease in the world, women are more likely to develop ischemic heart disease than men whereas males are at a greater risk to develop coronary artery disease'.

World Health Organization describes quality of life as an individual's self­ perception about their place, position, and status in context of culture and society in which they live and how well their goals, standards and demands meet with their expectations. It is a multi-dimensional concept that is affected by the one's physical and psychological health, personal beliefs, degree of independence and their socialrelationships'.

Chronic diseases often affect the quality of life of individuals.Theassessment of the quality of life of individuals with chronic diseases provides valuable information of all spheres of life which indicates the success of any treatment and adds significantly to the medical science'. Studies have found contrasting results in adultswith congenital heart disease; some found QOL of these patients lower than general population while others found higher QOL'.7\_Other studies have shown deteriorated quality of life in individuals with Congestive Heart Failure (CHF)', Cardio Vascular Disease (CVD) patients', and patients with Chronic obstructive pulmonary disease and heart disease". A study showed that increasing physical activity, medication adherence and control of risk factors were positive predictors ofHRQOLin individuals with CVD".

Resilience refers to the person's ability and capacity to cope with stressful situation and successfully regain control of mental state after confronting adverse situation". Resilience has proved to be beneficial in coping and better recovery from heart disease; trait resilience was negatively associated with cardiovascular reactivity.Study revealed that resilient people had better recovery from CVD than lessresilient people"·".

Very few researches have been done to detect the predictors of Quality of life in individuals with heart diseases in Pakistan. Therefore present study aimed to detect the determinants of quality of life in individuals with heart disease in Pakistan.It also aimed to assess the gender differences in the level of resilience and qualityoflife of individualswith heart disease. Objectives of the study areto access

demographic variables and resilience as a predictor of quality of life for individuals with heart disease, and to determine the gender difference in resilience in

individuals with heart disease. **Table 1:**

Table shows the predictors of quality of life in individuals with heart disease

# METHODOLOGY PARTICIPANTS

Total 461outpatients with heart disease were assessed from three major hospitals of Lahore by using purposive convenience sampling technique. It included both males (n= 298) and females (n= 164) age ranges 28 to 70 years old (M=47, SD=7.02).Survey research design was used. Individuals who had any other physical and psychological illness were excluded from the study.

**INSTRUMENTS**

Total R2

*P<.05\**

Quality of life

**B** SEB p

Age **Education Income**

**Resilience**

**Variables**

-.32 .10 -.13

1.05 .43 .IO

4.24 .49 .36

.57 .09 .25

.33\*

Self-prepared demographic form was used to obtain demographic information such as age, gender, marital status, socioeconomic status,and education.

## World Health Organization Quality Of life- brief (WHOQOL­

**BRIEF)**

It was developed by World Health Organization (WHO) in 1997. It consists of 26 items. It covers different domains of life (e.g. physical, psychological,social relationship,andenvironment)."

**Conner-Davidson Resilience Scale 10 (CD-RISC-1 0)**

It was the short version of original Conner-Davidson Resilience Scale developed by Drs. Campbell-Sills and Stein. Its score ranges from 0- 40."

**PROCEDURE**

Medical Superintends and Head of Cardiology department were approached to obtain permission to collect data. After taking permission respondents were properly informed about the research project and informed consent was taken. They filled the demographic, resilience and quality of life instruments and were guided properly by the researcher whenever they had difficulty in understanding any item. Keeping in view the ethical considerations severe patients with heart problem were excluded from sample. After that obtained data were entered in SPSS 17 version and multiple regression analysis and t-testwascarried out.

# RESULTS

Resultsof multiple regression showed that education, age, resilience and income all significantly predict the quality of life in outpatients with heart disease R2= .332, F(4,4S6)=S6.53, p=.000. Income was the strongest of all predictors of quality of life in patients with heart disease, .36, t (457) =8.54, p=.000. Resilience was also a significant predictor of quality of life in patients with heart disease,.25, t (457)

=6.23, p=.000 as was education .10, t (457) =2.40, p=.01. Age explained 13% variance in quality of life in patients with heart disease, -.13, t (457) =-3.25, p=.001; as age increases quality of life decreases.(See table **1)**

Results showed significant gender differences on resilience t (460)

=5.57, p=.000. Male heart patients (M=29.32, SD=7.26) were more resilient than female heart patients (M=25.26, SD=7.87).

**Table 2:**

Table shows Gender Differences in Resilience

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex** 95% Cl for Mean  **Difference**  **Male Female** | | | | | | | | |
|  | M | SD | n |  | **M** | SD |  | di |
| Leve\_lof  res,hence | 129.32 | 7 26  · | 298 | I | 25.26 | 7.87 | 164 | 12.62, 5.4915.571460 |

# DISCUSSION

Results showed that income, resilience, education and age were significant predictors of quality of life in individuals with heart disease; these findings are supported by previous literature. A study explored some demographic features were negatively associated with HRQOL such as female gender, increasing age and low educational levels. Basic findings showed that increasing physical activity, medication adherence and control of risk factors was positive predictorofHRQOLin individuals withCVD".

Results showed that income was the strongest predictor of quality of life in individuals with heart disease. Some previous studies revealed that age, duration of heart failure, physical symptoms, depression and low socioeconomic status were important predictor of HRQOL in individuals with heart disease"·''. Importance of socioeconomic status as a predictor of quality of life is universal especially in developing countries like Pakistan. As increased income makes it possible to access necessities, health care services, adherence to treatment and better food intake that ultimately increase the quality of life of masses.

Results also showed that resilience and education are significantly associated withquality of life.Early literature supportsthese findings. Resilience proved to be beneficial in coping and better recovery from heart disease as resilient people had the capacity and ability to bounce back from the stressful situation that ultimately enhances the overall quality of life. Trait resilience was negatively associated with cardiovascular reactivity. Study revealed that resilient people had better recovery from CVDthan less resilient people"·".This study revealed that age is negatively associated with quality of life. As the age increases, quality of life decreases proving that young age was

associated with better quality of life".Oldageusually brings different problems such as restricted mobility, different physical and mental anomalies, low metabolism, decreased functioning of immune system and other psychosocial problems that decrease quality of life of individuals withheart disease.



Males are more resilient than females. One of the reasons in Pakistani scenario would be the patriarchal society where men have more power, authority, autonomy and importance than females that makes them strong in taking decisions and to resist and deal with the critical situations of life.

# CONCLUSION

The study concluded that Quality of life of patients with heart disease can be improved by increasing education and resilience. Other factors supporting health outcomes were income and age.Providing better educational facilities, enhancing resilience and a supportive income structure willensure improvedhealth outcomes.

Medical professionals can emphasize the importance of resilience to their patients, encouraging them to change maladaptive behaviors which increase risk for disease. New initiatives at local community levels can teach positive life practices and support facilitating programmes for education. Longitudinal studies to advance knowledge of resilience are recommended.

## Suggestions

Resilience and demographic features were detected in present study; other important variable can also be assessed associated with quality of life in patients with chronic diseases such as social support, treatment adherence, exercise, stigma and others.

Resilience is an important predictor of quality of life in individuals with heart disease. Programs, workshops, 1V shows, and seminars can be conducted to create awareness in the general population aboutthe importance of resilience.

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