

## SUBJECTIVE WELL – BEING: CASE REPORTS OF CARDIAC AND RENAL FAILURE PATIENTS

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### ABSTRACT

*Background: Biomedical health only focuses on health problems and disease. Psychological and sociological explanations provide a broader concept of health. Subjective well being relates to the functional, physical, social, psychological, and behavioral health. However, health behavior is influenced by individual physical health and abilities. Among economic resources, some background factors such as age, gender, and socio-economic status play important role. Other than resources, social support builds adaptive capacity of an individual that bring gradual change in day to day life. It also enhances individual efforts for well – being in the physical, psychological, and social domains of life such as management of health problems.*

*Objective: To explore the subjective feelings of well – being of cardiac and renal failure patients that how social support and coping strategies influence in the context of Pakistani society.*

*Methodology: The empirical data was collected from four major hospitals in Lahore. For the collection of quantitative data, a hospital – based survey was conducted by using a structured interview schedule. 275 admitted patients (131 – cardiac and 144 – renal failure) 184 males and 91 females between age of 20 to 110 years were interviewed. Mean age was 44 years. Z-test for the differences of means was used in social support (emotional, informational, material, instrumental), coping (physical, psychological, and behavioral) and subjective well – being.*

*Results: Suggest that there exist a statistical significant difference of received emotional and informational social support. For material and instrumental social support, it was found insignificant. In coping, z-test suggests that there exist a statistical significant difference in behavioral and psychological coping. For physical coping, it was found insignificant.*

*Conclusion: Renal failure patients cope physically better than cardiac patients whereas cardiac patients cope psychologically and behaviorally better than renal failure patients. Results indicate that there exists a statistically significant difference in behavioral and psychological coping. For physical coping, it was found insignificant.*

*Key words: Social support, Coping, Subjective Well-Being, Cardiac and Renal failure patients.*

### INTRODUCTION

Biomedical health only focuses on health problems and disease. Psychological and sociological explanations provide a broader concept of health.<sup>1</sup> Subjective well – being relates with the functional physical, social, psychological, and behavioral health. During illness, individuals are considered healthy if they function well in the context of physical, social, and psychological domains and increase the sense of personal competence.<sup>2-5</sup> Functional physical health (such as management of daily activities and health related problems) empowering<sup>6,7</sup> patients to minimize illness impact on physical health and functioning as well as help in coping with the fear of death.<sup>8,4</sup> Psychosocial functioning

means to maintain psychosocial responses to illness, enhanced sense of reassurance.<sup>4,7</sup> All these activities depend upon available resources. Family members and close relationships provide these resources such as social and psychological support,<sup>8-12</sup> economic resources,<sup>13</sup> and social environment that enhance individual adaptability and behavior to adjust with the disease that is coping,<sup>14</sup> and capacity to maintain balance between self and environment, health, and well – being<sup>15-17</sup> and solve day to day problems.<sup>8</sup> In the context of social and psychological resources high quality of social relationships and sense of coherence inspire the subjective feelings of well-being. In other words, availability of social support resources reframes the situ-

ations.<sup>7</sup> Among economic resources, some background factors such as age, gender, and socio-economic status play important role.<sup>1</sup> All these resources significantly influence an individual satisfaction reflected through behavior either directly or indirectly. If an individual wants to perform well, attain the goals in day to day life, feels happy and satisfied, it is considered in a state of well – being.<sup>19</sup>

### ***Relationship of Social Support, Coping and Subjective Well – being***

Several studies have found relationships between subjective well – being, social support, and social networks.<sup>20-22</sup> Social support in different forms: emotional, informational, material and instrumental facilitate indirectly the process of well – being through mediating effects of self – efficacy, coping, and motivation by keeping moral high and assist activities of illness management.<sup>23</sup> According to Gallant (2003), “In case of chronic illness self – management, illness – specific or regimen – specific support may have a stronger influence on self – management behavior than more global types of support”. Social support influences coping through physiological and psychological mechanisms (such as self – care, daily activities, following doctor instructions, taking medication, manage health problems and taking part in recreational activities) that are associated with and enhance the subjective feelings of well – being.<sup>24</sup>

With the help of social support an individual builds adaptive capacity to bring gradual change to enhance efforts for well – being in day to day life in the physical, psychological, and social domains.<sup>25</sup> These efforts include adaptability and change such as to manage health problems, take food and medicines, personal care, and sharing of views. These are the independent factors which identify the extent of well – being and determine improvement. In a way, the level of subjective feeling of well – being is the manifestation of the extent of satisfaction provided by social support in coping.<sup>1</sup>

### ***Influence of other factors on Subjective Well – being***

Other than social support in coping, there are some other factors that influence on health and well-being directly or indirectly. Lalonde Report (1974)<sup>26</sup> emphasized the critical importance of lifestyle and environment for determining health. Lalonde defined four elements as determinants of health: human biology, life style, environment, and the organization of health care. These elements were considered interdependent, and it was their dynamic interactions over the course of a lifetime that determined the level of health and well – being attained by an individual. The role of environment and life style in determining health is also recognized by the United States Department of Health

and Human Services in the Julius Richmond Surgeon General Report (1979) on “Health Promotion and Disease Prevention”.

McKeown’s (1979)<sup>27</sup> studies mentioned three factors that are responsible for the major reductions in disease: the environment, economics, and behavior. Numerous studies consistently found that people in social environments, who have limited autonomy and control over their circumstances, suffer proportionately poor health. People from poor social class have no control over their circumstances, experience prolonged stress and negative emotions. In turn they face physiological consequences and more likely to be ill. Analysis confirmed the role of other factors or resources in health improvements other than medicine.

Krause (1990)<sup>28</sup> found that age, sex, and educational level were significant predictors of life satisfaction. Another study conducted by Adelman (1994) identified significant correlations between the depressive symptoms and education. According to Adkins et al. (1996), level of education was not related with subjective well – being.

Cohen and Gift (1995)<sup>31</sup> acknowledge the role of multiple determinants in their study like a decent standard of living, good labor conditions, education, physical culture, means of rest, and recreation. In a study Andersen (1995)<sup>32</sup> suggested that the external environment relating to both specific and general health is the primary determinant of oral health behaviors and outcomes.

### ***Influence of Socio-demographic variables on Subjective Well – Being***

Socio-demographic variables are useful in determining the influence of social support<sup>9,10</sup> in coping and subjective well – being for both diseases. Socio-demographic variables stem with functional social support.<sup>13</sup> These variables directly or indirectly influence physical health and health behaviors.<sup>34,35</sup> Several studies have shown that socio-economic status is a significant predictor of well – being and the management of the disease.<sup>36-38,1</sup> According to Larsson and Kallenberg (1996) economic resources seemed to be a less important predictor of perceived state of health. Elovainio and Kivimäki (2000)<sup>1</sup> discussed that perceived poor health shows a connection with low socio-economic status.

Some other studies indicated that lower socio-economic status has been related with higher prevalence and incidence of most chronic and infectious diseases,<sup>40-42</sup> mental distress, and depression,<sup>43,44</sup> and greater exposure to physical hazards. For example air and water pollution, wastes etc.<sup>45</sup>

Variations exist in socio-demographic characteristics from individual to individual and place to place, but are important, influential, and powerful elements (such as age, education, occupation, income, type of family system, marital status, and place of birth) to

explain the social position of an individual in the social organization to access the resources on one side and influence the social support in coping and well – being on the other side.<sup>46</sup>

Wilkinson and Marmot (2003)<sup>47</sup> in the final report of World Health Organization identified the social determinants of health or well – being as: circumstances / conditions in which people born, grow, live, work and age, including the health system as the social determinants of health or well – being. Report indicated that the conditions in which people live and die are, in turn, shaped by political, social, and economic forces. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. According to this report social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status which WHO observed within and between the countries. The Commission makes three main recommendations:

1. Improve daily living conditions: Equity from the start, Healthy places, healthy people, Fair employment and decent work, Social protection throughout life, Universal Health Care.
2. Tackle the inequitable distribution of power, money, and resources. Inequity in the conditions of daily living is shaped by deeper social structures and processes. The inequity is systematic, produced by social norms, policies and practices, and practices that tolerate or actually promote unfair distribution of and access to power, wealth and other necessary social resources.
3. Measure and understand the problem and assess the impact of action.

For social support, they said that:

Social support and good social relations make an important contribution to health. Social support helps people the emotional and practical resources they need. Belonging to a social network of communication and mutual obligation makes people feel cared for, loved, esteemed and valued. This has a powerful protective effect on health. Supportive relationships may also encourage healthier behavior patterns. Support operates on the levels both of the individual and society. Social isolation and exclusion are associated with increased rates of premature deaths and poorer chances of survival after a heart attack. People who get less social and emotional support from others are more likely to experience less well – being, more depression, a greater risk of pregnancy complications and higher levels of disability from chronic diseases. In addition, bad close relationships can lead to poor mental and physical health.<sup>47</sup>

Socioeconomic status, whether assessed by income, education, or occupation, or age and sex it is linked to a wide range of health problems, including car-

diovascular disease, hypertension, arthritis, diabetes, and cancer. This study analyzes the subjective feeling of wellbeing is the manifestation of the extent of social support in coping as subjective feelings of wellbeing not only related with the functional physical health but also with the social, psychological, and behavioral health.

### **Research Methodology and Data Used**

The empirical data was collected from four major hospitals in Lahore. For the collection of quantitative data, a hospital based, cross sectional survey was conducted with 275 admitted patients (131 – heart and 144 – kidney) 184 male and 91 female (20 to 110 years of age) by using a structured interview schedule. Mean age was 44 years for both the diseases. Z-test for the differences of means was used in social support (emotional, informational, material, instrumental), coping (physical, psychological, and behavioral) in the subjective well – being among cardiac and renal failure patients.

### **Data Sources**

Government hospitals were used as a main source to obtain the subjects for the study. A total of four hospitals (Punjab Institute of Cardiology, Lahore General Hospital, Mayo Hospital, and Jinnah Hospital) were covered. These Government hospitals were running the largest dialysis units in the Lahore city. Punjab Institute of Cardiology is a tertiary care cardiac hospital which is providing services to the maximum number of heart patients not only to the patients of Lahore city but also to the patients of other nearby cities.

### **Respondents**

In this study 275 interviews were conducted. Out of 275, 131 interviews were conducted from heart patients (92 males and 39 females) admitted in a Cardiac hospital and 144 interviews were conducted from kidney patients (92 males and 52 females) enrolled in the dialysis units of the selected government hospitals and at the time of data collection.

### **Instrument**

A structured interview schedule containing seventy nine items scales was used for data collection.

## **STATISTICAL METHODS**

### **Assessment of disease type differences of Means**

To find out the significant disease type differences of means between cardiac and renal failure patients, the researcher applied Z-test. Mean and standard deviations were also computed.

## **RESULTS**

### **Differences of Means with Social Support and Coping across Disease**

Four types of social support (emotional, instrumental,

**Table 1:** Summary statistics of subtypes of Social Support across Disease type.

	Emotional Social Support		Informational Social Support		Material Social Support		Instrumental Social Support	
	Heart	Kidney	Heart	Kidney	Heart	Kidney	Heart	Kidney
Mean	41.53	38.33	10.04	8.69	7.40	7.01	10.27	9.71
S.D	13.159	13.522	3.109	2.936	2.532	2.632	3.869	4.168
N	131	144	133	144	131	144	131	144
Range	56	64	14	14	12	12	15	18

informational, and material) and three types of coping (physical, psychological, and behavioral) were considered. By considering disease as an independent variable, mean, standard deviation, and z-test were applied for the significant difference of means between cardiac and renal failure patients.

Mean value indicated that heart patients tend to receive more emotional (M = 41.53) and instrumental support (M=10.27) than kidney patients (M = 38.33) and (M = 9.71). For informational social support, cardiac patients received more (M = 10.04) than renal failure patients (M = 8.69). Both types of patients received more or less equal material support (M = 7.40 and M = 7.01) (Table 1).

There exists a mean difference of received emotional social support between cardiac and renal failure patients  $z$  (df = 273) = 1.981, p-value = .049. Similarly, there exist a statistical significant difference of received informational social support between disease,  $z$  (df = 273) = 3.686, p-value = 0.000. As far as the material  $z$  (df = 273) = 1.250, p-value = 0.213 and instrumental social support  $z$  (df = 273) = 1.149, p-value = 0.252 are concerned, the result of independent sample z-test suggests that there exists no statistical significant difference of sample means across disease. Homogeneity was assumed in all the cases (Table 2).

Among three coping strategies, Mean value indicate that the cardiac patients cope psychologically more (M = 28.69) than renal failure patients (M = 27.97). In behavioral coping again cardiac patients cope more (M = 17.37) than renal failure patients (M = 15.43). In physical coping, renal failure patients cope more (M = 11.23) as compared to heart patients (M = 10.83) (Table 3).

**Table 2:** Results of z-test for significance on four facets of Social Support across Disease.

Disease	Emotional Social Support	Informational Social Support	Material Social Support	Instrumental Social Support
z-test value	1.981	3.686	1.250	1.149
p-value	.049	.000	.213	.252

Level of significance = 0.05. C.I .95%.

**Table 3:** Mean differences of three facets of Coping across Disease.

Disease		Physical Coping	Psychological Coping	Behavioral Coping
Cardiac	Mean	110.83	28.69	17.37
	N	131	131	131
	Std. Deviation	2.810	3.782	3.998
	Range	7	20	18
Renal Failure	Mean	11.23	27.97	15.43
	N	144	144	144
	Std. Deviation	2.491	4.115	4.062
	Range	7	18	17
Total	Mean	11.04	28.32	16.35
	N	275	275	275
	Std. Deviation	2.650	3.970	4.139
	Range	7	20	19

Results of significant difference of means suggest that there exist a statistical significant difference between the samples of cardiac and renal failure patients in behavioral coping  $z$  (df = 273) = -3.769, p-value = 0.000 and psychological coping  $z$  (df = 273) = -2.020, p-value = 0.044. Physical coping was not found to be significant as  $z$  (df = 273) = 0.417, p-value = 0.677. In the case of physical coping homogeneity of variance

was not assumed (Table 4).

**Table 4:** Results of z-test for significance on three facets of coping and Disease.

Disease	Physical Coping	Psychological Coping	Behavioral Coping
z-test value	.417	-2.020	-3.769
p-value	.677	.044	.000

Level of significance = 0.05. C.I. 95%

**Summary**

In the differences of means test for social support and coping across disease, z-test suggests that there exist a statistical significant difference of received emotional and informational social support. For material and instrumental social support, it was found insignificant. In coping, z-test suggests that there exist a statistical significant difference in behavioral and psychological coping. For physical coping, it was found insignificant.

**DISCUSSION**

The question of this study was to explore the difference of means between social support (emotional, informational, material, instrumental), coping (physical, psychological, and behavioral) and subjective well – being among cardiac and renal failure patients. The statistical test (z-test) suggests that cardiac patients received more emotional, informational, and material social support than renal failure patients. Both types of patients received equal material social support. There exists a statistically significant difference in emotional and informational social support received by these patients. For material and instrumental social support, it was found to be insignificant. In coping, the z-test suggests that renal failure patients cope physically better than cardiac patients whereas cardiac patients cope psychologically and behaviorally better than renal failure patients. Results indicate that there exists a statistically significant difference in behavioral and psychological coping. For physical coping, it was found to be insignificant.

In the process, it may be concluded that emotional and informational social support worked to release stress and depression, enhance satisfaction, slow disease progression,<sup>48</sup> and engage patients for active behavioral and psychological coping. Physical health is associated with physical coping. Due to severity of disease and weak physical health, active physical coping becomes difficult for heart and kidney patients. Medication adherence only provides primary support to physical health.<sup>34</sup> This study revealed that behavioral coping operates on the patients ability to manage their illness and subjective feelings of well – being.<sup>34</sup> Findings suggest that subjective well – being may vary as the role of

emotional state and informational source depends on support resources. In other words, subjective well – being depends on the patients’ general physical conditions specifically mental health and available resources. This finding is consistent with the theories discussed by Kessler.<sup>44</sup> Behavioral coping was strongly associated with subjective well – being. Behavioral coping (directly) and psychological coping (indirectly) influenced subjective well – being. These relationships showed patients’ coping efforts (enhanced by family support, education, and income) to alleviate the personal emotional stress and disabilities induced by the chronic illness, in performing daily activities and also indicate adaptation or adjustment to the disease as also highlighted by Duangdao.<sup>50</sup>

Studies of Bowling, Farber, Newson and Krause<sup>20, 21,28,22</sup> found a relationship between social support and feelings of subjective wellbeing. With the help of social support, the psychological and behavioral coping effect influenced feelings of well – being more among females than males. Age has a significant bearing upon all types of social support among heart patients. Among kidney patients, the results indicated that age has a significant association with emotional social support. Education and occupation significantly influenced emotional social support for heart patients which also affected wellbeing. This finding is consistent with Young (2000).<sup>51</sup> Income significantly influenced emotional social support received both types of patients. Income also influenced material social support for heart patients. In case of kidney patients, material social support was found to be an insignificant variable / factor. Marital status showed significant association with the emotional and informational social support of heart patients. The type of family system showed no significant relationship in all types of social support of both types of patients.

It is **concluded** that renal failure patients cope physically better than cardiac patients whereas cardiac patients cope psychologically and behaviorally better than renal failure patients. Results indicate that there exists a statistically significant difference in behavioral and psychological coping. For physical coping, it was found insignificant.

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