University of Babylon

College of Nursing

Assessment of Mothers' Home behaviors concerning their children with type I Diabetes Mellitus

Graduation Research Project

Submitted by

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بسم الله الرحمن الرحيم

وما أوتيتم من العلم إلا قليلا

صدق الله العلي العظيم

سورة الاسراء الاية (٨٥)

Dedication

All praise to Allah .today we fold the day's tiredness and errand summing up between the cover of this humble work

To the utmost knowledge lighthouse to our greatest and most honored Prophet Mohammed

To the great heart (my dear father)**..........**

To the pure white heart (my beloved mother)**.......**

To the innocent hearts to the winds of my life (my brothers)...

Our gratitude to the participants who generously gave their time and shared their experiences, without whom this project would not have been possible.

<div align="right">Project Students</div>

Acknowledgement

Dear Professors….

Dean Prof. Dr.Ameen Al-yassirie,

Dean Assistant Prof. Dr. Nuhad M. AL-Doori,

We are writing to express our sincere appreciation and gratitude for your contribution to our research project on "Assessment of Mothers' Home behaviors concerning their children with type I Diabetes Mellitus". Your willingness to share your expertise and insights has been invaluable and has greatly enriched the project.

We are particularly grateful for the time you took to provide detailed feedback on our work, which has helped us to refine our ideas and improve the quality of my research. Your thoughtful suggestions and constructive criticism have been instrumental in shaping the direction of the project.

Please know that your contributions are highly valued. Your support and encouragement have been a source of inspiration throughout the project.

Thank you again for your invaluable contribution to my research.

Sincerely,

Mohammed Bashir Zayed
Muhsen Ali Heddawi
Mohammed Fadhil Abd Al-Muhsen
Mohammed Fadhil Manthoor

Content

Chapter one

Chapter two

Chapter three

Chapter Four

Chapter Five

No.	Name of Tables & Figures	Page No.
1	Table 1:Distribution of socio-demographical information of the caregivers	7-8
2	Table 2: Distribution of demographical information of the patient	9-11
3	Table 3: Distribution related to assessment of Mothers' behaviors concerning their children with Diabetes	12-15
4	Table 4: Overall assessment of Mothers' behaviors concerning their children with Diabetes	16
5	Figure 1: Overall assessment of Mothers' behaviors concerning their children with Diabetes	16
6	Table 5: Association between Mothers home behavior and demographical characteristics	17
7	Figure 2: Association between Mothers home behavior and demographical characteristics	18
List of Appendices		
8	The Questionnaire	34-37
9	استمارة بحثية	38-41
10	Official approval of the College of Nursing, University of Babylon	42
11	Official approval of Marjan Medical Hospital	43
12	الخلاصة	١
13	العنوان	------

Abstract

Introduction: Type 1 diabetes mellitus is a complex disease requiring an ongoing care to prevent acute and chronic complications. It also requires continuing medical care and an ongoing patient self-management education. Likewise to prevent sickness, requires collaboration between the health care team and the family especial the mothers because she is adjacent to the child and thus the most essential point in the management.

Design of the study: A quantitative study descriptive cross sectional design selected to carry out the study directed to assess of Mothers' Home behaviors concerning their children with type 1 Diabetes.
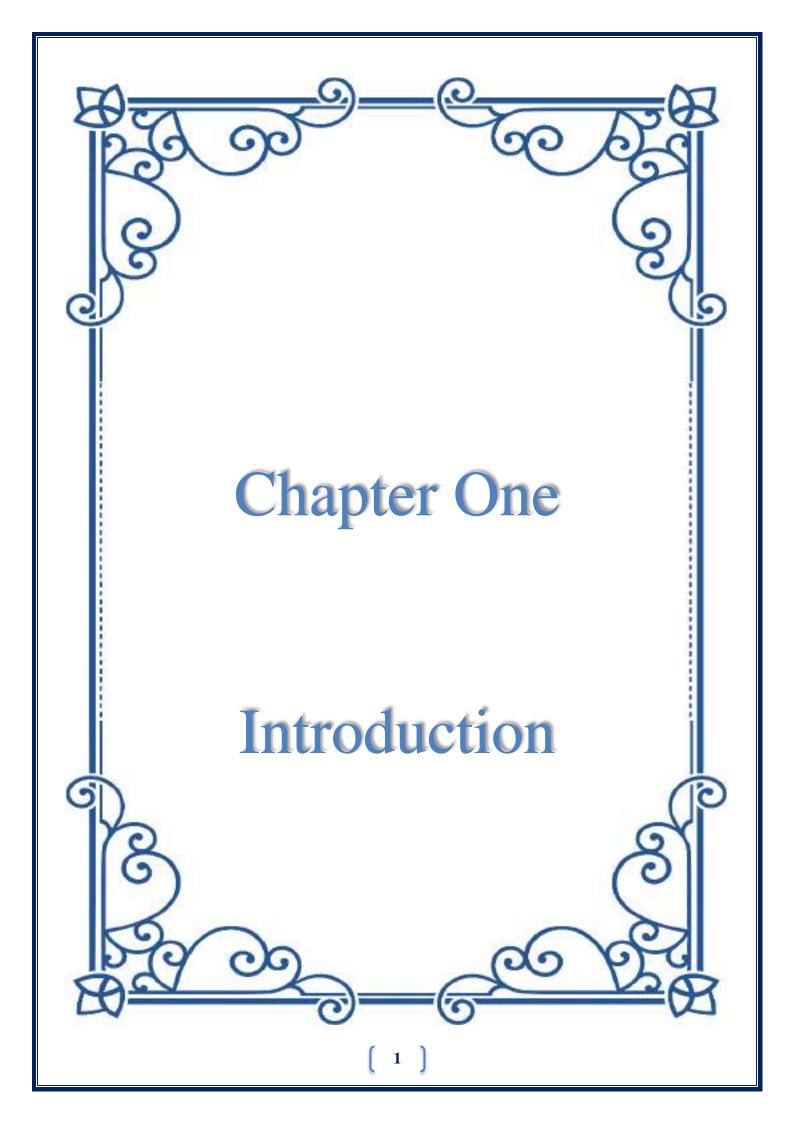
Results: A total of 75 participant, 51 (68%) Female, and 24 (32%) male. And the overall assessment recorded moderate level regarding Mothers' behaviors concerning their children with Diabetes. And the Association between Mothers home behavior and demographical characteristics reveal that there is a significant relationship between Mothers home behavior and the study samples related to demographical characteristics such as (caregiver , caregiver age, educational level of care giver, occupation of the care giver) while there is a insignificant relationship with other demographics.

Conclusion: Mothers of children with type 1 diabetes need an instruction and health education, to improve their knowledge and skills to dealing with their effected children.

Recommendations:

1- Mothers need to instruction with means of education, to improve their knowledge and skills to deal with their diabetic children.

2. Educational programs must be designed to improve mothers' knowledge of the disease.

3. Creating a new unit within the diabetes center to train mothers on how to deal with the disease and the proper way to use of the therapy.

Keywords: Diabetes, Caregiver Behavior, Children, Mother.

Chapter One

Introduction

1.1. Introduction

Type 1 diabetes (T1DM) is an autoimmune disease with aberrant immune responses to specific β-cell autoantigens, resulting in insulin deficiency (Iversen AS, Graue M, Haugstvedt A, Råheim, 2018). The diagnosis of diabetes has profound implications for the individual and his/ her family and its impact is considered by some as a 'psychological crisis' (Galatzer A, Amir S, Gil R, Karp M, Laron Z, 1982). This type of diabetes is most common in children and adolescents (T1DM) affects approximately 500,000 children (<15 years) worldwide. With around 80,000 new cases diagnosed each year (IDF. IDF diabetes atlas-7th edition EB/OL. 2016). Pediatric T1DM patients in China have an average HbA1c value of 8.6-10.3%, and only 27.5% of these patients achieve qualified blood glucose control (Guo J, Whittemore R, Jeon S, 2016). the Middle East and North Africa (MENA) have the highest worldwide prevalence of diabetes at 10.9% (Esteghamati A, 2005). In 2015 the statistic shows that new cases are (2335), while in 2016 statistics show that new cases are (3005) in Al- Najaf Province (AL-Sadder Medical City, Statistical Department, 2015, 2016).
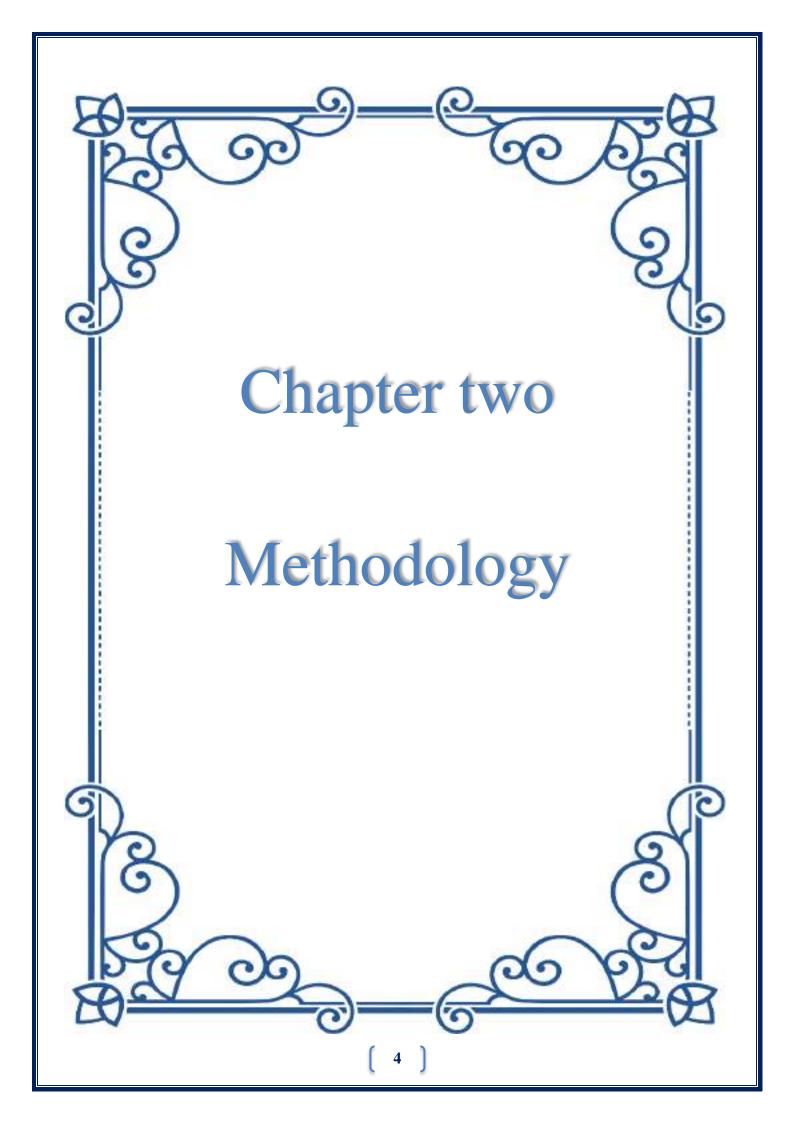
The presentations of diabetes in children with type 1 diabetes are polyuria, polydipsia, weight loss, and diabetic ketoacidosis (DiMeglio LA, Evans-Molina C, Oram R, 2018). The diagnosis of diabetes in children is a very stressful situation for parents. Management of this disease requires a rigorous and complex regimen that includes continuous monitoring and constant attention from caregivers especially mothers (Rechenberg K, Grey M, Sadler L 2017 & Greening L, Stoppelbein L, Cheek K 2017). Most children's time is spent at home or at school, so both environments (e.g., food eaten, exercise, sleep schedules) have a marked influence on blood glucose control and the concomitant necessity for insulin treatment (Gupta OT, MacKenzie M, Burris A 2018). As the result of that, children with T1DM have been identified as a difficult age group to treat, especially school-age patients (Guo J, Whittemore R, Grey M 2013). Interventions for children with diabetes involve the family, child, and

professionals including physicians, nurses, and nutritionist.(Donna LW, Hockenberry EM. St Louis: Mosby; 2001).

T1DM among adolescents may be linked with reduced Quality of Life (Wang Y, Meng Z, Huang Y 2016). T1DM management needs adherence to a strict diet and insulin therapy 365 days per year, so it is one of the key challenges is helping patients and their families integrate diabetes into their everyday life (Landau Z, Lebenthal Y, Boaz M 2013, Channon S, Hambly H, Robling M, 2017).Through this quantitative research we will be able to assess mother's behaviors dealing with diabetic children.

1.2. Objectives:

- .Assess the socio-demographic characteristic of children with DM type 1, as well as their mothers.

- Find-out the Mothers' Home behaviors concerning their children with type I Diabetes Mellitus

- Find-out the relationships between mother' home behaviors with certain demographic characteristics.

Chapter two

Methodology

2. Methodology

2.1. Design of the study

A quantitative study descriptive cross sectional design selected to carry out the study directed to assess of Mothers' Home behaviors concerning their children with type 1 Diabetes. Which consider a scientific framework to solve nurses' problems from the period between (2 /1 / 2023) and (28/ 3 / 2023).

2.1. Setting of the study

Marjan Medical City selected as arch field to collect the data to obtain the objectives of the study according to approval attained shown in appendix.

2.1. Sample of the study

A non-probability purposive sampling approach that recruited (75 samples) Mothers or others family members as caregiver selected from public governmental hospital (Marjan Medical City) at Babylon province, caregiver included as samples because they are assign to provide direct care to child selected according to the specific criteria of having a child diagnosed with T1D

2.1.4. Administration regulation

Starting the study, project formal form declared from pediatric nursing department assigned the group of researchers and the supervisor. The second step meeting assigned by the supervisor to crystalize the title and the objectives of study.

2.1. The research instrument:

In order to reach the objectives of the shady special questionnaire prepared after reviewing related literatures divided to three parts as the following:

Part I: this part Content the demographical characteristics of the study Sample

Part II: this part content Demographical Data of the study Sample Children's.

part Ill: this part this include (34 items) regarding nursing documentation in emergency care units items, the rating and scoring system when adapted in the questionnaire assigned as Always scored (3), Sometimes scored as (2), and Never scored as (1).

2.1. Data Collection

The questionnaire was used to gather data through (interview and self-report). Researchers were collected data individually from each participant. Each interview lasts 15-20 minutes maximum, with agreement to participate in the study

2.1. Statistical analysis

Descriptive statistical method were used to analyze the result of the study as frequency and percentage. Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 26.

Chapter three

Results

3. Results

Table 1: Distribution of socio-demographical information of the caregivers

Variables		Frequency	Percent
Caregivers	Father	19	25.3
	mother	47	62.7
	brother	1	1.3
	parents	8	10.7
	Total	75	100.0
Caregiver Age	30-40 years	45	60.0
	41-50 years	19	25.3
	51-60 years	11	14.7
	Total	75	100.0
The educational level of the Caregiver	do not read and write	7	9.3
	read and write	5	6.7
	primary	19	25.3
	secondary	28	37.3
	college	12	16.0
	post graduate	4	5.3
	Total	75	100.0

Caregiver occupation	employed	33	44.0
	unemployed	42	56.0
	Total	75	100.0
Residential area	Rural	19	25.3
	Urban	56	74.7
	Total	75	100.0
No. of children with IDDM in the family	One	68	90.7
	More than one	7	9.3
	Total	75	100.0

Table (1): This table demonstrated the demographical characteristics of the study sample, the results recorded that the most of sample 47 (62.7%) were mothers ,also recorded 45 (60.0%) were between age group (30-40)years old, related to educational status most of study sample 28 (37.3%) were secondary ,also this table show the high percentage 42(56.0%) were unemployed , related to residential area the high percentage 56(74.7%) were urban residency , also show the percentage 68(90.7%) with one child with IDDM in the family .

Table 2: Distribution of demographical information of the patient

Variables		Frequency	Percent
Age	lessthan5 years	1	1.3
	6-10 years	23	30.7
	11-15 years	44	58.7
	16-20 years	7	9.3
	Total	75	100.0
Gender	male	24	32.0
	female	51	68.0
	Total	75	100.0
School attendance	regular	40	53.3
	irregular	31	41.3
	no attendance	4	5.3
	Total	75	100.0
Family history of Diabetic disease	father	14	18.7
	mother	10	13.3
	brother	3	4.0
	sister	3	4.0
	no history	45	60.0
	Total	75	100.0

Anthropometric measurements(Height)	0.5-1 m	1	1.3
	1-1.5 m	74	98.7
	Total	75	100.0
Anthropometric measurements(weight)	20-30 kg	24	32.0
	31-40 kg	20	26.7
	41-50 kg	17	22.7
	51-60 kg	11	14.7
	61-70 kg	3	4.0
	Total	75	100.0
Anthropometric measurements(BMI)	18.5	30	40.0
	18.6-24,9	40	53.33
	25-29.9	5	6.67
	Total	75	100.0
Complications associated with the diseases	retinopathy	2	2.7
	nephropathy	8	10.7
	respiratory infection	10	13.3
	DKA	21	28.0
	hypoglycemia	27	36.0
	no complication	7	9.3
	Total	75	100.0

	3 years or less than	56	74.7
Duration of disease	4-6 years	14	18.7
	7-9 years	5	6.7
	Total	75	100.0

Table (2): This table demonstrated the demographical characteristics of the child , the results recorded that the most of sample 44 (58.7%) were between(11-15)years , related to gender recorded 51 (68.0%) were female ,also recorded 40 (53.3%) were regular School attendance , the result recorded45(60.0) without history of diabetic ,related to Anthropometric measurements of study sample recorded 74 (98.7%) were more than 1 m as height , 24 (32.0%) were 20-30 kg as weight and 40 (53.33%) as BMI ,also this table show the percentage 27(36.0%) were hypoglycemia as complication , related to Duration of disease the high percentage 56(74.7%) were 3 or less than 3 years .

Table 3: Distribution related to assessment of Mothers' behaviors concerning their children with Diabetes

No.	Items	Always		Sometimes		never		Total		Mean	Level
		F	P	F	P	F	P	F	P		
1	My meal planned according to regimen follow	21	28.0	45	60.0	9	12.0	75	100.0	2.16	Moderate
2	I eat at the same time every day	13	17.3	55	73.3	7	9.3	75	100.0	2.08	Moderate
3	The food labels used for planning meals	13	17.3	32	42.7	30	40.0	75	100.0	1.77	Moderate
4	Fatty foods eaten more than the meal plan allowed or the physician recommended	21	28.0	41	54.7	13	17.3	75	100.0	2.11	Moderate
5	Sweets eaten more than the meal plan allowed or the physician recommended	16	21.3	40	53.3	19	25.3	75	100.0	1.96	Moderate
6	Amount of insulin that the physician prescribed (including adjustments for diet or blood glucose level) actually taken.	36	48.0	37	49.3	2	2.7	75	100.0	2.45	Good
7	Insulin taken at the time your child was supposed to	45	60.0	26	34.7	4	5.3	75	100.0	2.55	Good

8	The amount of insulin your child took written in a daily note	34	45.3	33	44.0	8	10.7	75	100.0	2.35	Moderate
9	The injection site changed at least every three days.	37	49.3	30	40.0	8	10.7	75	100.0	2.39	Moderate
10	The injection site checked for signs of infection (e.g. redness or soreness).	26	34.7	37	49.3	12	16.0	75	100.0	2.19	Moderate
11	Blood sugar levels tested as often as recommended	37	49.3	31	41.3	7	9.3	75	100.0	2.40	Good
12	Blood sugar checked at the time of the day it should be	24	32.0	43	57.3	8	10.7	75	100.0	2.21	Moderate
13	Blood sugar numbers written in a notebook.	41	54.7	29	38.7	5	6.7	75	100.0	2.48	Good
14	"Fast sugar" (like candy, juice) used	37	49.3	33	44.0	5	6.7	75	100.0	2.43	Good
15	Frequently absent because of the disease	22	29.3	22	29.3	31	41.3	75	100.0	1.88	Moderate
16	Get exercise or participate in physical activity for at least 20 minutes	32	42.7	34	45.3	9	12.0	75	100.0	2.31	Moderate
17	Blood sugar levels tested every time your child ate.	14	18.7	42	56.0	19	25.3	75	100.0	1.93	Moderate
18	The amount of exercise changed, whenever meals and snacks changed	7	9.3	48	64.0	20	26.7	75	100.0	1.83	Moderate

No.	Item										Level
19	The amount of exercise changed, how often was total insulin dose (bolus) changed.	11	14.7	50	66.7	14	18.7	75	100.0	1.96	Moderate
20	less or more food was eaten than usual, how often was total insulin dose (bolus) changed	27	36.0	32	42.7	16	21.3	75	100.0	2.15	Moderate
21	Blood sugar levels were higher or lower than usual, how often was the amount of exercise changed.	21	28.0	47	62.7	7	9.3	75	100.0	2.19	Moderate
22	Blood glucose was out of the target range, the total insulin dose (bolus) adjusted	39	52.0	21	28.0	15	20.0	75	100.0	2.32	Moderate
23	The child needed help for diabetes in school, home, or social settings, how often was help obtained.	29	38.7	32	42.7	14	18.7	75	100.0	2.20	Moderate
24	Blood sugar checked routinely	42	56.0	25	33.3	8	10.7	75	100.0	2.45	Good
25	"fast sugar" (like juice) taken within 10 minutes	32	42.7	39	52.0	4	5.3	75	100.0	2.37	Moderate
26	Blood sugar checked within 20 minutes after having taken "fast sugar"	19	25.3	48	64.0	8	10.7	75	100.0	2.15	Moderate
27	"Regular food" eaten after needing to take "fast-sugar".	30	40.0	44	58.7	1	1.3	75	100.0	2.39	Moderate

28	Too much food eaten blood sugar went too high after being low.	35	46.7	31	41.3	9	12.0	75	100.0	2.35	Moderate
29	Insulin dose changed because of the results of blood sugar tests.	44	58.7	23	30.7	8	10.7	75	100.0	2.48	Good
30	Insulin correctly adjusted for meals eaten away from the home	30	40.0	27	36.0	18	24.0	75	100.0	2.16	Moderate
31	The child's friends, teachers, coaches and others told how to treat "low" blood sugar.	35	46.7	38	50.7	2	2.7	75	100.0	2.44	Good
32	The school nurse, dentist, and eye doctor told that the child has diabetes.	35	46.7	35	46.7	5	6.6	75	100.0	2.40	Good
33	Is a physician called for changes in insulin dose because of frequent "high" or "low" blood sugar levels.	39	52.0	34	45.3	2	2.7	75	100.0	2.49	Good
34	The physician called when the child has severe diabetic symptoms.	28	37.3	37	49.3	10	13.3	75	100.0	2.24	Moderate
General Mean										2.24	Moderate

MS (mild behavior =1-1.6, moderate   behavior = 1.7-2.3, good   behavior = 2.4-3)

Table 3: Indicated that most of the Mothers' behaviors concerning their children with Diabetes recorded moderate level with general mean 2.24.

Table 4: Overall assessment of Mothers' behaviors concerning their children with Diabetes

Level	Frequency	Percent
Mild	0	0.0
Moderate	24	70.85
Good	10	29.41

Table 4: shows that the higher percentage of the study sample 24(70.85%) were recorded moderate level regarding Mothers' behaviors concerning their children with Diabetes.
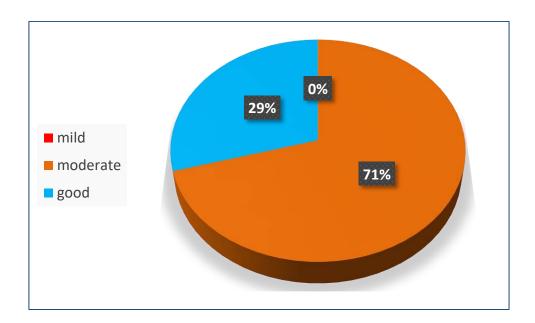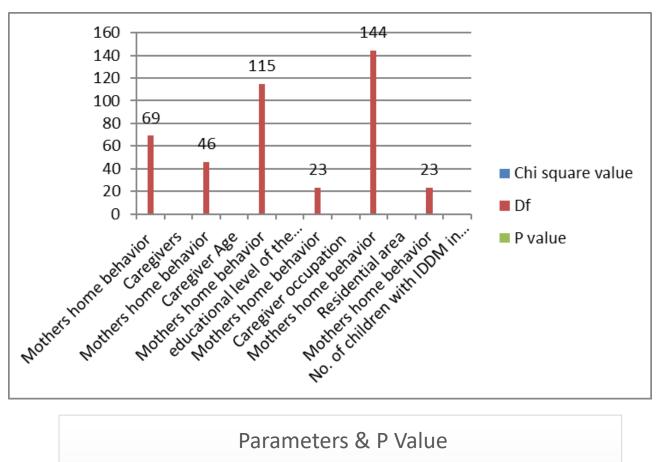

Figure 1: Overall assessment of Mothers' behaviors concerning their children with Diabetes

Table 5: Association between Mothers home behavior and demographical characteristics

Parameter	P value	Df	Chi square value
Mothers home behavior / Caregivers	.031	69	75.750[a]
Mothers home behavior / Caregiver Age	.003	46	77.436[a]
Mothers home behavior / educational level of the Caregiver	.031	115	122.468[a]
Mothers home behavior / Caregiver occupation	.015	23	31.121[a]
Mothers home behavior / Residential area	.393	144	147.957[a]
Mothers home behavior / No. of children with IDDM in the family	.268	23	26.728[a]

Table (5.) shows that there is relationship between Mothers home behavior and the study sample related to demographical characteristics were distributed in P ≤ 0.05 except Residential area and No. of children with IDDM in the family
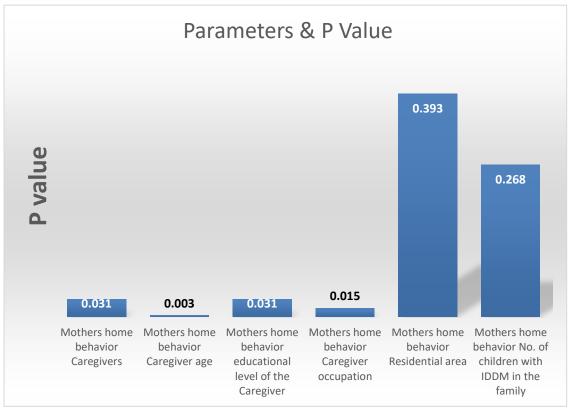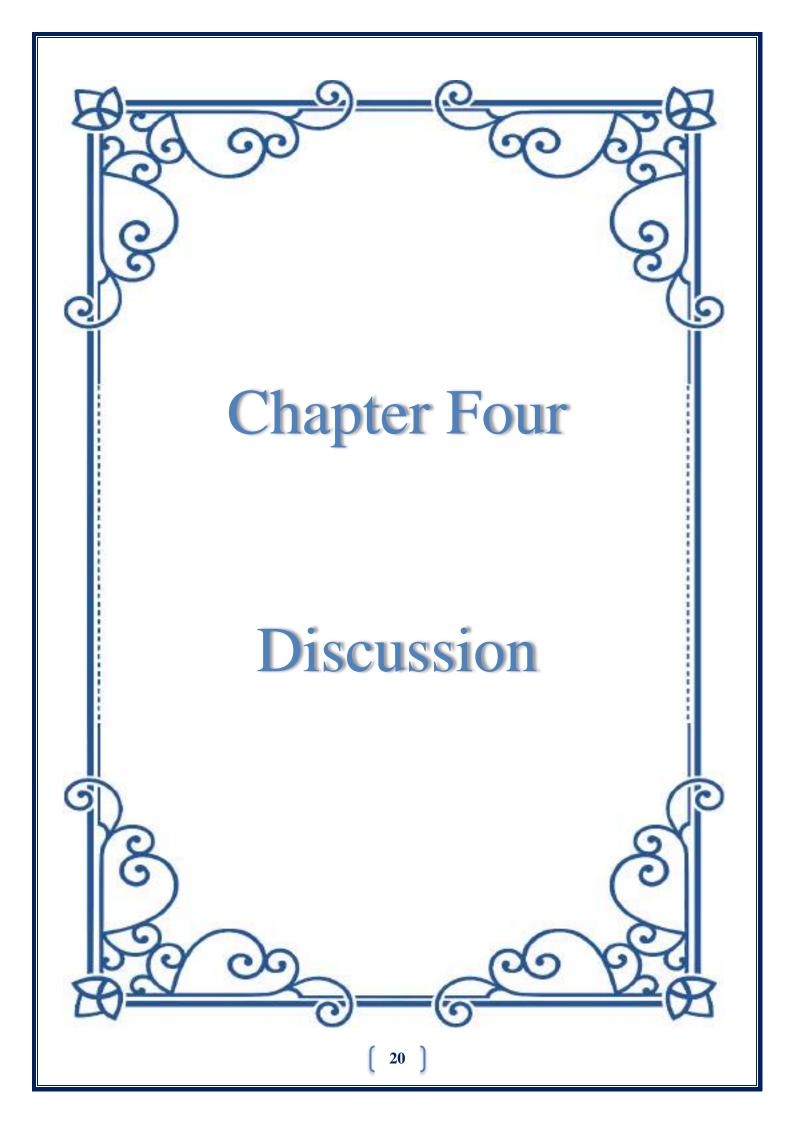
Figure 2: Association between Mothers home behavior and demographical characteristics

Chapter Four

Discussion

4. Discussion

The present study is Assessment of Mothers' Home behaviors concerning their children with (**T1DM**) in Marjan Medical City hospital. Focusing on assessment of mothers' behaviors, ability to deal with their diabetic children.

In the present study more than half of the caregivers accompanying their children were mothers, belonged to the age group of (**30-40**) years with (**60**%) out of the total samples. This observation is supported by the similar studies conducted by (Qunfeng Lu1,2, Youwei Li3, Ziyi Cai4, Sha Cui4, Yan Shi5 *et al*.2020) and (Zainab Abidzaid Abid *et al*.2019) .

More than quarter of the caregivers have secondary educational level and slightly more than half from the total were unemployed. Less than half of the respondents living in urban residential area.

Almost of all the study samples have one child associated with (**T1DM**). And this results is similar to study done in (Al-Sadder Medical City/ At Al - Najaf Center for Diabetes and Endocrine by (Zainab Abidzaid Abid et al.2019). The important reasons that lead to the exacerbation of the disease are the lack of knowledge, the level of education, the unhealthy lifestyle and the unhealthy diet such as fast food compared to the healthy environment in the countryside, as well as the lifestyle and the type of foods are among the most important factors in the development of the disease and its complications.

On the other hand in the second part of demographical data dealing with the diabetic children most of patients were Females. This result comes inconsistent with the findings of another study (Zainab Abidzaid Abid *et al*.2019). And from range of age (**6-10**) years were (**30.7**%), and (**11-15**) years were (**58.7**%).this is similar to study done by (Shahla Abolhassani, Sima Babaee, Maryam Eghbali *et al*.2007). This age poses great challenges for parents in caring for their children with diabetes, as it is the beginning of adolescence, meaning the age in which they need more calories, due to

physiological changes, as well as the tendency of children at this age to move often with their peers according to the age stages of Erik Erikson's psychosocial theory. Difficulty Controlling the activities and diet of diabetics is one of the most important factors in the development of complications and the transformation of the disease into an uncontrolled condition.
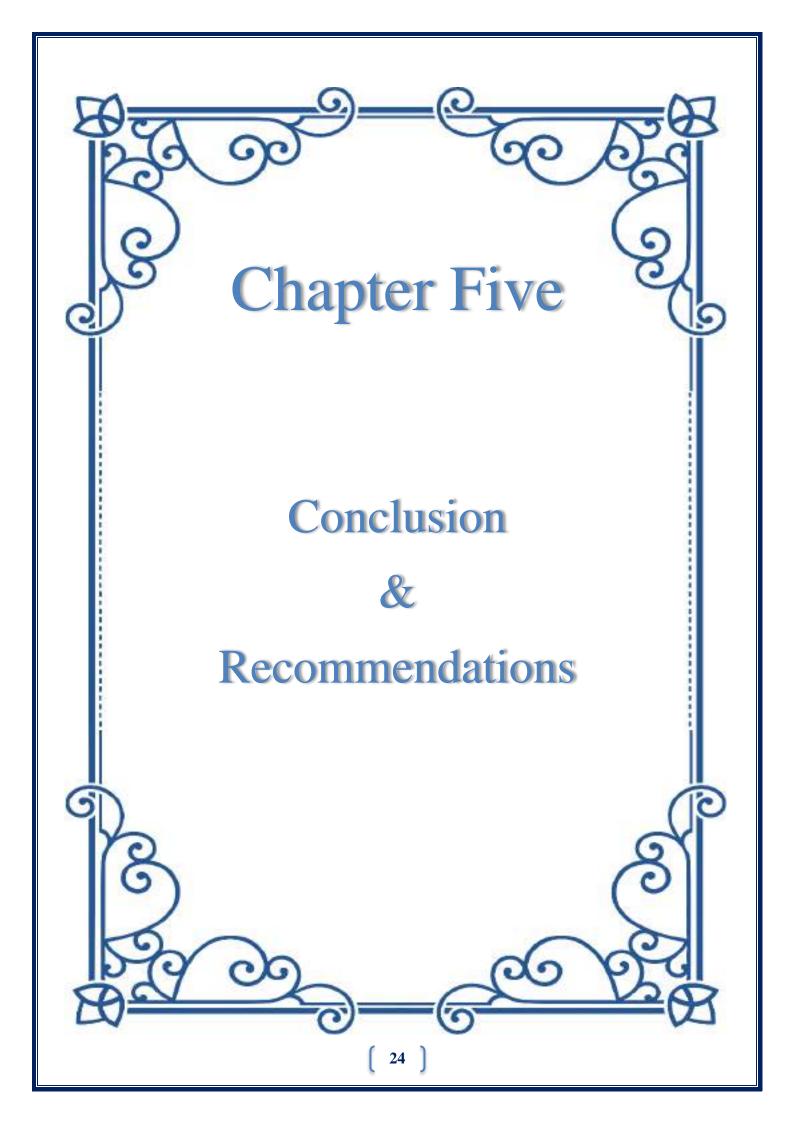
Majority of the participants were have regular school attendance and the rest were irregular. (**60**%) of the samples have no family history of diabetes this. This high result is considered scientifically unacceptable, because parents often justify this by exposing their children at a young age to a terrifying or frightening situation (Jumped scared at a very young age) that is the leading cause of the disease, well this consider a diabetes myths according to (MILA FERRER/ MARIANA GÓMEZ-2019) that body releases a series of hormones known as counter regulatory .These hormones "counter-regulate" the action of insulin (insulin-antagonistic). So then, blood glucose levels will rise due to the effect of the undiagnosed diabetes, and after the child get scared this will cause blood glucose levels (already high) to rise even more which make the diabetes symptomatic. That is when they get a diagnosis.

Concerning the anthropometric measurements (**98.7**%) were (**1-1.5**) m in high and, (**32**%) were (**20-30**) kg in weight while (**26.7**%) were (**31-40**) kg and (**22**.7%) were (**41-50**) kg. According to standers range values of body mass index **(BMI)** the participants in this study (**53.33**%) were having normal **(BMI)**, while a significant percentage about (**40**%) where underweight. About half of the samples (**36**%) associated with hypoglycemia, and (**28**%) were having the symptoms of diabetic ketoacidosis (**DKA**) and the other complication included nephropathy, and respiratory infection were less. This result was similar to studies in India, Ethiopia and China (Ayele *et al*.,2012;Gopichandran *e tal*.,2012;Guo *et al*.,2012). Majority of samples (**74.7**%) were suffering from (**T1DM**) for less than 3 years.

At table 3 the present study shows that Distribution related to assessment of Mothers' behaviors concerning their children with (**T1DM**) recorded moderate level with general mean 2.24.

While table 4 dealing with Overall assessment show that 24 (70.58%) were moderate and 10 (29.41%) were good level. This result is similar to a study done by (Noorani et al., 2016) which her results shows a fair (Moderate) level of overall assessment.

There are extremely rare studies have assessed mothers behaviors at table 5 this study results reveal that there is a significant relationship between Mothers home behavior and the study sample related to demographical characteristics such as (caregiver , caregiver age, educational level of care giver, occupation of the care giver) while there is a insignificant relationship with other demographics. These study results are supported by (Forsander *et al*.,2012, Abdel Megeid and El-Sayed , (2012)) who reported significant relationship between level of education and mothers knowledge about management of diabetic children.

Chapter Five

Conclusion

&

Recommendations

5.1. Conclusion

The Study Concluded That:

- Based on the findings of the current study, it can be concluded that, most mothers have barely sufficient behaviors about concerning their children with (**T1DM**).
- The majority of children with TIDM are females.
- There is a significant effect of educational levels of mothers on management of diabetic children.
- There is no serious and effective programs and staffs that educating mothers about the disease.

5.2. Recommendations:

Based on the study results and conclusion, the study recommends that:

1 -Mothers need to promotion and instruction with means of education, to improve their knowledge and skills to dealing with their child. An educational program should be designed and implemented to increase mothers information about etiology, signs and symptoms and treatment of their children with TIDM in order to reduce or prevent complications, so that primary health centers should take a more serious place in the education and the rehabilitation,

3 -Make emphasize must be direct toward the helping for sharing in continues educational program and course by nursing staff related to management of diabetic children.

4. Nurses should provide a scientific booklet, publication and journal about TIDM

5. Creating a new unit within the diabetes center to develop the association between mothers and center to training mothers of diabetic on the managements and therapy.

Appendices

Questioner

Assessment of Mothers' Home behaviors concerning their children with type I Diabetes.

Part I: / Section A:

Assessment of socio-demographical information of the caregivers

Caregiver	Father	◯
	Mother	◯
	Brother	◯
	Sister	◯
	Parent's	◯
	Other	◯
Caregiver Age	[ ]	Year
The educational level of the Caregiver	Don't Read & write	◯
	Read & write	◯
	Primary	◯
	Secondary	◯
	College	◯
	Postgraduate	◯
Caregiver occupation	Employed	◯
	Unemployed	◯
Residential area	Urban	◯
	Rural	◯
No. of children with IDDM in the family	One patient	◯
	More than one.	[ ]

Part I: / Section B:

Assessment of demographical information of the patient.

Age	☐	*Year*
Gender	Male	◯
	Female	◯
School attendance	Regular	◯
	Irregular	◯
	No attendance	◯
Family history of Diabetic disease	Father	◯
	Mother	◯
	Brother	◯
	Sister	◯
	Other	☐
	No History	◯
Anthropometric measurements	Height	☐ *Cm*
	Weight	☐ *Kg*
	BMI	☐
Complications associated with the diseases	Retinopathy	◯
	Nephropathy	◯
	Respiratory Infections	◯
	Diabetic ketoacidosis	◯
	Hypoglycemia	◯
	No complications	◯
	Duration of disease	☐

Part II:

Assessment of Mothers' behaviors concerning their children with Diabetes.

No.	Domain items	Never	Sometimes	Always
1.	My meal planned according to regimen follow.	○	○	○
2.	I eat at the same time every day	○	○	○
3.	The food labels used for planning meals.	○	○	○
4.	Fatty foods eaten more than the meal plan allowed or the physician recommended.	○	○	○
5.	Sweets eaten more than the meal plan allowed or the physician recommended.	○	○	○
6.	Amount of insulin that the physician prescribed (including adjustments for diet or blood glucose level) actually taken.	○	○	○
7.	Insulin taken at the time your child was supposed to.	○	○	○
8.	The amount of insulin your child took written in a daily note.	○	○	○
9.	The injection site changed at least every three days.	○	○	○
10.	The injection site checked for signs of infection (e.g. redness or soreness).	○	○	○
11.	Blood sugar levels tested as often as recommended.	○	○	○
12.	Blood sugar checked at the time of the day it should be.	○	○	○
13.	Blood sugar numbers written in a notebook.	○	○	○
14.	"Fast sugar" (like candy, juice) used.	○	○	○
15.	Frequently absent because of the disease	○	○	○
16.	Get exercise or participate in physical activity for at least 20 minutes.	○	○	○
17.	Blood sugar levels tested every time your child ate.	○	○	○
18.	The amount of exercise changed, whenever meals and snacks changed.	○	○	○
19.	The amount of exercise changed, how often total insulin dose (bolus) was changed.	○	○	○
20.	less or more food was eaten than usual, how often was total insulin dose (bolus) changed.	○	○	○

No.				
21.	Blood sugar levels were higher or lower than usual, how often was the amount of exercise changed.	◯	◯	◯
22.	Blood glucose was out of the target range, the total insulin dose (bolus) adjusted.	◯	◯	◯
23.	The child needed help for diabetes in school, home, or social settings, how often was help obtained.	◯	◯	◯
24.	Blood sugar checked routinely.	◯	◯	◯
25.	"fast sugar" (like juice) taken within 10 minutes.	◯	◯	◯
26.	Blood sugar checked within 20 minutes after having taken "fast sugar".	◯	◯	◯
27.	"regular food" eaten after needing to take "fast-sugar".	◯	◯	◯
28.	Too much food eaten blood sugar went too high after being low.	◯	◯	◯
29.	Insulin dose changed because of the results of blood sugar tests.	◯	◯	◯
30.	Insulin correctly adjusted for meals eaten away from the home.	◯	◯	◯
31.	The child's friends, teachers, coaches and others told how to treat "low" blood sugar.	◯	◯	◯
32.	The school nurse, dentist, and eye doctor told that the child has diabetes.	◯	◯	◯
33.	Is a physician called for changes in insulin dose because of frequent "high" or "low" blood sugar levels.	◯	◯	◯
34.	The physician called when the child has severe diabetic symptoms.	◯	◯	◯

استمارة بحثية

حول ((تقييم سلوكيات الامهات في المنزل فيما يتعلق بأطفالهن المصابين بداء السكري من النوع الاول))

**الرجاء الإجابة على الأسئلة التالية وإعطاء العلامة (x) داخل المساحه الفارغه:

الجزء الاول \ أ

البيانات الديموغرافية لمقدم الرعاية للطفل

مقدم الرعاية للطفل	الاب	⭕
	الام	⭕
	الاخ	⭕
	الاخت	⭕
	الوالدين	⭕
	اخرون	▭
عمر مقدم الرعاية	▭	سنة
مستوى التعليم	أُمي	⭕
	يقرأ و يكتب	⭕
	ابتدائي	⭕
	متوسط	⭕
	اعدادي	⭕
	جامعي	⭕
	دراسات عليا	⭕
العمل	موظف	⭕
	كاسب	⭕
السكن	ريف	⭕
	مدينة	⭕
عدد الاطفال المصابين في العائلة	واحد	⭕
	اكثر \ عدد	⭕

البيانات الديموغرافية للمريض.

عمر المريض	☐	سنة
الجنس	◯ ذكر	
	◯ انثى	
الحضور الى المدرسة	◯ اعتيادي	
	◯ متغيب احياناً	
	◯ لا يحضر المدرسة	
التاريخ العائلي لمرض السكر	◯ الاب	
	◯ الام	
	◯ الاخ	
	◯ الاخت	
	◯ لا يوجد	
القياسات الانثروبومينترية	☐ الطول	سم
	☐ الوزن	كغم
	☐ BMI	
المضاعفات المرتبطة بالم*رض	◯ اعتلال الشبكية	
	◯ اعتلال الكلية	
	◯ العدوى التنفسية	
	◯ الحماض الكيتوني	
	◯ هبوط سكر الدم	
	◯ لا مضاعفات	
	☐ مدة المرض	

الجزء الثاني

تقييم سلوكيات الأمهات تجاه أطفالهن المصابين بالسكري.

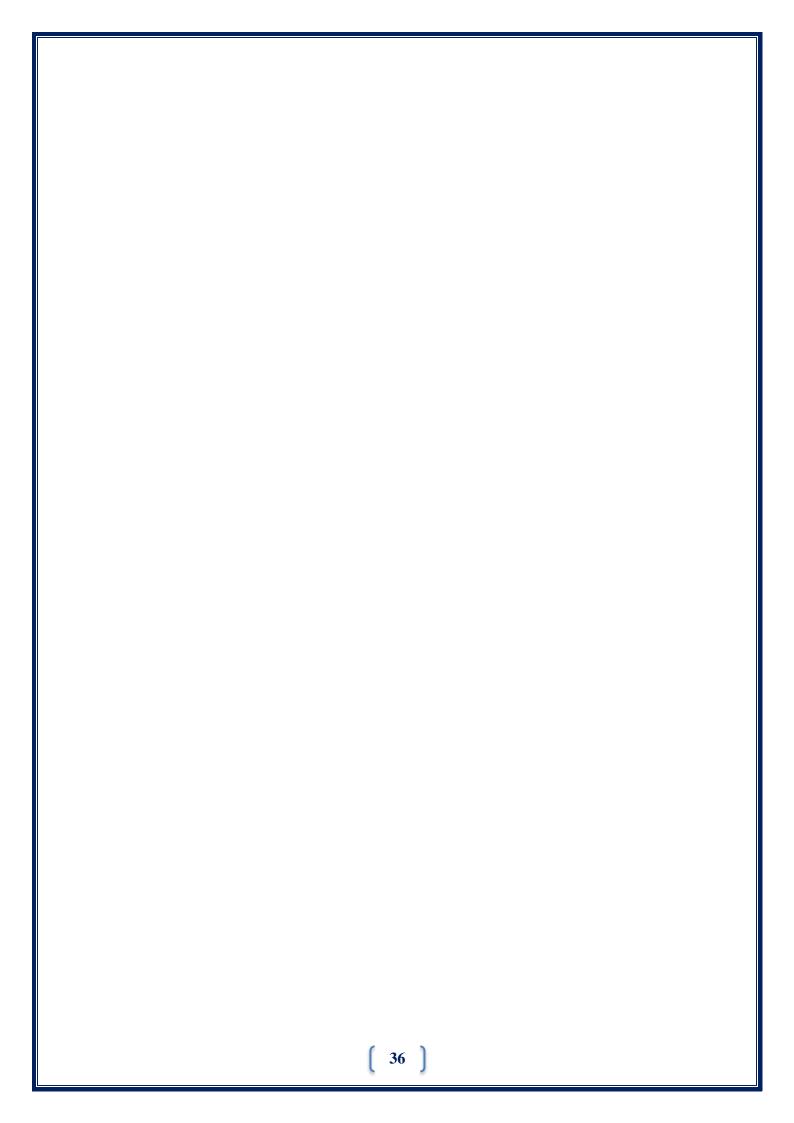| دائماً	احياناً	أبداً	العناصر	ت.
◯	◯	◯	الوجبات اليومية مطابقة للحمية الموصى بها.	١.
◯	◯	◯	الاكل اوقات منتظمة كل يوم	٢.
◯	◯	◯	اختيارالوجبات حسب المعلومات والمكونات الغذائية الملصقة على الاطعمة ؟	٣.
◯	◯	◯	تتناول كمية من الاطعمة التي تحتوي عل الدهون اكثر من الكمية المسموح بها التي اوصى بها طبيبك	٤.
◯	◯	◯	تناول كمية من الحلويات أكثر من المسموح بها أو التي أوصى بها الطبيب.	٥.
◯	◯	◯	تستخدم تماما نفس كمية الأنسولين التي وصفها الطبيب (بما في ذلك التعديلات على النظام الغذائي).	٦.
◯	◯	◯	يؤخذ الانسولين في ذات الوقت الذي يجب ان يأخذه الطفل به.	٧.
◯	◯	◯	كمية الانسولين المعطاة يجب ان تدون في دفتر ملاحظات.	٨.
◯	◯	◯	يتغير موقع الحقن كل ثلاثة أيام على الأقل.	٩.
◯	◯	◯	يُفحَص موضع الحقن بحثًا عن علامات العدوى (مثل الاحمرار أو الألم).	١٠.
◯	◯	◯	يتم قياس مستوى السكر في الدم بقدر ما هو موصى به.	١١.
◯	◯	◯	يجب فحص نسبة السكر في الدم في اي وقت من اليوم.	١٢.
◯	◯	◯	أرقام قياسات السكر تكتب في دفتر ملاحظات.	١٣.
◯	◯	◯	"هل تستخدم السكر السريع" (مثل الحلوى والعصير).	١٤.
◯	◯	◯	هل يتغيب كثيرا بسبب المرض؟	١٥.
◯	◯	◯	هل يمارس الرياضة أو المشاركة في نشاط بدني لمدة ٢٠ دقيقة على الأقل.	١٦.
◯	◯	◯	يتم اختبار مستويات السكر في الدم في كل مرة يأكل فيها طفلك.	١٧.
◯	◯	◯	كمية التمرين تتغير كلما تغيرت الوجبات والوجبات الخفيفة.	١٨.
◯	◯	◯	يتم تغيير مقدار التمرين ، مع تغيير جرعة الأنسولين او الحبوب المعطاة ؟	١٩.
◯	◯	◯	اذا تناول طعام أقل أو أكثر من المعتاد ، هل يتم تغيير جرعة	٢٠.

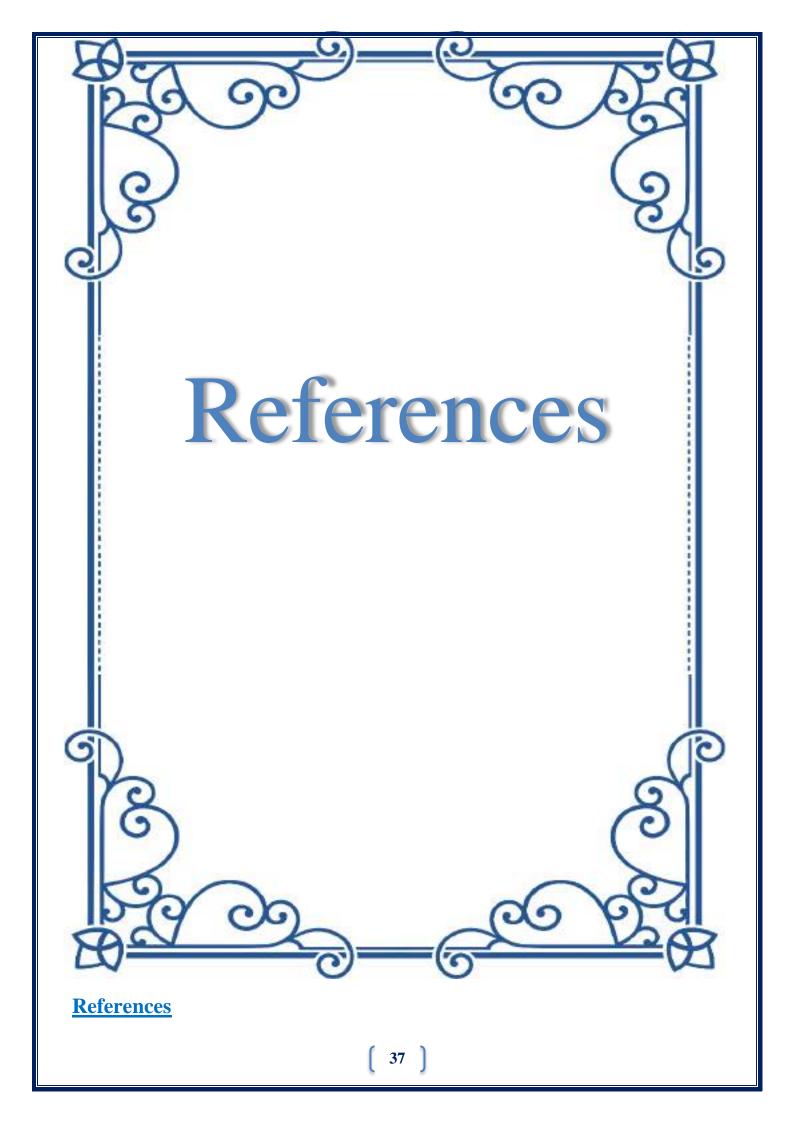|				
○	○	○	الأنسولين الإجمالية او الحبوب المعطاة.	
○	○	○	هل تلاحظ اختلاف في مستويات السكر صعوداً و نزولاً، تبعاً لتغير التمارين الرياضية.	.٢١
○	○	○	اذا كان السكر مرتفع ،هل تقوم بتعديل جرعة الأنسولين الإجمالية او الحبوب المعطاة.	.٢٢
○	○	○	غالبا ما يحتاج الطفل المصاب بالسكري إلى مساعدة في المدرسة أو المنزل أو الأماكن الاجتماعية ، هل يحصل طفلك على هذه المساعدة عندما يحتاجها. هل حدث من قبل؟	.٢٣
○	○	○	يتم فحص سكر الدم بشكل روتيني.	.٢٤
○	○	○	"السكر السريع" (مثل العصير) يؤخذ خلال ١٠ دقائق. في حال هبوط السكر عن المستوى الطبيعي؟	.٢٥
○	○	○	يتم فحص سكر الدم خلال ٢٠ دقيقة بعد تناول "السكر السريع"(العصير). في حال هبوط السكر عن المستوى الطبيعي؟	.٢٦
○	○	○	"الطعام العادي" يؤكل بعد أن يؤخذ "السكر السريع".في حال هبوط السكر عن المستوى الطبيعي؟	.٢٧
○	○	○	ارتفاع نسبة السكر في الدم بعد تناول الكثير من الطعام بشكل مفرط.	.٢٨
○	○	○	هل تتغير جرعة الأنسولين بسبب نتائج قياسات السكر في الدم.	.٢٩
○	○	○	يتم تغيير جرعة الأنسولين بشكل صحيح في حال تناول وجبات خارج المنزل والتي لا تتطابق مع الحمية	.٣٠
○	○	○	هل تم اخبار أصدقاء الطفل ومعلموه ومدربونه وغيرهم كيفية علاج "انخفاض" نسبة السكر في الدم.	.٣١
○	○	○	هل تم اخبار مقدمي الرعاية الصحية او الاساتذة في المدرسة وطبيب الأسنان وطبيب العيون أن الطفل يعاني من مرض السكري.	.٣٢
○	○	○	هل يقوم الطبيب بإجراء تغييرات في جرعة الأنسولين بسبب تغير مستويات السكر في الدم "المرتفعة" أو "المنخفضة".	.٣٣
○	○	○	هل تتصل بالطبيب عندما يعاني الطفل من أعراض مرض السكري الشديدة.	.٣٤

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<u>الخلاصة:</u>

المقدمة: داء السكري من النوع الأول هو مرض معقد يتطلب رعاية مستمرة لمنع المضاعفات الحادة والمزمنة. كما يتطلب أيضًا رعاية طبية مستمرة وتعليمًا مستمرًا ليتمكن المريض من التعامل مع المرض بنفسه. وللوقاية من المرض ، يتطلب التعاون بين فريق الرعاية الصحية والأسرة وخاصة الأمهات لأنهن ملازمات لاطفالهن عادة حيث تعد هذه الخطوة اساسية للسيطر على المرض.

منهجية البحث : دراسة كمية ووصفية تم اختيارها لإجراء الدراسة الموجهة لتقييم السلوكيات المنزلية للأم فيما يتعلق بأطفالهم المصابين بداء السكري من النوع الأول.

النتائج: إجمالي ٧٥ مشاركًا ، ٥١ (٦٨٪) إناث ، ٢٤ (٣٢٪) ذكور. وسجل التقييم العام مستوى متوسط فيما يتعلق بسلوكيات الأمهات فيما يتعلق بأطفالهن المصابين بالسكري. وتكشف العلاقة بين سلوك الأمهات في المنزل والخصائص الديموغرافية عن وجود علاقة قوية بين سلوك الأمهات وعينات الدراسة تتعلق بالخصائص الديموغرافية مثل (مقدم الرعاية ، عمر مقدم الرعاية ، المستوى التعليمي لمقدم الرعاية ، مهنة مقدم الرعاية) بينما هناك علاقة ضئيلة مع البيانات الديموغرافية الأخرى.

الاستنتاج: أمهات الأطفال المصابين بداء السكري من النوع ١ بحاجة إلى تعليمات وتثقيف صحي لتحسين معارفهم ومهاراتهم في التعامل مع أطفالهم المصابين.

التوصيات:

١ -تحتاج الأمهات إلى التثقيف بوسائل التعليم ، لتحسين معارفهن ومهاراتهن للتعامل مع أطفالهن المصابين بالسكري حيث يجب إنشاء برامج تعليمية لتحسين معرفة الأمهات حول المرض.

٢. إستحداث وحدة جديدة داخل مركز مرض السكري لتدريب الأمهات على كيفية التعامل مع المرض والاستعمال الصحيح للعلاج.

الكلمات المفتاحية: مرض السكري ، سلوك مقدم الرعاية ، الأطفال ، الأم

جامعة بابل

كلية التمريض

تقييم سلوكيات الأمهات فيما يتعلق بأطفالهن المصابين بداء السكري من النوع الاول

بحث تخرج

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البروفيسور د . نهاد محمد قاسم الدوري

نيسان٢٠٢٣

شوال١٤٤٤