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Social Support, Health Locus of Control and Quality of Life in Patients with Type I and Type II Diabetes

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Abstract

Objective. *The current study initiated with the thought to explore the relationship between social support, health locus of control and quality of life in patients with type I and type II diabetes.*

Design. *Co-relational research design was used.*

Place and Duration of Study. *This study was conducted at Services Hospital Lahore. This study was completed in six months.*

Methods. *The data collected method was survey that was employed via purposive sampling by administrating questionnaires relevant to social support, health locus of control and quality of life.*

Result. *The results revealed that there is a strong relationship in social support, health locus of control and quality of life in patients with type I and type II diabetes. However, quality of life was likely to be significantly positively predicted by social support and health locus of control.*

Conclusions. *The results of current study postulated the relationship between social support, health locus of control and quality of life and prediction of quality of life by social support and health locus of control.*

Key words: Social support, health locus of control, quality of life, type I & II diabetes

Introduction

Now-a-days, patients with type II diabetes are increasing day by day all over the world. According to a survey, there are approximately three hundred and fifty million people with diabetes and surprisingly, type II diabetes will be ranked seventh in all over the world (1). The major cause of this disease is linked with unhealthy living styles that include unhygienic eating patterns, inactive lifestyle and different biological factors. Diabetes can cause serious psychological problems that lead to different biological diseases later in life (2). Diabetes is incurable but it can be managed and its management enables one to self-management. Unfortunately, a very less number of people comply with medical treatment. Recently, the World Health Organization (WHO) has pointed that chronic diseases are incurable by government policies (4). This phenomenon can be explained by the biomedical model that is based on the design of preventive programs but unable to follow social and cultural factors. This model takes patients towards isolation and ignores social paradigm that eventually leads oneself towards sickness. It also highlights the ineffective role of one's lifestyle and less

influential for social and economic factors of individuals (5).

Researches related to social sciences enable health care practitioners to comprehend the ultimate surroundings of patients. On personal capacity, the fundamental effect occurs by emotional experiences. After proper diagnosis, the patient should modify his daily routine and should adhere towards effective treatment (6). Bury stated that a chronic disease followed by a disruptive event that permanently influential on one's daily life. Patients with chronic disease face disturb self-structure and the patient signifies his personal experiences of day to day life with different social, personal and environmental resources (7). Interestingly, patients are vulnerable by social support and social networks. These phenomena are dependent on the position that social and personal resources should be perceived as societal. On the other hand, social support is comprehended as ones' hypothetical perception of one's available societal reserves. It explains the potentiality of the basic and important significant social circles that are obeyed by the people to solve their problems at micro or macro level. Contrary, these kinds of social networks are the sum of all the relationships that are regarded as important can be scrutinized structurally and performance (8). Social capital is regarded as an imperceptible thing consisted of the set of unceremonious relationship of people having trustworthiness and harmony (9). Researches on social support highlight the benefits of patients as they perceived themselves as an integral part of a structured network. Psychological elements of social relations are linked to different support groups. The sense of belongingness to a certain group and awareness about one particular group lead the foundation of a social network as a defensive factor and minimize the stress necessitated by day to day life (10). Certain studies on diabetic people, have claimed about protective elements and agreed on the importance of social networks in facilitating support during the related events that occur with patients having different chronic diseases. Most importantly, it is also emphasized that people influenced by these kinds of diseases are not only perceived as less support but are also willing to provide support but as well as reciprocity (11). Moreover, there are many negative effects on one's health including substantial medical care facilities.

Health locus of control (HLC) has an important role in dealing with chronic illness and guarantees better health care plans. HLC points to one's beliefs about controlling his health and extent of his control over health related results (12). That's why, it determine one's efforts that are contributory towards health related care and treatment. There can be different forms of HLC as internal and external (13). The internal domain deals with one's responsibilities for his or her behavior and health related outcome. On the other hand, the external domain refers to one's beliefs for significant others. These significant others can be health care professionals, care givers and any other individual. It also marked as a belief that one's health is being controlled or affected by any luck (14). Many empirical researches have been claimed that health locus of control has been an important moderator for different health behaviors and treatment adherence relevant to health. Patients having higher level of internality tend to be having more

positive results on their health, whereas, people having lower level of internality and higher externality reported poor health outcomes by feeling less controlled health complications for their diseases (15). It has been also postulated that patients having greater locus of control tend to have effective techniques for controlling their pain. It had also been reported that positive relationship among beliefs related with health locus of control, psychological elements and biological factors of physical health.

Psychosocial status of people is linked with their capability to manage their needs relevant to health conditions. In this regard, self-efficacy is reported as having a vital influence on one's health outcome (16). The influence of chronic diseases on one' biological, psychological and social perspective of health and wellness is correlated with difficulties of one's adjustment to their illnesses and changes in their day to day routine and life style. Health locus of control and self-efficacy are regarded as important factors including care givers, treatment plans and health care professionals. Generally patients with type II diabetes having different health care settings perceive more control and involvement in their decision power (17). The management of patients with diabetes demands appropriate concentration on the prevalence of psychological and social health related problems but also on different clinical factors such as one's locus of control, stress and self-efficacy. The relationship between health locus of control and health related outcomes have widely been established in previous researchers, whereas, factors that increase moderate locus of control have not been examined properly (18). Generally, it has been claimed that there is a positive effect of higher health locus of control on patients with type II diabetes' health but there has been very less literature on one's demographic characteristics and his or her health locus of control (19).

Quality of life (QoL) has been defined by World Health Organization as an emerging trend by the presence of one's physical, mental and social wellness and absence of one's disease and illness (20). QoL is a vital health outcome that represents the fundamental purpose of all health related interventions. People having diabetes tend to have low level of quality of life than that of without any illness. QoL is not linked with duration or type of diabetes, however, glycemic control is thought to be related with better quality of life. People having diabetes feel different challenges not only by the disease but also by its related environmental factors (21). People having diabetes are liable to several decisions in their day to day life. There have been two main perspectives on health related quality of life that have been coined as generic and specific. The most frequently used measure is named as generic that measure quality of life is studies of people with diabetes including physical, social and functional role of different behavioral and health related problems. Mental health measurement, perceived health status and intensity of pain is marked as a subjective factor of health and common psychological and mental wellbeing (22). There have been several researches on exploration of influence of different elements on the quality of life of patients diagnosed with diabetes. The overall influence of social support, health locus of control and quality of life is yet to be explored; therefore, the purpose of the current study was to find out relationship between social support,

health locus of control and quality of life in patients with type I and type II diabetes.

Hypothesis

The hypotheses were as under:

- There is likely to be relationship between social support, health locus of control and quality of life.
- Quality of life is significantly positively predicted by social support and health locus of control.

Method

Research design

The current research was executed through co-relational research design.

Sample and Sampling Strategy

The convenient sample of 100 patients diagnosed with diabetes was collected with minimum age eighteen years and without any pre-diagnosed history of any psychological problem.

Measures

Following questionnaire were used to operationalize the construct of current study:

Multidimensional Health Locus of Control Scale (MHKC Form C): This scale comprised of three sub-scales; internal, chance and powerful others with six items for each. The alpha reliability for each subscale was .67, .77 and .72 respectively (23).

Social Support Questionnaire: Social Support Questionnaire (SSQ) was used with two subscales: number of social support and satisfaction with social support. The SSQ has been validated with different scales related to personality and adjustment linking with positive and negative social support (24).

WHOQOL-BREF (World Health Organization 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. (15) The reliability of this tool in every four spaces was 0. 70. (25)

Procedure

After permission process, the instruments were taken to the participants for administration purposes. The researcher briefly introduced nature 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. 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. The average time to fill the questionnaires will take around 20 minutes.

Ethical 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 were 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

Descriptive statistic and Psychometric Properties of Social Support, Health Locus of Control, and Quality of Life in Patients with Type I and Type II Diabetes (N = 100)

Variables	*M*	*SD*	*α*	*Sk*[a]
Social support	8.25	44.87	.74	.34
HLOC	26.24	22.88	.71	.21
Quality of Life	38.27	23.58	.80	.41

[a] Standard error of skewness = .10

Table 1 shows mean and standard deviation for social support, health locus of control and quality of life along with internal consistency index (alpha coefficients) for all above mentioned scales. The results showed that all scales were internally consistent as alpha coefficients was.70.

Table 2

Pearson Correlation among Social Support, Health Locus of Control and Quality of Life in Patients with Type I and Type II Diabetes (N = 100)

Variables	1	2	3
1. Social Support	-	.54***	.44***
2. HLOC	-	-	.57***
7. Quality of Life	-	-	-

***$p < .001$.

Table 2 shows Pearson correlation among social support, health locus of control and quality of life and as mentioned, it can be seen that there is likely to be significantly and positively correlation in social support, health locus of control and quality of life in patients with type I and type II diabetes.

Table 3

Regression Analyses for Social Support, Health Locus of Control and Quality of Life in Patients with Type I and Type II Diabetes (N = 100)

Variables	Quality of Life	
	β	R^2
1. Social Support	.18***	
2. Health Locus of Control	.21***	
3. Quality of Life	.30***	.25***

***$p < .001$.

Table 3 shows prediction of social support, health locus of control and quality of life in patients with type I and type II diabetes. The overall model explained twenty five percent variances, however, quality of life is likely to be predicted by social support and health locus of control

Discussion

Health locus of control emphasizes that patients' health related attitudes explain how the patients are dependent not only on themselves but also on general health practitioners or their care givers. On the other hand, perception of nurses for health locus of control of patients is linked with the notion whether nurses motivate patients to play a vital role in managing their health. Therefore, both the patients and the health care professionals are required to have a strong relationship and consensus on the achievement of management plan. The findings of the current study showed that there is likely to be relationship between social support, health locus of control and quality of life in patients with type I and type II diabetes. The findings of the current

study are supported by the previous researchers that claimed that patients with chronic disease showed firm belief that their health is more effective by health care professionals and friends than that of family members or others (26). It can also be explained as the long illness related duration may be influential on perception of patients about health locus of control. Moreover, patients' perceptions were linked with higher locus of control and adherence to treatment plans than that of internal health locus of control (27). As the prediction was postulated by social support and health locus of control for quality of life in current study, this finding is also been credited by a previous research stating that moderate level of health locus of control by patients diagnosed with type II diabetes. Perceived self-efficacy by patients, the current findings can be regarded as moderate perception of quality of life with previous international literature. Moreover, social support depending on its nature was related to gender i.e. male or female. However, support need to be differentiated at different levels of conditions. In simple words, support is regarded as what is being received and it is hugely based on solidarity action. In contextual reality of type II diabetes, it has been postulated that strong family functioning and social networking is positively and significantly predictor for increasing the perceptions of patients for individual capacity and its management (28). Family and friends tend to be a strong provider of emotional wellbeing and health friendly outcomes.

Conclusions

Diabetes is thought to be life threatening disease and it brings a lot of challenges not only for one's life but also for his or her other family members in terms of psychological distress and depression. The primary purpose is linked with quality of life but unfortunately there has been a lot of confusion regarding contextual quality of life. Now-a-days, a number of psychometric research tools have been developed for evaluation of QoL in relationship with social support and health locus of control. Diabetes is influential on major areas of QoL regardless of environment, culture and profession. However, it is postulated that the physical component must be coexisting with renal failure and diabetes, the psychological component is linked with type I diabetes emerged with depression and the social component is being effecting by destruction of family and friends. Therefore, it would be highly appreciated if different psychological tools and test could be translated into Urdu and being used at a wider level so that wider exploration of social support, health locus of control and quality of life in patients with type I and type II diabetes may be addressed in future.

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