



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3483365>Available online at: <http://www.iajps.com>

Research Article

**RELATIONSHIP OF PERCEIVED SOCIAL SUPPORT AND
HEALTH RELATED QUALITY OF LIFE AMONG DIABETIC
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Physiology Department at Ameeruddin Medical College Lahore.**Article Received:** August 2019 **Accepted:** September 2019 **Published:** October 2019**Abstract:**

The proposed study was conducted to investigate perceived social support and health related quality of life among patients of diabetes. Furthermore, impact of demographic variables was also studied. The present study sample comprised of diabetic patients taken from different hospitals of sargodha. (N=180). Proposed study variables were measured through standardized instruments such as Multidimensional Scale of Perceived Social Support was administered to measure social support (MSPSS; Batool 2012), WHOQOL-BREF Scale was administered to measure quality of life of a patient (WHOQOL-Group, 1998). Correlation, linear regression, ANOVA and independent sample t- test were run in order to meet the objectives of study by SPSS version 21. The results of the present study revealed that perceived social support is positively correlated with health related quality of life. There is no significant gender differences on health related quality of life and perceived social support.

Keywords: Diabetes, perceived social support, health, quality of life, gender differences.**Corresponding author:****Hafiza Attia Rehman,**

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Please cite this article in press Hafiza Attia Rehman et al., *Relationship of Perceived Social Support and Health Related Quality Of Life among Diabetic Patients.*, Indo Am. J. P. Sci, 2019; 06(10).

INTRODUCTION:

The present research has been conducted to conceptualizing and measuring psychological concepts. This study will throw light on perceived social support, health related quality of life and coping strategies among hypertension, diabetes and heart patients. It is defined as nonverbal and verbal communication between two persons i.e. receivers who received the support and providers who provide support. It minimizes the ambiguity about the person himself, about the other people and about the situation. Social support is form of network which includes family, friends, neighbors and other members of community all these people are present there to provide assistance and help at the time of need. Social network is available to provide support. There are different ways that are considered important to explain social support but none of the definitions covered all features and aspects. social support is an interactive process so it is important to define firstly actual and perceived support (Albrecht and Adelman 1987).

Actual support:

The type of support which is given to the person in which the support is given by saying something good, or done or given to that person (Sarason, & Pierce, 1990). it is defined as person faith and trust that social support is existing. Sometimes it is considered as positive or negative. It ensures the person about existence of support that he got the support what he needs. (Norris & kaniasty, 1996)

Perceived social support:

Perceived social support is as perception of a person's that social and public setup is effectively helpful or not. It means that social support is totally persons' self-assessment or appraisal. it is believed that the people are more satisfied and happy who are loved and wanted in different parts of their lives and who received help and support by their friends, family and close relationships when they are in need. Perceived social support is person's cognitive view that person has make trustworthy relationships with different people especially close relationships and that provide support to them (Yamaç, 2009)

Benefits of perceived social support:

Perceived social support is considered as most important element and it has lots of benefits that have been valued and appreciated for many years. It is said that perceived social support provides better health to the patients of chronic illness or other people without any type of disease. It is also believed that perceived social support had positive correlation with the health related quality of life and it also minimizes level of

anxiety. The most important aspect of social support is that it plays important roles in specific areas of life like friends, family the workplace etc. (Carlson and Perrewe, 1999).

Sources of support:

Social support comes from different type of sources, including friends, family, peers, spouse, community ties, pets and coworkers. The sources can be formal or informal i.e. Public groups and mental health professionals which may include psychologists, psychiatrists etc. (Yamaç, 2009).

Types of social support:

Different number of ways are explained in which people can support one another. Researchers explain five types of social support.

Emotional support:

It involves to show empathy, caring and concern toward a person. It provides the person with a sense of security, hope and being loved at the times of stress. By saying person that he will be get better soon and don't worry everything will be okay with time. These sayings didn't solve the individual's problem bur it help the person to alleviate his mood and feel relaxed for some time (Albrecht & Adelman, 1987).

Esteem support:

It is another type of support in which individuals show their feelings of positive regard for a person. It increased the self confidence in a person that he can face all the problems and difficulties of life. It boosts the person to take action and different steps to solve a problem. Esteem support increased the feelings of competence and self-worth in a person. (Sarason, & Pierce, 1990).

Tangible support:

It is instrumental support which involves direct or the financial help, physical things or facilities. It can also be called as an instrumental support. (Albrecht & Adelman, 1987).

Informational support:

The type of support in which different type of advices, suggestions, ideas are given to the person about his work. It helps the person to get a lot of ideas and suggestions and useful information about his work. In this way problems of the people are solved easily. (Albrecht & Adelman, 1987).

Network support:

It is the type of network or connection which is between different people who share social activities

and different type of interests. It helps and support people and ensures them that they are not alone in any situation and condition which that are facing. It includes social support setup that is made up of friends, family and peers. time (Albrecht & Adelman, 1987).

Benefits of a social support network:

Having a social support network benefits in the following ways. To have sense of group belonging and to increase the sense of self-worth and the most important is feeling of protection and safety. (Sarason & Pierce, 1990).

Health benefits of social support:

Different number of health benefits of social support are explained here. It helps person to feel better in any situation and helps to cope with the life difficulties they are facing. Another benefit is that it provides social, physical, psychological and environmental support. There were many researches done on the health and support. A study found that people who received highest level of social support had highest level of self believe and self-efficacy in selection of different nutritional foods. Friends and family support provides them with confidence and information about selection of unhealthy and healthy food. (Anderson, Winett, & Wojcik, 2007).

There are different concepts which explain the effect of social support on health and overall wellbeing. Most important concept is that physical health will be better when both emotional and mental health will better. These both are related with physical health of an individual. Stress buffering hypothesis explained that stress had negative effects on health of an individual. (Cohen & Willis, 1985).

Theory of social support:

According to Bianco and Eklund (2000), social support is defining an opinion in two ways based on the association between social support and health outgrowth. Social support can be defined as an accommodating situation or environmental provision that reduce the chance that an individual will evaluate an event as stressful (Lazarus and Folkman, 1984). This conceptualization is linked with "main effect hypothesis". On the other hand, social support is also defined as subsisting resource that is used through time of stress (Lazarus and Folkman, 1984). This conception is connected with the "buffering effect hypothesis".

Main effect hypothesis:

It states that social association throw into an individual overall health, thus interception the individual from undergoing stress (Sarason & Pierce, 1990). Hence once social interactions have an overall or environmental effect on his or her wellbeing that create a wide ranging feeling of support known as social support (Sarason & Pierce, 1990). A person's insight of steady perceived support provides constructive effects, a sense of inescapability and constancy, and acknowledgement of worth (Bianco and Eklund, 2000). If perceived social support is high, then the individual may feel more certain in his or her capability to conquer a stressful situation, thus dropping his or her appraisals of impending sufferings (Sarason et al., 1990). Ideally if an individual perceives that he or she has a sturdy support network, less stress may be experienced in spite of situation. Researchers began to apprehend, however, that a strong support network does not unavoidably provide immunity to a trouble person (Bianco and Eklund, 2000).

Buffering effect hypothesis:

The buffering effect hypothesis states that social support can be lighten by giving solutions (Cohen & Willis, 1985). Social support in this occurrence is viewed as a coping resource relatively than an environmental situation because the individual I using others support as a device to prevail over the distress. Social support is termed as received support because or concentrates on the support that the individual is in fact getting versus their discernment of his or her overall support. (Bianco and Eklund, 2000).

Quality of life:

Quality of life (QOL) is the wellbeing of individuals as well associates or it is perceived quality of an individual's daily life. Many researchers considered it as a multidimensional construct which shows how an individual's needs are fulfilled in different fields of life. According to Calman (1984), quality of life can be defined as degree to which expectations, wishes and hopes are harmonized with achieved goals. According to Ferrans & Power (1985), it is an individual's feeling of welfare that results from satisfaction with various components and aspects of life that are important for prions.

Murphy and Murphy (2006) stated that there are two types of quality of life one is subjective quality of life and the other is objective quality of life. The former is associated with persons past experience and degree of satisfaction he has in health, his social and material welfare. (Gladis, Gosch, Dishuk & Crits-Christoph, 1999).

Historical perspective of quality of life:

Quality of life is considered important not only now a day but also centuries before. Aristotle (384-322 BC) the great philosopher gave the concept of good life and living well. In 1930's researchers started to show a great interest in quality of life and they tried to define, measure and explore these concepts (Massam,2002). Many scientists considered material wealth as the important sign and indicator of quality of life. Different articles were available that tell about the ratings of QOL in different states and cities. These include both objective as well as subjective ratings. In 1950's, this was used in an argument against limitless economic growth.

According to Massam (2002) development in the area of computer science encouraged the act to flourish. Then different research centers were opened for the study of QOL. Another researcher Smith 2000 explained that QOL opened the new ways in social sciences researchers.

Domains of quality of life:

According to WHOQOL group (1998), the domains of quality of life are as follows.

Physical health It is the domain of quality of life that measures physical health by assessing individuals level of energy and fatigue, pain and discomfort, sleep and rest.

Psychological domain It is the dimension which includes various elements such as body image and appearance, negative and positive emotion, self-efficacy, self-esteem, thinking, learning and memory.

Social relationships It is the domain of quality of life which is characterized by social personal relationships, social support and sex life of an individual.

Environment The characteristics of environment domain are financial resources, physical safety and security, health and social care.

Indicators of quality of life:

Massam 2002 explained that there are different number of indicators which define, predict and improved the QOL. Andrew and Withey, (1976) defined the goals pf indicators of QOL that they should be easy to understand, limited and not too lengthy and should be short and comprehensive so that critical aspects of society are included

Subjective indicators the subjective indicator of quality of life can be referred to as what and how the person feels about his life. A person's satisfaction that either he is happy, satisfied or unsatisfied (Gurin, Verloff & Field. 1960). subjective indicators are the wellbeing of person or individual's appraisal. (Clarke, Ryff & Rosenthal, 2000)

Existential indicators It suggests that how good one's life is at boarder level. Every individual is different from one another, his nature and attributes are unique from other people around the world. Therefore, his nature, attributes, thoughts and values should be respected regardless of where he belongs, so that he can live in peace. (Rogerson, Findaly, Coombes & Mooris, 1989).

Objective indicators Objective quality of life means how one's life is observed by others. People judge others by the culture they live in, the norms and values they practice. Objective indicators are social prestige, standard of living, healthy, housing, neighborhood, characteristics, mortality rates, education and socio economic structure. (Flax, 1972).

Models of quality of life Quality of life is considered to be quite complex and is innately a multi-level concept, it is considered to be mirroring objective, subjective, positive and negative emotions (Lawton, 1991). There are three models of QOL.

Happiness model Various researchers define happiness in term of satisfaction a person has with his life. According to argyle, Martin and Crossland (1989), happiness is the proportion of joy and pleasure; it is the optimal level of life satisfaction and lack of negative emotions and feelings.

Psychological model It focuses on various aspects. Some of these aspects include personal growth, competence of individual cognitively; efficiency of person and how he can adapt himself according to the changing environment, the level of autonomy of person perceives that he has social competence, self-efficacy, and optimism and pessimism (Larson, 1978)

Social health model According to Bowling and Grundy (1998), social health model includes broader concepts. Its focus is on involving the local community to put an effort and enhance the welfare of social networks. It also includes social support weather from friends, family, society and community.

Health related quality of life:

The concept health related quality of life is multidimensional. It includes different domains like

social, environmental physical and psychological. It measures health, causes of death and life expectancy of population. Wellbeing is also the main concept of HRQOL which measures the positive aspects of person's life like positive emotions and life satisfaction. Wellbeing is the state in which persons physical, mental and social functioning increased when he got the full supportive environment in which he lives his life in satisfactory and productive way. (Kobau R, Snizek J, Zack MM, Lucas RE, Burns A. 2010)

Significance of health related quality of life:

According to World Health Organization (WHO) health is defined as state of complete mental, physical and social well-being and not the absence of any type of illness or disease (WHO Definition of Health 22 June, 1946). Researchers said that when quality of life is measured in perspective of both health and disease than it was called as health related quality of life. HRQOL is multidimensional concept which includes different domains physical, psychological, environmental and social context in which people live (Ferrans CE;2005)

Health related quality of life among chronic illness patients:

According to different researchers there is low rate of quality of life among patients of chronic illness like diabetes, heart and hypertension diseases. Diabetes is metabolic disease which stops the production of insulin in body, the diabetic patients have low rate of quality of life and sometimes they become anxious and depressed (Bottomley J, Gillam S, Murphy M, 2000).

Rationale of study:

The main purpose of present study is to explore the relationship of perceived social support and health related quality of life. Another purpose of this study is to check either the variables as mentioned perceived social support, health related quality of life among diabetic patients. Although separate researches done on these variables but there is little work present in past researches about the relationship among these variables. Therefore, present study wants to explore these variables and find out the quality of life and social support among the patients of diabetes.

Diabetes now a day is very common disease. Diabetes the type of chronic illness and often called as diabetes mellitus. It is the metabolic disease in which pancreas the organ which forms that insulin fails to work properly and individual may have high level of blood glucose. It is the condition in which

there is lack of insulin in the body or the cell of the body don't give proper response to insulin. Person who have diabetes may have certain problems like frequent urination, intense thirst, and intense hunger (Fisher,2009).

The prevalence of diabetes 2 in Pakistan is about 12% nowadays. There is high ratio of type 2 among males than females. If we see the prevalence in different provinces of Pakistan its ratio is also different. About 27% of type 2 diabetic patients exist in Sindh area while in Punjab it is about 22%. The ratio of diabetic patients is also different in rural and urban areas (Rafique G 1999).

Objectives of the Study:

The main objective of study was to find the relationship between perceived social support, health related quality of life and coping strategies among patients of diabetes, hypertension and heart diseases. Following objectives were set upon to accomplish the study.

1. To find out the relation perceived social support and health related quality of life among patients of diabetes.
2. To explore all the demographics of three study variables i.e perceived social support and health related quality of life among patients of diabetes.

Hypotheses:

To meet the objectives of present study certain hypotheses were formulated on the basis of empirical support.

H1 There will be a positive correlation between perceived social support and health related quality of life among diabetic patients.

H4 The level of perceived social support would be high among males as compared to females in diabetic patients.

H5 Female would have high rate of health related quality of life as compared to males in diabetic patients.

METHOD:

Operational definitions

Perceived social support

It is defined as nonverbal and verbal communication between two persons i.e. receivers who received the support and providers who provide support. It minimizes the ambiguity about the person himself, about the other people and about the situation (Albrecht and Adelman 1987). **Quality of life**

The term quality of life is utilized to check the general prosperity of people and social orders,

including the field of worldwide advancement, human services, legislative issues, environment, physical, and mental wellbeing, instructions, amusements and recreation time and social having a place (Oort, 2005). For the present study score on quality of life would be obtained through WHOQOL-BREF Scale (WHOQOL-Group, 1998). High scores on each subscale indicated high level of quality of life and vice versa.

Research Design:

This study investigates the perceived social support, health related quality of life and coping strategies among patients of hypertension, diabetic and heart disease. The research design used in study was correlation research survey.

Sample:

Sample of ($N=120$) was collected from different hospitals, by using convenient sampling technique. Participants in this study were heart, diabetes and hypertension patients.

Inclusion and exclusion criteria:

The inclusion criteria for the study was those patients who have diabetes, hypertension and heart diseases from several months. There was no restriction of education so all patients (educated and uneducated) were taken. The patients with physical disability were excluded from the study.

Table 1 Percentage and Frequencies of Demographics characteristics of diabetic patients ($N = 180$)

Demographic variables	F	%
Gender		
Male	100	54.2
Female	80	45.8
Age		
20-40	65	79.2
41-70	115	20.8
Residence		
Rural	55	25.8
Urban	125	74.2
Family system		
Nuclear	120	63.3
Joint	60	36.7

Instruments:

In current research data was collected through test booklets comprised of consent form, demographic information and instruments of the constructs. The detail of instruments is as following

Multidimensional Scale of Perceived Social Support (MSPSS):

It is the measure of the perceived availability of support developed by Zimet et al. (1988). The format is 12 items assessing 3 groups based on the source of support. Each of these groups contains 4 items these are family (3,4 & 11), friends (6,7,9 & 12), and special persons (1,2,5& 10). Items are rated on a 7-point Likert-scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). the sum of 4 items yields the sub scale scores while the total score is calculated by adding all scores of sub scale. The lowest score in sub scale is 12 and highest is 84.

In this present study the Urdu version of MPSS (Batool, 2012) was used. The Cronbach for MPSS

total is .78 for family subscale, .78 for friend's subscale .77 and for special person is .62 by Batool (2012).

WHO-Quality of Life Scale:

In this study quality of life was measured with the help of quality of life scale. World health organization quality of life scale was developed by Power (2003). It was translated in Urdu by Khan. Akhtar, Ayyub, Alam, and Laghari (2003). The questionnaire consists of 26 items. The questionnaire is a 5-point rating scale. Score ranges from 1 (strongly disagree) to 5 (strongly agree). There is no cut of scores in the scale therefore high scores indicate high quality of life and vice versa. Physical functioning will be measured by item numbers (3, 4, 10, 15, 16, 17, and 25). Psychological functioning will be measured by item numbers (5, 6, 7, 11, 18 and 26). Social dimension will be measured by item numbers (19, 20 and 21). Environment is measured by item numbers (8, 9, 12, 13,14,22,23 and 24).

Perception of quality of life and health will be measured by item number (1 and 2).

Procedure:

The current research study was divided into two parts. The first part of the research study consisted to get the permission from the authors of the instruments used in the current research and psychometric properties were explored among Pakistani diabetes, hypertension and heart patients while second part consisted on main study. At this step all of the hypothesis of the study were checked. Perceived social support and health related quality of life among diabetic patients were investigated. The patients were taken from different hospitals of Sargodha city. Then in accordance to the APA ethical consideration the sample were approached directly by the researchers after having consent for participation and acquiring permission from concerned authorities (administration of hospitals) after ensuring their permission to participate in the study, they were briefed about the goals and procedure of the study. The participants were told about the purpose of the study.

After that a booklet was handover to them and that booklet consisted of Perceived social support scale, health related quality of life and coping strategies scale and asked to fill out their particulars (gender, age, education etc.). A total of 180 participants were approached. Proper instructions were given to the participants about filling of scales and responding to the questions. The participants were told about filling

of scales sincerely and that participant must at all time voluntary I.e. feel they can leave the study at any time without any fear of adverse consequences. Confidentiality of data was guaranteed. Proper instructions were given about filling of scale and responding to questions. Demographic information was also added. At the end participants were thanked for giving valuable time and cooperation. After data collection the data of 180 participants were composer and analyzed on SPSS 18 and all the hypothesis of current research study was investigated. After analysis the results of current research study illustrated that some hypothesis was rejected and some hypothesis were accepted.

RESULTS:

The purpose of this study was to explore perceived social support and health related quality of life among patients of diabetes. Data obtained from sample was analyzed in order to test proposed hypotheses. Psychometric properties of each scale Multidimensional Scale of Perceived Social Support and WHO-Quality of Life Scale, were also determined.

Correlation analysis was conducted in order to examine the relationship of variables. Regression analysis was computed on study variables to test out the effect of predictor variables on one dependent variable which is health related quality of life. To see the effects of dependent variable there are different tables which demonstrate the effects of predictor on criterion independently.

Table 2: Means, Standard deviations, Alpha reliabilities, Range and Skewness for all study variables of diabetic patients.

Scales and subscales	N	M	SD	α	Range potential	Actual	Skewness
FS	40	17.28	5.64	.91	1-7	3.92-4.71	-.30
FRN	40	16.80	5.331	.86	1-7	4.07-4.30	-.119
SP	40	17.5	5.11	.80	1-7	4.25-4.57	.164
PSS Total	40	51.57	13.8	.91	1-7	3.92-4.70	.028
PHY	40	20.88	4.03	.58	1-5	2.67-3.35	.061
PSY	40	21.98	4.45	.63	1-5	2.52-3.37	-.181
SOC	40	9.58	2.96	.76	1-5	3.07-3.30	.021
EN	40	22.70	5.43	.74	1-5	2.40-3.17	-.016
HRQOL Total	40	77.03	14.03	.86	1-5	2.40-3.40	.529

Note. PSS = perceived social support scale; FS = family support; FRN = friends; SP = special person; BCS Total = brief cope scale; HRQOL Total = health related quality of life; PHY= physical; PSY = psychological; SOC = social; EN= environment

The results of table 2 illustrates the mean, standard deviation, alpha reliabilities and skewness of all variables. The above table shows high alpha reliability coefficient for and skewness of all study PSS Total i.e. .88 while family, friends and special

person also shows acceptable reliabilities which is .91, .86 and .80 respectively, while HRQOL Total and its subscales also have acceptable reliabilities from .58 to .86. overall results illustrated that the instruments used in the study are reliable.

Table 3: Pearson correlation between scales and subscales of Perceived social support and health related quality of life with the total scale scores of Diabetic patients (N =180)

Scales and subscales	PSS	PHY	PSY	SOC	ENV	HRQOL
PSS	–	.39**	.48***	.30*	.10	.47***
PHY		–	.35*	.279	.68***	.62***
PSY			–	.36*	.45**	.55***
SOC				–	.22*	.47**
ENV					–	.76***
HRQOL						–

Note. PSS = perceived social support scale; HRQOL Total = health related quality of life; PHY= physical; PSY = psychological; SOC = social; ENV= environment

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3 describes the inter-correlations among the scales and the subscales among diabetes patients. Results suggest that the Perceived social support

Scale (PSS) have significant positive correlation with Health related quality of life ($r = .47$, $p < .001$). and all its subscales except environmental quality of life.

Table 4: Linear regression predicting health related quality of life among diabetic patients (n = 180)

Variables	Health related quality of life		
	β	F	R^2
PSS	.31*	9.68***	.32

Note. PSS = perceived social support

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4 explained that perceived social support is a significant positive predictor of health related quality of life. Value of F (9.68, $p < .001$).

Table 5: Linear regression predicting physical and psychological health related quality of life among diabetic patients (n =180)

Variables	Physical health related quality of life			Psychological health related quality of life		
	β	F	R^2	β	F	R^2
PSS total	.39**	8.92**	.26	.32**	40.7***	.79

Note. PSS = perceived social support

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5 explained that perceived social support is a significant positive predictor of physical and psychological health related quality of life. (F = 8.92, $p < .01$) and psychological HRQOL (F=40.7, $p < .001$).

Table 6: Linear regression predicting social health related quality of life among diabetic patients (n = 40)

Variables	social health related quality of life		
	β	F	R^2
PSS total	.31*	6.52**	.30

Note PSS = perceived social support

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6 explained that and perceived social support is a significant positive predictor of social health related quality of life (F=6.52, $p < .01$).

Table 7: Means, standard deviation and t values for males and female diabetic patients on Perceived social scale (PSS) and health related quality of life (HRQOL) (n=180)

Scales and subscales	Males (n=100)		Females (n=80)		t	p	95%CI		Cohens d
	M	SD	M	SD			LL	UL	
PHY	21.77	4.14	19.78	3.71	1.58	.121	-.55	4.54	.36
PSY	22.27	5.10	21.61	3.61	1.58	.646	-2.23	3.55	.15
SOC	9.27	3.16	9.94	2.73	.463	.482	-2.58	1.24	.23
ENV	24.91	4.24	20.0	5.61	-.709	.003	1.75	8.06	.99
HRQOL	81.0	13.74	72.0	13.06	2.11	.041	.384	17.68	.68
PSS	50.95	13.74	52.33	13.06	-.310	.758	-10.39	7.63	.10

Note. PSS = Perceived social support scale; HRQOL Total = Health related quality of life; PHY= physical; PSY = Psychological; SOC = Social; EN= Environment

*p < .05. **p < .01. ***p < .001.

Table 7 shows Means, standard deviation and t values for males and female diabetic patients on Perceived social scale (PSS) and health related quality of life (HRQOL) (n=180). Results indicate that no mean difference found in all variables on males and female's diabetic patients.

Table 8: Means, standard deviation and t values for residential areas of diabetic patients on Perceived social scale (PSS) and health related quality of life (HRQOL) (n=180)

Scales and subscales	Rural (n=55)		Urban (n=125)		T	P	95%CI		Cohens d
	M	SD	M	SD			LL	UL	
PHY	20.94	4.25	20.83	3.96	.088	.930	-2.53	2.76	.02
PSY	22.06	5.46	21.91	3.96	.101	.920	-2.77	3.06	.03
SOC	10.6	3.17	9.22	2.81	.886	.381	-1.08	2.76	.50
ENV	22.71	5.98	22.70	5.13	.006	.995	-3.55	3.57	.01
HRQOL	77.41	16.26	76.74	12.50	-.127	.900	-1.56	1.38	.04
PSS	49.35	15.15	53.22	12.88	-.870	.390	-12.85	5.12	.27

Note. PSS = Perceived social support scale; HRQOL Total = Health related quality of life; PHY= physical; PSY = Psychological; SOC = Social; EN= Environment

*p < .05. **p < .01. ***p < .001.

Table 8 shows Means, standard deviation and t values for urban and rural areas among diabetic patients on Perceived social scale (PSS) and health related quality of life (HRQOL). Results indicate that no mean difference found for residential areas of diabetic patients.

DISCUSSION:

The current study reveals the relationship between perceived social support and health related quality of life among diabetic patients. The alpha reliabilities coefficient of all study variables were computed and psychometric properties of scales (PSS and HRQOL) were also calculated to judge the validity and reliability of the scales, whether scales are reliable and valid on Pakistani diabetic population or not. The scales of all the variables showed good and

acceptable reliabilities coefficients and all of the three scales (PSS and HRQOL Scale) were reliable for the sample of diabetic patients and there was no need to discard any item because all values of alpha coefficient were acceptable.

Pearson Correlation was also computed to find out the correlation of the study variables (PSS and HRQOL). The scales and subscales were significantly positively correlate with each other.

First hypothesis of the current study states that Perceived social support is positively correlate with health related quality of life among diabetic patients and the result of the study also proved the hypotheses. Sean B (2012) conducted the research to check the direct and indirect effects of perceived

social support on physical and mental health related quality of life on 602 HIV patients in Canada. According to the study results indicated that perceived social support has direct effect on physical and mental health of a patient mediated by depressive symptoms.

Another research was done by Barutcu, C. D., & Mert, H. (2013) to describe the level of perceived social support and quality of life in heart failure patients. About 150 heart patients were included in the study. Results indicated that quality of life of the patients improved with increasing social support. The treatment work better if family and social support will increase for heart patients.

Second hypothesis of the study is that the level of perceived social support is high among males as compared to females and the result of the study don't support the hypothesis because result indicated the no mean difference among males and females. The previous research was done to determine the combined effects of gender and levels of social support on the patients of heart failure. About 400 Persons with age ≥ 65 years were taken. Results showed that women have significantly lower support and physical function scores but after 1 year there were no significant gender differences were found. (Anderson et al., 2012).

Third hypothesis is females have high rate of HRQOL as compared to males and hypothesis is rejected because according to the results there is no mean difference among males and females HRQOL. According to previous research which was conducted by Parisa Amiri and Mehrdad Karimi in 2015 the purpose of study was to determine the gender differences in health-related quality of life (HRQOL). The study was conducted on 750 individuals aged 60–90 years who lived in Iran. Results indicated that women had significantly lower score in HRQOL compared with men.

CONCLUSIONS:

The present study was conducted to find out the perceived social support and health related quality of life among patients of diabetes. The result found significant relationship between the independent variable and dependent variable. The effect of demographical variable gender family system education etc. was also checked on the scale and subscale. Most of the demographic variables have non-significant mean differences.

Findings of the present study show that perceived social support has also a positive correlation with the

health related quality of life. Apart from objectives, correlation among all the study variables is also computed.

Result showed that dependent variable which is health related quality of life has a significant correlation between perceived social support. Diabetic patients. Perceived stress is a negative predictor of psychological wellbeing among drug addicts. s. The result showed that independent variables have a significant correlation with dependent variable.

REFERENCES:

1. Albai, A., Sima, A., Papava, I., Roman, D., Andor, B., & Gafencu, M. (2017). Association between coping mechanisms and adherence to diabetes-related self-care activities: a cross-sectional study. *Patient preference and adherence*, 11, 1235.
2. Alberti, F. B. (2010). *Matters of the heart: history, medicine, and emotion*. Oxford University Press.
3. Albrecht, T. L., & Adelman, M. B. (1987). Communicating social support: A theoretical perspective. In T. L. Albrecht & M. B. Adelman (Eds.), *Communicating social support* (pp. 18-39) Newbury Park, CA: Sage.
4. Amiri, P., Deihim, T., Taherian, R., Karimi, M., Gharibzadeh, S., Asghari-Jafarabadi, M., ... & Azizi, F. (2015). Factors affecting gender differences in the association between health-related quality of life and metabolic syndrome components: Tehran lipid and glucose study. *PLoS One*, 10(12), e0143167.
5. Amiri, P., Ghofranipour, F., Ahmadi, F., Hosseinpanah, F., Montazeri, A., Jalali-Farahani, S., & Rastegarpour, A. (2011). Barriers to a healthy lifestyle among obese adolescents: a qualitative study from Iran. *International journal of public health*, 56(2), 181-189.
6. Anderson, E. S., Winett, R. A., Wojcik, J. R. (2007). Self-regulation, self-efficacy, outcome expectations, and social support: social; cognitive theory and nutrition behavior. *Annals of Behavioral Medicine*, 34, 304-312.
7. Anderson, E. S., Wojcik, J. R., Winett, R. A., & Williams, D. M. (2006). Social-cognitive determinants of physical activity: the influence of social support, self-efficacy, outcome expectations, and self-regulation among participants in a church-based health promotion study. *Health Psychology*, 25(4), 510.

8. Andrew, F. M., & Withey, S. B. (1976). Social indicators of well-being. *New York and London: Plenum*, 20-31.
9. Khan, M. N., Akhter, M. S., Ayub, M., Alam, S., & Laghari, N. U. (2003). Translation and validation of quality of life scale, the brief version. *Journal of the College of Physicians and Surgeons--Pakistan: JCPSP*, 13(2), 98-100.
10. Bailey, C. J., & Turner, R. C. (1996). Metformin. *New England Journal of Medicine*, 334(9), 574-579.
11. Bekele, T., Rourke, S. B., Tucker, R., Greene, S., Sobota, M., Koornstra, J., ... & Hwang, S. W. (2013). Direct and indirect effects of perceived social support on health-related quality of life in persons living with HIV/AIDS. *AIDS care*, 25(3), 337-346.
12. Bianco, T., & Eklund, R. C. (2001). Conceptual considerations for social support research in sport and exercise settings: The case of sport injury. *Journal of sport and exercise psychology*, 23(2), 85-107.
13. Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of behavioral medicine*, 4(2), 139-157.
14. Calman, K. C. (1984). Quality of life in cancer patients--a hypothesis. *Journal of medical ethics*, 10(3), 124-127.
15. Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International journal of behavioral medicine*, 4(1), 92.
16. Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual review of psychology*, 61, 679-704.
17. Clarke, P. J., Marshall, V. W., Ryff, C. D., & Rosenthal, C. J. (2000). Well-being in Canadian seniors: Findings from the Canadian study of health and aging. *Canadian Journal on Aging/La Revue canadienne du vieillissement*, 19(2), 139-159.
18. Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
19. Ferrans, C. E. (1990). Development of a quality of life index for patients with cancer. In *Oncology nursing forum* (Vol. 17, No. 3 Suppl, pp. 15-9).
20. Ferrans, C. E., & Powers, M. J. (1985). Quality of life index: development and psychometric properties. *Advances in nursing science*.
21. Finlay, A. Y. (1997). Quality of life measurement in dermatology: a practical guide. *British Journal of Dermatology*, Vol. 136, pp. 305-314.
22. Gjesfjeld, C. (2008). *Economic hardship, social support, and maternal depression: A test of the social support deterioration model* (Doctoral dissertation, University of Pittsburgh).
23. Gladis, M. M., Gosch, E. A., Dishuk, N. M., & Crits-Christoph, P. (1999). Quality of life: Expanding the scope of clinical significance. *Journal of Consulting and Clinical Psychology*, 67(3), 320.
24. Group, T. W. (1998). The World Health Organization quality of life assessment (WHOQOL): development and general psychometric properties. *Social science & medicine*, 46(12), 1569-1585.
25. Grundy, E., & Bowling, A. (1999). Enhancing the quality of extended life years. Identification of the oldest old with a very good and very poor quality of life. *Aging & Mental Health*, 3(3), 199-212.
26. Holmes, J., McGill, S., Kind, P., Bottomley, J., Gillam, S., & Murphy, M. (2000). Health-related quality of life in type 2 diabetes (T2ARDIS-2). *Value in Health*, 3, 47-51.
27. Hu, F. B., Manson, J. E., Stampfer, M. J., Colditz, G., Liu, S., Solomon, C. G., & Willett, W. C. (2001). Diet, lifestyle, and the risk of type 2 diabetes mellitus in women. *New England journal of medicine*, 345(11), 790-797.
28. Kearney, P. M., Whelton, M., Reynolds, K., Muntner, P., Whelton, P. K., & He, J. (2005). Global burden of hypertension: analysis of worldwide data. *The lancet*, 365(9455), 217-223.
29. Khan, M. N., Akhter, M. S., Ayub, M., Alam, S., & Laghari, N. U. (2003). Translation and validation of quality of life scale, the brief version. *Journal of the College of Physicians and Surgeons--Pakistan: JCPSP*, 13(2), 98-100.
30. Kitabchi, A. E., Umpierrez, G. E., Miles, J. M., & Fisher, J. N. (2009). Hyperglycemic crises in adult patients with diabetes. *Diabetes care*, 32(7), 1335-1343.
31. Larson, R. (1978). Thirty years of research on the subjective well-being of older Americans. *Journal of gerontology*, 33(1), 109-125.
32. Lifton, R. P., Gharavi, A. G., & Geller, D. S. (2001). Molecular mechanisms of human hypertension. *Cell*, 104(4), 545-556.
33. Malik, V. S., Popkin, B. M., Bray, G. A., Després, J. P., Willett, W. C., & Hu, F. B. (2010). Sugar sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta-analysis. *Diabetes care*.

34. Massam, B. H. (2002). Quality of life: Public planning and private living. *Progress in planning*, Vol.58, pp. 141.
35. Munro, B. H. (2005). *Statistical methods for health care research* (Vol. 1). lippincott williams & wilkins.
36. Musial, F., Büssing, A., Heusser, P., Choi, K. E., & Ostermann, T. (2011). Mindfulness-based stress reduction for integrative cancer care—a summary of evidence. *Complementary Medicine Research*, 18(4), 192-202.
37. Navas-Acien, A., Guallar, E., Silbergeld, E. K., & Rothenberg, S. J. (2006). Lead exposure and cardiovascular disease—a systematic review. *Environmental health perspectives*, 115(3), 472-482.
38. Norris, F. H., & Kaniasty, K. (1996). Received and Perceived social support in times of stress: A test of the social support deterioration deterrence model. *Journal of Personality and social psychology*, 71, 498-511.
39. Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry: Interpersonal and biological processes*, 65(3), 207-239.
40. O'Brien, E., Waeber, B., Parati, G., Staessen, J., & Myers, M. G. (2001). Blood pressure measuring devices: recommendations of the European Society of Hypertension. *BMJ: British Medical Journal*, 322(7285), 531.
41. Oort, F. J., Visser, M. R., & Sprangers, M. A. (2005). An application of structural equation modeling to detect response shifts and true change in quality of life data from cancer patients undergoing invasive surgery. *Quality of Life Research*, 14(3), 599-609.
42. Pepine, C. J., Handberg, E. M., Cooper-DeHoff, R. M., Marks, R. G., Kowey, P., Messerli, F. H., ... & Erdine, S. (2003). A calcium antagonist vs a non-calcium antagonist hypertension treatment strategy for patients with coronary artery disease: The International Verapamil-Trandolapril Study (INVEST): a randomized controlled trial. *Jama*, 290(21), 2805-2816.
43. Ripsin, C. M., Kang, H., & Urban, R. J. (2009). Management of blood glucose in type 2 diabetes mellitus. *Am Fam Physician*, 79(1), 29-36.
44. Rosenstiel, A. K., & Keefe, F. J. (1983). The use of coping strategies in chronic low back pain patients: relationship to patient characteristics and current adjustment. *Pain*, 17(1), 33-44.
45. Rother, K. I. (2007). Diabetes treatment—bridging the divide. *The New England journal of medicine*, 356(15), 1499.
46. Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Traditional views of social support and their impact on assessment*. John Wiley & Sons.
47. Shera, A. S., Rafique, G., Khwaja, I. A., Ara, J., Baqai, S., & King, H. (1995). Pakistan national diabetes survey: prevalence of glucose intolerance and associated factors in Shikarpur, Sindh Province. *Diabetic medicine*, 12(12), 1116-1121.
48. Shi, Y., & Hu, F. B. (2014). The global implications of diabetes and cancer. *The lancet*, 383(9933), 1947-1948.
49. Silverstein, J., Klingensmith, G., Copeland, K., Plotnick, L., Kaufman, F., Laffel, L., ... & Clark, N. (2005). Care of children and adolescents with type 1 diabetes: a statement of the American Diabetes Association. *Diabetes care*, 28(1), 186-212.
50. Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annu. Rev. Psychol.*, 58, 119-144.
51. Smith, A. E. (2000). Quality of life: a review, education and aging. *Triangle journals*, Vol.15, pp. 419-435.
52. Taillefer, Christine, M., Dupuis, Gilles, Roberge, Marie-Anne, and Lemay, Sylvie. (2003). 'Health related quality of life models: systematic review of literature', *Social indicators research* 23(2), 122-135.
53. World Health Organization. (2000). *The world health report 2000: health systems: improving performance*. World Health Organization.
54. Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.