Depression and Demographical Features in Diabetic Patients

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Abstract: Depression is one of the psychiatric prevalent illnesses across the world. Depression is an illness which has a direct relationship with diabetes. The purpose of determining the level of depression among the diabetic persons referring to Rasht diabetes center. This research is a correlation – descriptive study which was conducted using the simple random sampling method within 3 months on 144 subjects of the social workers afflicted with diabetes referring to Rasht diabetes center in 2008.Data gathering tool was a questionnaire consisting of two parts . The first and second parts of the questionnaire consisted of demographic data and Back depression standard, respectively. Finally, the data out of this research were analyzed by using the SPSS version 15 statistical software and T-test statistical tests. Results showed that out of 144 subjects, there were 79.86 % female and 20.14% male, 16 people (11.1%) forty years old and younger, 18 people (12.5%) older than 65 years, and 2.1% single and 6.9% divorced .In one hand, in terms of education level, 47.9% and 6.9% were illiterate and educated, respectively . On the other hand, in terms of the illness type, 25 people (17.4%) and 75 people (82.6%) were afflicted with diabetes types 1 and 2, respectively .In addition, statistical tests showed that 35.41% of tester were afflicted with acute depression of which 88.23%,84.31%,and 84.33% were female, married,and afflicted with diabetes type 2, respectively . It was also shown that there is a significant relationship between depression and gender ($p=0.004$), marital status ($p< 0.05$), educations level ($p<0.05$), and jobs of the afflicted ($p<0.05$). The present study shows that there is a significant relationship between the depression in people afflicted with diabetes and their gender, marital status, educations level, and jobs and also 22.22%, 22.22%, 19.47% and 35.41% of the people were afflicted with weak, low, average, and acute depression .
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1. Introduction

One of the problems which threaten human being from the childhood to the life end has to do with Endocrine illnesses among which diabetes is the most prevalent (Fips, 2008). The number of diabetic people has increased to more than 70 million ones during the ten previous years and so World Health Organization (WHO) has called this event a tocsin for developing countries (Shahbazian et al., 2004). Diabetes is one of the prevalent illnesses in human being societies that unfortunately in spite of the medical sciences progresses, not only its prevalence has not decreased, but also it is ever on the rise (Shahbazian et al., 2004). Diabetes is among the medical disorders it can have psychiatric symptoms .Mode disorders with depression manifestation which are made by the presence of common medical problems are equal in both genders, while the acute depression disorder is dominant among the female (Sadock and Sadock, 2007). Diabetes is an illness which can be treated in spite of its chronicity, in such a way that the person survive and continue his / her life in the case the illness is controlled. Diabetic patients are generally aware of the fact that they are prone to the late coming effects of diabetes and their life time is shortened (Peyrol, 1997).

Recent studies show that depression increases the danger of death in diabetic patients very much (Black, 2003). Depression has since long been mentioned in writings, and Boqrat has also applied the term " hypochondria" (melancholy) to refer to a kind of depression about 450 B.C (Kalpan and sadock, 2007). Depression symptoms consist of fluctuations .in weight, appetite, and sleep hours which if are along with the symptoms resulting from the diabetes, then the depression arising from the diabetes is diagnosed clinically (Ludman et al., 2004). Of course, it is worth mentioning that the researches have shown just 50% of the patients afflicted with depression are identified in the initial

stages (Egede, 2004). Therefore, it is not surprising that emotional reactions towards the diabetes often make problems in treatment (Debra, 1996).

Depression is one of the psychiatric prevalent illnesses across the world with which 15 and 25 percents of the men and women in the society are respectively afflicted in their life spans (Fips, 2008). In the united States, 9.5% of the population, or 19 million people in other words, are yearly afflicted with depression (Regier et al., 1993). Depression is a dangerous disease because it leads to suicide, increases the danger of affliction and mortality resulting from the disease. Decreases the life quality, and is known as a cost taking disorder .Studies show that about 20% of the patients who refer to out clinics suffer from depression. Mentally, the first symptom of depression is reduction in motivation and enthusiasm after which reduction in activity and efficiency, hope in life, self-caring, and also tendency to death are emerged in the person (Kaplan and Sadock, 2002). For the first time, the relationship between diabetes and depression was determined by an English physician called Dr. Tomas Vilis in 1684 (Willis, 1971). In another study done by Grandinei et al, On 574 patients indigenous to Havaei region, it was known that the increase in depression prevalence is observed among the diabetic patients (Grandinetti and Kaholokula, 2000). In addition, there is some relationship between depression and blood sugar controlling in diabetic patients (Gory et al., 2000). It has been mentioned in Lostman's study that depression is along with the increase in blood sugar in the patients afflicted with diabetes of types 1 and 2 (Grandinetti and Kaholokula, 2000). In researches conducted by Gardeo et al. in Mexico in 1998 on diabetic patients of type 2, it was concluded that 46% of diabetic persons are afflicted with depression and also being female and time duration of affliction with diabetes are among the danger factors in depression occurrence (Graduno andTeles, 1998). On the whole, depression is one of the mental disorders which has the most accompaniment with diabetes. The issue whether this relationship has to do with either beginning of progress and deterioration of diabetes or preparation and reaction towards it, is under discussion (Talbot et al., 2000). Accordingly, considering the daily increase in the number of the people afflicted with diabetes and also the role of depression in making and controlling this disease, a study was conducted with the purpose of determining the degree of depression among the diabetic persons referring to Rasht diabetes center.

2. Material and Methods

This research is a correlation – descriptive study which was conducted using the simple random sampling method within 3 months on 144 subjects of the social workers afflicted with diabetes referring to Rasht diabetes center in (2008). Data gathering tool was a questionnaire consisting of two parts. The first and second parts of the questionnaire consisted of demographic data and Beck depression Questionnaire, respectively. Finally, the data out of this research were analyzed by using the SPSS 15 statistical software and T-test statistical tests.

3. Results

Results showed that out of 144 subjects (tested), there were 16 persons (11.1%) forty years old and younger, 18 persons (12.5%) older than 65 years, 66.4% between 41 to 65 years old, 2.1% single,6.9% divorced, and 91% married . In addition, in terms of education level, 47.9% and 6.9% were illiterate and educated, respectively. On the other hand, in terms of the illness type, 25 people (17.4%) and 75 people (82.6%) were afflicted with diabetes types 1 and 2, respectively .Be sides, statistical tests showed that 35.41% of tester were afflicted with acute depression of which 88.23%, 84.31%,60.78%, 80.39%, and 84.33% were female, married, illiterate, in age interval of 41-65 years old, and afflicted with diabetes type 2, respectively .It was also shown that there is a significant relationship between depression and gender($p=0.004$), marital status ($p<0.05$),educations level ($p<0.05$), and jobs of the afflicted ($p<0.05$) . (Table 1)

Table 1: Frequency distribution and relationship between personal identifications and depression in Rasht diabetic patients.

	Percent	Number	Percent	Number	Percent	Number	Percent	Number		
Not Significant	9.80%	5	10.71%	3		0	19.51%	8	40 years old and younger	Age
	80.39%	41	78.57%	22	87.5%	21	63.41%	26	Between 41 to 65 years old	
	9.80%	5	10.71%	3	12.5%	3	17.7%	7	Older than 65 years	
Significant p =0.004	88.23%	45	82.14%	23	75%	18	70.73%	29	Female	Gender
	11.76%	6	17.85%	5	25%	6	29.26%	12	Male	
Significant p <0.005		0		0	4.16%	1	4.87%	2	Single	
	84.31%	43	100%	28	87.5%	21	92.68%	38	Married	Marital Status
	15.68%	8		0	8.33%	2	2.43%	1	Divorced	
	17.64%	9	10.71%	3	4.16%	1	9.75%	4	Free	

Significant p <0.005	7.84%	4	14.28%	4	16.66%	4	39.02%	16	Employee	Job
		0	3.57%	1	8.33%	2	4.87%	2	Jobless	
	74.50%	38	71.42%	20	70.83%	17	46.34%	19	Housekeeper	
Significant p <0.005	60.78%	31	42.87%	12	50%	12	34.14%	14	Illiterate	Education level
	25.49%	13	46.42%	13	33.33%	8	34.14%	14	Secondary	
	11.76%	6	3.57%	1	8.33%	2	19.51%	8	Diploma	
	1.96%	1	7.14%	2	8.33%	2	12.19%	5	University	
Not Significant	6%	3	7.40%	2	4.16%	1		0	Village	Living place
	94%	47	92.59%	25	95.83%	23	100%	39	City	
	29.44%	15	17.85%	5	29.16%	7	21.95%	9	Rental	Living Status
	70.58%	36	82.14%	23	70.83%	17	78.04%	32	Personal	
Not Significant	15.68%	8	17.85%	5	16.66%	4	19.51%	8	Diabetes 1	Type of disease
	84.33%	43	82.14%	23	83.33%	20	80.48%	33	Diabetes 2	

4. Discussions

The present study shows that there is a significant relationship between the depression in people afflicted with diabetes and their gender, marital status, educations level, and jobs. According to the researchers conducted by Sepehrmanesh et al. Regarding the prevalence and types of depression on 300 diabetic persons in 1382, it was shown that men and women were 71% and 57.7% depressed, respectively, and also out of 30% patients afflicted with acute depression, 25 (32%) and 105(47.3%) persons were men and women, respectively .Researches showed that depression in diabetic women was almost 1.4 times as equal as diabetic men. Reference books proclaim acute depression in women about two times as equal as men (Kaplan H & Sadock, 2000). Reached also to the result in their research in 2001 based on which depression in diabetic women was more seen than in diabetic men (Anderson et al., 2001). Soinkok et al., (2001) noticed in their research that depression in diabetic people has just to do with the female gender (Soinkok et al., 2001) .In researches conducted by Gardeo et al in Mexico in 1998 on diabetic patients of type 2, it was concluded that 46% of diabetic persons are afflicted with depression and also being female and time duration of affliction with diabetes are among the danger factors in depression occurrence (Graduno and Teles, 1998).

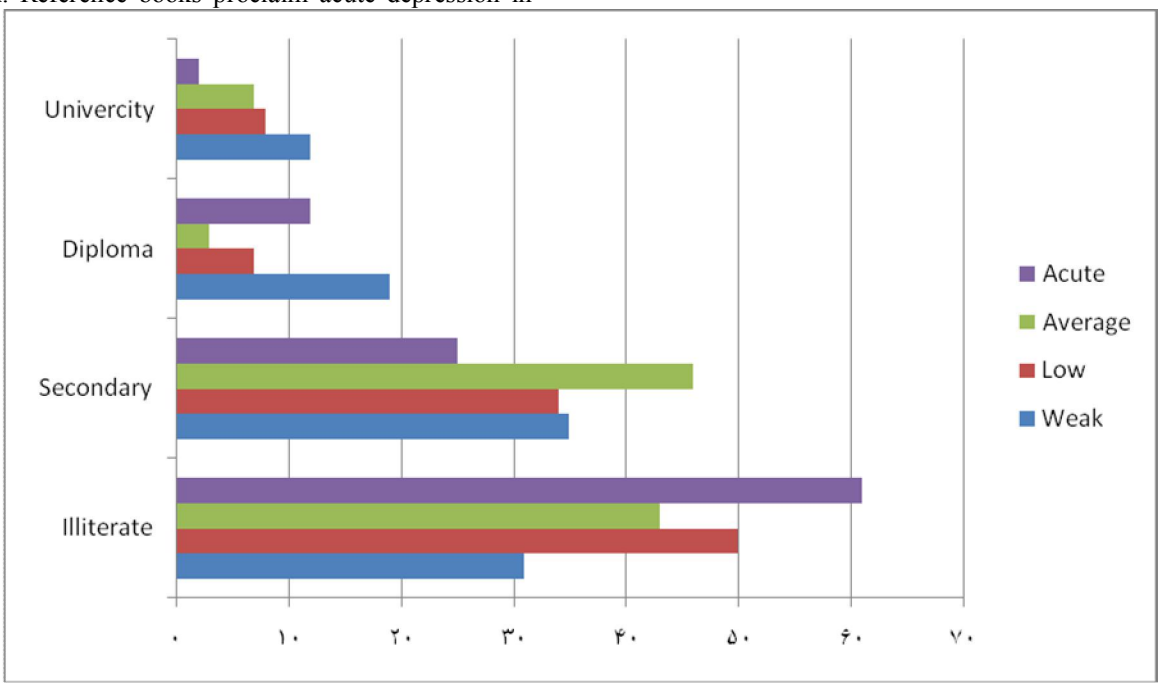

Figure 1: Distribution of individuals' depression types degrees in terms of education level

In another research conducted by Toziki et al., the sexual distribution of the patients under study was as follows: 35 people (34%) of the women were in the group of the undepressed and the other left 68 people (66%) were depressed. In the men's group as well, there were 23 people (48.9%0 undepressed and 24 ones (51.1%) depressed. The data obtained from the study indicate that depression is not under the

influence of gender. A significant relationship was also observed in our research ($p<0.05$) (Talbot et al., 2000). (Figure 2).

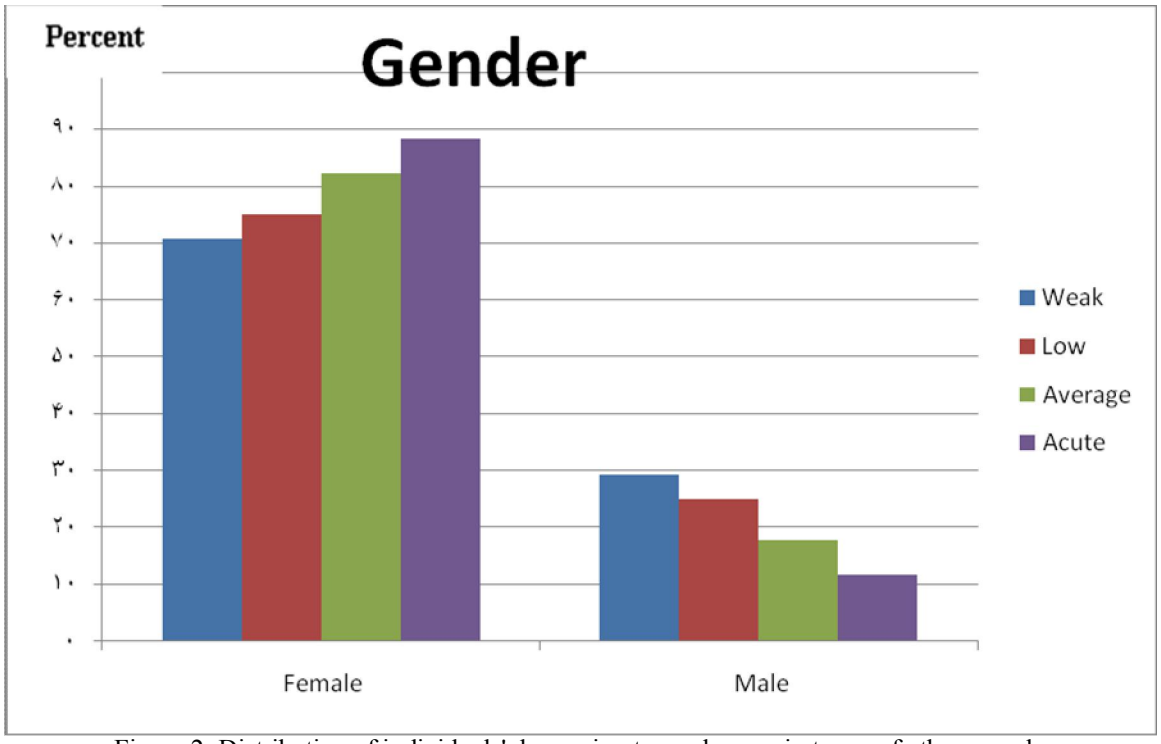

Figure 2: Distribution of individuals' depression types degrees in terms of them gender

In the United States, 6% of the people are afflicted with the depression arisen from diabetes. 1.5% of the people between 20 to 40 years old as well as 20% of the people older than 75 years are afflicted with depression whose 90% are among the diabetic type 2.In the present research, results showed that there were 16 people (11.1%) forty years old and younger as well as 18 ones (12.5%) older than 65 years out of the total 144 subjects (tester) .In addition, in terms of the illness type, there were 25(17.4%) and 75(82.6%) people afflicted with diabetes types 1 and 2, respectively . In addition, statistical tests showed that 35.41% of tester were afflicted with acute depression of which 88.23%, 84.31%,and 84.33% were female, married, and afflicted with diabetes type 2, respectively (Figure 3). According to the psychiatric references, the average age of depression initiation is about 40 years old (Kalpan and sadock, 1998). In our research as well, the people between 41 to 60 years old made up the most distribution of the diabetic. Some researches show the degree of depression occurrence in the people under 20 years old is on the rise (Talbot et al., 2000). Based on the reference books, the acute depression is more seen in the people who do not usually have any close interpersonal relationships (Kaplan and Sadock, 1999). Fisher et al (2001) proclaimed in their research that life stresses such as educations level are effective on occurring depression in the diabetic as the added and independent agents (Fisher et al., 2001). The married made up the most percentage of patients (84.31%) in the study conducted by us. It is while a high percentage of these people were ranked in low levels in terms of the education (Figures 1 – 4). In the research conducted in a clinic in california, it was seen a significant relationship between diabetes and the participants' employment status as well as between the regression analysis of depression variable and the employment status, respectively (Robert and Nanji, 1986). .In addition, it was shown in the study carried by ru-Ling Baia et al, that most of the participants were financially independent (n=113;72.4%), and also the results have not shown a significant difference in terms of the financial status and income level (Yu and Chou, 2008).

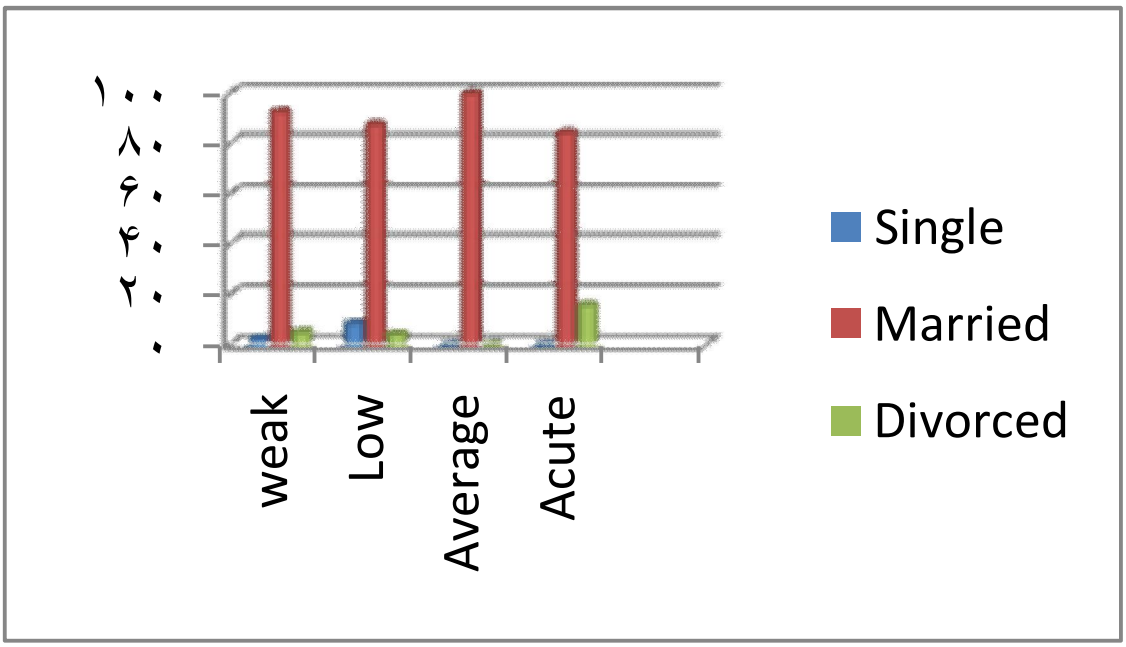

Figure 3: Distribution of individuals' depression types degrees in terms of marital status

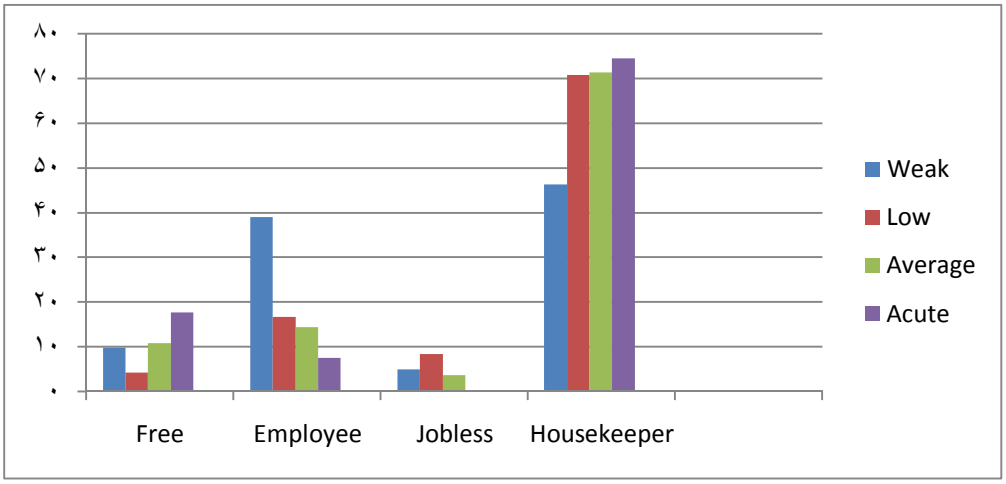

Figure 4: Distribution of individuals' depression types degrees in terms of them jobs

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