



The relationship between perceived stress and coping styles with psychological well-being in cardiac patients

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ABSTRACT

This study aimed to identify the relationship between perceived stress and coping styles with psychological well-being in cardiac patients. The study population consisted of all cardiac patients in the Shahid Rajaei Tehran hospital have to record. The statistical sample to a form of available and with the full consent 170 people was selected. Research tools were Cauldron stress questionnaire, Ryff psychological well-being (1989) questionnaire and coping skills by Lazarus & Folkman (1982). To analyze the data inferential statistical indicators was used multiple regression and Pearson correlation coefficient. The results showed that: need the approval of others, high expectations of themselves, high concern along with anxiety, dependence, and helplessness to change themselves, contribute in predicting of psychological well-being. As well as there is a correlation between perceived stress with management and decision on working pressure, mental health and stress due to life and stress due to the character. There is an inverse correlation between problem-focused coping styles with perceived stress. It was also shown that predictive perceived stress factors contribute in predicting psychological well-being. Based on the results suggest by teaching effective coping strategies and stress reduction strategies be provided greater psychological well-being for cardiac patients.

Keywords: perceived stress, coping styles, mental health, cardiac patients

INTRODUCTION

During the past 30 years major advances in the prevention, diagnosis, treatment and rehabilitation of cardiovascular disease have been carried and despite the decline in mortality from heart disease, these diseases are still a major part in mortality. Dimensions of psychological well-being contain self-acceptance, positive relationship with others, autonomy, and the purpose drove life, personal growth and mastery of the environment. Lyubomirsky and Dickerhoof (2010) showed that extraversion, deontology, coping styles of self-confidence are positive predictor of psychological well-being and neuroticism and helpless coping style is negative predictor of psychological well-being. Today, most psychological researchers reject the organ specificity opinions to justify physical symptoms and look from the standpoint of interactive physical symptoms. So that in most studies has been emphasized on the interaction between psychological states and biological and social variables. One of these psychological variables is perceived stress that is the body reacts to changes who requires compatibility or physical response, mental or excitement. Stress can be created by any agent or stressful stimuli even dealt with a patient. Fitzsimmons and Bardone Cone (2011) concluded has a negative relationship between a negative perception of stress with cognitive and behavioral coping styles and has a positive relationship with avoidant coping style. In front, a positive perception of stress has a positive relationship with cognitive and behavioral coping styles. Recent studies have shown the type of coping strategies used by person affect the psychological well-being and physical well-being (Hobfoll, 1988). In general, much of the research results have introduced emotional coping as the most effective

mediator of the relationship between stress and disease (Pakenham, 2001). Avoidant coping knew as the short-term and efficient strategic but in the long run

Preventing from psychological compromise and signs of helplessness, such as depression increases (Holahan, 1995). In this regard, the question arises: Is there a relationship between perceived stress and coping styles with psychological well-being in cardiac patients?

MATERIALS AND METHODS

This research is descriptive and of a correlation kind. The study population consisted of all cardiac patients in the Shahid Rajaei Tehran hospital have to record. To estimate the sample size was used plant formula. Therefore, in this study with 10 independent variables needed to volume more than 130 people. With regard to falling 170 people were considered. The statistical sample to a form of available and with the full consent 170 people was selected.

Research tools:

a) Coudron stress questionnaire:

This questionnaire consists of 4 tests that each of which, assessed stress in various fields.

The first test is dedicated to managers and decision makers and assesses the working pressure with 32 questions. The first 30 questions are related to working pressure and the last 2 questions are related to the lack of business involvement. The second test evaluates health of life. The third test assesses the stress of personal life. The fourth test consists of 23 questions and reveals the stress of your personality and habits of thought. Respond to these tests is Yes or No.

The Validity by using the opinion of guide and consultant teachers evaluate good and approved. Also its reliability by using Cronbach's alpha coefficient was obtained 0/78 that shows an acceptable reliability.

b) Psychological well-being questionnaire:

This scale was created in 1989 by Carol Ryff. This test involves 84 questions and 6 factors which 47 questions directly and 37 questions are scored in reverse. The results of the correlation with the each scale were acceptable (Reef, 1989). The Obtained Cronbach's alpha have been reported for self-acceptance (0/93), positive relationships with others (0/91), autonomy (0/86), mastery of the environment (0/90) and personal growth (0/87). In 2012 the Kalantar and Navarbafi in a population of 860 people standardized the psychological well-being questionnaire and it has been reported for the entire 0/92.

c) Coping skills questionnaire:

A 47-question is designed by Lazarus and Folkman (1982). Questionnaire to determine the content validity was given to 30 teachers, doctoral and senior students. 3 questions that the agreement of them was lower, was modified. The internal consistency by Cronbach's obtained 0/83. This scale measures problem-focused excitation-focused stress coping skills.

Findings

Hypothesis 1: There is a relationship between perceived stress and coping styles in cardiac patients.

Table 1: Correlation table between perceived stress and coping styles

Variable	Components of perceived stress				
	Management in working pressure	Health Life	stress due to life	stress due to the character	Total stress
problem-focused	-0/539	-0/344	-0/454	-0/536	-0/598
excitation-focused	0/596	0/509	0/507	0/603	0/692

The results in Table 1 indicate that between the problem-focused coping style with perceived stress for total score (-0/598) and in the sub-scales (-0/344 to -0/539) there is a moderate inverse correlation. In other words, we can say having a problem-focused coping style on average can reduce the perceived stress of the person. But this relationship with the excitation-focused coping style is positive and directly (0/507 to 0/603). Hence, it is possible that people who have high stress (like heart disease) use of excitation-focused coping styles.

Hypothesis 2: There is a relationship between perceived stress and psychological well-being in cardiac patients.

Table 2: Correlation table between perceived stress and psychological well-being

Variable	1	2	3	4
psychological well-being	-0/727	-0/611	-0/627	-0/719
Predictor variables				
1- management and decision on working pressure	1	0/477	0/528	0/633
2- Health life		1	0/404	0/555
3- stress due life			1	0/555
4- stress due character and habits of thought				1

*p<0/01

The results in Table 2 indicate that between psychological well-being with all components of perceived stress there is a strong inverse correlation (-0/611 to -0/719). All components of perceived stress have a moderate correlation (0/4 to 0/63). This result suggests that the assumption of the multicollinearity also adheres.

Table 3: ANOVA test of Hypothesis 2

	DF	Mean Square	F	Sig.
Regression	4	121240/098	117/047	0/0001
Remaining	165	1035/82		
Total	169			

R²=0/739

According to data from the above table F (4,165) = 117/047, P<0/001 it was shown that the results of regression are statistically significant. This model shows 73/9% variance of psychological well-being.

Table 4: Summary of regression analysis of Hypothesis 2

Variable	B	standard error	Beta	T	Sig.	Inflation factor of Variance	Tolerance
Fixed	482/599	11/809		40/867	0/0001		
management and decision on working pressure	-5/032	0/635	-0/425	-7/93	0/0001	1/855	0/539
Health life	-4/914	1/19	-0/202	-4/13	0/0001	1/514	0/661
stress due life	-3/395	0/88	-0/192	-3/859	0/0001	1/575	0/635
stress due character and habits of thought	-3/291	0/831	-0/228	-3/958	0/0001	2/018	0/474

According to the data, all predictor components of perceived stress contribute to the prediction of psychological well-being. In the other words, management and decision on working pressure (-0/425), stress due character and habits of thought (-0/228) and Health life (-0/202) respectively (absolute value expressed beta) has a unique role in explaining of attitude to psychological well-being.

Hypothesis 3: There is a relationship between coping styles and psychological well-being in cardiac patients.

Table 5: Correlation between coping styles and psychological well-being

Variable	1	2
psychological well-being	-0/56	-0/79
Predictor variables		
1- problem-focused	1	-0/36
2- excitation-focused		1

*p<0/01

The results in Table 5 indicate that between psychological well-being with problem-focused coping styles there is a moderate inverse correlation (-0/56) and with excitation-focused coping styles there is a strong inverse correlation(-0/79). In other words, we can say people with problem-focused coping style feel more mental health. These two styles together have a weak correlation (-0.36). This result suggests that the assumption of the multicollinearity also adheres.

Table 6: ANOVA test of Hypothesis 3

	DF	Mean Square	F	Sig.
Regression	2	233723/706	207/15	0/0001
Remaining	167	1128/283		
Total	169			

$$R^2=0/713$$

According to data from the above table $F(2,167) = 207/15$, $P < 0/001$ it was shown that the results of regression are statistically significant. This model shows 71/3% variance of psychological well-being.

Table 7: Summary of regression analysis of Hypothesis 3

Variable	B	standard error	Beta	T	Sig.	Inflation factor of Variance	Tolerance
Fixed	281/439	17/755		15/852	0/0001		
problem-focused	2/76	0/393	0/313	7/029	0/0001	1/153	0/867
excitation-focused	-3/9	0/256	-0/678	-15/227	0/0001	1/153	0/867

According to the data, both problem-focused and excitation-focused coping style contribute to the prediction of psychological well-being. In the other words (-0/678) excitation-focused coping style and (0/313) problem-focused coping style respectively (absolute value expressed beta) has a unique role in explaining of attitude to psychological well-being.

CONCLUSION AND DISCUSSION

The findings showed there is a relationship between perceived stress and coping styles in cardiac patients. Can be said to have a problem-focused coping style on average could reduce stress perceived by the person. But this relationship with excitation-focused coping style is positive and direct (0/507 to 0/603). Hence, it is possible that people who have high stress (like heart disease) use of excitation-focused coping styles. Lazarus and Folkman (1985) in health belief model and coping behavior model stated that people with high levels of perceived stress use more than excitation-focused coping styles and people with low levels of perceived stress more than problem-focused coping styles .

In the next results found that there is relationship between perceived stress and psychological well-being in cardiac patients. In this regard, Mac Gross (2009) on a study concluded that migraine sufferers, cancer patients and people who are going through the stages of life, Job threads, and family cohesiveness have the lower subjective well-being and the less mental health. Stress-driven diseases and worsening public health more on those seen that continuous use of excitation-focused coping styles.

According to other research findings, there is relationship between coping styles and psychological well-being in cardiac patients. And can state the use problem-focused coping style only on condition that the issue and problem evaluated controllable, stress can be reduced. Using problem-focused coping styles in the process of improving some patients that had suffered a myocardial infarction, more effective that excitation-focused coping style and these patients have shown more social and mental adjustment after discharge from the hospital than those who used excitation-focused coping style. As mentioned research results and current research excitation-focused coping style quite the contrary problem-focused coping style can reduce the psychological well-being for a person especially for people prone to stress. As a result, psychological state of each person is influenced by his physical condition and physiological changes. Heart patients who are psychosomatic disorders also are no exception. So, in review factors affecting in genesis, it must be considered the combination of biological and psychological factors and its importance arises when long-term effects of heart disease severely affected personal and social life, occupational, physical and mental health of patients and he is faced with serious concerns. Therefore, in this study, this issue was examined and it was found that there is a significant relationship between irrational beliefs, perceived stress and coping styles with the psychological well-being of cardiac patients.

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