

Assessment of Self Hardness and its Relationship to Treatment Acceptance for Patients with Diabetes Mellitus at Diabetic Center in Hilla City/Iraq

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Abstract:

Background: Accepting the treatment of diabetes is a necessity to avoid the risks of the disease and to better predict the outcome of the disease. Care should be taken to ensure that the patient's positive responses to the treatment, especially with regard to his beliefs about the disease and his recovery, Focusing on supporting aspects of his personality, enhancing his awareness of his own self hardness, and providing the necessary social support, which increases his levels of acceptance of treatment, gives him the ability to tolerate symptoms of disease, and the disadvantages of treatment.

Objectives: To assess the self hardness and treatment acceptance for patients with diabetes mellitus; and to determine relationship between self hardness for diabetic patients and their treatment acceptance.

Methodology: A descriptive study was conducted through the period of August 27th to October 5th at diabetic's center in Hilla City, by the used of questionnaire and interviews techniques, data are collected from those who attended the diabetic's center and diagnosed with diabetes mellitus. The questionnaire consist of three parts, part one concerned the patient's demographic characteristics, part two concerned the patient's treatment acceptance which composed of 38 items, and part three concerned the patient's self hardness which composed of 48 items. The data was analyses through using SPSS to find out the self hardness, treatment acceptance, and relationship between self hardness and treatment acceptance.

Results: The study results revealed that the 50% of the participants are responses to never acceptance to their treatment and 47% of them with moderate self hardness. In addition, there is a high significant relationship between patients self hardness and their treatment acceptance at p-value ($< 0.0.5$).

Conclusions: The study concludes that the half of the patients who reviews towards diabetics center in Hilla City never responses to treatment acceptance. And they are moderately self hardness. As well as, the self hardness affected their treatment acceptance.

Recommendations: The study recommends for decision makers need to be design programs to enhance the self-strength of patients with diabetes, ranging from psychological and social programs to face all difficult conditions when they occur strongly. It is also, self hardness is an important and prominent variable in psycho-social science, so it must be used for future studies.

Key Words: Assessment, Self Hardness, Treatment Acceptance, Diabetic Patients.

I. INTRODUCTION

Self-hardness means control, commitment, endurance and self-reparation which helps the individual to cope and face the challenges of life. It is linked to the prevention or persistent of diseases or disabilities. Despite all that the individual may face in life from acute or chronic conditions, as prone to despair, helplessness and resignation⁽¹⁾. Hardness is the measure of how resistant a sample is to diabetics or permanent problems due to commitment⁽²⁾. Also, hardness means the individual's belief that he can be controlled in the stressful situations to which he is exposed⁽³⁾.

Self hardness it means a constellation that concerned with traits of personal that act as a source of resistance in the face of stressful events⁽⁴⁾. As a general trait in a personality that carries on its composition and development the diverse environmental experiences surrounding the individual since childhood⁽⁵⁾.

Diabetes is the mother of the endocrine system and is caused by the inability of the body to secrete insulin, its biological effect decreases, or both⁽⁶⁾. The diabetic patient needs to have self-realization, realism and objectivity in self-assessment and events, setting future goals, caring for

the environment, and actively participating in maintaining, anticipating problems and preparing for them⁽⁷⁾. The acceptance, it is a compliance with a behavioral or religious norm, degree of agreement of the patient's behavior with the instructions on medicine or health⁽⁸⁾. The degree of harmony between the individual's behavior with regard to taking medication doses, following the diet, or modifying the lifestyle, prescriptions and medical recommendations⁽⁹⁾. There are many factors does not recognized by diabetic patients, such as factors related to the patient, factors associated with the disease, factors related to the therapeutic process, social and economic factors, and the relationship doctor / patient⁽¹⁰⁾.

II. METHODOLOGY

Objectives of the Study

To assess the self hardness and treatment acceptance for diabetic patients in Hilla City. And also, to determine relationship between self hardness for diabetic patients and their treatment acceptance.

Study Design: A descriptive study used assessment approach is carried out to assess self hardness for those who reviews of diabetic center in Hilla City.

Study Participants: A purposive sample is selected by probability sampling approach accounts of 100 patients is selected by the used questionnaire and interview.

Patients and Methods: A questionnaire adopted and modified ⁽¹⁾. It considered a means for data collection. The questionnaire includes the following parts:

Part I: This part concerned with the treatment acceptance and composed of (38) items divided into four sections. They are: follow doctor's instructions which composed of (11) items, periodic inspection which composed of (10) items, keep taking medicine which composed of (9) items, and excises, food and diet which composed of (8) items. All items are measured on 3-level type Likert Scale as (3) for always, (2) for sometime, and (1) for never acceptance treatment.

Part II: This part concerned with patients self hardness and composed of (48) items measured on 3-level type Likert Scale as (3) for high, (2) for moderate, and (1) for low self hardness.

Data Analysis Methods: Through the used (SPSS- version 20) descriptive statistic (mean, percentage) and inferential statistic (Chi square).

III. RESULTS

Table (1): Distribution of the Study Participants by their Social Variables (No. 100)

Variables	Rating	Number	Percentage
Age (years)	26-36	42	42
	37-47	10	10
	48-58	34	34
	59+	14	14
Gender	Male	56	56
	Female	44	44
Economic status	Not Enough	20	20
	Enough to Certain Limit	57	57
	Enough	23	23
Social status	Not married	5	5
	Married	84	84
	Divorced	5	5
	Widowed	6	6
Education level	Notable read and write	16	16
	Able to read and write	49	49
	Primary	13	13
	Secondary	6	6
	Preparatory	5	5
	Institute	5	5
Occupation	Collage and above	6	6
	Government employee	15	15
	Self employee	66	66
	Retired	5	5
	Unemployed	7	7
Period of diabetes	Unable to work	7	7
	(2-6) years	53	53
	(7-11) years	39	39
	(12+) years	8	8

Findings indicate that (42%) of the participants are within first age groups 26-36 years old. Concerning gender, most

of them is male and constituted (56%) out total number. In regard of economic, most of the diabetics patients making enough to certain limit status and account (57%), and mostly married, where they form (84%). A forty nine of the participants are able read and write and they occupied a self employees, it accounts (66%). Finally in regard diabetics patients social variables, results indicate that the most of them are (2-6) years as a periods of diabetes mellitus, and constituted (53%) out total number of the study participants.

Table (2): Distribution of Patients by their Overall Treatment Acceptance

Treatment Acceptance	Rating	F	%	M.S.	Assessment
	Never	50	50	1.49	Never
	Sometime	3	3		
	Always	47	47		
Total		100	100		

F= Frequency, %= Percentage, M.S.= Mean of score

In light of statistical cut off point, demonstrated that the majority of (50%) of diabetics patients are never responses to the treatment.

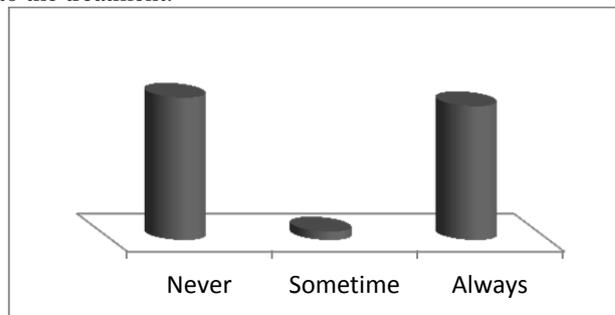


Figure (1): Patients Treatment Acceptance

Table (3): Distribution of Diabetics Patients by their Overall Self Hardness

Self Hardness	Rating	F	%	M.S.	Assessment
	Low	30	30	1.94	Moderate
	Moderate	46	46		
	High	24	24		
Total		100	100		

F= Frequency, %= Percentage, M.S.= Mean of score

Findings that based on the statistical cut off point, reveals that the majority of (46%) of diabetics patients are moderate degree of self hardness to acceptance for treatment.

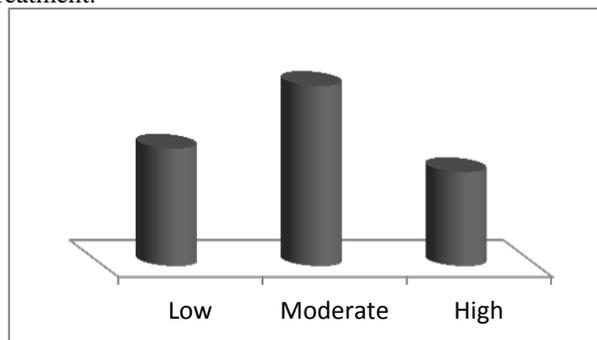


Figure (2): Patients Self Hardness

Table (4): The Statistically Association between Patients Treatment Acceptance and their Self Hardness

Variables	Rating	Treatment Acceptance			Total	χ^2	d.f	p- value
		Never	Sometime	Always				
Self Hardness	Low	17	2	11	30	27.107	4	0.000 HS
	Moderate	31	1	14	46			
	High	2	0	22	24			
	Total	50	3	47	100			

χ^2 = Chi-square, Df= Degree of freedom, P-value= Probability value, HS= high significant.

Findings demonstrated that there is a high significant relationship between diabetics patients treatment acceptance and their self hardness at p-value ($< 0.0.5$).

IV. DISCUSSION

In light of statistical cut off point, findings demonstrated that the majority of (50%) of diabetic's patients are never responses to the treatment acceptance. In personal view of point, the not acceptance of treatment are involved several aspects, as the patient and the doctor is caused by several factors or problems between them, which leads to the absence of a sense of satisfaction by the patient, which is the basis for the success of the process of good adherence to treatment. The most important of which is the lack of attention by the patient and the physician, the treatment by the doctor with the patient as a case, the level of information and understanding from both parties, and the inability to remember information by the patients. These results agree with the study has been assessed the diabetic's patients satisfaction with their treatment. Their findings indicated treatment satisfaction is lower among diabetic patients, who are insulin treated or have a diabetic complication and is related to difficulties in taking medications and coming to follow-up visits. And concludes that patients-decision makers need to be addressing the specific needs of these patients might be effective in improving their satisfaction, this have a positive influence on other clinical outcomes⁽¹¹⁾.

Findings that based on the statistical cut off point, depicts that the majority of (46%) of diabetics patients are moderate degree of self hardness to acceptance for treatment. The weakness in the existence of rigidity depends on several factors, most notably (the absence of a religious value system in patients that prevents them from falling into deviation, illness or addiction, lack of goals in their lives, meanings that they adhere to and are associated with, lack of initiative, lack of leadership, lack of tendency to lead, inability to withstand and resistance, optimism and positive attitude towards life, inability to make decisions and choice between multiple alternatives, lack of calm and ability to organize and control emotional exploitation, The belief that success in life is due to work and the unknown and, not to chance or luck and circumstances, lack of benefit from the experiences of failure in self-development, and mostly diabetic patients not feeling complacent⁽¹²⁾.

Characteristics of people with low or medium self hardness are characterized by their lack of feeling for themselves, meaning their lives, not interacting with their environment positively, and expect the threat continuous, weak in the face of changing events, prefer the stability of events they do not have a belief in the need for renewal and

improvement, and are passive in their interaction with and unable to bear the bad impact of stressful events⁽¹³⁾.

The researchers considers that the previous characteristics of the moderate self hardness for patients with diabetes mellitus, as they are characteristics that vary among individuals, and situations, events and training gradually develop, so it does not mean that those who have psychological depression should not feel the goal meaning to his life and they are negative. And that the main factor in its formation and development begins from childhood through normal and warm social relations and support within and outside the family. These are positive models for the development and enhancement of confidence in the patients and the development of the patients to cope with the distress of life. By positive relationships within and outside the family are among the most important psychological requirements and are supported by people we trust and respect, listen to religious institutions and other charitable groups are also sources of social support which the individual may need in some crises.

Furthermore, psychological and social aspect is considered as a management such as control, commitment, will (hardness) in diabetes management requires patients to follow complex self-care recommendations for nutrition, physical activity, blood glucose monitoring, and medication. Adherence to these recommendations improves glycemic control and mitigates the risk of diabetes complications; however, many patients struggle to follow these behaviors in everyday life. In the physician-patient relationship, self-care communication is largely influenced by interpersonal trust. Physicians need to incorporate interpersonal and relational skills to establish a trusting relationship. Physician-level barriers to self-care communication include lack of time, lack of collaboration and teamwork among health care providers, lack of patients' access to resources, and lack of psychosocial support for diabetes patients. Among patients, psychosocial barriers and health literacy may affect willingness to discuss self-care. Motivational interviewing techniques may be helpful for improving communication⁽¹⁴⁾.

Findings demonstrated that there is a high significant relationship between diabetics patients treatment acceptance and their self hardness at p-value ($< 0.0.5$). Acceptance of treatment is particularly complex in chronic diseases, as time imposes permanent changes that may be difficult for the patient to adhere to, according to the optimal accuracy and regularity, so this behavior gradually progresses within a series of stages of relapse. Where the patient goes through the stages include: pre-treatment in which the patient refuses to disease and treatment, and here does not feel the sick that he not interested in information

related to treatment; access to information by the health care provider on confirmation of the diagnosis, nature, development or recovery of the disease, and the type, effectiveness and side effects of the approved treatment; Accept the information provided about the disease and treatment; make the decision to initiate change and prepare for its implementation; to begin to adopt changes in the new behavior of being subject to the treatment system and adhering to it; and in the end, the new behavior is maintained and maintained, usually to be among the patient's habits. Therefore, hardness, strength and self-will affect the acceptance of treatment but it takes a long time with the guidance of the patient⁽¹⁵⁾.

Furthermore, these results consisted with the results have been assessed the psychological stress and its relationship to accept treatment in people with diabetes. Their findings indicated that treatment acceptance has a relationship or correlation with self hardness as being self-hardness means control, will, tolerance, and commitment to treatment, due to people with moderate or low self-hardness don't accept their treatment⁽¹⁾.

V. CONCLUSIONS

The study concludes that half of the patients who reviews towards diabetics center in Hilla City never responses to treatment acceptance. Patients who reviews towards diabetics center in Hilla City are moderately self hardness. Furthermore self hardness affected their treatment acceptance.

VI. RECOMMENDATIONS

The study recommends for decision makers need to be design programs to enhance the self-strength of patients with diabetes, ranging from psychological and social programs to face all difficult conditions when they occur strongly. It also, self hardness is an important and prominent variable in psycho-social science, so it must be used for future studies, and on other samples to expand its use on the one hand, and to get out of the circle of disease and pathological characters on the other hand and to deepen the more in building the personality of the individual.

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