

AFFECTIVE REACTIONS OF PATIENTS AND PERSONNEL DURING AIR-RAID ALERTS IN THE PSYCHIATRIC HOSPITAL UGLJAN

EMIL ŽAMPERA
Psihijatrijska bolnica Ugljan
Psychiatric Hospital Ugljan

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During alerts announcing general or air-raid warnings, it was noticed that the reactions of certain categories of patients and personnel in the Psychiatric Hospital Ugljan, differed in relation to the psychodynamic structure of the group. The aim of this investigation was to find out the level of anxiety in the reactions of these categories of people in the fore-mentioned stress situations. By the use of a questionnaire STAI (X-1, X-2) the level of the state and the trait of anxiety were assessed during the period when there was no alarm. Two days later, because of approaching enemy aircraft, an air-raid alarm was sounded, and the state of anxiety (X-1) was assessed again (self-assessment, assessment by observers) but in a different situation in the air-raid shelter. This investigation confirmed some differences in affective reactions of certain groups towards different entities. It was found that alcoholic patients and the personnel showed a significant increase in anxiety during the alarm, while this was not noticed in schizophrenic patients.

Introduction and aims

Emotional stress includes a relationship between external stimulating factors and the response based on the psychological structure. Stress requires an

adaptation, causes extra efforts and new adaptive activities. Stress depends on the intensity and the time of the stress situation. Of equal importance are the essential characteristics of the person facing stress. Kobasa (1979) thinks that people who have experienced many stress situations and have not become ill, differ according to personality structure from people who become ill as a result of the stress experience. The way people react to prolonged, unexpected, exceptional and extreme stress is very different, and it can lead to a breakdown of organised functioning. War situations represent efforts for psychological and physical capabilities. During the war period 1991/92 in Croatia the aggressor's attacks caused frequent danger alerts. The sound of alerts alone, announcing general or air-raid danger, represents a stimulating factor regarding existential threats and it causes internal stress which is manifested not only in behavioural and physiological changes, but also in anxiety reactions. Psychological reactions during the alarm are shown at the same time on a wider number of people who are inter-related, which is known as mass-reaction. During the alarms in the Psychiatric Hospital Ugljan different reactions were noticed on specific categories of patients (schizophrenics, alcoholics) but also on the personnel too, depending on the psychodynamic structure of the group.

The aim of this investigation was to establish the intensity of the anxiety in the reactions of hospitalised schizophrenic patients, alcoholic patients and the personnel of the Psychiatric Hospital Ugljan during air-raid alerts.

Method

The measuring instrument

State - Trait anxiety Inventory (STAI)

Spielberger and co-workers (1968) made a questionnaire for the assessment of anxiety as state and as trait. The authors created the possibility of establishing the differences between the transit level of anxiety, which is often situationally determined and fluctuates in time and in different situations (state anxiety - SAI - X-1), and relatively stable dispositional aspects of anxiety (trait anxiety - TAI - X-2).

Each of these two scales consists of 20 items, and each item is assessed through four point gradation (X-1), or frequency (X-2). Results on both scales range from 20 to 80. A low result indicates calmness, a medium result indicates a moderate level of anxiety, a high result shows approaching panic states (Ramanaiah et al 1983).

Subjects

Three groups of subjects took part in this investigation. Spielberger's STAI questionnaire was administered to two groups of patients (schizophrenics and alcoholics) and the personnel of the Psychiatric Hospital Ugljan. The group of schizophrenics was characterised by the chronicity of the illness. The group of alcoholics, regarding their personality structure, consisted of 28.12% subjects with changed personality and 71.88% of neurotics. The third group consisted of personnel of the Psychiatric Hospital Ugljan, where care was taken that the subjects had not been treated for psychiatric problems. The groups were equivalent regarding sex and age, and each of them included 32 subjects.

Procedure

The first application of the complete questionnaire (X-1, X-2) was made in December 1991 after five consecutive days without any kind of alert, meaning the enemy forces were not active. Two days later, because of the threat of enemy aircraft, the air-raid warning was sounded so that patients and personnel had to go to the air-raid shelters. The observers (eight psychiatrists and psychologists) assessed the level of state anxiety (X-1) on four of the subjects from each group. To prevent control over their behavior, the subjects were not told about the assessment procedure. After this, by the use of self-assessment, the subjects assessed their momentary state on the very same scale (X-1).

Results and discussion

Results obtained during the alert on the scale X-1b by the use of self-assessment method, were used in the analysis as a reliable measure of state anxiety, because of a high correlation ($r=0.725$) with the data obtained by observers.

Table 1. *The level of trait anxiety (X-2) before air-raid alert and state anxiety before (X-1a) and during (X-1b) the alert in hospitalised schizophrenic patients. The t-test of the significance of the differences.*

	Before alert		During alert
	X-2	X-1a	X-1b
M	42.719	42.875	43.156
SD	9.257	8.816	10.265
t=0.215, n'=31, p>0.05			

Table 2. *The level of trait anxiety (X-2) before air-raid alert and state anxiety before (X-1a) and during (X-1b) the alert in alcoholic patients. The t-test of the significance of the differences.*

	Before alert		During alert
	X-2	X-1a	X-1b
M	47.406	46.188	67.094
SD	12.396	16.989	6.055
t=7.717, n'=31, p<0.01			

Table 3. *The level of trait anxiety (X-2) before air-raid alert and state anxiety before (X-1a) and during (X-1b) the alert in personnel of the Psychiatric Hospital Ugljan. The t-test of significance of differences.*

	Before alert		During alert
	X-2	X-1a	X-1b
M	43.781	43.219	61.969
SD	12.021	12.505	10.069
t=9.601, n'=31, p<0.01			

Results obtained on the scales (X-1) (SAI) and (X-2) (TAI) at the first application (before the air-raid alert) showed small differences between the level of state anxiety (situational determined anxiety by external factors) and trait anxiety (stable dispositional aspect of anxiety), in all three groups (schizophrenics, alcoholics and hospital personnel). This indicates that at the moment of assessment there were no marked extraordinary stressors which could significantly increase the level of transit anxiety, ie. the anxiety which is determined by environmental stimulation.

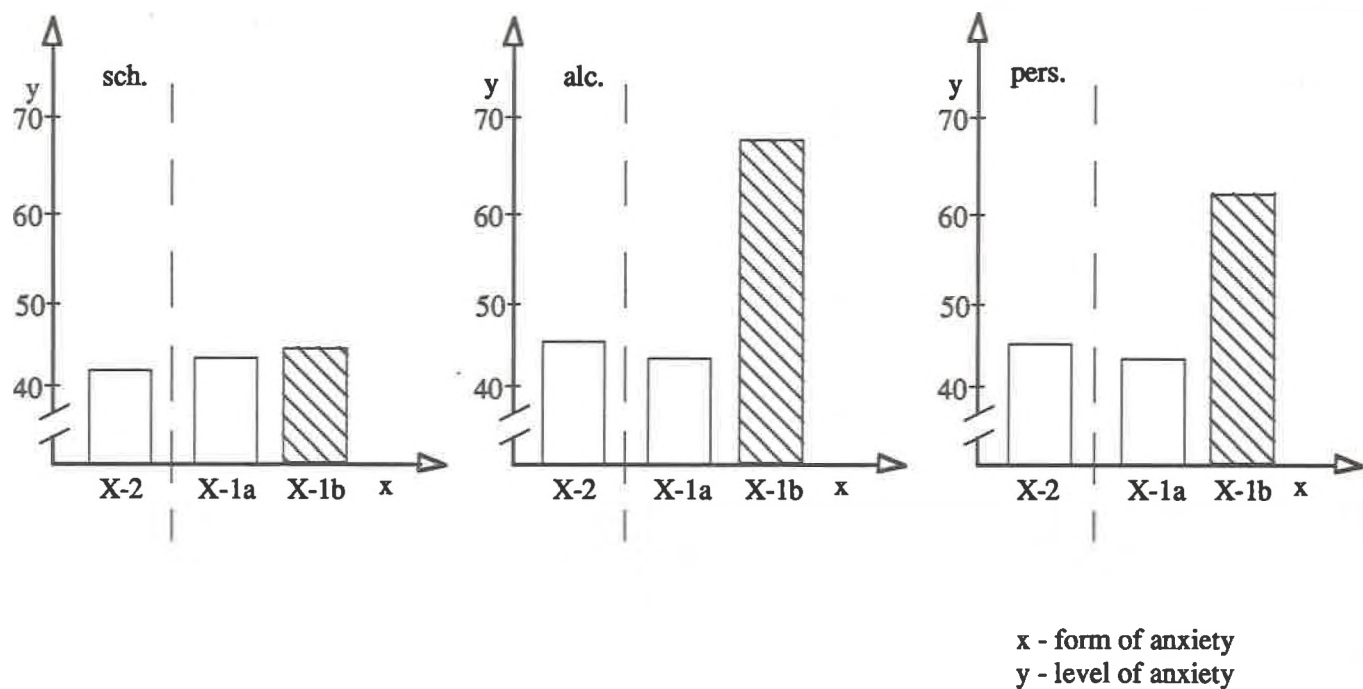


Fig. 1. The level of trait anxiety (X-2) before air-raid alert and state anxiety before (X-1a) and during (X-1b) the alert in hospitalised schizophrenic patients, alcoholic patients and the personnel of the Psychiatric Hospital Ugljan.

Before the air-raid alerts it was found that the anxiety (state and trait) was at the highest level in the group of alcoholic patients, followed by the personnel of the Psychiatric Hospital Ugljan, and the lowest level was found in schizophrenic patients (Fig. 1). The difference (tested by the analysis of variance) amongst the results of the groups obtained on the scales X-1 ($F=0.59$) and the scale X-2 ($F=1.15$) is not statistically significant at the level of 5%.

During the air-raid danger all the groups have higher values on the scale X-2, ie. the scale for assessment for state anxiety (Fig. 1). In this repeated measurement the biggest rise in state anxiety was found in alcoholics ($t=7.72$), followed by the hospital personnel ($t=9.60$). These differences are statistically significant at the level of 1% (Table 2 and 3).

Unlike in these two groups the schizophrenic patients (Table 1.) did not have a significant rise in anxiety ($t=0.22$, $p>0.05$). The analysis of the variance of obtained results during the air-raid danger on the scale X-1, found a significant difference amongst the groups ($F=62.65$; $p<0.01$), which indicates the differences in reactions of the three groups of subjects in such specific war conditions.

The patients with endogenous psychosis do not represent a special problem in war situations. Because of the impairment of their reality testing they could not adequately assess the situation, therefore the existing level of anxiety did not change in the group of schizophrenic patients.

The group of alcoholic patients (personality changes and neurotic structures) face a somewhat decreased tolerance to frustrating situations. The existing weakness of the ego and weaker adaptational mechanisms are the cause of the strongest acute anxiety reaction amongst the tested groups.

In the areas of war activities all the employed are under threat. The threat is directed at their lives, the lives of close persons, possessions, homes, while at the same time they are exposed to stressors which are connected with their profession (destruction of hospitals by the aggressor, treatment of war wounds, worse working conditions than in peace-time, shortage of medicine, shortage of water supply and electrical energy). There is also a role conflict among the personnel - between the professional and the parental, due to separation from the family. All of this contributes to a higher level of anxiety reactions during air-raid alerts.

Conclusion

In the conditions of air-raid danger, anxiety was significantly increased in groups of hospitalised alcoholic patients and the personnel of the Psychiatric Hospital Ugljan, but not among schizophrenic patients.

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*Emil Žampera: AFEKTIVNE REAKCIJE BOLESNIKA I OSOBLJA
ZA VRIJEME ZRAČNE OPASNOSTI U PSIHIJATRIJSKOJ
BOLNICI UGLJAN*

S a ž e t a k

Tijekom uzbuna koje su najavljujvale opću ili zračnu opasnost u Psihijatrijskoj bolnici Ugljan primijećeno je da se reakcije pojedinih kategorija bolesnika i osoblja razlikuju u zavisnosti o psihodinamskoj strukturi grupe. Ovim istraživanjem nastojalo se utvrditi kojim intenzitetom anksioznosti te kategorije ljudi reagiraju u uvjetima navedene stresne situacije. Upitnikom STAI (X-1, X-2), u periodu kad uzbuna nije bila dana, utvrdila se razina stanja i crte anksioznosti. Dva dana poslije, zbog blizine neprijateljskih zrakoplova, označena je zračna opasnost, te je u skloništu ponovno utvrđeno (samoprocjena, procjena opažača) stanje anksioznosti (X-1), ali sada u sasvim različitoj situaciji. Ispitivanjem su potvrđene neke specifičnosti u afektivnim odgovorima pojedinih grupa prema različitim entitetima. Naime, kod ovisnika o alkoholu i osoblja bolnice stanje anksioznosti za vrijeme uzbune značajno je poraslo, ali ne i kod shizofrenih bolesnika.