



Personal Growth and Coping Strategies in Heart Patients

Shahbaz Ali Shahzad^{1*}, Irfan Hussain Khan², Shazia Nawaz³

¹Lecturer at BZU Bahadar Sub campus Layyah, Department of Psychology

²PhD Scholar, Government College University Faisalabad

³Institute affiliation: BZU Bahadar Sub Campus Layyah

Received: February 10, 2020

Accepted: May 2, 2020

ABSTRACT

Coping strategies and Personal growth are significant components in the extensive dealing of patients with heart failure. The current study exploring the patients which they are suffering from heart diseases, how the way they cope and grow in this malady. The objective of this study is to recognize the personal growth and coping strategies in heart patients. Previous studies have been conducted to understand the practices and experiments of living with heart patients. However, strategies for personal growth and coping in cardiac patients are used to overcome personal growth, and coping strategies are less understood. This exploratory study describes the relationship between individual personal growth and individual coping strategies to determine, demographics, clinical and cognitive factors in the facilitated sample (N = 120) of the community resident D.K. Khan Division. The current research was conducted to find out personal growth and coping strategies among heart patients. The method used to find out the Mean and standard deviation of the variables was Descriptive statistical method. To find out the relationship between personal growth and strategies of coping Pearson product moment method was used. Linear Regression analysis was used to identify the influence of personal growth on coping strategies.

KEYWORDS: Personal Growth, Coping strategies, Cardiac patients

INTRODUCTION

Every part of the human body is most imperative and valuable and heart is the most important organ. Therefore no one can annoy the importance of any part of the human body (Kristen, J.Overbaugh. 2017). In Europe, about 15 million people suffer from heart failure (HF) (Ponikowski et al., 2014). In the coming years it is expected to increase due to further acute coronary events and an increase in treatment for the growing population (Ponikowski et al., 2016). Heart failure is a major community health distress, because of its closely linked to high illness, death and casts. (Van Riet et al., 2016).

Personal growth is essential in the long-term management of chronic illnesses such as heart failure (HF). Personal growth is defined as a process of maintaining health through health promoting practices and managing illness; Personal growth is performed in both healthy and ill states (Riegel, Jaarsma.2012). There are many types of diseases in this world which are being causes of death. The most panic and catastrophe diseases are heart diseases because there is no chance to alive after the any activation of heart (Kristen, J.Overbaugh. 2017). Several heart attacks are explosive and extreme, typically the affected person isn't understand what the matter is, however most heart attacks started slowly, loose pain or discomfort (Corline, B. 2015). Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or disappear and come back. It can feel uncomfortable pressure, squeeze, fullness or pain. (Corline, B. 2015). which is a thinning of blood vessels to the heart which can be a cause of chest pain, a heart attack (when the blood stream to the heart is blocked and some of the myocardium is broken or dead), heart failure (when the heart cannot pump enough blood and oxygen to support other organs) heartbeat is too fast, too slow or irregular (Dionne, Kassenga. 2014). Most South Asian countries, as well as Pakistan, Sri Lanka, Bangladesh, Republic of India and Nepal comprise over 1 / 4 of the low and middle income countries (LMICs) are known to possess the big risk of coronary heart diseases (CHD) as compared to different a part of the world. (WHO, 2014). Huge number of population-based incidence learning known that the popularity of coronary vascular disease (CVD) in South Asian patients was high as paralleled to Chinese and Canadian patients (Quan et al., 2013). Personal growth is recognized as individual improvement or own maturity that person having feelings about himself or herself. Personal growth entails the expansion and augmentation of all aspects of the human being (Jennifer, Lapum. 2012). Mostly there are two types of coping strategies one is the problem-focused coping strategy and also

*Corresponding Author: Shahbaz Ali Shahzad, Visiting Lecturer at BZU Bahadar Sub campus Layyah, Department of Psychology. Email: shahbazali.shahzad@yahoo.com

the other is emotion-focused coping strategy which are used for the facing specific issues and diseases such a hypertension (Graven, Grant. 2013).In the emotion-focused cope strategy, the target is to concentrate on feeling and to regulate emotional distress. This strategy is additional related to exercise, care, expression of feelings, and seeking social support. While Problem-focused strategy is distinguished from emotion-focused coping that is geared toward managing the emotions related to the case, instead of ever-changing the case itself (Graven, Grant. 2013).Heart diseases have paramount importance and not much work was for its management, during previous years, regarding personal growth and coping strategies. Present study was plan by considering these points for the betterment of lay man in Pakistan.

MATERIALS AND METHODS

A exploratory study measured relationships using questionnaires. The study was targeted on a cluster of a hundred and twenty patients with heart maladies confessed for the deterioration of heart disease within the Pervez Elahi cardiology institute in Multan. The follow up duration was measured up to 12 months. Scientific samples collected that involved signs of patience having heart malady, source of deterioration, further maladies. In this research the targeted population was confirm regarding their level of education. Hence researcher decided to make interview schedule as tool for data collection because every respondent was not in the position to response to any other tool for data collection.

Personal growth initiative (PGI)

Personal growth initiative (PGI) was measured by Robitschek (1999)

Brief cope inventory (BCI)

Coping strategies was applied by brief cope inventory scale given by carver (1989) which consist of total 27 items which includes demographic profile having 11 items viz. gender, age, education, family type, family members, marital status, occupation, number of heart attacks, area of residence and time duration of patient in which they suffer from heart disease, whereas general profile comprising 14 items assessed through different coping dimensions with the help of questionnaire as mentioned below.

Table. Coping dimensions in questionnaire

N0.	Coping strategy questionnaire statement
1	To what an extent do you think that Medicines changes can help you prevent another heart attack
2	To what an extent do you think that healthy life style can changes can help you prevent another heart attack
3	To what an extent do you think that being active can help you prevent another heart attack
4	To what an extent do you think that eating a heart-healthy diet help you prevent another heart attack
5	To what an extent do you think that controlling your blood pressure help you prevent another heart attack
6	To what an extent do you think that controlling your blood pressure help you prevent another heart attack
7	To what an extent do you think that cardiac rehabilitation program can help you prevent another heart attack
8	To what an extent do you think that deal with stress can help you prevent another heart attack
9	To what an extent you have the facility of doctor if you think you are having a heart problem
10	To what an extent do you think that level of blood pressure is a cause of your heart disease
11	.To what an extent do you think that Quit smoking is a cause of your heart disease
12	To what an extent do you think that secondhand smoke is a cause of your heart disease
13	To what an extent do you think that plenty of fruits can help you prevent another heart attack
14	To what an extent do you think that eating vegetables can help you prevent another heart attack

The data was collected by approaching the respondents in their locations. The coping questionnaire were applied to understand tools of coping in the cluster of patient who have heart problems to examine the relationship between personal growth and coping strategies among heart patients.

Statistical Analysis

Collected data was analyzed by using SPSS v.16.0 software. The data consisted of diagnosed heart patients and further investigated that diagnosed patients in favour of impartial of the study. There are two types of statistics, one is inferential statistics and other is Descriptive statistics here was used Descriptive statistics to calculate mean and SD of the variables. For understanding the association of the variables of personal growth and coping strategies Pearson product moment coefficient of correlation was calculated. Linear Regression analysis used to know the influence of personal growth on coping strategies.

RESULTS

Existing research was conceded out to study various aspects with coping strategies among heart patients. Table 1 showed that personal growth scored 5.38±.325 and Self-Distraction scored 5.88±.271 while Active Coping scored 7.82±.656 among heart patients. Denial scored 3.48±.801 and Substance Use scored 2.96±.136 while Use of Emotional Support scored 7.34±.444 among heart patients. Behavioural Disengagement scored 2.48±.291 and Venting scored 6.24±.498 while Positive Reframing scored 6.36±.925. Planning scored 7.80±.804 and Humour scored 2.40±.333 while Planning scored 7.80±.804 and Acceptance scored 7.44±.258. Religion scored 7.78±.927 and Self-Blame scored 4.62±.394.

Table 1. Descriptive Statistics for the scores of various aspects of heart patients

Variables	Mean±SD	Variables	Mean±SD
Personal Growth	5.38±.325	Venting	6.24±.498
Self-Distraction	5.88±.271	Positive Reframing	6.36±.925
Active Coping	7.82±.656	Planning	7.80±.804
Denial	3.48±.801	Humour	2.40±.333
Substance Use	2.96±.136	Acceptance	7.44±.258
Use of Emotional Support	7.34±.444	Religion	7.78±.927
Use of Instrumental Support	6.44±.235	Self-Blame	4.62±.394
Behavioural Disengagement	2.48±.291		

In Table 2 results showed that significant association was observed between personal growth and coping strategies (1, 2, 3, 4, 9, 10, 11, 12, 13) on the basis of questionnaire while negative association was observed with (5, 8, 14) and no correlation was assessed with (7). Self-Distraction negatively correlated with coping strategy (4, 7, 14) and no correlation with (2, 3, 6, 9, 11, 12, 13), while positively correlated with (5, 8, 10). In case of Active coping non-significant correlation was observed with (3, 4, 6, 9, 10, 11, 12), whereas positive association was assessed with (5, 7, 8, 13) and negatively associated with (12). Substance Use was observed negatively correlated with (7, 14) and positively correlated with (8, 10), whereas non-significant behavior was observed with (5, 6, 9, 11, 12, 13). Emotional Support was not correlated with (6, 10, 11, 13, 14) and negatively correlated with (7, 9, 12), in contrast Emotional Support was positively correlated with (8). Instrumental support was negatively correlated with (10, 13) and found no association with (7, 9, 11, 14), while positively correlated with (8). Behavioral Disengagement was observed positively correlated with (9, 10) and no correlation was observed with (9, 11, 12, 13), on the other hand negatively correlated with (14). Venting showed no correlation with (8, 11, 12, 13) and positively correlated with (8), whereas negatively correlated with (10, 12, 14). Positive Reframing was observed negatively correlated with (11) and positively correlated with (12). Planning was observed negatively correlated with (11) and have no correlation with (11, 13, 14). Humor, Acceptance, Religion, Self-Blame of the coping strategies were observed no correlation with the variables (12, 13, 14).

Table 2. Correlation Coefficient on the scale of personal growth and coping strategies

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PG	1	.219*	.256*	.143	-.309**	.339**	-.129	-.297**	.567**	.592**	.429**	.203*	.748**	-.321**
SD		1	.005	-.221*	.406**	.020	-.373**	.301**	.108	.734**	.037	.023	.034	-.198*
AC			1	.194	.209*	.113	.213*	.309**	.060	.137	.088	-.094	.347**	.169
D				1	-.343**	.198*	-.081	-.073	-.095	-.240*	.204*	-.054	-.096	.412**
SU					1	.116	-.414**	.435**	.137	.686**	.139	.195	-.064	-.289**
UES						1	-.114	.342**	-.011	.151	.184	-.098	-.070	-.051
UIS							1	.332**	-.127	-.452**	-.113	-.131	-.215*	.060
BD								1	.243*	.459**	.133	.126	.082	-.109
V									1	-.388**	.269**	-.178	.067	-.178
PR										1	.228*	-.060	-.355**	-.207*
P											1	-.239*	-.184	.135
H												1	.007	.010
R													1	.139
SB														1

*p<0.05; **p<0.01, Note: PG: Personal Growth, SD: Self Distraction, AC: Active coping, D: Denial, SU: Substance Use, U ES: Use of Emotional Support, UIS: Use of Instrumental support, BD, Behavioral Disengagement, V: Venting, PR: Positive Reframing, P: Planning, H: Humor, A: Acceptance, R: Religion, SB, Self-Blame.

Results in table 3 revealed that personal growth in male (3.0281±.52019) was more as compare to females (2.8553±.34660) while Self Distraction in male (3.9477±.66721) was more as compare to females (3.7309±.51128). In case of active coping non-significant difference was observed between male and female. It was observed that Denial behavior in male (3.0281±.52019) was more as compare to female (2.8553±.34660), while Substance Use in male (3.9477±.66721) was more as compare to female (3.7309±.51128). Use of Emotional Support showed non-significant behavior between male and female. Use of Instrumental support in male (3.0281±.52019) was more as compare to female (2.8553±.34660), while Behavioral Disengagement in male (3.9477±.66721) was more as compare to female (3.7309±.51128). In case of venting non-significant difference was observed between male and female. Reframing in male (3.0281±.52019) was more as compare to female (2.8553±.34660), while Planning in male (3.9477±.66721) was more as compare to female (3.7309±.51128). Result exhibited that non-significant behavior was observed in case of Humor between male and female. Religion impacted more in male (3.0281±.52019) as compare to female (2.8553±.34660), while Self-Blame in male (3.9477±.66721) was more as compare to female (3.7309±.51128).

Table 3. Means, variance and t-value of Male and feminine heart patients on the scales coping strategy and Personal growth.

	Gender	N	Mean	Std. Error	T	P	Cohen's d
PG	Male	51	3.0281	.52019			
	Female	170	2.8553	.34660	2.754	.006**	0.39
SD	Male	51	3.9477	.66721			
	Female	170	3.7309	.51128	2.466	.014**	0.36
AC	Male	51	4.6222	1.18776			
	Female	170	4.5886	.94657	2.85	.034	0.03
D	Male	51	3.0281	.52019			
	Female	170	2.8553	.34660	3.754	.006**	0.39
SU	Male	51	3.9477	.66721			
	Female	170	3.7309	.51128	2.55	.014**	0.36
UES	Male	51	4.6222	1.18776			
	Female	170	4.5886	.94657	2.85	.140	0.03
UIS	Male	51	3.0281	.52019			
	Female	170	2.8553	.34660	2.754	.002**	0.39
BD	Male	51	3.9477	.66721			
	Female	170	3.7309	.51128	2.466	.014**	0.36
V	Male	51	4.6222	1.18776			
	Female	170	4.5886	.94657	1.85	.854	0.03
PR	Male	51	3.0281	.52019			
	Female	170	2.8553	.34660	2.754	.006**	0.39
P	Male	51	3.9477	.66721			
	Female	170	3.7309	.51128	2.466	.014**	0.36
H	Male	51	4.6222	1.18776			
	Female	170	4.5886	.94657	1.85	.854	0.03
R	Male	51	3.0281	.52019			
	Female	170	2.8553	.34660	2.754	.006**	0.39
SB	Male	51	3.9477	.66721			
	Female	170	3.7309	.51128	2.466	.014**	0.36

PG: Personal Growth, SD: Self Distraction, AC: Active coping, D: Denial, SU: Substance Use, U ES: Use of Emotional Support, UIS: Use of Instrumental support, BD, Behavioral Disengagement, V: Venting, PR: Positive Reframing, P: Planning, H: Humor, A: Acceptance, R: Religion, SB, Self-Blame.

DISCUSSION

We focus on how patients with heart failure experience emotional stress in life that find at least one of the serious complications of their situation to be avoided in three or more ways: prevention, ignorance, and acceptance. The purpose of this trial is to critically evaluate the evidence related to personal growth and coping strategies in heart patients. The focus of the study is to exploring the association among personal growths and coping strategies among heart patients. Patients with heart failure who used adaptive or active coping methods had lower levels of depression as compared to patients who used maladaptive coping and had higher levels of personal growth. Main

objective of current study is to clarify and understand the relationship between these two variables in targeted population sample resides in Pakistan. There was a substantial positive correlation between high personal growth and coping strategies in heart patients. It means that with the increase in individual's personal growth in any field of life increase positive in heart patients. Coping strategies increased when personal growth is increased as it was assumed that high personal growth leads to positive attitude in heart patients (Prati, G., & Pietrantonio, L. (2009). The present research also aimed to study that gender differences exist in heart patients. The results showed significant difference between mean scores of male and female in heart patients on personal growth scale. The finding was expected that scores of male would be significantly higher than scores of female. These results are in line with Bombardier et al., (1990) and Buetow, (2001). Who found throughout their study on heart patients that stress caused by living with malady is decided by several factors, together with data concerning malady, important and several symptoms, perennial worsening and hospitalizations and also the volatility of the consequence. Consequently coping strategies are necessary for patients who have the heart patients Bombardier et al., (1990) and Buetow, (2001).

CONCLUSION

Coping strategies in the patients which are suffering from the heart problems are mostly sensation-concentrated. Procedure of adaptable is predisposed by analytical and medical factors as similarly as temperament traits. Distinctive cope mechanisms has relevancy to the rehabilitation method and additionally to the emotional and mental health of the patient. It also has practical aspects by guiding the therapy. It additionally has sensible aspects by guiding the medical care. On the basis of the findings of the present research it can be concluded that individuals both male and female have positive attitude in heart patients if they have high personal growth with high coping strategies. In Pakistan it is first time that such type of research was conducted and it is the need of future era, because our nation have high self-value, then they can progress regarding heart diseases patients. Secondly female needs to be have higher personal growth with high coping strategies, as a result they can progress in other fields and they should enrage things not to be criticizing them.

REFERENCES

- Bombardier, C. H., D'Amico, C., & Jordan, J. S. (1990). The relationship of appraisal and coping to chronic illness adjustment. *Behaviour Research and Therapy*, 28(4), 297-304.
- Brouwers, C., Denollet, J., Caliskan, K., de Jonge, N., Constantinescu, A., Young, Q., & Pedersen, S. S. (2015). Psychological distress in patients with a left ventricular assist device and their partners: an exploratory study. *European Journal of Cardiovascular Nursing*, 14(1), 53-62.
- Brouwers, C., Denollet, J., Caliskan, K., de Jonge, N., Constantinescu, A., Young, Q., & Pedersen, S. S. (2015). Psychological distress in patients with a left ventricular assist device and their partners: an exploratory study. *European Journal of Cardiovascular Nursing*, 14(1), 53-62.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, 56(2), 267.
- Dionne-Odom, J. N., Kono, A., Frost, J., Jackson, L., Ellis, D., Ahmed, A., & Bakitas, M. (2014). Translating and testing the ENABLE: CHF-PC concurrent palliative care model for older adults with heart failure and their family caregivers. *Journal of palliative medicine*, 17(9), 995-1004.
- Graven, L. J., & Grant, J. S. (2013). Coping and health-related quality of life in individuals with heart failure: an integrative review. *Heart & Lung*, 42(3), 183-194.
- Graven, L. J., & Grant, J. S. (2013). Coping and health-related quality of life in individuals with heart failure: an integrative review. *Heart & Lung*, 42(3), 183-194.
- Jennifer, Lapum. (2012). Arts-informed research dissemination: Patients' preoperative experiences of open-heart surgery *Heart & Lung: The Journal of Acute and Critical Care* Vol. 41, Issue 5, P. e4-e14
- Overbaugh, Kristen J., and Mark B. Parshall. "Personal growth, symptoms, and uncertainty in community-residing adults with heart failure." *Heart & Lung* 46, no. 1 (2017): 54-60.

- Ponikowski, P., Voors, AA, Anker, SD. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). Developed with the special contribution . *Eur J Heart Fail* 2016; 18: 891–975.
- Ponikowski, P., Anker, S. D., AlHabib, K. F., Cowie, M. R., Force, T. L., Hu, S., ... & Samal, U. C. (2014). Heart failure: preventing disease and death worldwide. *ESC heart failure*, 1(1), 4-25.
- Prati, G., & Pietrantonio, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of loss and trauma*, 14(5), 364-388.
- Quan, H., Chen, G., Walker, R. L., Wielgosz, A., Dai, S., Tu, K., ... & McAlister, F. A. (2013). Incidence, cardiovascular complications and mortality of hypertension by sex and ethnicity. *Heart*, 99(10), 715-721.
- Jennifer, Lapum. (2010). Patients' narrative accounts of open-heart surgery and recovery: Authorial voice of technology *Social Science & Medicine* Vol. 70, Issue 5 P. 754–762.
- Riegel, B., Jaarsma, T., & Strömberg, A. (2012). A middle-range theory of self-care of chronic illness. *Advances in Nursing Science*, 35(3), 194-204.
- Riegel, Barbara, Tiny Jaarsma, and Anna Strömberg. "A middle-range theory of self-care of chronic illness." *Advances in Nursing Science* 35, no. 3 (2012): 194-204.
- Robitschek, C. (1999). Further validation of the Personal Growth Initiative Scale. Measurement and evaluation in counseling and development.
- Rugai, D., & Kassenga, G. R. (2014). Climate change impacts and institutional response capacity in Dar es Salaam, Tanzania. In *Climate change vulnerability in Southern African cities* (pp. 39-55). Springer, Cham.
- Sakijege, T., Sartohadi, J., Marfai, M. A., Kassenga, G. R., & Kasala, S. E. (2014). Assessment of adaptation strategies to flooding: A comparative study between informal settlements of Keko Machungwa in Dar es Salaam, Tanzania and Sangkrah in Surakarta, Indonesia. *Jambá: Journal of Disaster Risk Studies*, 6(1), 1-10.
- Van Riet, EES, Hoes, AW, Wagenaar, KP. Epidemiology of heart failure: The prevalence of heart failure and ventricular dysfunction in older adults over time. A systematic review. *Eur J Heart Fail* 2016; 18: 242–252.
- World Health Organization. (2014). Global status report on noncommunicable diseases 2014 (No. WHO/NMH/NVI/15.1). World Health Organization.
- Buetow, S., Goodyear-Smith, F., & Coster, G. (2001). Coping strategies in the self-management of chronic heart failure. *Family Practice*, 18(2), 117-122.
- World Health Organization. (2014). Global status report on noncommunicable diseases 2014 (No. WHO/NMH/NVI/15.1). World Health Organization.