Optimism and Quality of Life among Cardiovascular Disorder Patients

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ABSTRACT

The role of psychological factors in the occurrence of Cardiovascular Disorder has been, widely excepted. CVD is a family of diseases that includes hypertension, coronary artery disease (CAD) and stroke. The present study is an attempt to investigate the role of optimism on quality of life among Cardiovascular Disorder patients. 100 patients were comprised as the sample for this investigation. The sample further categorized in terms of gender i.e. male and female. LOT – Revised version of the original LOT (Scheier & Carver 1992) and World Health Organization quality of life questionnaire-short version (WHOQOL-BREF) of the WHOQOL-100 SCALE (The WHOQOL Group, 1993a; 1993b) were used. The data will be analyzed by using appropriate statistical techniques. It is expected that optimism will improve the quality of life among cardiovascular disorder patients.

Keywords: Optimism, Quality of life, Cardiovascular Disorder

Now a day, the field of health psychology is gaining wide popularity. In the field of physical heath and psychological well-being, health psychology specializes in exploring biological, psychological, cultural, societal and environmental factor of life, and how each of these factors affects physical health. Problems like CAD and Cancer increasing worldwide. The role of psychological factors in the occurrence of CVD has been, widely excepted then health psychology deals with the identification of psychological factors in the occurrence of physical problems having an illness, specially CVD is considered not only a medical problem but also a social and psychological problem because "the illness changes society's attitude to the patient" (Tkhostov, 2002). A significant proportion of CVD patients suffer social, emotional and psychological distress. Psychological interventions have proven to be effective for helping patients. This chapter focuses on the psychological manifestation of hardiness, resilience, optimism, on quality of life among cardio vascular disorder (CVD) patients.

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In today's fast-paced modern life, our health is under attack from innumerable sources of stress, environmental pollution, unhealthy work conditions, industrial smoke, unsafe water, and noise and so on. There are countless risks to human health. Health risk constitutes a broad category that can include both health risk factors (substance abuse, violence, sedentary life style or habits, unprotected sexual intercourse, poor eating habits). WHO has recently published a report stating ten leading global health risk factors: under weight, unsafe sex, high blood pressure, tobacco consumption, indoor smoke from solid fuels, high cholesterols and obesity. Together, these factors account for more than one third of all death worldwide (Yadav & Sharma, 2007).

Optimism
The term optimism is originally derived from the Latin word "optimum", meaning "Best". It is defined as accepting the best possible out come from any given situation. Optimism means having strong expectations, that in general thing runs out all the right in life despite setback and frustration. An optimist will manage the situation by his/her flexible handling, changes and challenges of life, the individual has hope for innovation and will prefer to search novel ideas, approaches and new information. Optimists does not mean that one can always get successful in life but being an optimistic means how people explain to themselves their success and failures. "People who are optimistic see a failure as due to something that can be changed, so that they can success next time around while pessimist take blame for failure ascribing it to some characteristics they are helpless to change" (Seligman, 2002)

According to Peterson (2000) defined optimism as cognitive, emotional, and motivational components, indeed optimism assessed in variety of ways and it is related to positive mood and good morale, good health, effective problem solving, occupational and political success, pessimism in contrast has been linked to failure, passivity, depression, and social isolation.

Quality of life
Quality of life is an unstructured concept that has a usage across many disciplines like geography, literature, philosophy, health, economics, advertising, health promotion and the medical and social sciences (e.g. sociology and psychology). It is also a vague concept; it is multidimensional and theoretically incorporates all aspects of an individual's life.

Recently Quality of life has been defined as **"**a compound variable that is affected by several variables." Changes in living conditions, health, environmental, psychological stress, family happiness, leisure, social relationship and other variables' determined the quality of life (Ali *et al*., 2013). The World Health Organization (WHO) defines quality of life as, "individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns (Awan *et al*., 2011).

LITERATURE REVIEW

Hernandez et. al. (2015) optimism and cardiovascular health: multi ethnic study of atherosclerosis (MESA) examined the relationship between optimism and cardiovascular health (CVD) indicates that participants with highest quartile of optimism were more likely to have intermediate CVD when compared to the least optimistic group. These results suggested that cross-sectional difference between optimism and CVD.

Brenna (2014) a cross-sectional study was conducted on influence of optimism and resilience on quality of life & general health for haemophilia patients to explore the effects of medical diagnosis (severity level, family history etc). Haemophilia is a hereditary bleeding disorder in men. Eighty one male patients were collected from Ireland, age ranging was 20 to 82 years, took anonymous questionnaire, no treatment interventions were conducted. SF-36, GHQ, LOT-r and BRS instruments were use along with demographic characteristics relating to the bleeding disorder for collecting the data. Result shows that no statistical significant correlation was found between bleeding disorder type or severity and quality of life or psychological distress. But age and resilience were found to be positive predictors of quality of life, similarly, age, resilience, and optimism were found to be significant predictors of psychological distress.

Optimism is associated with superior emotional well-being in people with chronic and acute health problems, because optimists are more likely to implement problem-focused coping. Another interpretation posits that optimism can be a defensive response designed to diminish affective reactions to health problems. The study objective is to investigate this possibility. Bedi and Brown (2005) found that optimism, coping style and emotional well-being in cardiac patients. A measure of threat avoidance, it was found to be associated with both optimism and emotional well-being, and the common variance was predictive of positive affect. This link was stronger in people with low self-efficacy for problem-focused coping. It was concluded that optimism amongst patients with recently-experienced cardiac disease, particularly as the effect was more pronounced in the low self efficacy sub sample. They discuss possible explanations for these findings and implications for the study of coping with serious illness.

Cross-sectional study was conducted by Chica et al (2016) the objective of the study was to measure the relationship between health literacy and health-related quality of life (HRQOL) in patients with ischemic heart disease (IHD). They collect data from two Australian states (Queensland and South Australia) in two years (2007 to 2009). They took sample of 587 patients with IHD. Result reveals that health literacy was not associated with the mental component of HRQOL (p-value=o.482). Advanced aged, lower educational level, disadvantaged socioeconomic position, and a large number of CVD comorbidities adversely affected both, health literacy and HRQOL. It was concluded in their study health literacy is a contributional factor to poor physical functioning in patients with IHD. When health literacy increases health

may improve health related quality of life and reduces impact of IHD among patients with this chronic CVD.

Natasa, Biljana, and Ilic (2015) patients of angina pectoris after myocardial infarction has got a negative influence on their quality of life (QOL) the purpose of this study to measure the influence of angina pectoris on the quality of life of patients one month and twelve month after myocardial infarction. A prospective cohort study conducted on 240 patients of aged 30-79 years, they suffer from the first myocardial infarction in 2007. They use two questionnaires to measure the quality of life of these patients one was EuroQuol5 Dimensions and EuroQuolVAS. Multivariate logistic regression was used for analyzing the data. They collect data of 240 patients in which 160 males and 80 females filled both questionnaires one month after the myocardial infarction. Result showed that all the patients have the significant lower average scores in EuroQuolVAS compared these scores with twelve months after the myocardial infarction (p<0.001). The average grades of all the examined dimensions in EuroQuol 5 dimensions questionnaire were significantly higher after twelve months after myocardial infarction. The presence of angina pectoris in patients who survived myocardial infarction is associated with their lower HRQOL. After the twelve months of myocardial infarction patients measures their health conditions significantly better compared with the condition one month after the myocardial infarction. It was concluded in their study that angina pectoris is a risk factor for mortality in patients with established heart disease, it is essential to assess its impact on the patient's quality of life.

Objectives
1. To examine the relationship between optimism (with both the dimensions) and quality of life among CVD patients.
2. To explore the influence of optimism and quality of life among cardiovascular patients.

Hypotheses
1. There will be positive correlation between optimism (with both the dimensions) and quality of life among CVD patients
2. Optimism will not influence quality of life among CVD patients.

METHOLODOGY & MEASURE
Sample
The sample comprised of 100 CVD patients, of these 50 subjects was male CVD patients and 50 subjects will be female CVD patients. The data will be collected from Rajeev Gandhi Centre for Diabetes & Hypertension (RGC), JNMCH, AMU, Aligarh.

Tools
1. **Optimism Scale:** Revised version of the original LOT (Scheier & Carver 1992) was used in the study it is a 10 items measure of optimism versus pessimism. Of the 10 items 3 items measure optimism, 3 item measure pessimism and 4 items score as fillers.
2. **(WHOQOL-BREF) Scale:** World Health Organization quality of life questionnaire-short version (WHOQOL-BREF) of the WHOQOL-100 SCALE was used. This questionnaire contains 26 items (The WHOQOL Group, 1993a; 1993b) which contains four specific domains as follows: physical health (seven items), psychological well-being (eight items), social relationships (three items), and environmental domain (eight items).

Statistical analyses
In order to meet the research objectives data were analyzed; Pearson product moment correlation was administered to study the relationship between optimism and quality of life. And to see the influence of optimism and quality of life among CVD patients simple linear regression was performed.

Procedure
The research data was collected on different subjects individually. All the two scales were administered on the subjects individually. Prior the data collection, the investigator was establish rapport and keeping in mind the subject's readiness to support the purpose, the data may be completed in one session or more than one session. Also, the researcher was assured all the subjects that their responses would be kept confidential and shall be utilized for only for research purpose**.**

RESULTS

The proposed study was conducted to measure the correlation between optimism and quality of life among CVD patients. And also simple linear regression was calculated on optimism and quality of life.

Table 1: Showing the relationship between optimism (with both the dimensions) and quality of life among CVD patients.

	X1	X2	X3	Y1
X1	1	.26**	.51**	.23**
X2		1	.73**	.30**
X3			1	.16*
Y1				1

**Significant at the 0.01 level (2-tailed)
*Significant at the 0.05 level (2-tailed)
X1=optimism, x2= pessimism, x3= optimism total, y1= quality of life total

Results reveal the correlation between optimism and total quality of life (r=.16, p > .05), it is clear from the table that optimism and Quality of life were correlated among cardiovascular patients.

Table 2: showing the linear regression of optimism on quality of life among CVD patients.

MODEL	R	R^2	ΔR^2	F	B	t	Sig.
constants	.323[a]	.105	.105	3.736			
Optimism					-.398	-.310	.757
Pessimism					.029	.023	.982
Optimism total					.431	.228	.820

Linear regression analysis was applied with quality of life as the dependent variable in order to see the variance depict by optimism and its dimensions among cardiovascular patients. It was found that optimism has modest influence on quality of life with 10.5% of variance among CVD patients.

DISCUSSION & CONCLUSION

The present study explored the influence and relationship on optimism and quality of life among CVD patients. It was revealed from the results that optimism(r=.16, p >.05) along with its dimensions (optimism r=.23, and pessimism r= .30, p>.01) was significantly correlated with quality of life. The present findings were supported by Lin et al (2010) who explored the relationship between optimism and life satisfaction among patients with end stage renal disease, with groups that were waiting and non-waiting for transplantation. It was found that both groups reported moderate levels of life satisfaction, whereas, those in the non-waiting group had a greater life satisfaction in general. However, all patients were optimistic and optimism was positively associated with life satisfaction. In another study investigated by Kepka et al (2013) found that Optimism and trait anxiety appeared to be significantly correlated with HRQOL. Furthermore, an interaction existed between the trait anxiety and optimism. Contrary to optimism, it seems essential to evaluate trait anxiety in future studies about HRQOL, since it could represent a confounding factor.

Another finding of the present study was suggested that optimism has modest influence on quality of life among CVD patients with 10.5 % variance. This finding was corroborated by Vilhena et.al. (2014) who found that dispositional optimism is more likely to play a mediating, rather than a moderating role in personality traits-quality of life pathway in Portuguese chronic patients, suggesting that "the expectation that good things will happen" contributes to a better quality of life and subjective well-being.

According to Giltay (2004) who conducted the study on optimism associated with lowered risk of dying from heart disease. He found that an inverse relationship between level of optimism and risk of death. It was concluded that the trait of optimism was an important long-term determinant

of all-cause and cardiovascular risk factors. Although optimism reduces the risk of cardiovascular death through mechanism largely unaffected by baseline values of physical activity, obesity, smoking, hypertension, and lipid profile, pessimist person are more prone to changes across time in risk factors that affect the progression of cardiovascular disease.

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REFERENCES

Ali, M., Aslam, M. A., Awan, M. S., & Waqas, M. (2011). Status of health related quality of life between HBV and HCV patients of Pakistan. *International Journal of Business and Social Science, 2*, 213-220.

B.Fiona.2014): *Influence of optimism and resilience on quality of life and general health for haemophilia patients*, (DOI:10.13140/RG.2.2.26001.43361) research Gate.

Bedi G. Brown L.S (2005): Optimism, coping style and emotional well-being in cardiac patients. *British journal of health psychology,* 10, 57-70.

Giltay E.J (2004): Optimism associated with lowered risk of dying from heart disease, *journal of the American medical association.* (Arch Gen Psychiatry. 2004; 61:1126-1135).

Gonzalez-Chica D.A (2016): Effect of health literacy on quality of life amongst patients with ischemic heart disease in Australian general practice, *PLOSONE/ DOI: 10.137/journal.pone*.0151079.

Hernandez et. al. (2015): Optimism and cardiovascular health: multi-ethnic study of atherosclerosis (MESA), *Health behavior and policy review*.2015; 2(1):62-73.

Kepka et al (2013): The relationship between traits optimism and anxiety and health-related quality of life in patients hospitalized for chronic diseases: data from the SATISQOL study. *Health and Quality of Life Outcomes* 2013, 11:134.

Lin, M.H., Chiang, Y.J., Li, C.L., & Liu, H.E. (2010). *The relationship between optimism and life satisfaction for patients waiting or not waiting for renal transplantation*. Transplantation Proceedings 42 (3), 763-765.

N. Rancic, B. Kocic, I. Mirko (2015): The influence of angina pectoris on the quality of life of patients one month and twelve months after myocardial infarction, *Acta Medica Medianae 2015, Vol.54(1).*

Scheier, M.F. & Carver, C.S. (1992): Effects of optimism on psychological and physical well-being: *Theoretical overview and empirical update Cognitive Therapy and Research*, 16, 201-228.

Scheier, Michael F; Carver, Charles S; Bridge Michael W. (2001): "Optimism, pessimism, and psychological well-being." In change, E. Optimism and Pessimism: Implications for

theory, *Research, and Practice. Washington DC: American Psychological Association*, pp. 189-216.

Vaughan, Sasan, C. (2000): *Half Empty, Half Full: Understanding the psychological roots of Optimism*, New York: Courtyard.

Vilhena et. al. (2014): Optimism on quality of life in Portuguese chronic patients: moderator/mediator? REV ASSOC MED BRAS 2014; 60(4):373-380.

WHOQOL Group (1993a). Study protocol for the World Health Organization project to develop a quality of life assessment instrument (WHOQOL). Quality of Life Research, 2(2), 153–159.