Case Report

Investigating the level of Anxiety and Depression in Teenagers Suffering from Thalassemia in Iranshahr in 2015

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ABSTRACT

Introduction and Objective: Thalassemia is one of the prevalent genetic disorders in the world and particularly in Iran. Lots of reasons including: the illness is chronic, cost of treatment, patient condition and expecting premature death cause anxiety and depression in patients with thalassemia. This study was done to investigate the level of anxiety and depression in teenagers suffering from thalassemia in Iranshahr in 2015.

Methodology and Materials: This is a descriptive research and was done in teenagers suffering from thalassemia in Iranshahr in 2014-2015. In total 60 patients suffering from thalassemia have been selected for an available sampling and by a demographic questionnaire and Beck Anxiety Inventory and Beck Depression Inventory, data were collected and by using the descriptive statistics, SPSS19 were analyzed.

Findings: Results showed that the mean of anxiety symptoms was 34.73±5.62 and these patients were suffering from moderate to high anxiety. Also mean of depression score was 27.73±3.52.

Conclusion: Based on the mentioned results and the fact that thalassemia patients had approximately high anxiety and depression, appropriate training programs should be considered for these patients about the control of anxiety, depression and the related problems.

Key words: teenagers, depression, anxiety, thalassemia.

INTRODUCTION

Thalassemia is one of the prevalent genetic disorders in the world and particularly in Iran \cite{1}. This syndrome based on disorders in hemoglobin chains is divided into various types. Beta thalassemia in which there is a defect in the synthesis of Beta chain, in its homozygous form creates severe anemia. So the survival of patient is dependent on regular blood transfusions and it is called major thalassemia \cite{2}. This disease has been recorded in 60 countries \cite{3}. Thalassemia syndrome is prevalent in countries in the areas of Mediterranean countries such as Italy, Greece and
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It is estimated that there are about 270 million carriers for major defects of hemoglobin in the world. Every year approximately 300 to 400 thousand babies around the world are born with types of anemia. It is predicted that in the next 20 years 900 thousand thalassemia patients would be born in the world. Statistics of thalassemia in Iran exceeds 20 thousand persons. About 10% of people with chronic disease such as thalassemia are in their teenage years. Lots of reasons including: the illness is chronic, cost of treatment, patient condition and expecting premature death cause anxiety and depression in patients with thalassemia. These patients are under various pressures including humiliation, hopelessness, anxiety, depression, and are worried about school, employment, treatment problems, family, cultural and welfare issues. Studies have shown that teenagers suffering from thalassemia compared to their healthy peers, are at a greater risk of social and psychological problems. Anxiety is a negative feeling that occurs in response to the perceived danger and can be from an internal or external source and can be real or imaginary. Similar to all feelings anxiety has cognitive, neurological and behavioral components. Anxiety itself is a separate feeling and is identified as a harmful feeling. Depression is a collection of various psychological moods that occurs from the mild feeling of boredom to silence and being away from every day activity. There is no definitive and clear reason for depression. Depression is characterized with symptoms such as feeling of sadness, loss, anger, frustration, excitement and stress, apathy to everything and sometimes everyone; in fact patients by expressing these symptoms, make clear their discomfort. Therefore this study was done to determine the level of anxiety and depression in teenagers suffering from Thalassemia in Iran in 2015.

METHODOLOGY

This research is descriptive. Research environment was the thalassemia ward in Iran Hospital of Iranshahr. Patients were selected by available sampling method. Criteria for inclusion include the age range of 12-20, lack of a psychotic mental disorder, avoiding the use of psychotropic drugs, having no history of seizure and lack of drug addiction and the exclusion criteria include lack of cooperation with the therapist. Sample size regarding the similar study was calculated 60 persons. For data gathering three tools were used. Tools including: background information questionnaire, Beck Anxiety Inventory and beck Depression inventory. Background information questionnaire includes: age, gender, education and marital status. To measure anxiety and depression, Beck anxiety and Depression Inventory were used. Reliability and validity of these questionnaires, earlier by Kaviani&Mousavi (2008), in their investigation of the psychometric properties of this test in Iranian population, have reported the validity coefficient about 0.72 and validity coefficient of test-retest interval of one month 0.83 and Cronbach’s alpha 0.92. This questionnaire is a self-reporting questionnaire with 21 questions, which reflect the severity of physical and cognitive symptoms of persons in the past week. Each question has four answers (zero to three) is a mode of increasing intensity. This questionnaire focuses on the Physiological aspects of anxiety and three of these cases were related to anxious mood, three other cases were related to specified phobias and other questions were the automatic symptoms of hyperactivity and they measured the motion tension of anxiety. Scoring for all replies were: no (0), mild (1), average (2) and severe (3). Thus the range of score related to each individual, can fluctuate between (0-63). Score (0-21) is very low anxiety, (22-35) is average anxiety and more than 36 is severe anxiety. Beck Depression inventory is one of the self-assessment tests and is completed in five to ten minutes. Cases of the test totally consist of 21 cases related to various symptoms and subjects.
must answer it on a four-point scale from zero to three. These cases are in fields such as sadness, pessimism, sense of failure and disability, sense of guilt, sleep disturbance, loss of appetite and self-loathing. So 2 cases of it are dedicated to emotion, 11 cases to cognition, 2 cases to clear behaviors, 5 cases to physical symptoms and 1 case to interpersonal semiotics. Thus, this scale determines various degrees of depression from mild to severe and the range of its score is from at least zero to maximum 63. Gathered data were analyzed by SPSS v 19 software and descriptive statistics.

Findings
The average age of subjects was (15.22±1.93) and they were in the range of 12-19 years old (Table 1). The average anxiety in teenagers suffering from thalassemia was (34.73±5.62) and they were suffering from higher than average anxiety (Table 2). The mean score of depression in patients was (27.73±3.52) and in the interpretation of depression scores had a medium ranking. (Table 3)

Table 1: Describe the subject based on demographic variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean or Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>15.22</td>
</tr>
<tr>
<td>Gender Girl</td>
<td>40 percent</td>
</tr>
<tr>
<td>Boy</td>
<td>60 percent</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>20 percent</td>
</tr>
<tr>
<td>Middle</td>
<td>50 percent</td>
</tr>
<tr>
<td>High School</td>
<td>30 percent</td>
</tr>
</tbody>
</table>

Table 2: Level of Anxiety in teenagers suffering from thalassemia

<table>
<thead>
<tr>
<th>Number</th>
<th>SD (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>34.73 (5.62)</td>
</tr>
</tbody>
</table>

Table 3: Mean of Depression in teenagers suffering from thalassemia

<table>
<thead>
<tr>
<th>Number</th>
<th>SD (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>27.73 (3.52)</td>
</tr>
</tbody>
</table>

DISCUSSION
Lots of reasons including: the illness is chronic, cost of treatment, patient condition and expecting premature death cause anxiety and depression in patients with thalassemia (11). Anxiety and depression are of psychosocial problems of patients suffering from thalassemia that have negative effects on their health. Therefore, evaluating anxiety, depression and their treatment should be part of every patient’s care in order to increase the improvement. Analyzing the results of this research showed that the mean or average of anxiety in teenagers suffering from thalassemia was 34.73±5.62 and in the interpretation of anxiety scores had the severe rank and the mean of depression score was 27.703±3.52 and in the interpretation of depression scores had the medium rank.

This confirms the fact that teenagers suffering from thalassemia experience high level of anxiety and medium level of depression, which may expect premature death, due to the negative recognition of disease, treatment cost and conditions of disease. In the study of Rabona& et al (2006), Arbia& et al (2011), Abbasnezhad& et al (2007) and Shahnavazi& et al (2015) mean of anxiety level and depression level of patients respectively were 57.57±10.50, (45.13-52.20) 48.67, 33.8±5.69 and 48.87±4.281 and in the interpretation, anxiety scores had the severe rank and are consistent with the present study.

Final Result
Overall findings indicate that level of anxiety and depression in teenagers suffering from thalassemia is severe and medium and needs more evaluation and intervention.
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