

Investigating the Relation between Depression and Social Support in Deaf Patients of Special Schools in Ahvaz during 2014-2015

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ABSTRACT

According to the world statistics, the prevalence of congenital deafness is one to three cases per thousand babies. If we consider the acquired hearing loss in the years following the birth, these figures will rise. Depression is one of the common disorders associated with the deafness. Adequate social support can greatly reduce the symptoms of depression in patients even with high levels of defects. According to the lack of depression amount and social support investigation in children with deafness, in this study, the depression and social support of the deaf and then the relation between social support and depression in patients with hearing loss were studied. This study was conducted on 114 deaf patients who were selected through a random clustering sampling method from special schools of Ahvaz (Khuzestan, Iran). The sampling was carried out during 2014-2015 and the relevant variables were determined with the social support and depression questionnaire. Finally, the results were analyzed with SPSS software. Depression between male and female deaf patients has not a significant difference with each other ($p < 0.2$). Social support is influenced by gender, so that the social support in deaf male is more than deaf Female. The correlation coefficient between individual's score in social support tests from family and depression is -0.708 and between individual's score in social support tests from friends and depression is -0.72 that due to the significant level of 0.0001, the relation between these two variables is meaningful and reverse. From the results of this study, it can be concluded that the rate of depression in deaf patients has a reverse ratio with social support and a difference in terms of gender was not observed in this regard. Paying more attention to the psychological aspects of deaf patients and the impact of social support should be considered in the treatment of depression in deaf patients.

Key words: Depression, Social support, Deaf patients

INTRODUCTION

More than 90% of deaf children are born in families with non-deaf parents. For most of these families, their children are the first deaf person whom they had seen so far. From the family's perspective, deafness is the most complex sensory loss and makes parents face a permanent stress¹. Results of a study in Iran have shown that, 70% of deafness causes are non-genetic in Iran. The deafness foremost affects the communication ability

of the patient which imposes various difficulties for his/her involvements in the society and job employment^{2,3}.

Self is the most important psychological concept in the growth of identity that is linked to other social, cultural, emotional and intellectual elements. Several factors are involved in the process of identification, such as social support. Recent researches have shown that receiving social support from individuals is important to deal

with stressful events⁴. Social support can be an emotional, an informational and a tool support. Emotional support includes liking, loving the patient, accepting the patient, and respecting him. Goods or service tangible help is also called as a tool support and giving information and knowledge to people in times of physical and mental stress is called informative support⁵.

One of the disorders that presents after deafness in people is the depression

Depression is a mood disorder that shows itself with symptoms such as low mood, loss of pleasure and interest feeling, weight loss, insomnia, fatigue, feeling of emptiness, slowing psychomotor, feeling guilty and inability to concentrate, and thoughts of death. In contrast, social support is the most important feature that has been studied in relation with neutralizing the adverse effects and stress pressures. By definition social support is a sense of belonging, acceptance, interest, love and to be loved and creates a secure relationship for each person that in this relation the basic features are a sense of security, warmth and nearby. Social support from supervisors, friends, colleagues and relatives can lighten many psychological symptoms such as depression and anxiety.

Adequate social support can greatly reduce the deprecation symptoms in patients even with high level of flaws. In patients without social support, with the development of disability caused by the disease, the risk of depression and exacerbation of depression symptoms will be increased⁶) Social support creates the mutual commitments and makes the state in which the person will have the feelings of to be loved, caring, self-esteem and self-worth and these have a direct relation with health outcomes⁷.

A review of studies in this area shows a high prevalence of depression in deaf patients. It seems that social support can play an important role in maintaining health and reducing the negative effects of hearing loss. However, many researches have been done about depression in deaf people, but its association with other variables such as social support has not yet been fully investigated. Due to the lack of a comprehensive and efficient study, especially in the field of social support in

deaf people of Iran, its development seemed necessary. Due to the need in this study, depression and social support were assessed in the deaf at first and then the relation between social support and depression in deaf patients were studied in special schools of Ahvaz city.

METHODS

The subjects of this study were deaf patients in special schools in Ahvaz who were selected through a cluster random sampling. All the deaf patients who were able to cooperate in general condition and would like to participate in this project were entered into the study. The information has been collected with the help of Beck's depression questionnaire^{9,8} and social support¹⁰, from the deaf.

1. Beck's test is made in 1967 and it is a comprehensive questionnaire used to diagnose depression. Second Edition is the revised figure of depression Inventory (BDI), which is designed to assess the severity of depression in adolescents and adults and has 21 questions for the measurement of disease and is graded from 63 to 0. Each question has between 5-4 options which one option will be chosen based on the patient's psychological. This questionnaire is one of the most useful tools for measuring depression. Extensive investigations have been carried out about psychometric properties (reliability and validity) and an appropriate application for the test and in an analysis of the internal consistency of this tool, a correlation coefficient of 0.73 to 0.92 with an average of 0.86 is reported (marnat 1990). The Cronbach's alpha coefficient is calculated 0.86 and the internal consistency coefficient is 0.92 in the American population and Cronbach's alpha coefficient is 0.91 and the internal consistency coefficient is 0.94 in the Iranian sample. Beck's test has been used many times in masters and PhD thesis in universities (Mousavi 1998; Gorgi 2003; Akhund Mecca, 1998) and in all cases; it had high reliability and validity.

2. The social support test: it was designed in 1974 by Philips and his colleagues and it includes 23 questions that cover the family, friends and others area and graded from 23 to 0. Family's subscale is 8 questions (22, 18, 13, 11, 9, 7, 4, 2),

friends' subscale is 7 questions (23, 19, 16, 15, 10, 6, 1) and other questions related to other individuals' supporting. For the questions of grading system, we use the zero and one code. Thus, in the five questions (3, 10, 13, 21, 22), we give zero score for yes answers and one score to no answer. In the other questions, in yes answer the score one and in no answer the score zero will be belonged. Therefore, a minimum score of a person will be zero and a maximum score of that a person can get from this scale will be 23. The benefit of people from social support will be divided into two groups of high and low social support. Razi (2008) has obtained the reliability of this questionnaire in his study with the use of Cronbach's alpha 0.84⁶.

A total of 114 social support questionnaires and 114 depression questionnaires of Beck were amplified and were given to deaf. Questionnaires were answered by the patients themselves. In the complete response by the deaf, the questionnaires were studied by the researchers and if there is a defect or incomplete answers, they were explained to the patient. Then the questionnaires were collected and were used for the interpretation of the results from SPSS 19 software. For Assessing, the Person's correlation coefficient was used.

RESULTS

In this study, 114 deaf students who were selected at random from special schools in Ahvaz were present. They were 58 males (50.8%) and 56 females (49.2 percent). The age range of the people was 16-23 year, with an average of 18.5 years.

An average score of people in the Beck's Depression Inventory in deaf male patients was

14.05 and this average was 15.98 in deaf female. The average difference of the obtained score in the Beck's Depression Inventory was close to each other in these two groups and was 1.93. These data showed that depression had not a significant difference between male and female deaf patients ($0.2 > p$).

The highest people's scores in the Beck's Depression Inventory in the Deaf male were 40 and in the Deaf Female were 28. The lowest scores of the Beck Depression Inventory (BDI) in the deaf male and female patients were 0 and 5, respectively. Overall, the average of depression in the studied deaf people was 15.01 that the highest obtained score in this test was 40 and the lowest was 0.

Given that the depressed patients who require treatment in the BDI score of 10 and above our definition, the prevalence of depression in the studied deaf patients was 78.94%.

As Table 1 showed that, the average score of people in the social support test from the family, in deaf male was 18.50 and in deaf female were 16.28. The highest score in the social support test from the family in the deaf Male was 23 and this score in deaf female was 21. The lowest score in the social support test from the family in the Deaf Male was 8 and this score in the deaf female was 8.

The average score of people in the social support test from the friends, in deaf male and female was 17.68 and 15.96, respectively. The highest score in the social support test from the friends in the deaf male was 23 and this score in deaf female was 21. The lowest score in the social support test from the friends in the Deaf Male was 7 and this score in the deaf female was 5.

Table1: The average scores of patients in Beck's depression tests and social support

	Gender	Number	Average	Standard deviation	Minimum****	Max*****	P value
Support from family	Male	58	18.5000	3.57010	8	23	0/001
	Female	56	16.2857	3.30682	8	21	
Support from friends	Male	58	17.6897	4.12611	7	23	0/003
	Female	56	15.4643	3.68271	5	21	
Depression	Male	58	14.0517	10.27418	0	40	0/198
	Female	56	15.9821	4.69232	5	28	

Table 2: Correlations

		age	family	friend	depression
age	Pearson Correlation	1	-.036	-.021	.012
	Sig. (2-tailed)		.707	.821	.896
	N	114	114	114	114
family	Pearson Correlation	-.036	1	.888**	-.708**
	Sig. (2-tailed)	.707		.000	.000
	N	114	114	114	114
friend	Pearson Correlation	-.021	.888**	1	-.720**
	Sig. (2-tailed)	.821	.000		.000
	N	114	114	114	114
depression	Pearson Correlation	.012	-.708**	-.720**	1
	Sig. (2-tailed)	.896	.000	.000	
	N	114	114	114	114

Table 3 : Model Summary

Model	R	R Square
1	.720 ^a	.518
2	.735 ^b	.540

a. Predictors: (Constant), friend
b. Predictors: (Constant), friend, family

According to the data of the table, the social support has been influenced by the gender, so the social support of deaf males is more than deaf females. A significant level of support from family is $0.001 = p$ and support from the Friends is $0.003 = p$ confirms that the relation between these two variables is significant.

As Table 2 shows, the correlation coefficient between the people's score in the social support test from family and Beck's Depression Inventory is -0.708 and between the people's score in the social support test from friends and the Beck's Depression Inventory is -0.72 that according to the significant level of $p = 0.0001$ is the relation between these two variables is inverse and significant. This means that with increasing rates of social support, the depression in deaf male and female decreases.

According to Table 3, the effect of social support from friends is in reducing depression in deaf patients is more than having social support

from the family. As the correlation coefficient of social support from friends and the depression is 0.72 but when the support from the family, will be added to it, the correlation coefficient will reach 0.73 that shows a significant and an inverse association between two variables (social support from friends and the depression is $0.003 > p$, social support from family and the depression is $0.02 > p$).

DISCUSSION

In this study that was carried out to investigate the relation between social support and depression in deaf patients of special schools in Ahvaz, was shown that there is an inverse relation between social support and depression. This means that the higher social support of deaf patients, the lower likelihood of depression in them will be.

In this study, the correlation coefficient between social support from family and Depression is 0.708 , and the correlation coefficient between the social support from friends and depression is -0.72 that according to the level of significance ($p = 0.0001$) represents a significant and reverse relation between social support and depression.

Since no similar study has been done in this area, in other studied groups such as Ghafari and colleagues' study on diabetic patients, the correlation coefficient between people's score in

social support and depression tests is -0.54 which due to the significance level of ($p= 0.0001$) the relation between these two variables is inverse and significant. This means that by increasing social support, depression will be reduced in diabetic patients⁶.

Results showed the prevalence of depression needs a treatment in studied deaf patient is 78.94%. According to the average score of depression in male deaf patients is (14.05) and this score in deaf female is (15.98), the average difference is close to each other and equals to 1.93. This confirms the fact that the gender does not have a significant association with depression.

Since no study has directly examined the prevalence of depression in non deaf patients, the article that Hakim Javadi and colleagues conducted about the study of depression in mothers of deaf patients, indicate that the prevalence of depression in mothers of deaf children is more than in mothers with non deaf children. One of the reasons that can be mentioned is frustrations and aspirations of parents for their children about their future and for having the guilt feeling of creating such a child¹¹.

Salehi and Mahmoudifar studied hemodialysis patients and reported a significant relation between gender and depression where depression is more common in females. This relation is consistent with the fact that women face more social stressful factors⁵.

In Ghaffari and colleagues' research that have studied diabetic patients, the prevalence of depression in patients with diabetes was 67.2%. The prevalence of depression in female patients with diabetes is 76.2% and in male diabetes patients is 58.8%. Average scores of people in the BDI in male diabetic patients are 19.16 and this average in female diabetic patients is 23.36. The difference average of two groups is 4.2 and it means that depression in female patients with diabetes has a higher average than male patients with diabetes. However, this difference is more than 0.05, but it is very close to the significant ($p= 0.057$)⁶.

This study shows that the average scores of people in social support test scores from the

family in deaf male are 18.50 and the deaf female is 16.28.

Average scores of people in the social support test from friends in the deaf male are 17.68 and the Deaf Female is 15.96.

According to the results, deaf male patients have more support from friends and family than deaf female patients. This means that, gender can be influenced by social support. A significant level of support from family $p= 0.001$ and support from friends $p= 0.003$ confirms that the relation between these two variables is significant. Therefore, according to the data, the deaf patients benefit adequate social support.

Unfortunately, the above issue is not investigated in any similar studies. But in other groups, such as patients undergoing hemodialysis in the city of Mahabad in Salehi and Mahmoudi Far's article showed that 57% of people have low social support. This matter is returned to the cultural context of the study location⁵.

In the Ghaffari *et al*'s study on the diabetic patients, the average score of social support in female patients with diabetes was 18.52 and male patients with diabetes was 19.50 that had not a significant difference with each other ($p= 0.23$). Therefore, social support between diabetic male patients and diabetic female patients in this study showed no significant difference. This finding could be due to cultural and family structure in our country⁶.

CONCLUSIONS

The results showed that the prevalence of depression in deaf patients is high and has the significant relation with social support. Unfortunately, the above matter was not examined in none of the studies and therefore comparisons are not possible in this case.

It seems that social support includes emotional, tools and informational support from the family and the friends can contribute to improving the mental health of deaf patients.

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