

# THE ROLE OF STRESS IN RELAPSE OF SCHIZOPHRENIA

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**KEYWORDS:** schizophrenia, stress

## ABSTRACT

The role of stress in relapse of schizophrenia has not been fully explained yet. In this work stress has been defined as an outside event which is specific in itself and does not depend on the individual's actions. We studied individual reactions of schizophrenic patients in the period of air-alarms in Zagreb. The sample comprised 40 female patients, diagnosed as having schizophrenia (DSMIII R). 20 of them were treated for relapse as in-patients, and the other 20 out-patients showed no signs of relapse in that period. The patients were compared in regard to their clinical picture, course of disease, defense mechanisms, anxiety tolerance, psychosomatic symptoms and social functioning. Analysis of the results shows that there were no significant differences clinical picture, course of disease and defense mechanisms. Psychosomatic symptoms and anxiety tolerance prevailed in the group of out-patients in whom we also found an increase in social functioning as compared to the period before air-alarms. The conclusion of the research is that a schizophrenic patient's reaction to stress depends on the strength of his ego. Possible reactions are: relapse of the disease, psychosomatic symptoms, anxiety without psychotic breakdown and the usage of negation and omnipotence.

Results of some researches concerning the life events and schizophrenia suggest that life events do play a role in both onset and recurrence of the disease. But the question is: What kind of role do they play and how strong are they? We do not know to what extent recent life events are formative for some types of subjects who develop schizophrenic episodes, to what extent they are an important trigger for other types of subjects, or virtually irrelevant for some types who develop schizophrenic episodes '(Bruce, Dohrenwend and Gladys, 1981)'. Brown and Birely's (1968) study show an increase of life events just before the onset of schizophrenic episode or relapse. According to some researches '(Brown, Harris, Peto 1973)' the role of life events in schizophrenic episodes is mainly that of a trigger, or they can have a formative effect for, at least, a small group of schizophrenics. Progress in explaining the role of stress can only be achieved by evaluating subgroups of schizophrenics that are homogenous with respect to ethiology and with respect to the presentation of clinical features. The role of stress may, indeed, be different for each subgroup '(Spring, 1981)'. In spite of the general agreement about the influence of stress on mental health, there are various, often contradictory theories about the specific effect of stress on mental health. They view stress as a strenghtening factor in relation to being exposed to it in future '(Keinan, 1980)' and, quite the opposite, as a factor which causes vulnerability in a person in relation to being exposed to it in future, even if a person is exposed to stress of a lower intensity than the first one '(Selye, 1956)'

Theoretically, there are two possible effects of being exposed to stress: the effect is more favourable if stress is a strenghtening factor and, vice versa it is less favourable if stress represents a worsening effect. Stress has been defined as an external event which causes changes in the person's established balance and in his/her relations with the environment. Stress '(Spring, 1981)' requires a person's new adaptation to changes because of the disturbed balance. Reaction to stress depends on its intensity, duration and the person's psychological mechanisms to deal with his/her feelings. Most often it is anxiety caused by stress. According to Freud '(Freud, 1921)' psychological trauma is analogous with the surgical concept of trauma and it represents an event of such enormous intensity that it breaks through the ego defences and floods it with an uncontrollable anxiety.

## RESEARCH

In this research the following definition of stress has been used: Stress may be defined in terms of stressor, or stimuli whose properties are objectively specifiable, and whose probability of occurrence does not depend on the actions or characteristics of the individual on whom they have an impact. This is the basic definitional approach used in most studies of stressful events '(Spring, 1981)'.

### **Sample**

The sample comprised the total number of 20 patients who have been diagnosed as having schizophrenia according to DSM III-R criteria and who were treated for relapse. They were the author's in-patients in the period of air-alarms in Zagreb from September 15 1991 to January 3, 1992. The control group consisted of 20 female patients with the diagnosis of schizophrenia according to the same criteria. They were regular out-patients and they showed no signs of relapse of the disease. All of them were under neuroleptic therapy and they were exposed to stressful events equally during the observed period.

### **Method**

Each hospitalized female patient was joined to one female out-patient for the purpose of comparison. The out-patient was chosen according to her age similarity, symptoms of disease, course of disease, social functioning and similar conditions of living. The data on pairs formed in this way have been compared according to:

1. Clinical picture ( whether there are any productive and negative symptoms of the disease)
2. Course of the disease ( remission, without remission )
3. Social functioning measured by SADS L '(Spitzer,Endicott,1979)' scale from 0 to 6
4. Defense mechanisms ( omnipotence and negation as predominant defenses )
5. Anxiety tolerance ( we estimated the ability to verbalize, recognize and endure anxiety outside the psychotic decompensation as good or bad )
6. Psychosomatic symptoms ( present or not present in the stressful situation )

## **RESULTS**

The examined patients were 25-55 years old. Most of them were 25-38 years old. Clinical picture: 17 female in-patients and 7 female out-patients showed a productive clinical picture (delusions and hallucinations), 11 female in-patients and 6 female out-patients showed negative symptoms, 7 female out-patients had no symptoms of the disease, 8 female in-patients had both productive and negative symptoms and 3 patients had only negative symptoms.

### **Course of disease**

With regard to the course of disease, 5 female patients in the group of in-patients had the course of disease of remission, while in the group of female out-patients there were 7 of them. Other patients had a chronic course of disease.

### **Social functioning according to SADS L**

In the group of female in-patients, 5 female patients had a good social functioning with no symptoms of the disease before the present relapse of the disease, the other (5) patients had mild symptoms with good functioning in general, and 10 patients had some difficulties in functioning with moderate symptoms. (10).

In the group of female out-patients 7 had good social functioning without symptoms, 3 had good functioning in general with some mild symptoms, and 10 female patients had mild symptoms and functioning with some difficulties. In the group of out-patients 3 patients displayed an improvement in social functioning.

### **Defense mechanisms: negation and omnipotence**

In the group of female in-patients 9 patients had negation as a very marked defense and 3 patients had omnipotence, other patients did not have these marked defenses at high degree. In the group of female out-patients 5 patients had a marked degree of negation, and the same number of patients had omnipotence as defense.

### **Anxiety tolerance**

In the group of female in-patients 4 patients had a good ability to tolerate anxiety and in the group of out-patients there were 10. Other female patients in both groups had a weaker capacity to tolerate anxiety.

### **Psychosomatic symptoms**

In the group of female in-patients 3 out of 20 had psychosomatic symptoms (headache, stomachache, chest-pains) in the period of air-raids before the relapse of the disease. In the group of out-patients who did not have the relapse 13 of them had psychosomatic problems. The symptoms were identical.

## **DISCUSSION**

The analysis of the results shows that there were no significant aberrations between the two groups of patients concerning the clinical picture, course of disease, social functioning and using negation and omnipotence as dominant defenses. This makes the sample homogenous and fit for comparison. All the female patients were exposed to the identical stress of equal intensity. The analysis shows that the group of female out-patients has a greater anxiety tolerance and that in this group there occur significant psychosomatic symptoms during the period of stressful events. In the group of out-patients three of them showed an improvement in social functioning as compared to their functioning before the air-raids started. The working hypothesis in the research was that ego strength determines reaction to stress. Anxiety tolerance is an ego function and, together with other functions it determines the ego strength. The number of ego functions (Bellak, 1973) often reflects various authors' views. They



mention reality testing, drive control, autonomous ego functions, synthetic ego functions, object relations, defense mechanisms, frustration tolerance, capacity to enjoy, thinking, perception and others. Among other difficulties, a great task of the schizophrenic patient's ego is to overcome anxiety and to recognize it in general. Therefore, a schizophrenic ego will use all the available "techniques" in order to deceive himself and to prevent anxiety to enter the experiencing ego. This is why: in most cases anxiety in schizophrenics has not reached the level of signal anxiety (Blank, 1985) and so traumatic anxiety threatens to overflow the ego and jeopardize its functioning completely, as well as any other strong emotion which is unpleasant to the ego threatens to ruin the established balance.

Stressful situation represents a threat to everyone's ego as well as the schizophrenic ego. We must point out that schizophrenic patient's evaluation of outside reality differs. In order to prevent anxiety from breaking into the conscious part, they most often use defense mechanisms such as negation and omnipotence. Negation "protects" them from perceiving the event or from denying its potential danger, so it does not exist and there is no reason for anxiety. Omnipotence gives them a false illusion of the almighty protection. If these mechanisms function successfully they protect them from the break of anxiety. My assumption is that exactly these mechanisms make it possible for some schizophrenic patients to survive the stressful event without relapses and psychotic decompensations. These two mechanisms protect them from becoming overflowed by emotions, which is dangerous for them. I personally believe that the so called residual symptoms of hypobulia and non-adequate affect are partly defense mechanisms for protection from excessive emotions between schizophrenics and their environment.

The increased tolerance towards anxiety in the group of out-patients and the capacity to react bodily through psychosomatic symptom is what distinguishes the group of in-patients from the group of out-patients, or the group with relapse of disease from the group without relapse during the period of stress. This suggests that the ego is stronger in the group of out-patients. The improvement in social functioning indicates that in some cases stress can be a factor that strengthens the ego.

## CONCLUSION

Stress provokes reaction in every person, as well as in schizophrenics. It has been generally accepted that schizophrenic patients differ in the way they react to stress, which depends on the strength of their ego. A schizophrenic behaves like any other person who, being in interaction with stress intensity, stress duration and ego strength, reacts to stress in his/her own way. In regard to the schizophrenic patient's ego strength the possibilities are the following:

1. It is possible to isolate the reaction to stress, or to postpone it for some time by using negation and omnipotence as defense mechanisms.
2. Stress can cause marked anxiety which then becomes a trigger for a relapse of the disease.
3. The development of psychosomatic symptoms channels the anxiety into the body.
4. Enduring anxiety without psychotic breakdown suggests a larger capacity of the ego to deal with stress and, at the same time it represents an opportunity to strengthen the ego and improve social functioning through the experience of dealing with anxiety caused by stress.

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