The Comparison of Self-esteem and related Factors in ITP Patients and Healthy Individuals

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ABSTRACT

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Background: Self- esteem is defined as confidence in one's own worth or abilities. Low self- esteem may lead to failure to solve problems or not being able to use one's abilities. However, due to the chronic nature of this disease, this study was conducted to compare self-esteem in idiopathic thrombocytopenic purpura patients and healthy cases.

Methods: This is a descriptive-comparative study in which 64 randomly selected idiopathic thrombocytopenic purpura patients referring to Seyed Al-Shohada Hospital in Isfahan along with the same number of healthy people from the patients' neighborhoods (as the control group) participated. The data collection instrument used in the study was Coppersmith self-esteem inventory which was completed by the subjects. The data were analyzed by SPSS 15 and through using independent T-test, chi-square, and Mann-Whitney tests.

Results: The study results showed that 64.1% of the subjects in both the treatment and control groups were older than 35 years old, 59.4% were females, and 53.1% had primary educational degree. Independent T-test showed a significant difference between the two groups in terms of the mean score of self-esteem. ($p < 0.01$)

Conclusion: Considering patients' low self-esteem and the fact that their ability to make decisions and control the disease and its treatment have important role in raising their self-esteem, treatment team is responsible to recognize related factors and empower the patients' self- worth to help them to achieve this goal.

Keywords: Self- esteem, Idiopathic thrombocytopenic purpura, Related factors

Introduction

Idiopathic thrombocytopenic purpura is the most common cause of acute thrombocytopenia in an individual with good general condition. The incidence of this disease is estimated 1 in every 10,000 cases per year[1]. Idiopathic thrombocytopenic purpura is an autoimmune disease with antibodies detectable against several platelet surface antigens, which leads to their premature destruction and emergence of thrombocytopenic symptoms[2]. Of total patients with acute Idiopathic thrombocytopenic purpura, 65% are automatically treated within the first 6 months and only 34.9% continue the disease to the chronic state[3].

The investigations showed that, in the chronic type, patients are older and the disease starts quietly[4]. Some common complications of the disease include gastrointestinal and gums bleeding petechiae in head and neck, chest, and other organs. Similarly, with respect to high rate of occurrence of blood discharges during menstruation, this disease is observed in female gender and has been shown to rise with age[5]. Regarding the results of the study conducted by Clyer et al., one of the most important complications of petechiae is anemia and wide hemorrhages followed by several medical measures taken for these patients. Although, this disease has low mortality, limitations in doing daily activities, fear of bloodshed, economic problems, and frequent hospitalizations may have important influence on the patients' moods[6-8]. Moreover, low levels of platelets and frequent use of drugs and subsequent changes in the appearance resulting from petechiae in the patient's organs would change their self-esteem[9].

Self-esteem is closely related to one's image of himself/herself, as well as way of adaptation; it means that a positive image of one's body is directly related to a person's sense of worth; subsequently, any changes in the image lead to changes in the sense of being valuable. Illness, treatments, or their complications would make changes in the patient's mental image and self-esteem, which is much more apparent in chronic diseases due to their long term and unexpected nature[10]. Self-esteem is an important and effective psychological factor on a person's health and quality of life, which forms one's sense of satisfaction and self-worth toward him/herself as well as his/her performance; ultimately, self-esteem affects the degree of an individual's self-esteem and all levels of his/her life including thoughts, feelings, behaviors, and actions[11].

The complications Idiopathic thrombocytopenic purpura brings about, such as gastrointestinal hemorrhage and excessive bruises on face and neck, intensively affect patients' life quality[12]. Forming mental disorders, such as anxiety and depression, and decrease in personal relations in these patients, along with limited daily activities due to fatigue lead to a decrease in their performance level. The shame and embarrassment due to the disease marks and decrease in their relations with other individuals are among effective factors on patient's psychology and sense of worth in them[13].

Since the difficulties due to this disease lead to formation of psychological problems in patients and ultimately a decrease in self-esteem among them, while negatively impact their interpersonal relations establishment, thoughts, and performance, studying the disease as a key point is of significance. Finally, considering the continuous search of the researcher and lack of any domestic and foreign comparative studies on self-esteem in Idiopathic thrombocytopenic purpura patients and normal individuals, this research was carried out in 2013. It is hoped that by preparing situation for the application of results obtained from this research by the authorities in education, research, and treatment, a step is taken towards improvement in the treatment process of these

patients, along with increasing their self-esteem and as a result, the sense of worth among them.

Methods

This research is a descriptive-comparative study which was carried out on two 64-memebered groups. After acquiring permission from the Research Center of Isfahan University of Medical Sciences and authorities, the patients who retained the inclusion criteria were randomly selected from Seyyed-Al-Shohada Hospital, Isfahan, based on a table of random numbers. Inclusion criteria included age range between 20 and 70, Isfahan citizenship, definite diagnosis of Idiopathic thrombocytopenic purpura based on medical and laboratory findings, and diagnosis of the disease for at least 6 months in order to for their disease to be confirmed (according to the definition of chronic diseases, at least 3 months has to be passed after definite diagnosis of the disease so that the disease could lead to disturbance in one's daily activities and impact one's life quality), lack of cognitive and mental disorders, and lack of exposure to a stressful event such as the death of a loved one during the past month in both the case and control groups, while the exclusion criterion included unwillingness to continue participating in the study. Subsequent to describing the study objectives to the participants, they were asked to fill out the questionnaires after receiving their written consent from both the case and control groups. The number of 64 healthy individuals were randomly selected to be included in the control group, so that considering the address of the patients diagnosed with purpura (since individuals who live in one neighborhood are close based on economic and social variables), the first door would be approached and in case a similar case bearing the same aforementioned demographic specificities was found, after seeking their consent, the questionnaire would be filled by the researcher, otherwise, the next door would be approached.

In this research, self-esteem and being diagnosed with Idiopathic thrombocytopenic purpura were considered as the main variables and age, gender, education background, duration of the disease, and the number of times being hospitalized were considered as the underlying variables. In order to study self-esteem in the patients, Coppersmith self-esteem inventory was used. This scale is among the most well-known scales which measures the self-esteem and is used in many studies. School and adult forms of the Coppersmith self-esteem inventory were provided based on the extensive study of foundations, implications, and interactions of self-esteem. This scale includes 58 items, of which 26 are on general, 8 on social, 8 on family, and 8 on professional questions. The number of 8 questions is dedicated to the lie scale, which in fact is to assess the defensiveness to the questionnaire, rather than being an indicator of lying. Considering the above, the minimum score is zero and the maximum is 50, and an individual has a higher self-esteem as their score gets closer to 50, and a lower self-esteem as their score gets closer to zero. The validity and constancy of this instrument was obtained as 78% in previous studies, indicating its constancy, reproducibility, and accuracy[14]. The reliability of the scale in Delaram et al.'s study was reported to be respectively 90% and 93%, based on the retest method[15]. The collected data was analyzed by SPSS software v. 15 and to compare the age and gender, independent T-test and chi-square were respectively used. Further, Mann-Whitney test was used to evaluate the education background of individuals in the both groups and independent T-test was used to compare the score average of various aspects of life quality between the case and control groups.

Results

Most of members in the case group (64.1%) and in the control group (56.3%) were older than age 35

Table 1: Demographic characteristics of Idiopathic thrombocytopenic purpura patients in the two groups			
Demographic variables	case group	Control group	P value
Mean age (yrs)	23(35/9)	28(43/8)	0/37
20-35	41(64/1)	36(56/3)	
Sex N (%)			
Male	26(40/6)	19(29/7)	0/19
Female	38(59/4)	45(70/3)	
Education level N (%)			
Elementary	34(53/1)	30(46/9)	
Secondary	11(17/2)	12(18/8)	0/43
Diploma	11(17/2)	11(17/2)	
University degree	8(12/5)	11(17/2)	

in this survey. Independent t-test did not show any significant difference in the age of members between the both groups (P>0.05). Majority of members in the case group (59.4%) and control group (70.3%) were females and no significant difference was observed among members in the both groups in terms of gender (P=0.19). Moreover, most individuals in the case group (53.1%) had elementary education and no significant difference was seen between the both groups in terms of education level (P=0.43). (Table 1)

Independent T-test showed the self-esteem score average between the case and control groups to be statistically significant (p<0.01). Pearson correlation test showed that there is a significant relation between the total average of self-esteem score and the duration of being diagnosed with the disease and the number of times being hospitalized. In addition, Spearman correlation coefficient showed a significant relation between the education background and self-esteem in both the case and control groups (Table 2).

Discussion

Feeling of self-esteem and sense of worth as a vital asset and value plays a major role in flourishing talents and creativity in individuals; that is, one›s cognitive processes, emotions, motivations , decision

Table 2:The relationship between demographic specifications and self-esteem in both the case and control groups					
Group \ Variable	Title of test	Case group		Control group	
		Statistical results		Statistical results	
Age	Pearson	P =0.11	r= 0.38	P = 0.09	r=0.45
Education level	Spearman	P = 0.003	r= 0.36	P = 0.03	r=0.26
Number of hospitalization	Pearson	P = 0.01	r=0.30	-	-
Duration period of disease	Pearson	P = 0.03	r= 0.26	-	-

making and choices are impacted by the sense of worth[15]. One of the effective methods for adapting with the physical and mental limitations is to help patients gain a high self-esteem[16].

Based on the collected data in this research, the age of most of the studied individuals was higher than 35 years and the majority of them in the both groups were female, that was in accordance with the study by Suzan et al. in which 77 percent of the studied cases were female and the average age was 45 years [17]. Hence, based on the conduced studies, patients of chronic diseases have higher age, which approves the results from this research[18,19]. Moreover, the majority of individuals in the case group had primary school education, hence, the formation of disease complications and their negative impacts on individuals' lives decrease their opportunities for further education[17].

Moreover, there was a significant relation between the duration of being diagnosed with the disease, the number of times being hospitalized, and self-esteem. The intensity of complications in patients is among the main factors; greater complications result in greater need for being hospitalized, which ultimately cause the patients to be totally inactive and as a result, increase the sense of being a burden and decrease the sense of worth in such patients. According to the results of the conducted studies, due to complications such as frequent bleeding, petechiae, and purpura, patients are hospitalized on a regular basis[13], which is among the influential factors affecting self-esteem in them. Chronic diseases not only involve patients, but also their families and by the development of disease compilations over time, the pressure on such families increases and consequently, mental problems grow in them. Reasons such as decline in family economic capacity for purchasing expensive medications and lack of financial

support system[20] lead to formation of a sense of being a burden to the family and society in patients.

In this research, findings suggest that patients diagnosed with Idiopathic thrombocytopenic purpura have a lower level of self-esteem, comparing to the control group. Self-esteem in patients diagnosed with chronic diseases such as Idiopathic thrombocytopenic purpura is under the influence of many factors. Studies indicate that the main reason for the diseases complications is due to the emergence of Cushing syndrome symptoms and changes in the patients' appearance after long-term intakes of corticosteroids[9].

In chronic diseases, fatigue due to the feeling of helplessness and incompetence in a patient, leads to a decrease in control over life which could result in detachment and isolation in a patient. All these issues could change the natural process of life in patients and cause their self-esteem level to be changed[8]. Due to the sense of losing control over self in such diseases, patients are exposed to a decrease in their self-esteem and this could also result in decrease in life satisfaction and increase in depression prevalence, and other physical diseases. Daily events due to the disease and its complications lead to stress and change in self-esteem level in patients diagnosed with chronic diseases[21,22]. Results from Macinson et al.'s research suggest that formation of symptoms such as bleeding, weakness, fatigue, and pain followed by decrease in energy level are among the main factors to decrease the performance in such patients[13].

Results from McMillan et al.'s study showed that due to the change in lifestyle in patients diagnosed with Idiopathic thrombocytopenic purpura, failure to comply with intravascular treatments, frequent visits, and long-term hospitalization lead to a decrease in social relations in these patients[9], and

such a decrease in relations at family and society levels could be the beginning of isolation for these patients and decrease in their self-esteem level. In the study conducted by Claire, it is suggested that decrease in self-esteem level is among the main factors in decreasing the performance of patients diagnosed with chronic diseases[23].

Accordingly, in a study carried out to compare the self-esteem level among male and female patients diagnosed with cancer, Noqani et al. came to this conclusion that the majority of studied units from both sexes had an average level of self-esteem[10]. Also, findings from Antle et al.'s study in Canada are in accordance with the findings from this research. In their research under the title of "factors associated with self-worth in young people with Spinabifida, spinal cord injury, and physical disabilities", they came to this conclusion that only 30 percent of the patients had a high self-esteem and the majority of the studied units had an average level of self-esteem[16].

Considering the fact that patients diagnosed with Idiopathic thrombocytopenic purpura retain a low level of self-esteem and since this decrease in self-esteem could lead to many other problems, it is important that the treatment team helps with increasing the sense of self-worth and self-esteem in these patients through proper solutions, for a high self-esteem is among the most valuable resources on which a patient can rely to be safe in dealing with physical or mental damages[15,24].

Hence, considering the significance of chronic diseases and their impacts on patients' health conditions and their families, having proper information about the patients' self-esteem could play a great role in improving the health by the treatment team through offering care with a higher quality. Considering the presence of various psychological problems in these patients and lack of studies in Iran and other countries, using a series of methods in order to decrease their psychological problems and increase their self-esteem in future is recommended by the researchers through using novel healthcare solutions, since neglecting this issue by the treatment team leads to isolation of patients and their inadequate performance in the process of treatment. The limitation in this research included the low number of patients diagnosed with this disease which was tackled by the researcher referring to the hospitals for 9 consecutive months in order to fill out the questionnaires. Hence, carrying out a further study with higher number of participants and comparing its results with the results obtained in this research is proposed.

Conclusion

Since the disease and its compilations along with the treatment impact the self-esteem in patients, and considering the fact that self-esteem in patients influences their self-efficacy, self-care, and performance, it is the treatment team's duty to improve the sense of worth in accordance with increasing the patients' self-esteem through identifying the relative factors in this regard and increase their healthcare performance.

Acknowledgment

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