Psychosocial Aspect among Adolescents with Diabetes Mellitus Type 1

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Abstract:

Objective: *To assess psychosocial aspect among adolescent with diabetes mellitus type 1and To find out an association between adolescent psychosocial aspects diabetes mellitus type 1 and their socio-demographic data.*
Methodology: *A cross sectional descriptive design was carried out through the present study in order to achieve the early stated objectives for period from February 2016 to March 2016.*
Conclusion: *The Most of the sample male (57.7 %).Most of the sample from above 16 years old (54.3 %).The majority of the study subjects have urban (81.4%).The educational level of majority of the sample is primary school graduate (62%). The majority of complication for patients was the (81.4%) for inflammation urinary tract infection. The majority of the study subjects responded with fair behavior (82.9%), sometime good behavior (14.3%), poor behavior (2.9%), for overall assessment social domain. and the whereas psychological domain was good behavior (54.3%), and the fair behavior (44.3%), the a lowest was poor behavior (1.4%). The overall assessment of social domains and psychological domains and socio-demographic characteristics significant, the results have indicated that there have been a non-significant differences at P>0.05. The different levels of Age Groups variable whatever a large frequency was reported at sixteen and above (54.3%).The majority of father education level is secondary school graduated (31.4%), whereas the majority of the mother education level was intermediate school graduated (25.7%).Father occupation was unemployed (25.7%).While mother occupation was Private sector (67.1%).*
Recommendation: *Adolescents should be support to assume increasing responsibility for diabetes management but with continuing, mutually agreed parental involvement and support. All mental and behavioral health specialists should have training in diabetes and its management.*
Keywards: *Psychosocial aspect among, Abuse, upon , School age, Children, Behavior, .*

I. Introduction

Diabetes mellitus is a common chronic, metabolic syndrome characterized hyperglycemia as a cardinal biochemical feature. The major forms of diabetes are classified according to those caused by deficiency of insulin secretion due to pancreatic beta cell damage type 1 Diabetes mellitus and those that are a consequence of insulin resistance occurring at the level of skeletal muscle, liver and adipose tissue, with various degree of β cell impairment (Alemzadeh and David Wyatt 2007). (1)Morbidity and mortality stem from metabolic acute derangements and from long-term complications that affect small and large vessels resulting in retinopathy, nephropathy, neuropathy ischemic heart disease and arterial obstruction with gangrene of extremities (Alemzadeh and David Wyatt 2007).2) Diabetes mellitus is not a single entity but rather a heterogeneous group of disorders in which there are a distinct genetic pattern as well as other etiologic and pathophysiologic mechanism that lead to impairment of glucose tolerance (Evertson and Jennifer 2009). (3)

Type 1diabetes mellitus associated with other autoimmune disease such as celiac, thyroiditis, multiple sclerosis and Addison disease, the incidence of Type 1diabetes mellitus is rapidly increasing in specific regions and shows a trend toward earlier age of onset type 1diabetes mellitus account for about 10%of all diabetes affecting 15 million in the world (H.Peter Chase, George S).(4) levels over the past several (2 to 3) months. Polyuria, polydipsia, and polyphagia are the classic presenting symptoms of the disease, Weight loss, dehydration, and general thinness are associated symptoms. Other symptoms include nausea and vomiting, abdominal pain or discomfort, fatigue, blurred vision, irritability, or restlessness hyperglycemia and glycosuria are discovered through screening (Lamb, 2011). (5) The incidence of diabetes mellitus type 1, a chronic autoimmune disease, may reach the status of an epidemic in the 21st century. estimated 3.4 million people died from consequences of high fasting blood sugar, more than 80% of diabetes deaths occur in low- and middle-income countries (Silink , 2005).(6)

Statement of problem:

Psychosocial Aspect among Adolescent with Diabetes Mellitus Type 1 at Al Sadr Medical City.

The study aims :
1. To assess psychosocial aspect among adolescent with diabetes mellitus type 1.
2. To find out an association between adolescent psychosocial aspects diabetes mellitus type 1 and their socio-demographic data.

II. Methodology

The setting of the study, the sample of the study, the study instrument, data collection, statistical data analysis and validity of the questionnaire.

Design of the study: A cross sectional descriptive design was carried out through the present study in order to achieve the early stated objectives for period from February 2016 to March 2016..

Setting of the study: The study is conducted at AL-Najaf health directorate / Al Sadder medical city.

The sample of the study: Simple purposeful sample of (70) diabetic adolescent patients in the present study all from diabetic center of Al-Sadder medical city.

III. Results

Table (1) Distribution of the Study Sample by Their Socio-Demographic Characteristics

Variable	Items	Frequency	Percent
Gender	Male	39	55.7
	Female	31	44.3
	Total	70	100
Residence	Urban	57	81.4
	Rural	13	18.6
	Total	70	100
	<= 10	7	10
Age year	11 - 15	25	35.7
	16+	38	54.3
	Total	70	100
Father Education Level	In able To Read And Write	10	14.3
	Primary School Graduated	12	17.1
	Intermediate School Graduated	16	22.9
	Secondary School Graduated	22	31.4
	Institute , College, Graduated	9	12.9
	high education	1	1.4
	Total	70	100
Mother Education Level	Inable To Read And Write	14	20.0
	Primary School Graduated	14	20.0
	Intermediate School Graduated	18	25.7
	Secondary School Graduated	16	22.9
	Institute Graduated	8	11.4
	high education	0	0
	Total	70	100
Father Occupation	Employee	14	20.0
	Private sector	14	20.0
	Unemployed	18	25.7
	retired	16	22.9
	helpless	8	11.4
	Total	70	100
Mother Occupation	Employee	16	22.9
	Private sector	47	67.1
	Unemployed	6	8.6
	Retired	1	1.4
	Total	70	100

This table shows that the percentage was for male (55.7%).This table shows that the majority of the study subjects haven't urban (81.4%). the different levels of Age Groups variable whatever a large frequency was reported at sixteen and above (54.3%). This table also reveals that frequency is a highly significant mainly at the fourth level of education (Secondary School Graduated) for father education level (31.4%), whereas the mother education level was intermediate school graduated (25.7%).this table show is father occupation was unemployed (25.7%). While mother occupation was Private sector (67.1%).Clinical characteristics and complications

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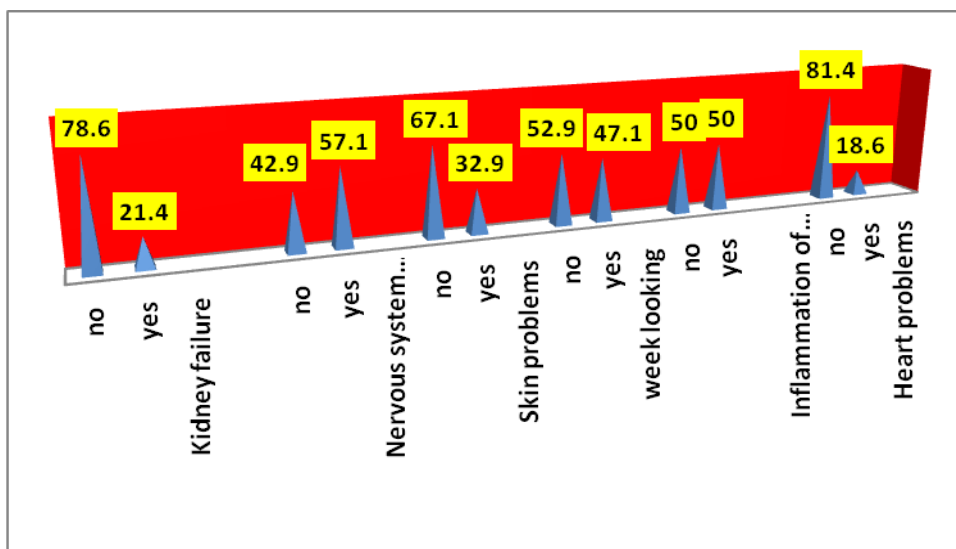
This figure appearance the complication for patient's was the (81.4%) for inflammation urinary tract infection .

Table (2) Distribution of the Study Sample by Their Responses to the overall assessment of Social domain and psychological domain

Social domain			
Assessment	Items	Frequency	Percent
Overall Assessment	Poor Behavior	2	2.9
	Fair Behavior	58	82.9
	Good Behavior	10	14.3
	Total	70	100.
psychological domain			
Assessment	Items	Frequency	Percent
Overall Assessment	Poor Behavior	1	1.4
	Fair Behavior	31	44.3
	Good Behavior	38	54.3
	Total	70	100.

This table shows that the majority of the study subjects responded with fair behavior (82.9%), sometime good behavior (14.3%), poor behavior (2.9%), for overall assessment social domain. And the whereas psychological domain was good behavior (54.3%), and the fair behavior (44.3%),the a lowest was poor behavior (1.4%).

Table (3) Relationship Between the Overall assessment of Social domains and psychological domains and Socio-Demographic Characteristics

Socio-Demographic Characteristics	Items	Health Behavior (Binned)			Sig.
		Poor Behavior	Fair Behavior	Good Behavior	
Gender	Male	0	29	10	p-value (0.23)
	Female	1	29	1	d.f(2)
Residence	Rural	0	10	3	p-value (655)
	Urban	1	52	37	d.f(2)
Father Education Level	In able To Read And Write	0	7	3	p-value (171)
	Primary School Graduated	0	12	0	df(10)
	Intermediate School Graduated	0	16	0	
	Secondary School Graduated	1	14	7	
	Institute , College, Graduated	0	1	9	
	high education	1	58	11	
Mother Education Level	In able To Read And Write	0	12	2	p-value (476)
	Primary School Graduated	0	14	4	d.f(8)
	Institute Graduated	0	8	0	
Father Occupation	Employee	0	12	2	p-value (0.512)
	Private sector	0	13	1	
	Unemployed	0	14	4	
	retired	1	11	4	
	helpless	0	8	0	
Mother Occupation	Employee	0	13	3	p-value (.224)
	Private sector	1	41	5	d.f(6)

	Unemployed	0	0	4	
	retired	0	0	2	
family members	1	0	9	0	p-value (.66.0)
	2	0	1	0	d.f(4)
	3	1	48	11	
room	<= 3.00	0	2	1	p-value (0.69)
	4.00 - 10.50	1	49	10	d.f(4)
	10.51+	0	7	0	
Housing unit	property	0	10	1	p-value (.671)
	rent	0	19	4	d.f(6)
	Mutual	0	17	3	
	other	1	12	3	

This table shows the overall assessment of social domains and psychological domains and socio-demographic characteristics significant, the results have indicated that there have been a non-significant differences at P>0.05.

IV. Discussion

Part I-A: Discussion Of The Socio-Demographic Characteristics for the adolescent diabetic mellitus type one: table (1) Throughout the course of the present study, the study results show that the mean of the sample gender, this table shows that the percentage was for female (55.7%) this result agree with kaskleas, et al 2009) with the psychosocial problems in adolescents with type 1 diabetes mellitus. (7) Regarding to the residence, the study results indicate that the majority of the study subjects (81.4%) urban,This result comes along with Delamater, 2014). Psychosocial Aspects of diabetes mellitus in children.(8)This result agrees with (Atkinson 2012) who showed that the mean age was 18.78 ±2.28 years, 58.5% were male(9).Concerning the age, most of the study sample (54.3 %) are adolescent was above 16 years, this may be due to that the mean age of the patients is 16years , this result is similar to results obtained from study of the Psychosocial Impact of Diabetes in Adolescents by (Ashraf, et al 2013).(10)

This result is also supported by Siousioura et al.(2012), who studied Review of therapeutic groups for type 1 diabetes mellitus patients, a father secondary educational level.(11)

This result is also supported by Delamater.(2009), who studied Psychological care of children and adolescents with diabetes, mother intermediate school graduated educational level.(12)

As known that adolescent diabetic mellitus type one occurring in all socio-economic levels of the society , so that in Iraq society rent level of the socio-economic status represents the majority of the population which aids the result of this study.

Part I-B : Discussion of The Complications for the Adolescents Diabetic Mellitus type one (table 3)

With respect to the complications of the studied diabetic mellitus patients, the results indicate that the majority of them (81.4%) inflammation Breuning et. al.,(2004), their findings indicate that the majority of the study subject had inflammation complication.(13) Part I-C : Discussion of The overall assessment of Social domain and psychological domain : (table 2)

In relation to the social domain and psychological domain of the patients , the results show that (82.9 %) of the patients have fair behavior for social, this is results agree with Johan and Erik (2015), Children and adolescents with Type 1 Diabetes Mellitus family dynamics and health-related quality of life after diabetes onset.(14) The current study also reveals that (54.3%) of the patients have good behavior for psychological domain, this result agrees also with Delamater (2009), in his study (Psychological care of children and adolescents with diabetes).(15)

Part 3: Discussion of the Overall assessment of Social domains and psychological domains and Socio-Demographic Characteristics: (Table 3) In regarding to correlations between the Social domains and psychological domains and Socio-Demographic Characteristics, and the overall assessment due to for the adolescent patients, the non-significant correlation was between Gender , Residence, Father Education Level, Mother Education Level and the overall assessment this result disagree with kaskleas, et al(2009). The study was the psychosocial problems in adolescents with type 1 diabetes mellitus.(16)

V. Conclusions

According to the present study findings, the researcher concluded the following:Based on the study results the researchers concluded that:Most of the sample male (57.7 %), most of the sample from above 16 years old (54.3 %).The majority of the study subjects have urban (81.4%), educational level of majority of the sample is primary school graduate (62%). The majority of complication for patients was the (81.4%) for inflammation urinary tract infection, The majority of the study subjects responded with fair behavior (82.9%), sometime good behavior (14.3%), poor behavior (2.9%), for overall assessment social domain. and the whereas psychological domain was good behavior (54.3%), and the fair behavior (44.3%), the a lowest was poor behavior (1.4%). ,The overall assessment of social domains and psychological domains and socio-demographic

characteristics significant, the results have indicated that there have been a non-significant differences at P>0.05,The different levels of Age Groups variable whatever a large frequency was reported at sixteen and above (54.3%).,The majority of father education level is secondary school graduated (31.4%), whereas the majority of the mother education level was intermediate school graduated (25.7%). Father occupation was unemployed (25.7%). While mother occupation was Private sector (67.1%).

VI. Recommendation

1. Adolescents should be support to assume increasing responsibility for diabetes management but with continuing, mutually agreed parental involvement and support.
2. All mental and behavioral health specialists should have training in diabetes and its management.

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