

# Investigation of the relationship between mental pressure in parents of children with Schizophrenia and patient features in the city of Zahedan

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**Abstract:** Patients incur so much suffering, but little or no attention is given to the people around patients who endure many psychological stresses because of their children's physical and mental problems. The present study aims to investigate the relationship between mental pressure in parents of children with Schizophrenia and patient features in the city of Zahedan. The statistical method in this research is survey and correlation type. The statistical population of this study consists of all children suffering from Schizophrenia in the city of Zahedan; and our sample includes 205 of these patients who were selected by random sampling method. The results were analyzed by spss software. The findings of this study indicate that there is a significant relationship (sig = 0.000) between the factors of age, parents' education level and the economic status of the family in the psychological stresses. It should be noted that the results of the present study indicate that with increasing age of the child, low level of education of parents and poor family economic status, the family incurs more stress and psychological pressure. In this study, the relationship between the gender of children and the pressure level was also investigated. The results did not show any significant relationship.

**Keywords:** Schizophrenia, Childhood Disease, Family Stress, Zahedan City.

## INTRODUCTION

Schizophrenia is the most severe chronic psychiatric illness that is associated with impaired social and occupational skills. The function of these patients is impaired in various educational, social, interpersonal and self-care areas and the patient needs permanent care in various and wide dimensions. Therefore, today, this disease is considered as one of the most important and most disabling mental illnesses in all psychiatric and psychological communities in the world and great attention is paid to it (Goudarzi and Partovi, 2005). The symptoms and signs of schizophrenia include two types of symptoms (positive and negative). Children with schizophrenia usually experience both categories of symptoms. Positive symptoms include delusions, thought disorders and illusion; and negative symptoms include insensibility and social withdrawal that can be revealed in behaviors such as losing interest in activities that the child enjoyed earlier, the lack of attention to personal care and also the lack of interest in concentrating on tasks such as day-to-day work or school assignment. Of course, all children with schizophrenia do not experience all positive and negative symptoms. But the occurrence of a combination of positive and negative symptoms is likely (Ibid, 2005). Schizophrenia should only be diagnosed by a specialist who is often a child psychiatrist. To diagnose the disease, two of the symptoms described above should at least be present for 6 months and interfere with the child's daily life. Unfortunately, the diagnosis of schizophrenia in children is very difficult, in such a way that misdiagnosis, such as depression and bipolar disorder, is common (Fraset & Bandy, 1994). There is no known or unique cause for schizophrenia. It is believed that the chemical imbalance in the brain is a hereditary factor that causes schizophrenia. Schizophrenia is also an inherited multifactorial disease; it means that there are many factors involved in this disorder, the factors are usually both genetic and environmental. Combinations of genes from parents, along with unknown environmental factors cause this disorder. A child born in a family with one or more schizophrenic patients is more likely to develop schizophrenia than a child born in a family that does not have any history of this disease. After a person had a diagnosis of schizophrenia in the family, the chance of siblings to receive a diagnosis of this disorder is 7 to 8 percent. If one of the parents has schizophrenia, the chance for this disorder is 10 to 15 percent. Damage to the nervous system during growth is the most important factor in the type of childhood Schizophrenia. Also, genetic readiness is a contributing factor in this field (Faindeling, 2005). In general, it can be said that the risk of schizophrenia varies from 1% for children with no family history of schizophrenia, up to 10% for children with one of their first-degree relatives with schizophrenia and 50% in identical (monozygotic) twins (Hassani, 2013). In the treatment of this disease, early diagnosis and intervention

can improve the life quality of children and adolescents with schizophrenia. Drug therapy is the main method for the treatment of schizophrenia. Unfortunately, most of these drugs have severe side effects that weight gain is one of them. Therefore, having a healthy diet and everyday exercise are very important. Children suffering from schizophrenia should follow the therapies regularly. These children should be supported at home and at school; and the teachers and parents of these children should have the necessary support and patience. Children with schizophrenia usually do not show any interest to social relationships, so group games may not be a good option for them. In general, the treatment of children with schizophrenia is based on the age, severity of the disease, the type of schizophrenia, the tolerance of the child to receive the drugs and also the views and preferences of the parents (Faindeling, 2005). Now, in light of what has been said about this disease and its implications and consequences, in the present study we seek to investigate the psychological stresses of the family of these sick children according to the conditions of these patients. According to researcher's investigation in the field of conducted studies related to schizophrenia, there was no research for the investigation of the psychological stresses of patients' families, so we decided to explore the impact of each of the factors of gender, severity of the illness, the child's age, and the economic situation of the family on the family members' psychological stress.

Psychological disorders and especially psychological stress can have many adverse effects on family members' functions and activities. Therefore, the factors that create these pressures should be identified and measures should be taken in order to reduce these pressures. Psychological pressures are defined as the experience of circumstances or threats that cannot be effectively handled (Faiser and Ronan, 2009). These pressures create disturbances in the person that cause some restrictions for this person in the family. These limitations are an obstacle to creative thinking. Psychological stresses have physical effects, causing the family a severe impairment. People who suffer from stress and lose the ability to cope with it, they are injured in physical, mental, and behavioral ways (Finklhor et al., 2005). Watts et al (1984) quoted from Lotfi and Kashani (2006) in an investigation of a series of studies conducted in relation to at-risk groups of schizophrenia; they stated that anemia, difficult maternal labor, lack of close relationship with mother in the first year of life, weak performance of parents in the test of intelligence, poor ability, especially in verbal ability, cognitive defects, preparedness for disturbances and problems of concentration and attention, social defects and hostility in the relation between parents and child are the factors that increase the risk of schizophrenia. According to the BBC website, more than 1000 births in Denmark between 1973 and 1975 show that the risk of schizophrenia among children whose mother had lost one of their relatives during pregnancy is 67% higher than other children. From the viewpoint of researchers, the risk is far lower if the death of close relatives appear during the third trimester of pregnancy, and also this relationship is meaningful when there is no person with schizophrenia in first-degree relatives (Harit, 2005).

Patients suffering from this disease create many concerns for their family because of the recurrence of the disease, also due to cognitive and social impairment (Bulgerd et al., 1993). Long-term social problems are known as a major feature of schizophrenic patients. Social deprivation, deficiency in self-care, functional problems, and disability are the criteria for the diagnosis of schizophrenia in most diagnostic systems (Tores et al., 2002). In these patients, support and care always fall into the family, families not only have to provide primary care (personal care and financial support) to patients, but they also must be able to adapt themselves to the patient's symptoms and manage and control these symptoms and disorders (Ivarson, 2004). Most families of these patients are faced with unpredictable stressors and strange behaviors from their relatives on a daily basis. Usually, external stressors and family isolation have a lot of mental effects, such as feeling guilty, loneliness, and inability to take care of their patient (Martins & Addington, 2001). One of the most important issues of these patients is the burden to be added to family problems; they create problems such as depression, anxiety, sadness and sorrow and physical problems for families (Chen, 2007). The burden of this disease on the family involves physical, psychological, social and economic problems that are experienced by people who take care of the patient (Rungreangkulkij & Gilliss, 2000). People at home who are caring for the patients are at risk for diseases such as depression and anxiety disorders. The life expectancy of these people is 10 years less than other people, and also this situation decreases the life quality of these people (Chou, 2000). Living with a person with mental problems, especially schizophrenic patients, has negative effects on the physical and psychological well-being of family members and the caregivers of these patients tolerate mental and psychological problems such as anxiety and depression (Navidian et al., 2001). Also, various conducted studies to compare the caring burden of diseases such as mood disorders, anxiety disorders and schizophrenia disorders have shown that schizophrenic disorders impose more burden and difficulty than other mental diseases to the family (Buhse, 2008). The results of one of these studies showed that the majority of family carers are women's groups, also the spouses of these patients take care of them due to their sense of responsibility. A study by Gulsern et al. (2010) did not show a correlation between the gender of patient and the family care burden. McDanel et al. (2003) described the patient's age as a predictive factor in determining psychological stress; the younger ones will impose more stress on the family. The results of this study were not in line with the results of Navidian et al. (2001), in their study, the results had shown that the higher the age, the

family care increases (McDanel, 2003). Education and awareness rising of families can play an important role in family acceptance of the patient. More aware people about the mental illness and how to deal with and respond to the symptoms of the disease, they have shown a higher degree of acceptance and more willingness to take care of the patient.

As we mentioned, mental stress has physical and psychological symptoms. Psychological pressures may appear in form of symptoms such as rage, anxiety, depression, nervousness, sensitivity, tension and feeling of boredom and frivolity. The effect of these factors on the morale and mental states of the family is destructive and leads to a loss of self-confidence in them and a decrease in their performance. Also, the physiological symptoms of stress can be manifested as changes in heart rate, changes in respiration and breathing, changes in blood pressure, headache, gastric ulcer, gastrointestinal disorders, and heart attacks. Therefore, paying attention to psychological pressures and providing solutions to reduce its destructive effects are necessary. Research indicates that personality type of individuals is effective in their reaction to psychological stress (Looyeh et al., 2012).

## METHODOLOGY

The present study is descriptive survey and of applied type. Since the purpose of this study was to investigate the relationship between parents' stress in children with schizophrenia and their characteristics, including gender, age, parental education and family status of children with schizophrenia in Zahedan. This research is an applied research in terms of purpose. Present study's population is all Children with schizophrenia in Zahedan, than According to the statistics of the Welfare Organization of Sistan and Baluchestan, 1463 children, we decided to consider our sample according to Morgan's table. Since the sampling method in this research is simple random sampling, 205 questionnaires were distributed among available patients according to the size of the population and based on Morgan's table. In order to test the hypotheses, T-test was used to compare the means. Data were analyzed using SPSS software. The study area is Zahedan city which is located in southeast of Iran and is the Center of Sistan and Baluchestan province. In this research, we try to answer the question of how effective the survival of these patients is in terms of psychological pressure on families? The instrument of this study is a standard questionnaire of family stress which determines the level of stress and family stress due to the presence of a patient with schizophrenia. The questionnaire has been graded in the form of a Likert spectrum and consists of 46 items (criteria), which, in the case of the articles contributing to each of the responses (very high, high, no opinion, low and very low), respectively, were 1,2,3 , 4.5, and for each of the questions, we will place scores 5,4,3,2,1, respectively. In this questionnaire, the range of scores between people ranging from 46 to 230 will fluctuate, which means that higher scores reflecting high levels of stress and low score reflects low psychological stress on the family. Content validity and reliability of this questionnaire by the researcher on the statistical population of the study, which was calculated based on factor's alpha of 0.89, which is confirmed by the psychometric criteria.

## RESULTS

The findings of this research are divided into two groups of descriptive statistics and inferential statistics. In descriptive statistics, in order to examine the data collected based on the research variables through questionnaires distributed among the patients, frequency and also percentage of responding to each of the research questions were determined.

### The age of respondents to the questionnaire

Age	Frequency	Percentage
Under 25 years	56	27.31
25-45 years	76	37.07
Above 45 years	73	65.6
Total	205	100

According to the results of Table 1, out of 205 participants in this study, The age of 56 persons (27.31%) was under 25 years of age, 76 persons (37.07%) were at the age range of 25 to 45 years and 73 persons (65.6%) of the total number of questionnaires were in the age range of over 45 years.

### Educational level of respondents to the questionnaire

Table 2: Participants' status in terms of educational level

Group	Frequency	Percentage
Illiterate & Diploma	45	21.95
Associate Degree	64	31.21
Bachelor's degree	86	41.95
Master's degree & Phd	10	4.87
Total	205	100

According to the results of Table 2, out of 205 participants in this study, 45 persons (21.95%) had Illiterate & Diploma, 64 persons (31.21%) had Associate Degree, 86 persons (41.95%) had bachelor's degree and 10 persons (4.87%) of all questionnaires had Master's degree & Phd or were PhD students.

**Gender**

Table 3: Status of participants in terms of gender

Group	Frequency	Percentage
Male	114	55.6
Female	91	44.39
Total	205	100

According to the results of Table 3, out of 58 participants in this study, 114 persons (55.6%) were men and 91 persons (44.39%) of the total questionnaires were women.

**The economic situation of respondents to the questionnaire**

Table 4: Participants' status in terms of The economic situation

Group	Frequency	Percentage
Down	146	71.21
Average	49	23.9
Up	10	4.87
Total	205	100

According to the results of Table 4, out of 205 participants in this study, 146 persons (71.21%) had weak economic situation, 49 persons (23.9%) had Have Average economic situation and 10 persons (4.87%) of all questionnaires had Up economic situation.

**Question 1: What is the effect of the gender of children with schizophrenia on family psychological stress?**

Table 5, T-test results of comparison of the subjects' views about the variable of realization of goals with the hypothetical mean of society.

Table 5. One-Sample Statistics

Family stress	N	Mean	Std. Deviation	Std. Mean Error
	205	126.28	6.95466	.42403

**One-Sample Test**

Family stress	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	124.683	268	.000	126.28	129.0350	120.7047

The subject of the question of this research has been about the impact of the gender of children with schizophrenia has been associated with psychological pressure in the family of patients. To examine the mentioned question, one-variable t-test was used. Considering that the mean value of the compared item is 138 and the average of the subjects' opinions is 126.28, so it can be concluded with 95% confidence that the difference between the two means is significant and the average impact of Patients' gender on the psychological pressure in the family of patients is lower than the hypothetical average. Therefore, it can be stated that the effect of gender on the psychological pressure in the family of patients is low and this has little effect on psychological stress in the family.

**Question 2: How much does the age of children with schizophrenia affect the family's stress?**

Table 6, T-test results of comparison of the subjects' views about the variable of realization of goals with the hypothetical mean of society

Table 6, One-Sample Statistics

Family stress	N	Mean	Std. Deviation	Std. Mean	Error
	205	145.27	3.95	.40173	

One-Sample Test

Family stress	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	96.27	269	.000	145.27	134.090	153.69

The subject of the question of this research has been about the impact of the age of children with schizophrenia has been associated with psychological pressure in the family of patients. To examine the mentioned question, one-variable t-test was used. Considering that the mean value of the compared item is 138 and the average of the subjects' opinions is 145.27, so it can be concluded with 95% confidence that the difference between the two means is significant and the average impact of Patients' age on the psychological pressure in the family of patients is higher than the hypothetical average. So stated that the effect of age of patients on the psychological pressure in the family of patients is high and this has a significant effect on the psychological pressure in the family.

**Question 3: How is the level of education of a family with schizophrenia in family psychological stress?**

Table 7, T-test results of comparison of the subject's views on the variable of realization of goals with the hypothetical mean of society

Table 7, One-Sample Statistics

Family stress	N	Mean	Std. Deviation	Std. Mean	Error
	205	140.36	3.9666	.1403	

One-Sample Test

Family stress	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	23.39	269	.000	140.36	136.90	140.25

The subject of the question of this research has been about the impact of the level of education of children with schizophrenia has been associated with psychological pressure in the family of patients. To examine the mentioned question, one-variable t-test was used. Considering that the mean value of the

compared item is 138 and the average of the subjects' opinions is 140.36, so it can be concluded with 95% confidence that the difference between the two means is significant and the average impact of Patients' level of education on the psychological pressure in the family of patients is higher than the hypothetical average. So stated that the effect of level of education of patients on the psychological pressure in the family of patients is high and this has a significant effect on the psychological pressure in the family.

**Question 4: How is the economic impact of families of children with schizophrenia on family psychosocial pressure?**

Table 8, T-test results of comparison of the subjects' views on the variable of realization of goals with the hypothetical mean of society

Table 8, One-Sample Statistics

Family stress	N	Mean	Std. Deviation	Std. Mean	Error
	205	189.39	9.36	.97803	

One-Sample Test

Family stress	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	364.25	267	.000	189.39	180.97	201.967

The subject of the question of this research has been about the impact of the economic impact of children with schizophrenia has been associated with psychological pressure in the family of patients. To examine the mentioned question, one-variable t-test was used. Considering that the mean value of the compared item is 138 and the average of the subjects' opinions is 189.39, so it can be concluded with 95% confidence that the difference between the two means is significant and the average impact of Patients' economic impact on the psychological pressure in the family of patients is higher than the hypothetical average. So stated that the effect of economic impact of patients on the psychological pressure in the family of patients is high and this has a significant effect on the psychological pressure in the family.

**CONCLUSION**

Schizophrenia is one of the most severe neuropsychiatric disorders. About one percent of the world's population suffers from this disease. The possibility of developing this disease is present almost throughout life. Patients suffering from this disorder often require continuous psychiatric services. According to statistics, these patients occupy half of the beds of psychiatric departments of hospitals. This disease is observed in all ethnic groups, all cultures and among all social classes. In a person with schizophrenia, mental and psychic activities are changed. In the acute phase of the disease, patients lose their emotional, behavioral and intellectual activities as well as their normal performance. Timely treatments along with family supports maintain the patient's psychological functions; these factors are effective in the return of psychic abilities. In the present study entitled "Investigation of the relationship between mental pressure in parents of children with Schizophrenia and patient features in the city of Zahedan", we sought to investigate the relationship or impact of patients' living conditions on particular psychological pressures of families. The obtained results indicated that the factor of gender was lower than the hypothetical average of 138, with an average of 126.28; this factor had a quantitative relationship with the psychological pressures. In examining the factors of age, education level, and the economic status, the results showed that all three factors were associated to psychological pressures, with averages of 145.27, 140.36, and 189.39, respectively. For families with schizophrenic patients, among these factors, the economic situation is one of the most important issues in creating psychological stress and mental pressures. Many families expressed that they have lost a significant amount of their capital because of the cost of treatment and care for their children; and in this regard, they are eyeing government assistance.

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