

## **Ratings of stressful life events and their relationship with symptoms of mental disorders in the general population of Ardabil**

**Reza Kazemi, Sonia Didehroshani and Azimeh Haggi Topraglo**

*Department of Clinical Psychology, Islamic Azad University, Ardabil Branch, Ardabil, Iran*

### **ABSTRACT**

*Psychological stress, as one of the causative factors of mental and physical disorder, are considered to be important health issues. The aim of this research was rating of life stressor Events and their Relationship with mental disorders in Ardabil General population. In these descriptive, cross – sectional study, all the 600 people of 18th to 50th were cluster random sampling data were gathered by using the life events inventory and SCL-90-R questionnaires.. And data analysis, frequency distribution, percentage, mean, and correlation and t test was used. Results showed that the death of a spouse is dedicated to creating more stress and then the following events, respectively, among the first ten events were stressful. Child death, collide candidate, marital infidelity, death of family members except his wife and children (parents, brothers, sisters), a close family member's addiction, physical or mental disability of a family member, professional failure, heavy financial problems, (heavy debt, bankruptcy), leaving their house followed by his wife conflict. Between psychiatric symptoms and stress with physical complaints ( $r = 0/35$ ), obsession-compulsion ( $r = 0/37$ ), Interpersonal Sensitivity ( $r = 0/38$ ), depression ( $r = 0/33$ ), anxiety ( $r = 0/35$ ) and hostility ( $r = 0/31$ ), Phobia ( $r = 0/23$ ), paranoia ( $r = 0/31$ ) and psychosis ( $r = 0/35$ ) There is a positive relation. The identification and assessment of stress in different groups to identify vulnerable groups is essential.*

**Key words:** a stressful event, mental disorders, Ardabil

### **INTRODUCTION**

Stress as a psychological phenomenal is one of the most important factors in causing and continuity of the psychological disorders [1]. Experts believe that stress is one of the effective factors and the source of the 50%-80% of psychological and mental illnesses [2]. These days stress is mostly defined as a negative excitement mood which is the answer to the events over ones capability to adapt with [3]. This definition emphasizes on important role that understanding or evaluation from ones stressful experiences plays. For many years, detecting the most common stressful factors and also the degree of stress and rating them has always been one of the major goals of the researchers in any society [4]. In Holmes and Rahe's researches[5]. a list of the incidents causing changes in life is prepared and represented to a group of normal subjects. the death of the spouse is the most stressful event for subjects in Paykel, Prusoff and Unlenhuth's researches[6], also the death of the children is reported as the most stressful factor. Also in some researches in Iran, the stressors in some samples of the Zahedan general population has been studied, Malakooti and Et al [7], in some researches have estimated the average degree of stress to 57/2% which had a slight difference with extent morbidity and one of family members hospitalization, procreation, unexpected death, financial problems. high cost of living, unemployment and family conflicts were the most common life stressors. The stress has also a positive relationship with mental disorders and is considered to be the most dangerous factor. Malek and Et al [8], also in a research in Tabriz have shown that the death of the children has allocated the highest score of stress and summer holidays has the lowest score of stress. After the "death of the children" the death of the spouse, marital infidelity, being imprisoned, addiction, divorce, being slandered,

unsuccessful marriage, family member's abundance, the death of the close relatives, are the first stressors. so we can say that stress is unseperatable element of life and generally stress is experienced by each and every one and it should be noticed that some degrees of stress can be an effective factor in improving the peoples actions. It shows that peoples success often is formed in stressful situations, but the high degree of stress has several consequences which physical, mental illnesses ,depression ,anxiety ,being restless ,sleeping disorders ,irritability ,amnesia. abnormal tiredness , decreasing ones resistance and catching infections, headaches, losing focus ,memory disorderliness, problem resolve ability weakening are the examples [9,10 ]. Also, the majority of the studies shows that the stressful situations and psychological discomforts are relevant [11,12]. stressful situations of life in psychological patients is more than healthy people [13]. researches show that there is a link between this situations and out breaking the psychological disorders such as depression and its relapse ]14,15 ].it shows that the more the distance between stress occurring and its start is ,the less is the disruptive effect .researchers believe that this period of time must be 1-6 months. Some researches had come to this conclusion that stress in addition to causing physical illnesses ,causes some mental disorders like anxiety [16,17]and severe depression [18].researches shows that in people suffering from severe depression ,the life's stressful situations and stress caused by that before the illness out breaking is more than healthy people. This relationship in depressed women is seen more than depressed men. high tension situations not only on illness out breaking, but also on the whole illness procedure and treatment has a negative effect. Therefore stress is one of the factors causing mental and physical illnesses. its an important health issue which must be prevented in the first place. Lots of psychological strategies try to control the stimulus's and reduce the stress and try to help to adapt effectively in high tension situations. thus according to represented items, this research is to rate stressful situations and study the role of the stress in causing mental disorders in Ardabil general population.

## MATERIALS AND METHODS

This research is done in a short period of time and in a descriptive-analytic way. The research samples are the people living in Ardebil population, aged 18-50 which according to Iran Statistic Center, the statistic result is 220217 on 1385.this experiment is carried out on 600 samples. This number of sample is more than any internal or foreign similar researches samples. This sampling was in a random cluster and systematic way. The selection method is to set 300 families(in 30 cluster and 10 families in each) by means of random cluster sampling and by the use of statistic information available in Ardabil families (in Health Center) and then two people aged 18-50 ,according to age order, were chosen by the use of random systematic sampling. so that all the samples in this range has the probability to be chosen.

### Measures

#### Psychological symptoms questionnaire

The illness alike symptoms list of 90 questions is a diagnostic questionnaire which has a widespread usage and is designed to be measure the 9 dimension of pathology by the use of physical(breathing disorders)obsessive-compulsive disorders(OCD) interpersonal differences (the feeling of paltriness) depression, anxiety, aggression(hostility)phobia, paranoia and psychosis. The purpose of this questionnaire is to share a side view of pathology for any researcher [19 ]. This questionnaire is on Likert way ( from none to extreme ) and is scored from 0-4.The total score is 360 and the lowest score is 0.The reliability and invariance of this questionnaire has been proved in several researches .For instance in this questionnaire, Hashemi and Et al have reported all the questions subscales Cronbach's alpha coefficient more than %7.Also according to other researches opinion simultaneously reliability coefficient of nine fold dimensions of this test is reported with multiple dimension questionnaire of Minnesota (MMPI) which are in domain of %36-%73[20 ]. Asgari according to Talebzadeh has reported the invariance coefficient of this questionnaire to %58-%95 [21 ].

#### Paykel life events questionnaire

This questionnaire contains of 65 life events which the subject should write down all the experienced events in last two years or so in two separate columns and score the events according to their tension rate in Likret's multiple choices(none ,little, tolerable ,a lot ,extreme). This questionnaire is much more efficient than the others because of content reliability and being comprehensive. Mohammadian[22]has reported the reliability of this questionnaire to %82 and its invariance to %78.Also he used this questionnaire in another research and got good invariance, which shows that the life event's invariance in number of life event's stress is %8[23 ].

### Data analysis

After the completing the questionnaire. The data were analyzed in SPSS program. In this research, the mean percentage frequency distribution and standard deviation are used to determine the variables connection.

In this research 600 people aged 18-50 of Ardabil people got studied which %66/5 of them were female subjects and %33/5 of them were male subjects.%39/8 were single and %66/2 were married,%15/2 were under graduated,%23/7 were diploma and %61/2 had the upper diploma degree.%30/2 were unemployed subjects%14 house makers %38/7 government employ and %17/2 NGO employs (None Governmental Organization).From those who were employed,%19/5 had the 1-5 years of service,%14/3 had the 5-10 years,%17/4 had the 10-15 years and %9/3 had more than 15 years of service. In this research also the stress frequency in Ardabil general population is %39/7.Also %4 of subjects had physical complains,55/2 obsession,%6/5 depression,%2/8 interpersonal problems%3/2 anxiety,%4/3 hostility,%8 phobia,%6/5 paranoia,%1/2 psychosis and %3/8 had serious mental issues.

**Table 1 : most common experienced stressful events rated in last two years**

	Events	Valid Percent
1	high cost of living	61.5
2	household responsibility	41.2
3	being away from most loved person(friend or close relative)	38.8
4	taking an important exam	37
5	insufficient income	36.7
6	one of family members hospitalization due to serious illnesses	27.5
7	having a conflict with a close friend	25.5
8	mild physical illness	24.5
9	educational failure(failing in an exam)losing a possession	22.5
10	having conflict with his wife	20.3

Stressful event's rating (10 first events) is represented in table 1 which shows the most common life stressor is the high cost of living. these events in women are : high cost of living ,household responsibility, being away from most loved person(friend or close relative),taking an important exam, insufficient income, one of family members hospitalization due to serious illnesses, mild physical illness, having a conflict with a close friend, educational failure(failing in an exam)losing a possession. In men : the high cost of living, household responsibility, being away from most loved person(friend or close relative)insufficient income, one of family members hospitalization due to serious illnesses, mild physical illnesses, having conflict with a close friend, losing a possession, undesirable change in living place, having conflict with his wife ,getting heavy loan from the bank(more than half of his annual income)changes in workplace(working in a new section or a new boss's transfer) unexpected incidents(car crash, being attacked).

**Table 2: the life stressors rating is based on the degree of the stress**

	events	Valid Percent
1	death of her husband	18.66
2	the death of her children	16.94
3	called off engagement	16.55
4	marital infidelity	15.95
5	death of the family members except his wife and children(parents ,brothers, sisters)	15.63
6	a close family member's addiction	15.62
7	physical or mental disability of a family member	15.3
8	professional failure	15.11
9	heavy financial problems(heavy debt ,bankruptcy)	14.93
10	her house because of having conflict with her husband	14.92

**Table 3: Rating stressful events in terms of correlation with overall severity index score (GSI) of the SCL-90-R (600n =) in the past two years**

	events	correlation	sig
1	mild physical illness	0.274	.000
2	heavy financial problems(heavy debt ,bankruptcy)	0.268	.000
3	Involvement of family members living with you at home.	0.220	.000
4	professional failure	0.186	.000
5	educational failure(failing in an exam)losing a possession	0.182	.000
6	having sexual problems	0.181	.000
7	Severe physical illness	0.173	.000
8	having conflict with his wife	0.164	.000
9	Redundant Work	0.159	.000
10	Involvement of family members in a home that you can not live	0.157	.000

In table 2 the life stressors rating is based on the degree of the stress and the death of the spouse has the highest rank. the most stressful events in women are: being wanted due to fraud. the death of her husband, the death of her children, called off engagement, physical or mental disability of a family member, leaving her house because of having conflict with her husband, being expelled from university/school, marital infidelity, professional failure. In

men :the death of his wife, a close family member's addiction, marital infidelity, temporary unemployment (1month), abortion or delivering a dead baby, divorce, death of the family members except his wife and children(parents ,brothers, sisters), his children's marriage(undesirable one)heavy financial problems(heavy debt ,bankruptcy), having sexual problems, being summoned to the court.

**Table 4: Spearman correlation coefficients to examine the relationship between severity of psychiatric symptoms in each**

Variable	psychosis	paranoia	phobia	hostility	anxiety	depression	interpersonal sensitivity	obsession-compulsion	physical complains
stress degree	**0.35	**0.31	**0.23	**0.31	**0.35	**0.33	**0.38	**0.37	**0.35

Table 3 shows the first ten events which have the most correlation with mental disorders and table 4 shows that there is a positive relationship between stress degree and physical complains obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia and psychosis.

## RESULTS AND DISCUSSION

the result of this research shows that high cost of living, house hold responsibility ,being away from a most loved person( a friend or close relative)taking an important exam, insufficient income, one of family members hospitalization due to serious illnesses, having conflict with a close friend, mild physical illnesses ,losing a possession, having a conflict with his wife are the most stressful events which has a slight difference but so many similarities with the same research of Nasiri and Et al, which is having the same result as Fagih Nasiri and Et al[24], Malakooti and Et al's[7], research. the result shows that stressful events regardless of ethnic-cultural intervention and psychological qualities, still effect severely and this also follows the idea of Holmes and Rahe[5]who evaluated the stress based on exterior stimulus. But some researches show that some events are not only because of exterior stimulus, but also because of some variables like cultural/social/personal qualities. adaptation skills and defensive mechanism. this result follows the theory which says the stress is caused by interactions between exterior stimulus and psychological qualities which are cognitive evaluation of that event[25].

The result of comparison between the frequency of the most common stressors in men and women shows that the most stressful events in women are : the high cost of living, house hold responsibility, being away from a loved person(a friend or a close relative)taking an important exam, insufficient income, one of family members hospitalization due to serious illness, mild physical illnesses, having conflict with a close friend, educational failure(failing in an exam)losing a possession, and in men :high cost of living, insufficient income, taking an important exam, house hold responsibility, being away from a loved person(a friend or a close relative)one of family members hospitalization due to serious illnesses, losing a possession, having a conflict with a close friend, undesirable change in living place, having conflict with his wife, getting heavy loans from bank( more than half of the annual income)mild physical illnesses, changes in work place (working in a new section or a new boss's transfer)unexpected incidents(car crash. being attacked)the result is showing the same result as Nasiri and Et al's researches.

results show that the most stressful experienced events are: the death of the spouse, the death of the children, called off engagement, marital infidelity, the death of a family member except from the spouse and children(parents, brother, sister)one of family members addiction, one of family members mental or physical disability, professional failure, heavy financial problems(heavy debts, bankruptcy)leaving the house because of having conflict with their spouses. and comparing this result with similar researches, shows that the 10 first events have slight differences but so many similarities with Malakooti and Et al[7], Mottaghi poor and Et al[26], Paykel and Et al[6 ], and Malek and Et al's researches and it makes this point that life's stressful events happen regardless of ethnic/cultural intervention and personal qualities and conforms the idea of Holmes and Rahe[5]who evaluated the stress with exterior stimulus. so much sadness due to some stressors like the death of the spouse and children shows that marital and family issues however are not so much common, are sadder than other stressors.

The represented research shows that the %39/7 of subjects had the high degree of stress which shows the same result as Fagih nasiri and Et al's researches.

Results show that there's a positive relationship between stress degree and psychological symptoms, physical complains, obsession-compulsion, interpersonal sensitivity, depression, anxiety and hostility, phobia, paranoia and psychosis Paykel[13,14,27], Fagih Nasiri and Et al[24]. Also lots of studies show a relationship between stressors and psychological discomforts[11,12]. Life stressors are much more common in psychological patients more than the others[13]. Researches show that there's a direct relationship between these events and out breaking and

relapsing of the psychological disorders like depression[14]. Stressors are known as the main factors causing disabilities in the society. These factors can cause serious issues like increasing the probability of physical/psychological disorders out breaking. Fast relapsing of the illness and lingering for a long time.

Over all, we can come to this conclusion that a large quantity of Ardabil population have experienced the stressful events 2 years before the experiment and carry most of the symptoms. In the theoretical part of the project on the effects of stress in causing or exacerbating the psychological disorders and the confirmation of the results found in represented internal and foreign researches shows that the degree of the stress has a direct relationship with mental disorders and also there is a relationship between psychological symptoms and the stress intensity and the number of stressors in the past two years. it's found from these studies in different societies and different cultural/social groups and different periods of time that some stressful events in different societies and different eras are still stressful, however some other events have been effected by cultural/social terms and different groups and cultural factors absolutely has affected the events whether they are stressful or not. being retrospective and being based on the memory of the subjects are this researches limitation, so remembering can't be flawless, therefore, its recommended to do the researches in a prospective way.

Also its recommended to inform the health care authorities about the terms of this issue in order to improve the knowledge of the stress and the ways to deal with and to train the living skills to special groups and activate the community services in order to screen the several stressful factors and people suffering from serious psychological illnesses. It's recommended to teach stress managing to these groups.

## REFERENCES

- [1]Tennant c, *journal of psychosomatic Research*, **1987**, 22,41-45.
- [2]Long BC, Phipps WJ, Cassmeyer VL, *Medical surgical nursing, a nursing process approach*, 7th ed, St Louis, Mosby Co **2003**; pp: 89-95.
- [3]Cohen Sh, Herbert TB, *Annual Review of Psychology*, **1996**, 47: 113-142
- [4]Amiel-Lebigre, F, Kovess V, Labarte S, Chevalier A, *Social Psychiatry and Psychiatric Epidemiology*, **1998**,33(6),263-268.
- [5] Holmes TH, Rahe RH, *Journal of Psychosomatic Research*, **1967**, 11: 213-218.
- [6]Paykel ES, Prusoff BA, Uhlenhuth EH, *Archives of General Psychiatry*, **1971** ,25: 340-347.
- [7]Malakouti K, Bakhshani NM, Babaei GR, Motagi Pour Y, *Andeesheh va Raftar*, **1998**, 11(3): 17-28.
- [8] Malek A, Dadashzadeh H., Pourafkari N, Safaiyan AR, *Tabriz University of Medical Sciences Journal*, **2008**: 30, 4: 73-80.
- [9]rekeh N, Faghihzadeh S, *journal of Daneshvar raftar University of shahed*, **2002**, 9 (38): 15.
- [10]Beddoe AE, Murphy SO, *J Nurs Educ*, **2004**, 43(7): 305-12.
- Blazer D, *American journal of psychiatry*, **1987**, 144,9.
- [11]Cooke DJ, Hole D J, *British Journal of Psychiatry*, **1983**, 143, 397-400.
- [12]Brown, G W, Harris T O, *Life events and illness*, New York: Guil Ford Press. **1989**.
- [13]Paykel E S, *Journal of psychosomatic Research*, **1983**,27(5), 341- 352.
- [14] Paykel E S, *Acta Psychiatrica Scandinavica* ,Supplem entum **2003**, (418),61-660.
- [15]Mepherston H, Herbison P, Romans S, *British Journal of Psychiatry*, **1993**, 163,381-85.
- [16] Blazer D, *American journal of psychiatry*, **1987**,144,9.
- [17] Shari LW, *American journal of psychiatry*, **1993**, 150.
- [18] Frank E, *Archive of General Psychiatry*, **1994**, 51.
- [19] Lindsay SJE, Powel GE, *[The handbook of clinical psychology ] 2nd ed. Translated by Hamayak Aviasisyans, Mohammad Reza Nikkhoo. Tehran: Sokhan publisher. 2009*, (Persian).
- [20]Seiiedhashemi H, *[Standardization of diagnostic questionnaire mental status (SCL-90-R) in highschool students of Zarrinshahr city ]* MA dissertation. psychology and educational sciences faculty of Isfahan university. **2001**, (Persian).
- [21] Asgari P, *[Manual of psychological tests ]* , 1th ed. Ahwaz : Azad Uiversity of Ahwaz, **2009**.
- [22] Mohammadiyan, F, *investigated personality traits, stress and coping strategies in people with suicidal suicide in Ilam, clinical psychology master's thesis*, Institute of Psychiatry, Tehran, **1997** (Persian).
- [23]Pourshahbaz A, *Evaluate the relationship between stress, life events and personality in patients with leukemia*, Master's thesis in clinical psychology, Tehran Psychiatric Institute, **1993**, (Persian).
- [24]Faghih Nasiri L, Sharifi V, Sadeghiyan mehr Z, Mirkiya sh, Nadiyan hatmi Z , Darabvy Sh, Effatpanah M, Mirsharifa S M, *the prevalence of stressors and psychiatric symptoms in the population Abuzar health center in Tehran*, New Cognitive Sciences, **1385**, 8, No. 1: 47-53. (Persian).
- [25]Lazarus r s, folkman s, *stress appraisal an coping*, new York, springer, **1984**.
- [26]Mottaghi Pour Y, Mohajer M, Katozian B, *Journal of Darou va Darman*, **1992**: 96: 5-10. (Persian).