

Role of Resilience in Self Esteem and Mental Health of Diabetic Patients

Abstract

Diabetes is a group of metabolic diseases characterized by hyperglycemias resulting from defects in insulin secretion, insulin action, or both. Majority of diabetic patients are unable to do their proper work in time because of their physical and mental disturbances. The aim of the present study was to assess the self esteem, resilience and mental health of diabetic patients. The sample consisted of 35 diabetic and 35 non diabetic healthy people from S.S. Hospital, BHU, Varanasi. All the participants were in the age range of 45 to 55 years. Data was statistically analysed for examine the differences in the level of mental health, self esteem and resilience between diabetic and non diabetic healthy person by computing t test and also for determining the prediction of mental health by all domains of resilience through correlation and step wise multiple regression analysis. Results showed that there are significant differences between the means for self esteem, resilience and mental health among diabetic and non diabetic healthy. In order to examine the relative significance of various dimensions of resilience in predicting the mental health step wise multiple regression analysis was conducted and finding revealed that self awareness (a dimension of resilience) emerged as the best predictor of somatic symptom (Dimension of mental health) contributing 43% of total variance. Overall the findings of the present study imply that resiliency plays an important role in enhancement of mental health and self esteem.

Keywords: Self Esteem, Resilience, Mental Health, Diabetes.

Introduction

Diabetes is a chronic disease and the most common endocrine disorder, characterized by abnormalities in the carbohydrate, protein and fat metabolism (Taheri et al. 2011). The previous research reports that the prevalence of diabetes has turned into a global epidemic (Asad Abadi et al. 2014). Research has shown an increasingly clear relationship between diabetes and a variety of mental health issues. These include diagnosable psychiatric disorders, and other problems that are specific to the experience of living with diabetes. "Diabetes distress" refers to the negative emotions and burden of self-management related to living with diabetes. Many studies have been carried out in order to understand how people, in adverse situations, have shown positive ways of coping with their reality. In this way, the concept of resilience has been appropriated and evolved in the human, social, and health sciences. This corresponds to the capacity of human beings to face the adversities of life, to learn from them, to overcome them, and be transformed by them (Dell'aglio et al. 2011, Fuentes NIGAL et al. 2017).

Resilience is characterized by the ability to return to the functioning levels prior to the traumatic or threatening situation. It makes experiencing a positive psychological process possible as a result of dealing with the critical vital circumstance which includes, among others, the development of more affective relationships, recognition of individual possibilities, a greater sense of personal strength, and significant changes in the hierarchy of vital priorities which, as a whole, may be a protective factor (Montes-Hidalgo et al. 2016). It is believed that the development of resilience abilities involves the activation of their self-esteem abilities. By interfering in affective, social, and psychological conditions of individuals, self-esteem becomes an indicator, or a meter, of mental health, wellbeing and quality of life. Studies on resilient characteristics shows the sufficient evidence that there is a close relationship with self-esteem, because it allows for a better adaptation of the individual to the environment, besides providing a greater capacity to withstand pressures and face situations.



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Poorly resilient individuals present greater exposure to stress in the face of adversity, which can generate anxiety, depression, anger, impulsivity, and low self-esteem (Leite MAC et al.2015).

One reason for the lack of research is that although studied in various contexts for many years, there is no universal agreement on what constitutes "resilience." In fact, distinguishing factors that define resilience and ones that promote or reduce resilience can be difficult (Kinard, 1998). Diabetes is very sensitive to stress effects. Stress in many diabetic patients disrupts the blood glucose control process. Resilience-based diabetes self-management education can improve the psychological and physiological health in patients with type 2 diabetes. The goal of our study was to explore the impact of self esteem and resilience on glycemia. We expected that resilience would differentiate levels of glycemic control and self-care behaviours and that those with higher levels of resilience would be most protected from the adverse effects of increases in diabetes-related distress.

Objectives of the Study

1. To assess and compare the self-esteem, resilience and mental health of Diabetic and healthy
2. To determine the association between self-esteem , resilience, and mental health
3. To explore the impact of resilience on mental health

Methods

The sample comprised of 35 diagnosed patients of diabetes and 35 healthy by using the purposive sampling. The diabetic patients were taken from S.S. Hospital, B.H.U. Varanasi. All patients were interviewed for demographic and personal history. Demographic variables (Age, Sex, Education, Marital status) and Clinical variables (duration of disease, Onset of disease) were considered.

Inclusion Criteria

Participant who is diagnosed as diabetic by the physician, willing to participate in the study and who is able to speak or understand Hindi was selected.

Procedure

The participants were approached after taking permission from the respective hospitals and

consent from the participants. The participants were given full information about the measures and the procedure of completing those questionnaires. There queries were effectively handled. Patients were assured that their confidentiality will be maintained. The subjects were asked to fill three scales i.e. Resilience scale, self esteem scale and General health questionnaire.

Tools

Self-Esteem Scale

Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used. It consists of 10 statements with 4 responses for each statement. Each item is to be scored as 1-2-3-4. Total score range from 10-40. Higher score depicts high self-esteem of the respondent.

GHQ-28

Goldberg General health questionnaire (Goldberg 1979) was used. The existence of four subscales permits analyses within the subscales and this is an additional advantage of the GHQ-28 scale over the other versions. Its scores range from 0 to 28. Higher scores indicate a greater probability of a psychiatric distress. It has been shown to be a valid and reliable instrument across many other cultures as well. Reliability coefficients have been ranging from 0.78 to 0.95 in various studies. Cronbach's alpha was reported for GHQ as 0.82, as well as for each subscale 0.85 for somatic, 0.87 for anxiety, 0.79 for social dysfunction, and 0.91 for depression.

Resilience Scale by Mampne (2012)

The resilience scale by Mampne (2012) was used for the purpose of identifying resilient and non-resilient person. The scale consists of 25 items based on four factors such as problem solving, social competence, autonomy and sense of purpose. It has eight dimensions- using supportive relationship, role model, future aspiration, sense of control, commitment, problem solving, giving and maintaining relationship, self-awareness. Scoring on this scale is five-point rating scale (0 to 4).

Results and Discussion

To assess and compare the differences between diabetic and healthy person on self esteem, Resilience and mental health, Mean, SD and t values were computed and the obtained results have been displayed in table-1.

Table-1
Mean, SD, and T-Values of Diabetic and Healthy Person on Self- Esteem and Resiliency and Mental Health

Measures	Nature of sample	mean	SD	t-value
Self-esteem	Diabetic	9.71	3.40	12.28**
	Healthy	20.57	3.96	
supportive relation	Diabetic	9.08	4.13	2.968**
	Healthy	12.22	4.72	
role model	Diabetic	2.17	1.09	.88(NS)
	Healthy	2.42	1.33	
future aspiration	Diabetic	1.74	1.09	2.88**
	Healthy	2.60	1.37	
sense of control	Diabetic	3.54	1.65	2.57**
	Healthy	4.71	2.12	
commitment	Diabetic	6.80	3.94	3.75**
	Healthy	10.08	3.34	
problem solving	Diabetic	5.54	3.01	3.18**

	Healthy	7.68	2.59	
giving maintain relationship	Diabetic	7.11	2.57	1.40*
	Healthy	8.05	3.01	
somatic symptoms	Diabetic	8.97	4.59	3.35**
	Healthy	5.51	3.99	
Anxiety/insomnia	Diabetic	10.05	5.11	2.55**
	Healthy	7.11	4.52	
social dysfunction	Diabetic	9.85	4.30	2.09**
	Healthy	7.65	4.48	
severe depression	Diabetic	6.34	4.24	2.46**
	Healthy	3.77	4.49	

*P < .05, **P < .01

Table-1 shows the nature of significant difference between diabetic and healthy person with respect to self esteem and all dimensions of resilience. It reveals that diabetic person scored low on self esteem and all domains of resilience and differences were found to be significant on self esteem, supportive relations, future aspiration, and sense of control, commitment, and problem solving and giving maintain relationship dimension. Resilience is the ability to withstand and bounce back from adversity. Studies in people with diabetic have shown

that low level of resilience is related to higher A1C level (Ryan et al. 2014). Table also reveals that diabetic person scored high on all dimensions of mental health. High score on GHQ indicates poor mental health. Having diabetes can also lead to a mental health condition that doctors call diabetes distress. This condition shares some elements of depression, anxiety, and stress. Following a rigorous insulin schedule might disrupt a person's daily routine and trigger concerns about missing a dose, causing regimen distress.

Table-2

Correlation of Various Dimensions of Resilience with Self Esteem and GHQ

Measures	Self Esteem	Somatic	Anxiety	Social Dys	Depression
Self esteem	----	-0.44**	-0.35**	-0.33**	-0.39**
Supportive relationship	0.43**	-0.58**	-0.51**	-0.43**	-0.69**
Role modal	0.24**	-0.60**	-0.44**	-0.45**	-0.61**
Future aspiration	0.43**	-0.60**	-0.61**	-0.33**	-0.59**
Sense of control	0.40**	-0.51**	-0.45**	-0.37**	-0.49**
Committment	0.47**	-0.61**	-0.53**	-0.37**	-0.59**
Problem solving	0.41**	-0.64**	-0.53**	-0.29*	-0.54**
Maintaining relations	0.30**	-0.54**	-0.33**	-0.45**	-0.52**
Self awareness	0.40**	-0.66**	-0.65**	-0.44**	-0.67**

**p < 0.01

It is evident from table-2 that all dimensions of resilience is negatively and significantly correlated with GHQ except self esteem which is positively correlated with resilience. It means resilience can help and protect from various mental health conditions, such as depression and anxiety. Resilience can also

help offset factors that increase the risk of mental health conditions, such as being bullied or previous trauma. If person have an existing mental health condition, being resilient can improve the ability to cope (Parvaneh and M.Ali 2010).

Table 3

Step-Wise Multiple Regression Analysis Using Resilience Self-Awareness, Problem Solving, And Role Model As Predictors And Somatic Symptoms As Criterion

Predictors	Criterion (Somatic symptoms)						
	R	R2	R2 change	B	Beta	t	F
Self awareness	0.65	0.43	0.43	-0.25	-0.33	2.84*	52.11**
Problem solving	0.71	0.51	0.08	-0.44	-0.28	2.45**	35.36**
Role model	0.73	0.54	0.02	-0.86	-0.22	2.02**	26.03**

**p < 0.01

However, as relative significance of various dimensions of resilience in predicting mental health cannot be determined by simple bivariate correlation, so step wise multiple regression was conducted which has been shown in table -3. The results revealed that self awareness emerged as the best predictor of mental health contributing 43% of total variance followed by problem solving and role model contributing 8% and 2%. Beta indicates that higher level of self awareness and problem solving attitude is associated with reduced mental illness. In reduction of

mental illness and enhancement of all aspects of resilience was found to be significant. It indicates that resilience relies on the characters that related to positive outcomes in exposure to difficulties of life (Tugade & Fredrickson, 2004).

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