## **ORIGINAL ARTICLE**

# Life Orientation, Illness Perceptions and Quality of Life in **Patients with Coronary Heart Disease**

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### ABSTRACT

Aim: To assess the relationship between life orientation, illness perceptions and quality of life in patients with coronary heart disease

Methods: The study was conducted at Punjab Institute of Cardiology Lahore, Services Hospital Lahore and Allied Hospital Faisalabad. This study was completed in six months. The co-relational research design was employed to assess the hypothesis of the current study. Survey method was use to collect data for current study. Life orientation, illness perceptions and quality scales were used to operationalize the life orientation, illness perceptions and quality respectively.

Results: The findings of the study showed that the life orientation and illness perceptions were significant predictors of quality of life in patients with coronary heart disease

Conclusion: Results from this study exhibit the prediction of life-orientation, illness perceptions with quality of life among patients with CHD. Indeed, negative illness perceptions and life orientations among patients with CHD were co-related diminished quality of life. Identifying CHD patients with a profile of negative life orientations and illness perceptions, including greater consequences, negative belief and low apparent control, high symptoms burden could help illness perceptions intervention targeting at reducing mal-adaptive illness perceptions and life-orientations to improve quality of life. Keywords: Life orientation, Illness perceptions and quality of life, Coronary heart disease.

### INTRODUCTION

A process known as atherosclerosis in which coronary heart disease (CHD) ensues because of an accretion of fatty plaque in the arterial walls of the heart. This plaque tightens the arteries and declines the blood stream from and to the heart, leading to the angina, and if the plaque erupts, this leads to myocardial infarction (MI)<sup>1</sup>. CHD is the foremost source of global mortality, which is also accountable for 33% of deaths in people under 65, and 28 of all deceases<sup>2</sup>. There are an assortment of physical, demographic and societal factors that upsurge both the risk of developing CHD and subsequent morbidity and mortality, such as smoking, obesity, hyperlipidemia, hereditary predisposition, hypertension and diabetes<sup>3</sup>. Although, past investigations have mostly focused on the role of biological factors in this disease, recent studies suggest a new comprehensive paradigm<sup>4</sup> (biological and psychological) in clinical care for patients with CHD. Pervious researchers have found that the degree of physical recovery isn't specifically connected to illness seriousness<sup>5</sup> and that

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psychological factors also imperative are determinants of CHD outcome and other chronic health conditions, such as, health locus of control (HLoC)<sup>6</sup>. illness perceptions,<sup>7</sup>and health related quality of life<sup>8</sup>. This has led to greater attention being directed to the role of psychological factors in the etiology, progression, stability and consequences of this disease9.

There has been a speedy expansion in the measurement of quality of life as an indicator of health outcome in patients with CHD. In the medical course of CHD, there are numerous aspects where patients' quality of life may be influence which includes symptoms of angina, heart failure, limited exercise capacity of previously mentioned manifestations, the physical disability caused and mental pressure related with the chronic stress. Contemporary treatment nowadays concentrates not only on improving life expectancy, symptoms and functional status, but also quality of life. Thus, an improvement in health-related quality of life (HRQoL) is thought is to be imperative as an essential outcome in the determination of remedial advantage.8 This article will provide an overall impact of life orientation and illness perception on guality of life in patients with CHD.

In spite of the extensive use of the phrase, there is no agreement on the characterization of the concept of HRQL; however, definition usually refers to physical, emotional and social wellbeing. HRQL is

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particular construct which refers to the impact that health conditions and their symptoms have on an individual's quality of life, and with context to health care, the term HRQL is preferred over quality of life because the focus is on health.

It gives a typical standard against which can be valued the impact of various experiences and treatments for a same condition or the effect of various medications crosswise over various conditions. As an outcome, HRQL instruments have evolved in order to assess the impact of assessment of the patient's experience of his or her health issues in areas such as physical function, emotional function, social function, role performance, pain and fatigue. Hence, HRQL can be defined as health status and viewed as a continuum of increasingly complex patient outcome: Natural/physiological factors, symptoms, functioning, general health perception and overall wellbeing or quality of life.

Illness perceptions are belief and expectations with regarding one's own or others illness and develop from variety of sources, including knowledge and conditions. The most widely applied model for between explaining the relationship illness perceptions, emotional and behavioral responses is the self-regulatory model.<sup>10</sup> This model demonstrate that patients react to specific internal and external stimuli, such as, symptoms, events and treatment effect and employ illness related cognitive and emotional representation to make sense these and their illness in general. These representation guide decisions regarding coping strategies, which are subsequently evaluated based on outcome. The review also investigated whether these interventions would affect secondary outcomes, such as, changes in Qol.1 One of the health-related concept is life orientations. Life orientation, in an all holistic approach, reviews the relationship of oneself with others and the community.11 Life orientations cause balanced improvement of the individual and have an imperative role in the change of the QoL.<sup>11</sup>

#### Hypothesis:

- Life orientation and components of illness perception is likely to have relationship with quality of life.
- Life orientation and components of illness perception is likely to be predictors of quality of life

# MATERIAL AND METHODS

The current research was executed through corelational research design. The purposive sampling strategy was used to recruit the sample of the present study, from of public and private hospitals of Lahore, Pakistan. The present study sample (N =100) comprised of diagnosed coronary heart disease patients. Following questionnaire were used to operationalize the construct of current study:

**Brief Illness Perception Questionnaire (B-IPQ):** The Brief Illness Perception Questionnaire (B-IPQ) was developed by Moss-Morris, Weinman, Petrie, Horne, Cameron and Buick (2002).<sup>12</sup> The B-IPQ comprises of eight items. The B-IPQ was intended to quickly evaluate cognitive and emotional representations of illness. Every item is scored on a 0– 10 scales. A recent meta-analysis has demonstrated that the scale has great concurrent and predictive validity.<sup>13</sup>

**Life Orientation Test-Revised (LOT-R):** It was first designed by Scheier and Carver (1985) but was revised again<sup>14</sup>. Life orientation test was standardized in Iran in 2004. Optimism scale factor analysis showed that this scale is formed by two factors: hope for the future and a positive attitude towards events. It has 10 items made based on 5-to point Likert Scale. As indicated, the range of changes varied from 0 to 24. Coefficient was calculated 0.67 for the LOT.

**WHOQOL-BREF (WHO Quality of Life-BREF):** Investigates four areas of physical health, psychological health, social relationship and environmental health through 24 questions (with 3, 6, 7 and 8 questions, individually); the first question belongs none of the domains and assesses health and QoL in general.<sup>15</sup> The reliability of this tool in every four spaces was 0. 70<sup>15</sup>.

Procedure: After permission process. the instruments were taken to the participants for administration purposes. The researcher explained the nature and purpose of the study before taking the written consent from those who met the inclusion criteria and were willing to participate. The questionnaires administered on sample personally and would be ask to fill up the questionnaires. They were assured about the confidentiality of their responses. They were also informed that they could withdraw from study any time if they feel inconvenience. The questionnaires were completed within the presence of the researcher. The participants were instructed to fill all the items of the questionnaires and if they do not do as instructed their responses were not considered for results and questionnaire will become discarded.

**Éthical Considerations during Study:** First of all, tools wording appropriateness was check by expert to adopt or remove the socially or emotionally loaded items. No item found which seemed to be problematic for patients. Before data collection, permission of data collection was being taken from the concerned authority of hospitals where the data was collected. The dignity and wellbeing of patients were under-consideration during data collection. The research data remained confidential throughout the study.

# RESULTS

The collected data were entered in SPSS, to assess the hypothesis. First, normality of data was checked through descriptive statistics i.e. skewness, kurtosis, P-P-plots, Q-Q-plots. Through this we assured that there were no outliers. Then the reliability of assessment measures was checked through Cronbach alpha. All scales were satisfactory reliable. Next, we were move to assess the hypothesis of the present study through correlation and regression. Detailed result of the current study is given below.

Table 1 shows mean and standard deviation life orientation, illness perceptions and quality of life. It also illustrates internal consistency index (alpha coefficients) for all above mentioned scales. The results showed that all scales i.e. life orientation, illness perceptions and quality of life were internally consistent as alpha coefficients of all scales were above benchmark i.e. .70. The values of skewness suggested that variables of the present study were symmetrical distributed. Therefore, it was inferred that distribution of these variables approximate symmetrical distribution, which justified the use of parametric testes.

Table 1: Descriptive statistic and Psychometric Properties of Life Orientation, Illness Perceptions, Quality of Life in Patients with Coropary Heart Disease(N = 100)

Variables	М	SD	α	Sk <sup>a</sup>
Life Orientation	10.17	47.40	.83	.46
Illness Perceptions	33.47	21.06	.77	.15
Quality of Life	41.10	26.60	.86	.04

<sup>a</sup> Standard error of skewness = .14

 Table 2: Pearson Correlation among Life Orientation, Illness Perceptions, Quality of Life in Patients with Coronary Heart

 Disease (n=100)

Variables	1	2	3	4	5	6	7
Life Orientation	-	.36***	.26***	.31***	.21***	.41***	.66***
Cure Control	-	-	-67***	-52***	43***	38***	.57***
Consequence	-	-	-	.28***	.31***	.62***	49***
Timeline	-	-	-	-	36***	.43***	40***
Belief	-	-	-	-	-	29***	.38***
Identity	-	-	-	-	-	-	47***
Quality of Life	-	-	-	-	-	-	-

<sup>\*\*</sup>p <.001.

Table 2 shows Pearson correlation among life orientation, components of illness perceptions with quality of life. Results showed that life orientation have significant positive co-relation with quality of life. Illness perceptions components: cure control and belief about disease were significant positive corelated with quality of life whereas consequence of CHD, time line of CHD and identity of CHD were negatively co-related with quality of life.

Table 3: Regression Analyses for Life Orientation, Illness Perceptions, Quality of Life in Patients with CHD (n = 100)

Variables	Quality of Life		
	β	R <sup>2</sup>	
Life Orientation	.24***		
2.Cure Control	.27***		
3.Consequence	31***	.43***	
4.Timeline	33***		
5. Belief	.27***		
6. Identity	35***		

\*\*p< .001.

Table 3 shows prediction of life orientation and illness perceptions for quality of life. The regression analysis showed that life orientation was significant positive predictor for quality of life. Illness perceptions components: cure control and belief about disease were significant positive predictors of quality of life whereas consequence of CHD, time line of CHD and identity of CHD were negative significant predictors. Moreover, life orientation with all components of illness perceptions explains 43 percent variance in quality of life.

### DISCUSSION

When the related literature is considered, research concerning quality of life is observed to be made in various fields mainly in Western European countries and North America. This study has been made with coronary heart disease patients in national context. The present study was intended to discover the relationship between life orientations, illness perceptions and quality of life in patients with CHD. Results of this study broaden past researches by analyzing the relationship of illness perceptions with quality of life among patients with CHD by incorporating life orientations.

The main objective of this investigation was to evaluate the relationship of illness perceptions, life orientations with quality of life. In general, illness perceptions were feebly co-related with patient's outcome. In line to pervious research<sup>16</sup>, beliefs regarding to time line were related with diminished quality of life: due to protracted illness process and nonattendance of cure, patients may perceive chronic timeline to be an inalienable part of CHD. Along these lines, patients may have not balanced their behavior to deal with the lengthy and ensuing effect of CHD on quality of life. It is also possible that numerous factors influence quality of life and that the relative contribution of timeline in this was outweighed.

Consistent with the past researches in other chronic illness, more prominent cure control and fewer consequences were related with better quality of life.<sup>16,17,18</sup> Patients with a more noteworthy feeling of control and fewer perceived consequences may experience greater self-adequacy in regards to routine activity, that improve his/her quality of life. Perceptions of personnel control was related with guality of life. Patients with more control might have the capacity to take part in exercises in their own particular condition, where they can use adaptive stories. Thus, objective measures of functioning may be related in various ways to illness perceptions among patients with CHD. Identity of CHD symptoms was negative predicator of quality of life: identity is rating of a number of symptoms that the patient sees as part of the illness. In this way, when patients feel symptoms burden than his/her quality of life will affected.

Life orientations were significant predicator of quality of life. Life orientation, in an all holistic approach, reviews the relationship of oneself with others and the community<sup>11</sup>.

# CONCLUSION

There are various confinements of this investigation that limit the conclusions that can be drawn from the findings. In the first place, this examination is crosssectional; in this manner, bearing and causation among factors can't be built up. Longitudinal information would consider the appraisal of potential moderators and mediator to illustrate the connections among autonomous and subordinate factors. Likewise, information was self-report and could be affected by social allure. Moreover, the quantity of correlational examinations led expands the likelihood of Type I error.

Future studies underscore the significance of considering caregivers illness perceptions with regards to assessing illness related impacts among patients. Because caregivers perceptions may interact with patients perceptions to influence patients experience of ailment, assessing caregivers emotional representations and psychological wellbeing in future studies will assist identify factors related with patient's quality of life.

Results from this examination exhibit the prediction of life-orientation, illness perceptions with outcome i.e., quality of life among patients with CHD.

Identifying CHD patients with a profile of negative illness perceptions, including greater consequences, negative belief and low apparent control, high symptoms burden could help illness perceptions intervention targeting at reducing mal-adaptive illness perceptions to improve quality of life. In turn, patients with more adaptive cognitive and emotional representations may be more likely to engage in healthy behaviors that contribute to better outcome.

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