

## QUALITY OF LIFE, PERCEIVED SOCIAL SUPPORT AND DEATH ANXIETY AMONG CARDIOVASCULAR PATIENTS

Muhammad Adeeb<sup>1</sup>, Muhammad Saleem<sup>2</sup>, Zartashia Kynat<sup>3</sup>,  
Muhammad Waseem Tufail<sup>4</sup>, Maham Zaffar<sup>5</sup>

<sup>1</sup>Riphah International University  
Faisalabad-Pakistan.

<sup>2</sup>The Islamia University of Bahawalpur-  
Pakistan.

<sup>3</sup>Govt College University, Faisalabad-  
Pakistan.

<sup>4</sup>University Pendidikan Sultan Idris, Perak-  
Malaysia.

<sup>5</sup>National College of Business  
Administration & Economics, Lahore-  
Pakistan.

Address for Correspondence:

### Muhammad Saleem

The Islamia University of Bahawalpur-  
Pakistan.

Email: chsaleem\_1@hotmail.com

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### Contribution

MS,MD conceived the idea, designed and conducted the study and analyzed the data. ZK,MZ helped in acquisition of data and did statistical analysis. MWT did critical review. All authors contributed significantly to the submitted manuscript.

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### ABSTRACT

**Objective:** To measure the relationship among quality of life, perceived social support and death anxiety in cardiovascular patients.

**Methodology:** This cross-sectional study measured the quality of life, perceived social support and death anxiety among cardiovascular patients through purposive sampling from two public hospitals (Bahawal Victoria Hospital Bahawalpur and Shaikh Zayed Hospital Rahim Yar Khan) of Southern-Punjab, Pakistan, conducted from March 2016 to December 2016. Only out-patients on follow up checkup with no diagnosed comorbidity were included in the study. Three questionnaires were used for data collection WHO-QOL, Perceived Social Support and Death Anxiety Scale.

**Results:** A total of 132 cardiovascular patients were included in the study. Quality of life and perceived social support negatively correlated with death anxiety ( $p < .05$ ). Better quality of Life was found to be more in males with  $M (SD) = 71.94 (12.33)$  as compared to females  $M (SD) = 65.23 (17.08)$  at  $t=4.50$ . Perceived social support and death anxiety was found higher in females  $M (SD) = 65.27 (11.22)$  as compared to males  $M (SD) = 55.39 (14.83)$   $t=-7.71$ .

**Conclusion:** Quality of life and perceived social support were at lower level and death anxiety was higher among cardiovascular patients. Gender played a significant role in quality of life, social support and death anxiety in cardiovascular patients.

**Keywords:** Quality of life, Perceived social support, Death anxiety, Cardiovascular patients.

## INTRODUCTION

Human beings have conscious awareness of their mortality, and patients who have life-threatening illnesses are forced to face their mortality.<sup>1,2</sup> The diagnosis of an incurable disease can trigger a profound existential crisis in everyday life and the future is threatened for patients. As an existential issue, death anxiety stems from the conscious awareness of our own mortality and may be defined as "negative emotional reactions provoked by the anticipation of a state in which the self does not exist".<sup>3,4</sup>

According to statistics about 17.5 million persons died of cardiovascular diseases in the year 2012, which was 31% of all global deaths. It is reported that 7.4 million persons died due to coronary heart disease and 6.7 million died due to stroke. More than 82% of deaths occurred due to cardiovascular diseases in the low and middle income countries.<sup>5</sup> Pakistan, Bangladesh, India, Sri Lanka and Nepal have the highest rates of cardiovascular diseases in the world.<sup>6</sup> Further a study concluded that death anxiety was significantly negatively correlated with quality of life.<sup>7</sup>

Quality of life has been described as the impact of sickness and health care on a person's daily activities and sense of well-being, related to an individual's ability to cope.<sup>8</sup> As death approaches, important dimensions of the quality of life include physical concerns (pain and symptoms) and psychological distress (depression and existential anxiety).<sup>9</sup> Social support is a crucial component in adaptation to life threatening illness. Social support becomes important as the people approached death, and interpersonal interactions lessen death anxiety. Perceived positive support from family was strongly related to lower death anxiety as seen in a study of patients, where a greater social support was seen in those who had good prognosis.<sup>10</sup>

Further, social support has also been related to lower anxiety among cardiac patients and, like anxiety, is related to reduce heart disease risk.<sup>11-14</sup> For example, higher self-reported social support has been related to reduce anxiety among patients assessed following myocardial infarction (MI), and social support predicts reduced fear and anxiety among patients awaiting coronary artery bypass surgery.<sup>11,12</sup>

In Pakistan, a study was concluded that social support may help in reducing the death related thoughts among chronic disease patients.<sup>15</sup> Furthermore a study showed that death anxiety was predictive factor of the quality of life.<sup>16</sup> The objective was to measure the correlation among quality of life, perceived social support and death anxiety among cardiovascular patients and compare difference of quality of life, perceived social support and death anxiety between male and female cardiovascular patients.

## METHODOLOGY

The present research based on cross-sectional survey design was carried out between March, 2016 to December, 2016. Patients with cardiovascular disease were recruited by using purposive sampling technique from two public hospitals (Bahawal Victoria Hospital Bahawalpur and Shaikh Zayed Hospital Rahim Yar Khan) of Southern-Punjab, Pakistan. A demographic questionnaire was filled out for each patient including (name, age, gender). Three tools were administered: Perceived Social Support Questionnaire: developed by 7-point ratings Likert type scale.<sup>17</sup> The score range starts from very strongly disagree (1) to very strongly agree (7). This scale is designed to measure the perceived acceptability of support through three subscales, family support, friend support and significant others. The WHOQOL-BREF instrument comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment.<sup>18</sup> Death Anxiety was measured by an indigenous Death Anxiety Scale formerly developed for the Pakistani population.<sup>19</sup> It is self-reported scale consisting of 20 items related to fear of personal death.

Permission was taken from actual authors of instruments and hospital authorities and consent page was provided to participant for data collection who were explained the purpose of study. They participants were assured for the confidentiality of the data and results were analyzed by using the SPSS (23.0). Bivariate correlation was calculated to gauge the relationship among the studied variables, while for gender comparison independent sample t-test was used.

## RESULTS

A total of 132 clinically diagnosed cardiovascular patients were recruited, with a mean age of 35.7 years ranging from 25-50 years; 76 (57%) were males and 56 (42%) females. As shown in Table 1, quality of life was found to be positively and significantly correlated with perceived social support and QoL was found to be negatively correlated with death anxiety.

QoL was also found to be more prevalent in male cohort {M (SD)=71.94 (12.33)} as compared to female cohort {M (SD)=65.23 (17.08)} at t=4.50. Whereas, perceived social support was found to be more prevalent in female population {M (SD) = 54.43 (6.18)} as compared to male patients {M (SD) = 48.92 (8.21)} at t=-3.02. In the same vein, death anxiety was found higher in female patients {M (SD) = 65.27 (11.22)} as compared to males {M (SD) = 55.39 (14.83)} at t = -7.71 (Table 2.)

**Table 1: Correlation among Quality of Life, Perceived Social Support and Death Anxiety (n=132)**

| Variables                   | M     | SD    | 1 | 2       | 3       | 4       | 5       | 6       | 7        |
|-----------------------------|-------|-------|---|---------|---------|---------|---------|---------|----------|
| 1. Quality of Life          | 68.24 | 15.99 |   | .333 ** | .454 ** | .218 *  | .247 ** | .290 ** | -.196 *  |
| 2. Physical                 | 19.25 | 3.47  |   |         | .484 ** | .181 *  | .149 *  | .364 ** | -.182 *  |
| 3. Psychological            | 16.12 | 4.91  |   |         |         | .243 ** | .226 *  | .321 ** | -.172 *  |
| 4. Social Relation          | 8.46  | 2.38  |   |         |         |         | .384 ** | .291 ** | -.271 ** |
| 5. Environment              | 24.41 | 5.23  |   |         |         |         |         | .214 *  | -.692 ** |
| 6. Perceived Social Support | 51.07 | 7.33  |   |         |         |         |         |         | -.241 ** |
| 7. Death Anxiety            | 60.14 | 16.69 |   |         |         |         |         |         |          |

\*\* p < .01, \* p < .05

**Table 2: Gender based Comparison for Quality of Life, Perceived Social Support and Death Anxiety among cardiovascular patients (n=132)**

| Variable                 | Male (n = 76) | Female (n = 56) | t       | CI .95% |      |
|--------------------------|---------------|-----------------|---------|---------|------|
|                          | M(SD)         | M(SD)           |         | LL      | UL   |
| Quality of Life          | 71.94 (12.33) | 65.23 (17.08)   | 4.50**  | 1.60    | 8.73 |
| Perceived Social Support | 48.92 (8.21)  | 54.43 (6.18)    | -3.02*  | 9.61    | 1.29 |
| Death Anxiety            | 55.39 (14.83) | 65.27 (11.22)   | -7.71** | 11.02   | 2.36 |

## DISCUSSION

In many studies, patients who have no hope of life due to their medical condition and severity of illness are more prone to death. This specific change increases the level of anxiety in them.<sup>22, 25, 26</sup> These thoughts are more predominant in the patients whom are hospitalized (in wards) and have a discussion with other patients on the same ailment. Large number of studies demonstrated that the patients whom have lost hope of life such as cardiac patients have higher levels of death anxiety than normal individuals, family members and patients with other diseases.<sup>27,28</sup> Past researches exhibit that poor quality of life enhances anxiety in cardiac patients, similarly, a plethora of studies display that quality of life was negatively associated with death anxiety of cardiovascular patients.<sup>9,16-19, 29,30</sup> The present study further presented that quality of life (including; physical, psychological, social and environmental) was significantly negatively correlated with death anxiety of patients (p < .05). Further, social support was significantly negatively correlated with death anxiety (p < .01). A plethora of studies concluded that social support was negatively associated with death anxiety.<sup>12,13,20,21</sup> Previous researches evidence that social support defends the deadly effects of psychological distress and acts to defend against the enlarged risk of death.<sup>31-33</sup> Furthermore, an association

between social support and lower anxiety has been recognized in elderly populations and in cardiac patients.<sup>11,34,35</sup> Another recent research also determined significant negative relationship between the fear of death and social support.<sup>36</sup> It is also evident that some studies concluded that women perceive more death fear and anxiety than men, comparable results about death fear and anxiety was found more in female cardiovascular patients.<sup>9,23-25,36</sup> The social support networks showed inverse relation to fear of dying for women but not for men.<sup>25</sup> The results of present research showed that quality of life was better in male cardiovascular patients than female cohort. While, perceived social support and death anxiety were found more rampant in female cardiovascular patients as compared to male cohort. The major findings of the current study are aligned with the previous literature.

## CONCLUSION

In sum, the heart patients belonging to South-Punjab, Pakistan feel higher levels of death anxiety, on the other hand, their life quality and social support coming from family, friends, and others are contributing less in reduction of their death related anxiety. Notably, the female patients belong to the same area, have a better social support, but severely affected by the death anxiety as compared to male cohort.

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