

**An-Najah National University
Faculty of Graduate Studies**

**Prevalence of Depression and Associated
Factors Among Major and Intermediate
Patients with Thalassemia in West Bank:
A Cross Sectional Study**

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الإهداء

بسم الله الرحمن الرحيم و الصلاة والسلام على سيدنا محمد عليه الصلاة والسلام
إلى روحه الطاهرة... إلى من غرز في عقلي وقلبي حب العلم والسعي وراء الطموح... إلى
والدي العزيز رحمة الله

إلى من يحمل قلبها كل معاني الحب والحنان والعطاء ويكتم بدعواتها ونضائها سر نجاحي
وتوفيقي... أمي الحبيبة

إلى رفقاء دربي وأصدقائي وسندي... أشقائي وشقيقاتي

إلى رفيق دربي وشريك في الطموح والذي ساندني ودعمني خلال رحلتي العلمية... زوجي

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الإقرار

أنا الموقعة أدناه، مقدمة الرسالة التي تحمل العنوان:

Prevalence of Depression and Associated Factors Among Major and Intermediate Patients with Thalassemia in West Bank: A Cross Sectional Study

مدى انتشار الاكتئاب والعوامل المؤثرة في حدوثه بين مرضى
الثلاسيميا العظمى والمتوسطة في الضفة الغربية: دراسة مقطعية

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Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's name:

اسم الطالبة:

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التوقيع:

Date:

التاريخ:

Abbreviations

PWT	Patients WithThalassemia
BTM	Beta-Thalassemia Minor
BTI	Beta- Thalassemia Intermediate
TM	Thalassemia Major
APA	American Psychological Association
DSM-2	Diagnostic and Statistical Manual of Mental Disorder-2
BDI	Beck Depression Inventory
TBFS	Thalassemia Patients' Friends Society
SPSS	Statistical Package for the Social Sciences
MOH	Ministry of Health
QOL	Quality of Life

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Prevalence of Depression and Associated Factors Among Major and Intermediate Patients with Thalassemia in West Bank: A Cross Sectional Study

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Abstract

Thalassemia is a condition that causes the human body to destroy red blood cells faster than they can be made. It affects physical aspects of Patients With Thalassemia (PWT), thus causing them psychological problems such as depression. **The aims of our study** was to identify prevalence of depression disorders among intermediate and major PWT and to assess impact of some associated factors such as age, sex, health status, level of education, economic status and marital status. To these two ends, the researcher conducted quantitative descriptive cross- sectional study. Beck Depression Inventory was used to assess the level of depression among PWT. To administer the research instrument, 163 patients suffering from of intermediate and major thalassemia were conveniently chosen. After data collection and analysis, it was found that 55.2% of females and 44.8% of males were between 21 and 25. About (38.7%,58.3%)of them hailed from villages respectively. About 55.8% of the sample reported suffering from a severe level of depression as opposed to 22.7% who suffered from moderate depression. A significant correlation was found between some variables. The male patients were more prone to moderate and severe depression (p. value=0.014,0.05) respectively.

Patients, who had a low monthly income of less than 1,500 shekels (p. value =0.02), had a low level of education (p value =0.02). There was also a significant correlation with place of living. There was, in addition, significant correlation between taking medications (tablets) and pump machine. However, no significant correlation was found between some variables as complication, the number of times of blood transfusions and others. In the light of these major findings, most PWT in the West Bank were suffering from severe depression in their life. Therefore, the health policymakers need to give serious attention to the needs of PWT in terms of psychological and emotional support.

Key words: Thalassemia; Depression; West Bank

Chapter One

Introduction

Chapter One

Introduction

Thalassemia is one of blood disorders(1).Patients With Thalassemia sufer from some emotional and psychological problems. This study is unique in studying the prevalence of depression among them.It also assesses some associated factors and highlights the needs of participants.

1.1.Background

Thalassemia is a set of genetic diseases of hemoglobin synthesis characterized by reduced or absent of one or more of the globin chains of person's hemoglobin(1).

It is the most common genetic disease with chronic blood disorder in the world. It is characterized by decreased synthesis of one of the two types of polypeptide (chain B and A) that form the adult human hemoglobin molecule. It results in decreased filling of the red blood cells with hemoglobin and leads to anemia(2).

There are two kinds of thalassemia. The first is Alpha Thalassemia which occurs commonly in persons from the Middle East, Southeast Asia, China, and Africa. There are about 26 million alpha thalassemia carriers of Southeast Asian origin, with an incidence of 5-15%. Alph- thalassemia occurs in the Mediterranean area (Cyprus, Turkey, Greece and Southern Italy) and parts of the Middle East, with an incidence of around 1%(3).

The second, Beta Thalassemia, is a complex disease rampant in Africa but rare in the United States. It is also common in the Mediterranean region, China and the Middle East, the Indian Subcontinent and Southeast Asia in a line stretching from Southern China down the Malaysian Peninsula to the Indonesian Islands(4)..

Beta thalassemia is also known as Mediterranean anemia. Beta thalassemia has three types: mild or minor, intermediate or moderate and major Beta- thalassemia(5).

In Beta-Thalassemia Minor (BTM) or Thalassemia carrier, the deficiency of beta protein leads to inappropriate functioning of the hemoglobin chains. A person with this status simply carries the genetic trait for thalassemia without problems other than a possible moderate anemia(6).

Beta-Thalassemia Intermediate (BTI) is an intermediate condition between the minor and major forms. In this type, the deficiency of beta protein in the hemoglobin causes a moderate to severe anemia, thus causing some complications, including bone deformities and enlargement of the spleen(7).

Thalassemia Major (TM) or Cooley's anemia (TM) or β -thalassemia occurs when the same gene abnormalities affect production of the beta globin protein. It is the most common and dangerous type of beta thalassemia; it damages beta protein in the hemoglobin chain, thus leading

to life-threatening anemia. In that case, it requires recurrent blood transfusions and prolonged medical care. These prolonged, lifelong blood transfusions can lead to iron overload and in this case, it must be treated with chelation therapy to prevent early complications which end with loss of life as a result of organ failure(8).

Physical complications that result from recurrent iron overload occur in patients with thalassemia major because of regular blood transfusion. It can lead to additional serious complications because the body does not have a mechanism to arrange for the excess iron. Complications of chronic iron overload in thalassemia patients include pulmonary hypertension, bone deformities, cardiac disease (including heart dysfunction and arrhythmias, endocrine diseases including hypogonadism and hypothyroidism and bone diseases, including osteoporosis, liver cirrhosis and fibrosis(9).

Disease symptoms can differ significantly depending on the form of thalassemia and seriousness of the condition. PWT may complain of symptoms such as irritability, pale appearance, weakness and fatigue, facial bone deformities, yellow discoloration of skin and shortness of breathing (10).

PWT are treated using two methods: traditional treatment which includes blood transfusion, splenectomy and desferal or exjade treatment. Another method is bone marrow transplantation(11).

Depression is the most common psychiatric problem(12). Depression was the fourth cause of unemployment in 2000, and in 2002 it was the second incapacitating diseases among all mental illnesses and physical diseases(13).

There are several forms of depression. These depend on duration of extension and severity of symptoms. Most of these kinds of depression are defined according to *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV2), an American Psychological Association publication (APA). It describes the standard criteria for different types of psychiatric disorders. There are different kinds of depression(14). The most common forms of depression are reactive depression, major depression disorder, dysthymic disorder, manic depression or bipolar depression, minor depressive disorder, psychotic depression and post -partum depression(15).

According to the DSM-5 criteria of depression, the person's symptoms extend to two weeks and include persistent sadness, anxiety, or empty mood, feelings of hopelessness, feelings of guilt, worthlessness, pessimism, helplessness, loss of interest or pleasure in hobbies and activities, fatigue, general body decline, difficulty in concentrating on, and remembering things and making decisions. This is in addition to difficulty in sleeping, early-morning awakening, or oversleeping, appetite loss and/or weight changes, obsession with death or suicide, suicide attempts, diminished energy, restlessness, irritability and persistent physical symptoms(16).

Prevalence of thalassemia

Thalassemia occurs in approximately 4.4 of every 10,000 live births throughout the world. It causes males and females to inherit the relevant gene mutations equally because it follows an autosomal pattern of inheritance with no preference for gender. About 0-3% of the American population is affected by a gene mutation as opposed to 2-18% of Eastern Mediterranean people, 0-19% of Europeans, 0-11% of Southeast Asians and 0-12% of Sub-Saharan Africans(17). The prevalence of thalassemia in Palestine is about 700 cases. Until 2015, Jenin had the largest number of thalassemia patients. There were 125 cases. In the Gaza Strip, in contrast, according to a study conducted in 2007, there were 293 patients with thalassemia(18)..

Epidemiology of depressive disorder

The prevalence of depression has been estimated to be between 8% - 12% among adult men and 20%-25% among adult women(19). A general prevalence of depression was between 9 – 2. The prevalence of depression was found to be higher among females: 2:1(20)

1.2 Significance of the study

Thalassemia is a major health problem worldwide. Several studies have been conducted to understand psychological problems among patients

with thalassemia in order to help them to become more active and productive free from any emotional and psychological problems.

Unfortunately, little attention has been drawn towards understanding the psychological status of Palestinian patients with thalassemia during their life cycle. Having severe anemia, pale face, loss of appetite, weakness, fatigue and change in body appearance contribute to thalassemia patients' psychological problems. This study has been conducted to understand the prevalence of depression and its associated factors among patients with thalassemia in the West Bank.

1.3 Problem Statement

In West Bank, there is a dearth of studies regarding depression among patients with thalassemia. They do receive health care services at governmental hospitals but without any attention towards other aspects of their lives. People are unaware that thalassemia could have undesirable effects on the patients' mental health, thus leading to emotional and physical problems. That is why attention and support are necessary to be drawn towards depression among patients with thalassemia.

1.4 Aims of the study

The aims of this study are two-fold: to identify prevalence of depression symptoms among patients with thalassemia in the West Bank and to assess the effect of associated factors such as age, income and education on them.

1.5 Specific objectives of the study

1. To assess the prevalence of specific psychological illnesses, like depression, among thalassemia patients.
2. To find out if there is a correlation between the prevalence of depression and other independent variables such as age, sex and education, place of resident, marital status, income, work, type of thalassemia, medication and complications of disease.

Chapter Two

Literature Review

Chapter Two

Literature Review

Thalassemia major (TM) is the most common genetic disorder around the world(1). Like other chronic disorders, TM leads to psychological and physical effects(7). This chapter surveys the most relevant studies on depression among PWT in the world.

2.1 Prevalence of depression among PTW in the world

PWT are exposed to emotional and psychological problems during their life cycle and these affect negatively self-esteem along their stages of life as children, adolescents and adults(7). Prevalence of depression has increased among them and this could affect their future life.

Yahiaet et al conducted study done in Egypt (2013) evaluated the prevalence of anxiety and depression among PWT in Egypt and assessed the factors behind these psychiatric disorders. In the study, it was found that 32.1% and 16.1% respectively, of patients reported experiencing abnormal and borderline depressions. The independent factors had an effect on patient's psyche which leads to depression. Effects were heart failure, hospitalization, diabetes mellitus, short stature and delayed puberty(21).

Haliasos (2013) conducted in Athens to understand and assess the level of knowledge of all PWT, in all stages of their life, about depression and its associated factors. The result of study showed that the quality of health services provided to patients had an effect on their psychological

well- being. It positively increased life expectancy of PWT and so created a significant ongoing of health care supplements and requirements.(22)

Hashemi et al (2012) conducted in Iran as a case – control study on 34 major beta thalassemia patients to assess the prevalence of major depression and anxiety disorders among them and their correlation with the education of their mothers as a family agent. This study indicated that the major depression disorders were significantly more prevalent among major thalassemia patients whose mothers had low level of education.(23)

Saravi et al (2007) in Iran also conducted a case – control study on 165 male and female thalassemia patients. It was found that 14% of PWT had depression as opposed to 5.5% among the control group in comparison with the average depression score of the questionnaire. In thalassemia boys, the score was 134 while the score of the boys in the control group was 127. It was also found that the average score of girls of control group was higher than the same score of thalassemia girls (139 vs 135). Further, the depression score of the girls in control group was higher than the score of the girls who had thalassemia.(24)

Messina (2008) evaluated PWT's self –image, quality of life and the way of coping with stress and identified the psychiatric disorders among young adults of PWT in Italy. The study showed that most of patients with Thalassemia Major (MT) had severe psychological problems such as depression, low self –image and identity crisis coupled with a feeling of insufficiency.(25)

In addition to these studies, Hajibeigi (2009) conducted a cross-sectional study in India to assess the correlation between depressive symptoms and quality of life and sleep patterns among PWT. The study was conducted on 292 patients. It was found that emotional and physical problems with the quality of life scores would be enough to reveal symptoms of depression. Higher depressive symptoms were positively associated with sleep quality and quality of life(26).

Beside these study, Behdani(2015) in Iran assessed the psychological aspects of Iranian adolescents of PWT. In this case – control study, about 60 healthy subjects with 60 PWT were included. It was found that the children and adult PWT had more emotional and psychological problems, such as depression, than healthy people.PWT had a lower quality of life than their friends and rate of depression was higher in the same group. Therefore, the psychological problems among the PWT were more than those among healthy people ($P = 0.005$)(27).

In addition, a study done in Iran by Shafiee(2014) assessed the rate and severity of depression among PWT. To that end, he used the Beck Depression Inventory scale(BDI). The study found that 12.5% patients suffered from severe depression, and no significant relationship was found between depression and age and gender according to BDI scale. The total prevalence of various degrees of depression was found to be 30.8% in this study(28).

Khuoryet al (2015) assessed the prevalence and risk factors of depression and anxiety among patients with thalassemia major and intermediate. The result of study indicated that there was a positive significant relationship between duration of known thalassemia diagnosis in PWT and TI. Diagnosis of depression among patients was 35%(29).

2.2 Thalassemia-Associated Factors

During their life cycle, PWT are exposed to many factors that lead to change in their thoughts, beliefs, imagine and future(10). This section surveys several studies that have examined different types of factors that are likely to affect PWT's life and emotions.

A study conducted in America by Mednick et al (2010) examined the prevalence of depression among adolescent and adult patients with thalassemia and identified possible demographic, psychological and medical symptoms in 276 patients. It was found that most patients didn't report symptoms of depression. Female patients were more likely to experience symptoms of depression. In contrast, male and older patients' symptoms of depression were positively associated with self -report of difficulty with adherence and negatively with quality of life(30).

Aydinok (2005) conducted a study on PWT in Turkey to know who had desferrioxamine treatment. It was found that patients with lower ferritin values had significantly higher scores. About 24% of the patients had major depression and anxiety disorders and the patients with

dexferrioxamine had higher psychiatric diagnosis than patients who did receive the same treatment(31).

Khamoushi (2015) done study in Iran to identify the prevalence of depression and socio-demographic characteristics associated with anxiety and depression among patients with TM. The study found that 60.9% of the patients suffered from severe anxiety while 59.4 % reported suffering from severe depression. This study showed that the marital status and job had significant relationship with anxiety while educational level had significant relationship with depression(32).

Yengil et al (2014) conducted study in Iran to assessed depression and anxiety among PWT and evaluated the effect of these diseases on the quality of their life. The result showed that the BDI was 17 or 20.5% among patients with PWT and 28.6% among their caregivers in comparison with Beck Depression Inventory. In the linear regression, it appeared that depression among thalassemia patients affected their physical and mental health status(33).

Hooshmandi et al (2015) found in their study done in Iran that depression had significant inverse relationships with the total scores of social support and with the scores of family support and support of other significant individuals. However, the relationship between friend support and depression was not statistically significant(34).

Gharaibeh et al (2009) found in study done in Syria that there were positive associated factors between socio- demographic factors, such as

age, gender, family income, education, and the complication of disease with the psychosocial variables including education, burden of school, sporting and depression (35).

Hongally et al.(2012) conducted a cross-sectional study in India and they found that behavioral problem were common in multi-transfused PWT. Total scores were high. About 32% of patients had behavioral problems. Higher scores of psychological problems were found among elderly patients, poorly schooled patients and early detection of diagnosis of illness with low hemoglobin level(36).

Cakalozet al (2009) conducted study in Japan to assessed the psychological and behavioral status of PWT and found it to be significantly higher among PWT(55%) compared to the control group(14.7%). About 15% of the patients reported frequent depressive disorders while the thalassemia patients group showed significantly high problems in peer relationship and education(37).

2.3.Summary and conclusion:

Through this chapter we noticed that there was no previous studies done in Palestine about the effects of thalassemia among PWT, in contrast, there are many studies dealing and relating with depression among PWT in the world. This chapter discussed the prevalence of depression among PWT, and found that there were different associated factors leads to mental and psychological problems in their life.

Chapter Three

Methodology

Chapter Three

Methodology

This study employed a quantitative research approach to study many variables in the life of PWT and how they affect on the level of depression.

3.1 Study Design

A descriptive cross- sectional design was used to achieve the aims and the objectives of the present study by studying different variables at the same time for participants.

3.2 Population of the Study

The population of the study was all major and intermediate patients with thalassemia who were admitted to thalassemia wards for regular blood transfusion treatment in the governmental hospitals run by Ministry of Health (MOH)and who also met the inclusion criteria.

3.3 Setting of the Study

The setting of the study included five governmental hospitals in the Northern West Bank. These hospitals provide health care services to PWT. They are Al-Watani Hospital, Nablus; Darwish Nazal Hospital, Qalqilia; Dr. Thabet Thabet Hospital, Tulkarm; Jenin Hospital, Jenin;and Tubas Hospital, Tubas.

3.4 Sample Size

About 163 adolescents(aged 16 years and older) with intermediate and major patients with thalassemia participated in the study. Of these, 41 were from Tulkarm (29 TM and 12TI),30 from Qalqilia(20 TM and 10 TI, 40 from Nablus (30 TM and 10 TI), 48 from Jenin(40 TM and 8 TI) and 4 from Tubas (1 TMand3TI).The sample was conveniently chosen between 2017 and 2018. The sample size applied was based on and according to similar studies. It depended on the statistical procedures done by Thalassemia Patients Friends' Society, Ramallah(38).

3.5 Sampling Technique

A convenient sampling technique was used to collect the sample from intermediate and major PWT in the five governmental hospitals in the North of the West Bank. The study population was 188: 52intermediate and 136 major. There were 16 years and older. About 163 patients participated in the study based on the inclusion criteria(39).

3.6 Data Collection

The questions explained to PWT the objectives of study. All patients completed questionnaire in a closed area inside the thalassemia ward for privacy. Data was collected by conducting face to face interviews with all the patients who met the inclusion criteria. Each interview lasted approximately 10 to 15 minutes to complete the questionnaire. Interviews

were conducted with patients who were 16 years and older. Some patients preferred to answer the questionnaire alone for more privacy. A translated version of Beck Depression Inventory was used to make it possible for the patients to complete it, We will provide name of person who translating the scale later on. Some specific information in Arabic about the study was given to all the participant The researcher received valuable assistance from the staff nurses in the wards of the hospitals.

3.7 Instrumentation

1. Beck Depression Inventory (BDI)

This is a self – reported instrument which consists of 21 sections. Each section consists of 4 scores giving degree from 0 to 3 scores to determine the possible degree of depression symptom. Scores 1-13 mean having minimal depression, 14-19 means having mild depression, 20-28 means having moderate depression and 29-63 means having severe depression (see Annex 3) (40).

2. Socio-demographic Data

In this part of the questionnaire, the patients were asked questions about their health history. Descriptive data included age, gender, years of education, income and medical history regarding the duration of thalassemia (see Annex 2).

3.8.Study Variables

1. Dependent variable:

Depression

2. Independent variables:

Age, place of resident, type of thalassemia, gender, marital status, periode of transfusion,,income, age at diagnosis, level of ferritin, medicationsm, level of education and complications.

3.9 Sample Selection

Inclusion and exclusion criteria

3.9.1 Inclusion criteria

Major and intermediate patients with thalassemia in the North of West Bank because they are easy to reach for population of the study and other researches can be encouraged later on.

1. Patients aged 16 years and older because they are able to understand the questionnaire. BDE is also suitable for respondents who are more than 16 years old.
2. Patients willing to participate in the study.

3.9.2 Exclusion criteria

1. Minor thalassemia because they are carriers of thalassemia and are not commonly admitted to hospital for blood transfusion and treatment.

2. Patients admitted to other hospital wards during time of study
3. Patients with thalassemia who are less than 16 years old because they are not able to complete the questionnaire and sign the consent form.
4. Patients with thalassemia who refuse to participate in study which reflect that there are some problems in their life and they need support and psychologist in their life which give the researcher some recommendations.

3.10 Validity and Reliability

The validity of the questionnaire was evaluated by a number of researchers worldwide. A study that was conducted in Korea indicated that the Beck Depression Inventory scale is valid for measuring the severity of depressive symptoms(41). Reliability means that scores of questionnaire are stable and consistent. Scores must be the same when researchers administer the questionnaire recurrent times at different times to participants at different times. When an individual answers certain questions, the individual should consistently answer closely related questions in the same way(42).Cronbach coefficient, and Guttman split-half coefficient tests were found to be 0.66%. This is considered acceptable for these types of studies(43)

Validity and reliability of Arabic version scale were tested by Dr. Abed Elaziz Thabit, assistant professor of Psychaitry at Al- Quds

University, Abu Dis. It is also worth noting that this scale has been used in many studies in the Arab countries(44). Other studies and researches used this translated version in Palestine such as study done in WB in AL-Najah University by Hanady Abu-Hadeed(2014) supervised by doctor Waled Sweileh and doctor Samah A-Jabi and there was study done by Nemer Ahmad (2015) in Al-Najah University supervised by Aida Alkiassi (45,46).

3.11 Data Analysis

3.11.1 Pre- analysis

Coding was used to maintain confidentiality for all participants in this study. Measurement of variables was established. Demographic data and scores of the instrument were entered in Version 2 of SPSS.

3.11.2 Statistical analysis

Descriptive statistical analysis was used for all variables and was expressed, using P-value (0.05). They were all statistically calculated. Chi-square with 95% confidence interval was used to find out if there was a correlation between the dependent and independent variables of study.

3.12 Ethical Consideration

The Institutional Review Board(IRB) of An-Najah National University gave ethical approval since the proposal of study was discussed. Permission letters were obtained from both the Ministry of Health and Thalassemia Patients Friends' Society. The study was conducted

according to the principles of research ethics. Consent forms were obtained from all participants in the study. They were informed about their right to refuse participation in the study and withdraw at any time of data collection. Participation was voluntary. Personal information was used only for research purposes and was treated in full confidentiality. The procedures were also explained in detail to them.

Chapter Four

Results of the Study

Chapter Four

Results of the Study

4.1.Introduction

This chapter presents the results of this study. Part one reports the results of demographic data. Part two is devoted to Beck Depression Inventory test for depression with its degrees. Part three reports the results of relationship between depression levels and the socio-demographic characteristics.

Table (4.1): Distribution of participants according to their socio-demographic data

Variables		No%
Gender	Male	(73)44.8
	Female	(90)55.2
Age	20-16	(43)26.4
	21-25	(63)38.7
	26 and older	(57)35.0
Place of living	Refugee Camp	(27)16.6
	Village	(95)58.3
	City	(41)25.2
Education levels	Primary Stage	(22)13.5
	Secondary Stage	(67)41.1
	Diploma and higher	(74)45.4
Age at diagnosis	One year And less	(106)65.0
	More than 1 year	(57)35.0
Period of transfusion	Weekly	(45)27.6
	Monthly or more	(118)72.4
Percentage of ferritin	Low	(62)38.0
	High	(101)62.0
Medication for treatment of ferritin	Tablet	(97)59.5
	Pump machine	(48)29.4
	No treatment	(18)11.0
Complication	Change of face shape	(22)13.5
	Splenomegally and hepatomegally	(141)86.5

Table (4-1) shows that the female participants outnumbered the male participants: 55.2% versus 44.8% respectively.

Most of the participants were older than 20 years old. Also Most of the participants(58.3%) were from villages. About 41% had completed their secondary level of education. Sixty five percent of the participants were diagnosed with thalassemia one year and less while 35% were diagnosed after one year of age.

Regarding period of transfusion, the results showed that 72.4% of the sample received blood transfusion monthly and above while 27. 6% received the blood transfusion weekly. About 62% of the sample had a high ferritin level. Close to 60% of participants used tablets to treat ferritin while 34.5% used pump machine or didn't need treatment. Also 86.5% of the participants reported complaining from complications such as hepatomegally, splenomegally and heart failure as opposed to 13.5% who reported face shape changes.

Table 4.2 Distribution of the sample according to depression level

Level	Frequency (%)
Minimal	25(15.3)
Mild	10(6.1)
Moderate	37(22.7)
Severe	91(55.8)
Total	163(100)

As Table (4-2) shows, most of the sample(55.8%) complained from severe level of depression, 22.7% experienced moderate depression, 15.3% had, minimal depression and 6.1% suffered from mild depression.

Table (4.3): Generalized linear models for factors associated with minimal to mild depression compared with severe depression among PWT

Variable	coefficient	Stander Error	95% C.I		Chi	Df	p.value
			Lower	Upper			
Gender							
Male	0.345	0.1403	0.070	0.620	6.058	1	0.014
Female	0a						
Age							
16-20	-0.158	0.1892	-0.529	0.213	0.697	1	0.404
21-25	0.186	0.1621	-0.132	0.504	1.312	1	0.252
26 and older	0a						
Place of living							
Refugee Camp	0.069	0.2141	-0.351	0.488	0.103	1	0.748
Village	0.020	0.1630	-0.300	0.339	0.015	1	0.903
City	0a						
Edu.level							
Primary	0.478	0.2094	0.068	0.889	5.216	1	0.022
Secondary	0.275	0.1478	-0.015	0.564	3.452	1	0.063
Diploma and higher	0a						
Marital Status							
Single	-0.270	0.2955	-0.849	0.309	0.837	1	0.360
Married	-0.518	0.3538	-1.211	0.176	2.141	1	0.143
Divorced	0a						
Work							
Employed	-0.079	-0.079	-0.378	0.219	0.273	1	0.620
Unemployed	0a						
Income (NIS)							
<1,500	0.703	0.703	0.382	1.025	18.401	1	0.001
>1, 500	0a						
Age at DX							
One and <year	-0.207	0.1498	-0.501	0.086	1.916	1	0.166
More than 1 year	0a						
Period for transfusion							
Weekly	0.191	0.1629	-0.128	0.510	1.373	1	0.241
Monthly and more	0a						
%of ferritin							
Low	0.301	0.1571	-0.007	0.609	3.661	1	0.056
High	0a						
Medication							
Tablet	0.621	0.2208	0.188	1.054	7.917	1	0.005
Pump	0.979	0.2325	0.523	1.435	17.726	1	0.001
No need	0a						
Complication							
Face changes	-0.082	0.2212	-0.515	0.352	0.137	1	0.711
Splenomegally Hepatomegally	0a						

Table (4-3) illustrates the significant correlation between minimal to mild depression compared with severe depression among PWT due to different independent variables.

The results show a significant association between gender and depression; males were found to be more prone to severe depression than females ($p: 0.014$). Besides, low income can increase the likelihood of severe depression; patients, whose monthly income $<1,500$ shekels, complained from severe depression more than those whose monthly income was more than 1, 500 shekels ($p: 0.02$).

We can see significant association between the educational level of PWT and their level of depression. The low level of education can increase the level of depression from minimal and mild to severe ($p:0.02$).

In addition, a significant association was found between the severity of depression and medication taking such as tablets or pump: $p:0.005$ and $p:0.001$ respectively. Other variables showed no significant correlation between minimal to mild depression and severe form of depression among PWT.

Table (4.4): Generalized linear models for factors associated with minimal to mild depression compared with moderate depression among PWT

Variable	Coofficient	S.Error	95% C.I		Chi	Df	P-value
			Lower	Upper			
Gender							
Male	0.237	0.1206	0.000	0.473	3.855	1	0.050
Female	0a						
Age							
16-20	-0.185	0.1406	-0.461	0.090	1.736	1	0.188
21-25	-0.207	0.1443	-0.490	0.076	2.063	1	0.151
26 and older	0a						
Place of living							
Camp	0.172	0.2073	-0.351	-0.234	0.690	1	0.406
Village	0.296	0.1451	-0.300	0.012	4.164	1	0.041
City	0a						
Edu.level							
Primary	0.034	0.2693	0.068	-0.493	0.016	1	0.899
Secondary	0.021	0.1227	-0.015	-0.220	0.029	1	0.866
Diploma and higher	0a						
Marital Status							
Single	-0.713	0.5482	-0.849	-1.788	1.693	1	0.193
Married	-0.847	0.5649	-1.211	-1.954	2.247	1	0.134
Divorced	0a						
Work							
Employed	-0.173	0.1584	-0.378	-0.138	1.190	1	0.275
Unemployed	0a						
Income(NIS)							
<1,500	0.165	0.1363	0.382	-0.102	1.473	1	0.225
>1,500	0a						
Age at DX							
One and <year	-0.014	0.1158	-0.501	-0.241	0.014	1	0.906
More than 1 year	0a						
Period for transfusion							
Weekly	0.092	0.1341	-0.171	0.355	0.470	1	0.493
Monthly and more	0a						

Variable	Coofficient	S.Error	95% C.I		Chi	Df	P-value
%of Ferritin							
Low	-0.022	0.1252	-0.267	0.224	0.030	1	0.863
High	0a						
Medication							
Tablet	0.190	0.1578	-0.119	0.500	1.453	1	0.228
Pump	0.264	0.2193	-0.166	0.694	1.449	1	0.229
No medication	0a						
Complication							
Face changes	0.106	0.1613	-0.210	0.422	0.432	1	0.511
Spleenomegally,hep atomegly	0a						

As Table (4.4) shows that there was a significant association between minimal to mild depression and moderate depression among PWT due to different independent variables. A significant correlation was found between the increasing degree of depression from minimal and mild to moderate which could be attributed to gender and place of living ; males were found to be more prone to complain from moderate depression than females (p: 0.05). Furthermore, moderate depression was found to be more prevalent among patients living in villages than among patients living in refugee camps or cities (p: 0.04). The other independent variables had no significant correlation between minimal to mild depression and moderate depression among PWT.

Chapter Five

Discussion

Chapter Five

Discussion

This study gave the researcher the chance to have better understanding for associated factors and how they act as the main reasons for depression among PWT in West Bank and also to talk deeper to these factors.

The main aim of this study was to identify the prevalence of depression and socio-demographic characteristics associated with it among patients with thalassemia intermediate and major in the West Bank. Beck Depression Inventory Scale was used with its score to identify type of depression that affected PWT during their lifetime. Distribution of socio-demographic data among PWT indicated that 55.2% of participants were females and 44.2% males. Of these, 58.3% were village inhabitants. The variable of diploma was the highest: 45%. About 72% of the participants in the study visited the hospital monthly for treatment. The level of ferritin was 62%, thus leading to some complications such as splenomegally, and hepatomegaly.

5.1 Prevalence of Depression among PWT in Northern West Bank

According to table(4-1) the result of this study showed that 55.8% of the participants (intermediate and major thalassemia) had severe depression while 22.7% had moderate depression. This shows high prevalence of severe depression among PWT in the West Bank. This could be attributed to political conditions in Palestine that affect on loss of

opportunities to work for PWT especially the male, and some associated factors such as low income, lack of opportunities for work, low level of education of patients. In this regard, Sabry and Salama(2009) found that there were no PWT free from depression symptoms and were significantly higher among PWT(47). This result concurs with the result of study done by Khurana et al (2006)found that most of PWT reported complaining from moderate depression symptoms and low self –esteem (48). Shafiee et al (2014) found that 30.8% of PWT had depression. Pradhan et al(2009) suggested that depression was the most common mental disorder among PWT in India(49). All these studies' findings concurred with the findings of this study.

5.2 Associated Factors with Thalassemia

Pertaining to the associated factors among PWT intermediate and major in this study, it found that there was significant correlation between males and females: p value(0.050, 0.014)respectively in moderate and major depression. That shows the males were more vulnerable to different stressors as lack of work, low income and a lot of responsibilities. All these factors give bad history about life and affect mental health.

Ghafari et al (2003) found that depression among males was more than among females(50).

Beamish et al (2016) found that males were more prone to depression and gender played an important role in depression; there was significant association with depression score(51).

Mednick et al (2010) indicated that males had positive significant association with depression when compared with females. The findings of these studies are also consistent with this study findings.

However, Naderi et al (2012), and Khodaei et al (2005) found no significant association between gender and mental health disorders such as depression(52, 53). This finding is not consistent with this study finding.

This study results revealed that there was significant association between depression and primary education level among PWT in the West Bank (P- value 0.022). This association could be attributed to lack of support of Ministry of Education (MOE) to participants and because of poverty of their families.

Hajbaghery et al (2015) found that there was statistically significant association between the low level of education of PWT and depression symptoms. They maintained that the higher level of education and knowledge of PWT could help them to accept the environment in contrast to the low level of education which could lead to poor self-esteem(54).

Khoamoush et al (2015) reported that level of education had significant association with the major depression among PWT (p-value 0.022). Findings of these studies are consistent with this study findings.

In addition, this study found that participants whose income was less than 1,500 had a positive correlation association with depression which could be attributed to their bad economic situation resulting from shortage of work, rejection by others in the community and loss/lack of support from governmental institutions.

Baswis et al (2016) found that hard economic condition of participants was a social burden on medical treatment, and the monthly income of 5,000 rupees was very little. It was difficult for them to meet cost of treatment, thus leading to psychological problems(55).

One study(2016) showed that 31.6% of participants were unemployed and 59.1% had a monthly income below the standard. All these studies findings concur with the findings of this study(56).

Besides, this study has showed significant correlation between the severity of depression and taking some medications in both routes: tablets and pump machine ($p\text{-value} = 0.005, 0.001$) respectively. This might be attributed to the low level of education among participants, which prevented them from understanding their disease, and the importance of continuing their lifetime treatment. This is in addition to the pain that results from recurrent injections.

Saravi et al (2007) suggested that participants experienced a high rate of stress due to frequent blood sampling and continuous subcutaneous injections of iron chelating agents which play an important role in creating

depression. Moussa et al (2005) reported that frequent subcutaneous injection for the pump machine which is used to iron chelation. Its complications are associated with depression among them(57).

Trachtenberg et al (2012) found that 63% of the participants in his study had used a treatment or medications orally, 11% had used a combination and 6 % had used a slow subcutaneous infusion or portable pump machine. Taking oral chelation was significantly associated with depression ($p\text{-value} < 0.01$) (58). Therefore, it has to be given attention.

These findings of previous studies are consistent with the findings of this study.

In this study, it was found that there was a significant association between depression and participants' place of living. For example, the villages were associated with moderate depression ($p\text{-value}=0.01$).

Shaligram et al (2007) found that 75% of rural area patients were prone to depression as opposed to 25% of patients from urban areas. This could be attributed to their need to pay a lot for transportation from village to city. This finding also concurs with the finding of this study(59).

However, it should be pointed out that some variables in this study were not significantly associated with depression. These variables include marital status, work, period of transfusion, age and complications of disease.

5.3 Limitations of Study

Because this was a cross- sectional study, it was not possible to measure all factors that may affect depression among patients with thalassemia. Another possible limitation had to do with the time for data collection. Some patients were admitted to other wards for other health problems so it was too difficult to see and communicate with them. There were other patients who refused to cooperate and participate in the study for reasons of their own. There were also patients who refused to answer some of the questions in the questionnaire. These limitations combined have affected the results of the study.

5.4 Strength of Study

To the best of the researcher's knowledge, this is the first study to be conducted on depression among patients with thalassemia in the West Bank.

5.5 Conclusion

The prevalence of depression among PWT is higher in local communities(towns, villages and refugee camps) than it had been thought, and it has never been studied in Palestine. Male patients are more prone to depression than females due to their low level of education, low concern about medications such tablet drugs and pump machines which act as significant predictors for developing moderate and major depression among

patients. Therefore, early detection of depression among patients, giving them greater concern by health care provider, providing them with health education about thalassemia and referring them to specialists to give them more comprehensive and individualized care can all make a difference in the quality of their lives and the lives of people living with them. These measures would also save these patients a lot of suffering, would save a lot of money and increase their productivity

5.6 Recommendations

1. Early detection of depression among patients with thalassemia must be the main concern of health care providers at hospitals
2. PWT should be transferred to psychologists to give them comprehensive and individualized care.
3. Lectures should be given to the Palestinian care providers(nurses and psychologists) to assist them in identifying the problems that result from depression and ways of dealing with them.
4. Community awareness about thalassemia should be increased particularly concerning the acceptance and understanding of PWT.
5. Psychotherapeutic methods for patients should be used, including problem -solving techniques, group therapy and interpersonal therapy, to control depression symptoms among patients.

6. Health care providers should instruct patients and their families on how to use adaptive policies such as social and spiritual support, thus helping them to deal with depression and control factors that lead to psychological problems.
7. There is a need for coordination and collaboration with other ministries such as the Ministry of Education, the Ministry of Social Affairs, the Ministry Of Health and the Ministry of Labor to improve the social status of the patients and to provide them with jobs based on their specializations and qualifications.

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Annexes

Annex (1)

Consent form

معلومات مشاركة المريض

بسم الله الرحمن الرحيم

انا الباحثة شهناز صابر محمود مدلل، طالبة ماجستير قسم الصحة العامة في جامعة النجاح الوطنية ، يسرني ان ادعوكم للمشاركة في دراستي المتعلقة بمعرفة مدى انتشار الاكتئاب بين مرضى التلاسيميا في الضفة الغربية، مع العلم أنه لك مطلق الحرية في قبول المشاركة في هذه الدراسة او الرفض، كما لك | ي الحق في اخذ الوقت للتفكير في المشاركة او استشارة أي شخص بذلك، ولك اي الحق في السؤال عن هذا البحث او أي جزء من هذا الاستبيان.

كما ونضمن السرية التامة للمعلومات المتعلقة بك اي، وذلك بما يضمن تحقيق اهداف هذه الدراسة.

وشكرا

الباحثة: شهناز مدلل

جوال: 0592932244

شهادة موافقة للمشاركة في البحث:

بعد ان قمت بقراءة المعلومات الواردة في الاستبيان وفهمها، قمت بالاجابة عن كافة الاسئلة المطروحة بشكل كاف وتام، وبناء على ذلك اوقع طوعيا على المشاركة في هذه الدراسة.

توقيع المشارك

التاريخ:

Annex (2)**Data collection sheet****1. Socio – demographic data**

1. Patient's serial number
2. Gender: a) Male b) Female
3. Age: a) 16-20 b) 21-25 c) 26 and older
4. Place of living: a. City b. Village c. Refugee Camp
5. Education: a) Primary c. Secondary d. Diploma and higher
6. Marital Status: a) Single b) Married c) Divorced
7. Work: a) Employed b) unemployed
8. Income: a) <1,500 shekels b) >1,500 shekels
9. Age at Diagnosis: a) One and less b) More than one year
10. Type of Thalassemia: a) Minor b) Intermediate c) Major
11. Period for Transfusion: a) Weekly b) Monthly and more
12. Percentage of Ferritin: a) Low b) High
13. Medications: a) Tablet b) Pump c) No medication
14. Complications from Blood Transfusion:
 - a) Face Shape Changes
 - b) Splenomegaly and Hepatomegaly

Annex (3)

Beck Depression Inventory Scale

This depression inventory can be self-scored. The scoring scale is at the end of the questionnaire.

1.		
0	I do not feel sad.	
1	I am sad sometimes.	
2	I am sad all the time and I can't snap out of it.	
3	I am so sad and unhappy that I can't stand it.	

2.		
0	I am not particularly discouraged about the future.	
1	I feel discouraged about the future.	
2	I feel I have nothing to look forward to.	
3	I feel the future is hopeless and things cannot improve.	

3.		
0	I do not feel like a failure.	
1	I feel I have failed more than the average person.	
2	As I look back on my life, all I can see is a lot of failures.	
3	I feel I am a complete failure as a person.	

4.		
0	I get as much satisfaction out of things as I used to.	
1	I don't enjoy things the way I used to.	
2	I don't get real satisfaction out of anything anymore.	
3	I am dissatisfied or bored with everything.	

5.		
0	I don't feel particularly guilty	
1	I feel guilty a good part of the time.	
2	I feel quite guilty most of the time.	
3	I feel guilty all of the time.	

6.		
0	I don't feel I am being punished.	
1	I feel I may be punished.	
2	I expect to be punished.	
3	I feel I am being punished.	

7.		
0	I don't feel disappointed in myself.	
1	I am disappointed in myself.	
2	I am disgusted with myself.	
3	I hate myself.	

8.		
0	I don't feel I am any worse than anybody else.	
1	I am critical of myself for my weaknesses or mistakes.	
2	I blame myself all the time for my faults.	
3	I blame myself for everything bad that happens.	

9.		
0	I don't have any thoughts of killing myself.	
1	I have thoughts of killing myself, but I would not carry them out.	
2	I would like to kill myself.	
3	I would kill myself if I had the chance.	

10.		
0	I don't cry any more than usual.	
1	I cry more now than I used to.	
2	I cry all the time now.	
3	I used to be able to cry, but now I can't cry even though I want to	

11.		
0	I am no more irritated by things than I ever was.	
1	I am slightly more irritated now than usual.	
2	I am quite annoyed or irritated a good deal of the time.	
3	I feel irritated all the time	

12.		
0	I have not lost interest in other people.	
1	I am less interested in other people than I used to be.	
2	I have lost most of my interest in other people.	
3	I have lost all of my interest in other people	

13.		
0	I make decisions about as well as I ever could.	
1	I put off making decisions more than I used to.	
2	I have greater difficulty in making decisions more than I used to.	
3	I can't make decisions at all anymore.	

14.		
0	I don't feel that I look any worse than I used to.	
1	I am worried that I am looking old or unattractive.	
2	I feel there are permanent changes in my appearance that make me look unattractive	
3	I believe that I look ugly.	

15.		
0	I can work about as well as before.	
1	It takes an extra effort to get started at doing something.	
2	I have to push myself very hard to do anything.	
3	I can't do any work at all.	

16.		
0	I can sleep as well as usual.	
1	I don't sleep as well as I used to.	
2	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.	
3	I wake up several hours earlier than I used to and cannot get back to sleep.	

17.		
0	I don't get more tired than usual.	
1	I get tired more easily than I used to.	
2	I get tired from doing almost anything.	
3	I am too tired to do anything.	

18.		
0	My appetite is no worse than usual.	
1	My appetite is not as good as it used to be.	
2	My appetite is much worse now.	
3	I have no appetite at all anymore.	

19.		
0	I haven't lost much weight, if any, lately.	
1	I have lost more than five pounds.	
2	I have lost more than ten pounds.	
3	I have lost more than fifteen pounds.	

20.		
0	I am no more worried about my health than usual.	
1	I am worried about physical problems like aches, pains, upset stomach, or constipation.	
2	I am very worried about physical problems and it's hard to think of much else.	
3	I am so worried about my physical problems that I cannot think of anything else.	

21.		
0	I have not noticed any recent change in my interest in sex.	
1	I am less interested in sex than I used to be.	
2	I have almost no interest in sex.	
3	I have lost interest in sex completely.	

INTERPRETING THE BECK DEPRESSION INVENTORY

Now that you have completed the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three. This would mean you circled number three on all twenty-one questions. Since the lowest possible score for each question is zero, the lowest possible score for the test would be zero. This would mean you

circles zero on each question. You can evaluate your depression according to the Table below.

Total Score _____ Levels of Depression

1. 1-13: minimal depression
2. 14-19: mild depression
3. 20 – 28: moderate depression
4. 29- 63: severe depression

Annex (4)

Beck Depression Inventory Scale (Arabic version)

استبان بيك للأكتئاب

يتضمن هذا الاختبار من 21 مجموعة من العبارات ، الرجاء قراءة كل مجموعة من العبارات بعناية ثم اختيار عبارته واحده فقط من كل مجموعة والتي تصف شعورك خلال الأسبوعين الماضيين بما فيها اليوم.

1	
0	لا اشعر بالهم والحزن
1	اشعر بشيء من الهم والحزن
2	اشعر بالهم والحزن معظم الوقت ومن الصعب علي الخروج من هذه الحالة
3	اشعر بالهم والحزن طوال الوقت ولا اشعر بالفرح او السعادة على الاطلاق
2	
0	انا لست متشائما من نظرتي للمستقبل
1	اشعر بان المستقبل غير مشجع
2	اشعر بانه لم يعد لدي شيء اتطلع اليه
3	اشعر بان المستقبل لا امل فيه وان الامور لا يمكن ان تصبح أحسن
3	
0	لا أشعر بأنني شخص فاشل
1	لقد فشلت أكثر مما ينبغي
2	كلما نظرت الى الوراء أرى الكثير من الفشل
3	أشعر بأنني شخص فاشل تماما
4	
0	أشعر بالرضا تجاه ما أفعله في حياتي
1	لم أعد أستمتع بالاشياء بنفس الطريقة التي كنت عليها من قبل
2	لم أعد أحصل على الشعور بالرضا الحقيقي في أي شيء أبدا

3	أنا غير راضي وأشعر بالملل في كل شيء
5	
0	لا أشعر بالذنب
1	أشعر بالذنب في كثير من الأحيان
2	أشعر بالذنب تقريبا في كثير من الأحيان
3	أشعر بالذنب طيلة الوقت
6	
0	لا أشعر بأنني أعاقب
1	أشعر بأنني قد أعاقب
2	انني اتوقع ان اعاقب
3	أشعر بأنني أعاقب فعلا
7	
0	لا أشعر بخيبة أمل في قرارة نفسي
1	أشعر بخيبة أمل في نفسي
2	أنا مشمئز من نفسي
3	انني أكره نفسي
8	
0	لا أشعر بأنني بحال من الاحوال أسوأ من الآخرين
1	انني أنتقد نفسي في حالات ضعفي أو أخطائي
2	انني ألوم نفسي طيلة الوقت على أخطائي
3	أنني ألوم نفسي على كل شيء سيء يحدث
9	
0	ليس لدي أي أفكار للانتحار
1	لدي أفكار للانتحار ولكن لا يمكنني تنفيذها
2	أريد أن أنتحر
3	قد أنتحر لو سمحت لي الفرصة
10	
0	لا أبكي أكثر من المعتاد
1	أصبحت أبكي أكثر من المعتاد
2	انني أبكي الآن طيلة الوقت

3	كان بمقدوري البكاء قبل ذلك ولكنني الان لا أستطيع أن أبكي رغم أنني أريد ذلك	
11		
0	لست أكثر تهيجا أو أستثارة من المعتاد	
1	أشعر بالتهيج والأستثارة أكثر من المعتاد	
2	اهتاج أو استثار لدرجة انه من الصعب علي البقاء	
3	اهتاج أو استثار لدرجة تدفعني للحركة أو فعل شيء ما	
12		
0	لم أفقد رغبتي أو اهتمامي بالناس الآخرين	
1	اصبح اهتمامي بالناس الآخرين اقل من المعتاد	
2	لقد فقدت معظم اهتماماتي ورغباتي في الناس الآخرين	
3	لقد فقدت كل اهتماماتي ورغباتي في الناس الآخرين	
13		
0	قدرتي على اتخاذ القرار لم تتغير تقريبا	
1	أوجل أخذ القرار اكثر من المعتاد	
2	لدي صعوبة في اتخاذ القرارات أكثر من ذي قبل	
3	ليس بمقدوري اتخاذ القرارات اطلاقا	
14		
0	لا اشعر بانني عديم القيمة	
1	لا اعتبر نفسي ذو قيمة وذو نفع كما اعتدت ان اكون	
2	اشعر بانني عديم القيمة بالمقارنة بالآخرين	
3	اعتقد اني عديم القيمة تماما	
15		
0	لدي نفس القدر من الطاقة كالمعتاد	
1	لدي قدر من الطاقة اقل من المعتاد	
2	ليس لدي طاقة كافية لعمل كثير من الاشياء	
3	لا استطيع القيام بأي عمل على الاطلاق	
16		
0	استطيع ان أنام كالمعتاد	
1	نومي لم يعد كالمعتاد	

2	استيقظ ساعة او ساعتين قبل المعتاد واجد صعوبة في الاستغراق في النوم ثانية
3	استيقظ بعدة ساعات قبل المعتاد ولا يستطيع النوم فيما بعد
17	
0	لا اشعر بالارهاق او الانزعاج اكثر من المعتاد
1	ارفق وانزعج اكثر بسرعة أكثر من ذي قبل
2	اشعر بالارهاق والانزعاج من اداء أي شيء تقريبا
3	انني في غاية الارهاق والانزعاج للقيام بأي عمل كان
18	
0	شهيتي للاكل ليست اسوأ من المعتاد
1	شهيتي للاكل ليست جيدة
2	شهيتي للاكل اصبحت اسوأ بكثير
3	ليست لدي أي شية للاكل على الاطلاق
19	
0	استطيع التركيز بكفاءة المعتادة
1	لا استطيع التركيز بنفس الكفاءة المعتادة
2	من الصعب علي التركيز على شيء لمدة طويلة
3	اجد نفسي غير قادر على التركيز على أي شيء
20	
0	لست اكثر ارهاقا او اجهدا من المعتاد
1	اصاب بالارهاق او الاجهاد عن عمل الكثير من الاشياء التي اعتدت عملها
2	يعوقني الارهاق او الاجهاد عن عمل الكثير من الاشياء التي اعتدت عملها
3	انا مرهق او مجهد جدا لعمل اغلب الاشياء التي اعتدت عليها
21	
0	رغبتي الجنسية لم يطرأ عليها أي تغيير
1	لدي رغبة في الجنس اقل مما كانت عليه
2	رغبتي في الجنس اقل بكثير الان
3	لم تعد لدي أي رغبة في الجنس على الاطلاق

جامعة النجاح الوطنية

كلية الدراسات العليا

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الثلاسيميا العظمى والمتوسطة في الضفة الغربية: دراسة مقطعية

إعداد

شهناز مدلل

إشراف

الدكتور عدنان سرحان

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الماجستير في الصحة

العامة بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس، فلسطين

2018م

ب

مدى انتشار الاكتئاب والعوامل المؤثرة في حدوثه بين مرضى التلاسيميا العظمى والمتوسطة
في الضفة الغربية: دراسة مقطعية

إعداد

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الملخص

التلاسيميا هي حالة مرضية تتسبب في تكسير كريات الدم الحمراء في الجسم أكثر من تصنيعها والتسبب في مشاكل جسدية عند المرضى وبالتالي تؤثر على النواحي النفسية مسببة بعض الأمراض النفسية كالإكتئاب والتوتر النفسي.

هدف الدراسة: هدفت هذه الدراسة إلى معرفة مدى انتشار حالات الاكتئاب بين مرضى التلاسيميا المتوسطة والعظمى في شمال الضفة الغربية ودراسة بعض العوامل المؤثرة في حدوثه كالعمر والجنس والحالة الصحية والاقتصادية والاجتماعية ومستوى التعليم. ولتحقيق أهداف الدراسة تم استخدام الدراسة المقطعية ،واستبيان بيك لتقييم مستوى الاكتئاب عند المرضى ، بالإضافة إلى استعمال معلومات شخصية.

عينة الدراسة: شملت الدراسة 163 مريض ومريضة تلاسيميا متوسطة وعظمى من شمال الضفة الغربية، تم أخذهم من أقسام التلاسيميا المتواجدة في خمس من المستشفيات الحكومية التابعة لوزارة الصحة الفلسطينية.

نتائج الدراسة: تبين من نتائج الدراسة ان 55.2% من المرضى إناث و 44.8% ذكور، منهم 38.7% أعمارهم 21 فما فوق. كما اظهرت النتائج ان 58.3% من المرضى من سكان القرى وان 45.4% كانوا من حملة الدبلوم، و 62% منهم يعانون من ارتفاع في نسبة الحديد، و 59.5% يتلقون علاج ارتفاع الحديد بالحبوب. كما بينت الدراسة أن نسبة 55.8% من المشتركين يعانون من اكتئاب شديد، ونسبة 22.7% اكتئاب متوسط. ووجدت الدراسة أن هناك علاقة كبيرة

ما بين الذكور والاكتئاب من النوع المتوسط والمزمن والذي توضحه الدلالة (ب) (0.05، 0.014) على الترتيب. وان نسبة عالية يعانون من تدني في الرواتب الشهرية وتدني في المستوى التعليمي بينهم وهناك علاقة ما بين الاكتئاب والإقامة في القرية واخذ العلاج عن طريق الحبوب والجهاز، ومن ناحية أخرى تبين عدم وجود علاقة ما بين الاكتئاب والمتغيرات الأخرى مثل مضاعفات التلاسيميا بداية التشخيص واخذ الدم وعدد مرات نقل الدم.

وبناء على النتائج تبين ان معظم المرضى المصابين بالتلاسيميا المتوسطة والعظمى في فلسطين يعانون من اكتئاب شديد في حياتهم، ولذلك فهم بحاجة الى دعم نفسي، ومزيدا من الاهتمام من أصحاب القرار للحصول على أفضل عناية صحية في المستشفيات، ووضعهم في جدول أولوياتهم.