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LIFE STRESS FACTORS AND GENERAL ANXIETY DISORDER

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Abstract

Between daily anxiety and psychological anxiety disorder there is a long route which can be influenced by many factors. In this paper we aimed to make a short analyze and evaluation of the environmental and social risk factors that can predict the General Anxiety Disorder development. We have included in the study a group of 138 patients hospitalized in Clinical Hospital "Dr. Gavril Curteanu" Oradea, Psychiatry Department, in the period of 1 January 2013 to 1 May 2015, which have met discharge criteria for the diagnosis of Generalized Anxiety Disorder (GAD). We focused on the following items: age, gender, social and environment of provenience, level of instruction, living conditions, toxic substances abuse, stress factors, signs and symptoms at admission. We considered appropriate the study of the life stress factors and the conditions that has the highest probability to lead to this disorder.

Key words: stress, general anxiety disorder, risk factors

INTRODUCTION

Anxiety is a feeling of unease, such as worry or fear that can be mild or severe. Everyone experiences feelings of anxiety at some point in their life.

Fear and stress reactions are essential for human survival. They enable people to pursue important goals and to respond appropriately to danger. In a healthy individual, the stress response (fight, freeze or flight) is provoked by a genuine threat or challenge and is used as a spur for appropriate action (Clum G. A., 2006).

Anxiety is also a perfectly normal response to threat, and in some situations that are really threatening it can be helpful in preparing us for action. Some degree of anxiety can improve our performance in certain situations such as job interviews, taking exams, sporting events, or even helping us to pay our bills on time. However, if anxiety occurs too often and for no apparent reason, or if it begins to interfere with our life, then it has become a problem (Kessler R. C., 1998).

An anxiety disorder, however, involves an excessive or inappropriate state of arousal characterized by feelings of apprehension, uncertainty, or fear (Clum G. A., 2006). The word is derived from the Latin *angere*, which means to choke or strangle. The anxiety response is often not triggered by a real threat, nevertheless it can still paralyze the individual into inaction or withdrawal (Burns D. D., 2000,). An anxiety disorder persists, while an appropriate response to a threat resolves, once the threat is removed.

Anxiety is defined as a psychogenic problem mainly characterized by the presence of anxious emotion (great fear) and its somatic equivalents, continually developing paroxysm (Kessler R. C., 1998).

Another view is that anxiety is "a future-oriented mood state in which one is ready or prepared to attempt to cope with upcoming negative events" suggesting that it is a distinction between future versus present dangers that divides anxiety and fear (Shivers R. L., 1990).

The term was first introduced in the psychiatry field by Sigmund Freud who referred to it "A danger signal that the person is feeling in response for the perception of danger or physical pain" (White J., 1999).

All of the definitions are revolving around three essential conditions: A state of imminent danger that comes in expectancy of danger, a state of alert throughout the dominating personality, and chaos (Kessler R. C., 1998).

- Anxiety occurs as a tensed state, unjustified in terms of scope, the feeling of danger being undefined, the response to it being overreaction and inadequate. It is necessary to differentiate the concept of anxiety related to other concepts that are used improperly: fear, horror, stage fright, restlessness, agony.
- Fear is a state of tension proportional to the intensity of the danger, which disappears once danger has been removed. Fear has an alarm function, is an adaptive phenomenon, appearing when the capacity of adaptation of the subject is overcome. It causes the mobilization capabilities of confrontation with danger which triggers actions of fight or flee.
- Horror (distress) is a feeling of imminent vital and extreme danger, accompanied by a vegetative somatic component.
- Stage fright consists of a feeling of extreme tension in the face of challenges derived from the desire for success and fear of failure, Involving anxiety and doubt concerning the person and his becoming.

Between daily anxiety and psychological anxiety disorder there is a long route which can be influenced by many factors.

Given the increasing frequency of the generalized anxiety disturbance occurrence in the active population, we considered appropriate the study of the life events that are causing this disorder. Simultaneously we pursued

other parameters that may facilitate or increase the influence of threatening life events.

MATERIAL AND METHOD

We have included a study group of 138 patients hospitalized in Clinical County Hospital "Dr. Gavril Curteanu" Oradea, Psychiatry Department between 1st of January 2013 to 1st of May 2015, which have met discharge criteria for the diagnosis of Generalized Anxiety Disorder.

We used the database and archive of the Psychiatry department of the hospital and we focused on the following items: age, gender, environment provenance, level of instruction, living conditions, consumption of toxics, stress-agents, psychopathologic pictures at admission.

RESULTS AND DISSCUSIONS

Distribution of cases by age is presented in table 1.

Table 1

Distribution by age					
Age group	15-25	26-35	36-45	46-55	56-70
No. of cases	12	28	44	38	16
%	8.69	20.28	31.88	27.53	11.59

The highest frequency of this disorder lies in the age group 36-45 years, full time activity of adults, with possible negative consequences on both family life and the socio-professional behavior.

Although usually this disorder begins early between 15 to 25 years, higher frequency was found in th study group (36-45 years). This could be explained by the fact that many cases were readmissions, as the tendency of this disorder to become chronic is well known.

In descending order of frequency in the place there is the next age group 46-55 years, which adds to the general economic stress factors – the endocrinological factors of this period. It is known that many women menopauses begins with anxiety disorders with prolonged evolution, train requiring both treatment and psychotropic hormone.

A high frequency of occurrence of generalized anxiety characterized the ages between 26-35, probably in conjunction with the family foundation, finding and keeping a job, increased responsibilities with children in birth families concerned.

In the studied group the frequency of disorders appears to be low to extreme, perhaps in the context in which these ages have more anxiety symptoms in other psychiatric disorders.

Distribution of cases by gender is presented in figure 1. Generalized anxiety disorder in the studied group was more common in women (82 cases versus 56 cases in men). In literature, the frequency of this disease is two times higher in women than in men. It is known that the physiological responsiveness of woman to stress agents is better, but it is just possible that the intervention of other factors (personality, endocrine status, the role of woman in family life, etc.) lead to increased disturbance frequency of generalized anxiety in females. Certainly the percentage of patients applying to medical help is much higher for female sex.

Of the total patients studied, 56% came from urban areas and 44% from rural areas (figure 2).

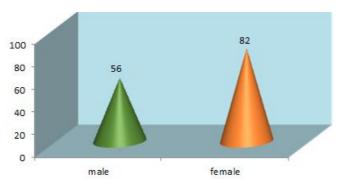


Fig.2.Distribution of cases depending on the environment of origin

urban

56%

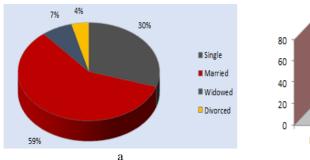
rural

44%

Fig.1.Distribution of cases by gender

Urban environment assumes a higher incidence of stress factors and a decreased level of behavioral inhibition, which may involve increased frequency of generalized anxiety. Rural areas can offer, sometimes against the occurrence of life events or other stress factors, valves like religion or tradition which may contribute to decrease anxiety.

Distribution of cases depending on marital status is shown in figure 3. Of the 138 patients 82 were married and 41 were single. Family responsibilities, especially in terms of transition period may increase anxiety. Number of widows and divorced patients is almost equal (3 and 2 cases) much smaller compared to existing data in literature. It is relevant that in all cases most patients (72) had 1 or more children and 17 patients had more than 2 children.



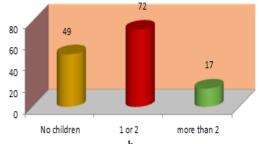


Fig.3.Distribution of cases depending on marital status (a) and no. of children (b)

Regarding the level of instruction (figure 4) a number of patients 67 secondary and 58 patients of lower education. Only 13 cases of 138 have higher education from university (teachers, economists, students etc.)

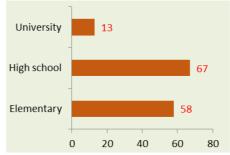


Fig.4.Level of education of the cases

Distribution of cases depending on conditions of life

- 1. Living conditions. In general the observation files are not consistent regarding living and working. A number of 110 patients (83%) were recorded with proper housing. Lack of sanitation and crowded surrounding could be for example two of the reasons frequently encountered when referring to living conditions.
- 2. Consumption of toxics. Concerning consumption of toxics, 63% of patients deny consumption, 22% are smokers, 9% admit drinking alcohol occasionally or abusive and 6% drinks coffee daily.

The small percentage of coffee consumers in the lot studied could be explained by the fact that the intensity of anxiety symptoms increases with the consumption of this toxic. It is possible for the percentage of alcohol consumers to be higher, this behavior being disguised for various reasons.

The effects of alcohol for the alleviation of symptoms appears frequently in late adult life. But often once the drug dependence syndrome is installed, anxiety symptoms increase or become chronic.

3. Stress Events. Clinical observations indicate that generalized anxiety disorder is often in relation to stressful events and becomes chronic if they

persist. In the studied group, there were 10 cases with major psychic traumas (death of a parent, death of a child, witnessing the death of colleague in the explosion, recent divorce, chronic illness of a child, criminal investigation) and for 18 cases familial/ professional stress was recorded. Reference literature notes that 15% of patients who are to undergo surgery develop generalized anxiety disorder (11), but in the group studied, somatic and surgical stress was not recorded in the cases.

- 4. Assessment of cases by number of hospitalizations. In connection with the above, a number of 72 cases were first admissions and 66 cases were readmissions. The high number of readmission cases is consistent with the generalized anxiety disturbance growing tendency to become chronic.
- 5. Depiction of psychopathology at admission. According to ICD10 psychiatric taxonomies painting psychopathology of generalized anxiety disturbance comprises mainly: apprehension with anxiety, motoric tension, vegetative hyperactivity. In fact, they are the psychological anxiety symptoms and the somatic equivalents thereof.

Data obtained may be coordinated as follows:

Psychiatric symptoms mainly in the sphere of attention, memory, thought, conscience and emotion (figure 5 and 6):

- Allocation of the symptoms of attention and memory;
- Distribution of symptoms in the cognitive thought;
- Assessment of symptoms in the emotional and conscience sphere.

Among Psychiatric symptoms most frequently encountered are diffuse anxiety, anxiety as paroxysmal form of panic attacks, the depressive emotional liability, irascibility.

Somatic Symptoms are presented in figure 7.

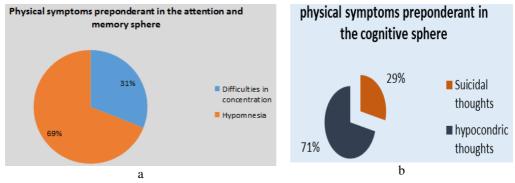


Fig.5.Allocation of the symptoms of attention and memory (a) and the distribution of symptoms in the cognitive thought (b)

Assessment of symptoms in the emotional and conscience sphere

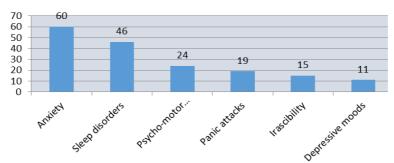


Fig.6. Assessment of symptoms in the emotional and conscience sphere

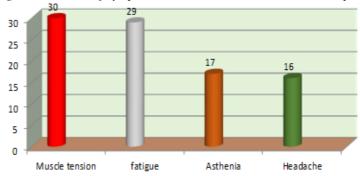


Fig.7. The Somatic Symptoms

CONCLUSIONS

While life stress factors like surgeries and other medical conditions or crowded surroundings are more commonly associated with generalized anxiety disorder according to literature, the cases that we studied have more frequent socio-professional determinism in relation with the disorder, like marital status, high level of education and small family number with one or two children.

Females are more exposed to general anxiety disorder development compared to males.

Higher frequency of generalized anxiety disorder observed in married patients of the study group compared with data from literature can also be explained through the influence of the particular socio-economic factors in familial frame.

63% of patients deny consumption of alcohol in contradiction with data from the literature were a larger number of patients use alcohol as a pre-medication step.

Out of 183 patients studied, a number of 72 cases were at the first admission and 66 cases were readmissions. The high number of readmission

cases is consistent with the generalized anxiety disorder growing tendency to become chronic with socio-economic implications.

The most frequent somatic complains were muscle tension, fatigue, asthenia and headache and the most common afective and emotional disturbances found were anxiety, psychomotor restlessnes, panic attacks, irascibillity accompanied with sleep disturbances.

REFERENCES

- 1. American Psychiatric Association, 1994, Diagnostic and statistical manual of medical disorders (fourth edition) DSM IV; Washington D.C.
- 2. Antony, M. M., & Swinson, R. P. , 2000, The shyness & social anxiety, Workbook: Proven techniques for overcoming your fears. Oakland, CA
- 3. Burns D. D., 2000, Feeling good: The new mood therapy. New York: Avon Books
- 4. Burns D.D., 1989, The feeling good handbook. New York; Penguin Books.
- 5. Clum G. A. , 2006, Trauma and recovery: The aftermath of violence From domestic abuse to political terror. New York: Basic Books Hirai
- 6. Goodman & Gilmans, 2000, The pharmacological basis of therapeutics, Tenth edition (International edition); Mc. Graw-Hill; Medical Publishing division.
- 7. Herman J., 1997, Intuition and scientific evidence: What is their role in treating eating Disorders. Renfrew Perspective
- 8. Hyman B. M., Pedrick, C., 1999, A meta-analytic study of self-helpinterventions for anxiety problems. Behavior Therapy
- 9. Irick K. M., Fried S.B., 2001, The OCD workbook: Your guide tobreaking free from obsessive-compulsive disorder. Oakland, CA: NewHarbinger.
- 10. Kessler R. C., Chiu W. T., Demler O., Merikangas K. R., Walters E. E., 2005, A content analysis of recent self-help books on caregiving and aging parents. Clinical Gerontologist
- 11. Kessler R. C., Olfson, M., Berglund, P. A. ,1998, Patterns and predictors of treatment contact after first onset of psychiatric disorders.
- 12. Kumar P.I, Clark M.L, 1997, Clinical medicine. Psychological Medicine; Bailere Tindal; London, Harrison 17th edition.
- 13. Leachy R. L., 2005, The worry Cure. New York: Random House.
- 14. Marrs R. W., 1995, Randomized controlled trial of interpersonal psychotherapy and cognitive-behavioural therapy for depression. British Journal of Psychiatry
- 15. Parkinson F., 2000, Psychometric theory (2nd ed.). New York:McGraw-Hill Pardeck, J. T. (1993). Using bibliotherapy in clinical practice: A guide to self-help books. Westport, CT: Greenwood Press.
- 16. Shivers Rebraca Louise, 1990, Basis concepts of Psychiatric-Mental Nursing (second edition); Lippincott Company; Philadelphia
- 17. Stephen M. Stahl , 2013, Essential Psychopharmacology Prescriber's guide fifth edition, Cambridge University Press.
- 18. Stephen M. Stahl, 2013, Stahl's Essential Psychopharmacology Neuroscientific Basis and Practical Applications, Fourth edition, Cambridge University Press.
- 19. White J., 1999, Overcoming generalized anxiety Disorder: A relaxation, cognitive restricting and Exposure-based protocol for the Treatment of GAD, CA: New Harbinger 20. Zuercher-White, 1998, An end of panic: Breakthrough techniques for overcoming panic
- disorders