

Stress as a cause of suicidal attempts among young people from various environments

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Abstract: The data by the World Health Organization indicate that the number of suicidal attempts and committed suicides is increasing in all countries, especially in the environment of young people. One of the causes of this phenomenon is anxiety induced by typical factors of the habitation and work environment. These are the following factors: high degree of difficulty or tasks, loss of control over the course of events, discrepancies between external and internal demands and the possibility of their realization by individuals in conditions threatening health or life. The objective of the study was clinical and toxicological analysis of motivation attitudes, causes for undertaking suicidal attempts by young people in conditions of exposure to typical stressors, which in an evaluation by a psychologist-psychiatrist could have determined suicidal attitudes. The material for the study was a group of 275 adolescents and young adults treated in the Toxicology Ward at the Clinic of the Institute of Agricultural Medicine in Lublin due to acute poisoning with xenobiotics. The methodology of research was based on the analysis of medical records of hospitalized patients, expanded by an evaluation by a psychologist-psychiatrist of the attitudes, and motivation for poisoning among young people who had undertaken a suicidal attempt. The study covered 154 urban inhabitants of both genders, and 121 patients living in the rural environment. The material was subject to simple statistical analysis. In both groups examined the causative agents were pharmaceuticals and alcohol in combination with pharmaceuticals, xenobiotics being a dominant cause of poisoning. According to psychological-psychiatric evaluation the causes of undertaking suicidal attempt by young urban population were as follows: failure in a family, at school, in the peer environment, and also long-term incapability for finding a satisfactory job. Among young people living in rural areas there dominated failures and conflicts in a family, in the environment, at school and difficulties of the period of adolescence.

Key words: risk of suicidal attempt, stress, motivation for poisonings, psychological and psychiatric conditioning

INTRODUCTION

From the aspect of psychology, stress is the state of hinderance or the inability to realize goals, tasks and values which are important for an individual. The typical factors inducing stress are:

- threat to life and health;
- threat to one's self-esteem;
- high degree of difficulty or loss of control over the course of events.

Stress occurs in the situation of a discrepancy between internal and external demands, and the capabilities for their realization by a person in the state of threat.

OBJECTIVE

The objective of the study is presented in the form of a clinical outline in the clinical and toxicological analysis of the attitudes, motivation and causes for undertaking suicidal attempts by adolescents from various environments, in conditions of exposure to typical factors inducing stress which, according to the opinion of a psychiatrist-psychologist, could

have determined suicidal attitudes in the examined group of people poisoned with various xenobiotics taken with the intention of losing health and life.

MATERIAL AND METHODS

The material for the study was a group of 275 adolescents and young adults treated in the Toxicology Ward at the Institute of Agricultural Medicine in Lublin due to poisoning with suicidal intent.

The method of the study was analysis of medical records concerning the hospitalized patients, the course, complications and death due to acute poisoning, expanded by psychological-psychiatric assessment of attitudes, motives and behaviours which were the cause of undertaking a suicidal attempt.

The study covered 154 urban inhabitants of both genders, and 121 people living in the rural environment.

The mean age of the people in the study was:

- in rural areas: $X = 25.45$ SD ± 11.39 – median 20;
- in urban areas $X = 26.2$, SD ± 11.33 – median 22.

In both groups, the causative agents of poisoning were pharmaceuticals, and alcohol in combination with pharmaceuticals, the intake of which resulted mainly in 2nd degree toxic coma, according to the 4-degree classification by Mathew and Lawson.

Table 1 Number of patients in the groups

		No.	Age ($\bar{x} \pm SD$)
Urban	Total number of patients in the group	N - 154	26,20 \pm 11,33
	Males	N - 49	27,46 \pm 12,88
	Females	N - 102	25,46 \pm 10,06
Rural	Total number of patients in the group	N - 121	25,45 \pm 11,39
	Males	N - 41	27,00 \pm 12,03
	Females	N - 80	24,70 \pm 11,18

Table 2 Occupations performed by people in the groups examined

Specification	Number of people in the study – percentage		
	Group examined	Males	Females
Urban School adolescents and students	63 (41%)	21 (14%)	42 (27%)
Urban People occupationally active	35 (23%)	10 (6%)	25 (17%)
Urban Unemployed	42 (27%)	12 (8%)	30 (19%)**
Urban Old-age pensioners and those receiving health benefit	14 (9%)	6 (4%)	8 (5%)
Urban Total	154 (100%)	49 (32%)	105 (68%)
Rural School adolescents and students	48 (40%)	11 (9%)	37 (31%)
Rural People occupationally active	46 (38%)	17 (14%)	29 (24%)
Rural Unemployed	20 (16%)	11 (9%)	9 (7%)**
Rural Old-age pensioners and those receiving health benefit	7 (6%)	2 (2%)	5 (4%)
Rural Total	121 (100%)	41 (34%)	80 (66%)

**/ Significant at $p < 0,05$

Table 3 Marital status of patients In the group examined

Specification	Number of patients examined – percentage		
	Group examined	Males	Females
Urban Never-married	95 (62%)	32 (21%)	63 (41%)
Urban Married	49 (32%)	13 (8%)	36 (23%)
Urban Divorced	8 (5%)	3 (2%)	5 (3%)
Urban Widowed	2 (1%)	1 (1%)	1 (1%)
Urban Total	154 (100%)	49 (32%)	105 (68%)
Rural Never-married	70 (58%)	22 (18%)	48 (40%)
Rural Married	47 (39%)	18 (15%)	29 (24%)
Rural Divorced	1 (1%)	0 (0%)	1 (1%)
Rural Widowed	3 (2%)	1 (1%)	2 (1%)
Rural Total	121 (100%)	41 (34%)	80 (66%)

There were no significant differences between means of groups

Table 5 Tonic coma in poisoning – acc. to Matthew

Deepness of coma		Cause of poisoning			Total/xx
		Drugs	Drugs + alcohol	Commercial alcohol	
Urban	I°	9 (6%)	7 (5%)	0 (0%)	16 (11%)
	II°	47 (33%)	21 (15%)	2 (1%)	70 (49%)
	III°	29 (20%)	17 (12%)	4 (3%)	50 (35%)
	IV°	4 (3%)	3 (2%)	0 (0%)	7 (5%)
	Total	89 (62%)	48 (34%)	6 (4%)	143 (100%)
Rural	I°	5 (6%)	0 (0%)	0 (0%)	5 (6%)
	II°	33 (41%)	11 (14%)	2 (2%)	46 (57%)
	III°	16 (20%)	9 (11%)	2 (2%)	27 (33%)
	IV°	2 (2%)	0 (0%)	1 (1%)	3 (4%)
	Total	56 (69%)	20 (25%)	5 (6%)	81 (100%)

/xx – no coma 51 patients

χ^2 test did not show significant statistical differences between the groups.

Table 4 Motivation for poisoning in the groups examined

Specification	Number of people examined – percentage		
	Group examined	Males	Females
Urban Conflict at school	12 (8%)	4 (3%)	8 (5%)
Urban Difficulties of the age of adolescence	26 (17%)	5 (3%)	21 (14%)
Urban Difficulties with finding employment	35 (23%)	12 (8%)	23 (15%)
Urban Overuse of stimulants	15 (10%)	7 (5%)	8 (5%)
Urban Conflict in the family	26 (17%)	9 (6%)	17 (11%)
Urban Conflict with mates	15 (10%)	6 (4%)	9 (6%)
Urban Disappointment with love	12 (7%)	2 (1%)	10 (6%)
Urban Depression	11 (7%)	2 (1%)	9 (6%)
Urban Other causes	2 (1%)	2 (1%)	0 (0%)
Urban Total	154 (100%)	49 (32%)	105 (68%)
Rural Conflict at school	6 (5%)	2 (2%)	4 (3%)
Rural Difficulties of the age of adolescence	23 (18%)	3 (2%)	20 (16%)
Rural Difficulties with finding employment	17 (14%)	8 (7%)	9 (7%)
Rural Overuse of stimulants	9 (8%)	7 (6%)	2 (2%)
Rural Conflict in the family	23 (19%)	4 (3%)	19 (16%)
Rural Conflict with mates	15 (13%)	7 (6%)	8 (7%)
Rural Disappointment with love	14 (12%)	2 (2%)	12 (10%)
Rural Depression	8 (6%)	4 (3%)	4 (3%)
Rural Other causes	6 (5%)	2 (2%)	4 (3%)
Rural Total	121 (100%)	39 (32%)	82 (68%)

χ^2 test did not show significant statistical differences between the groups.

RESULTS

Studies conducted among people treated in the Toxicology Ward of the Clinic at the Institute of Agricultural Medicine, as a result of suicidal attempts, showed that suicidal attempts were most often undertaken by young people in the age category 25-26. The percentage of attempts undertaken decreased with age. This regularity is reported by many authors, both in Poland and in other countries, with respect to attempted suicide [3].

In the group of the patients in the study, schoolchildren and students dominated, with the greatest number being females. The second position was occupied by those occupationally active, followed by permanently unemployed people (the number of females being twice as large as males). The smallest group comprised young people who used health benefit granted for somatic diseases (Table 2).

The patients in the study group were young, the majority of them single – 165; 96 were married, and a small group – 14 patients – were divorcees and widowers. Females dominated in all groups of marital status (Table 3).

The most frequent cause of suicidal poisoning, both among males and females, was from pharmaceuticals. They are the most frequent cause of suicidal poisonings, not only in Poland, but also in many other countries [2, 4]. At present, more than half of unsuccessful suicides are from poisoning while under the influence of alcohol and pharmaceuticals.

Alcohol is consumed by suicides in order to enhance the effect of drugs or other toxic substances. These observations are consistent with the reports by other authors, and provide evidence that alcohol in combination with pharmaceuticals still remains the main cause of poisonings in Poland, being the factor which facilitates the commitment of the act of auto-aggression through the weakening of instinct reactions for self-preservation (Table 5) [3, 5, 6].

Patients who poisoned themselves for suicidal reasons often required treatment in the Intensive Medical Care Room due to toxic coma accompanying suicide, which in the majority of cases accompanied acute poisoning. In the group of suicidal poisonings there dominated coma of medium degree of severity (II°) and severe coma (III°), which might indicate that a considerable group of the people poisoned actually desired death, while the remainder attempted suicide in order to attract attention to themselves and the problems of their everyday life.

Based on our material, the motivation for poisoning in the group examined was therefore as follows: difficulties with finding employment, conflict in a family, and among adolescents – difficulties of the age of development. Conflicts with mates, conflicts at school or disappointment with love occupied further positions (Table 4). According to the causes of suicides, females dominated in the groups examined.

The results of studies conducted in many countries of the relationship between undertaking a suicidal attempt and the social and economic situation are not uniform; differences are observed in education level, occupation, occupational activity, marital status, emotional bonds in a family and social group [4].

The presented study confirms that people who undertake suicidal attempts remained in the situation of a deep crisis, unable to cope with an adverse life situation, and had no support on the part of their environment. The decision to commit suicide was an escape from a stressful, often chronic, situation, with which the person could not cope and could not find anyone to help him/her overcome this crisis.

CONCLUSIONS

- Suicidal poisonings among young people in the presented study were twice as frequent among females as males.
- In the material analysed there dominated schoolchildren and students who, as motivation for suicide, reported: difficulties of the period of adolescence, conflicts with mates, disappointment with love.

- A considerable group of people who undertook a suicidal attempt were those who remained permanently unemployed, especially in the group of young females.
- Marital status did not seem to be a factor predisposing for suicide. Based on the material examined, suicidal reactions covered both those who were single, where they were dominant, and people who were married.
- The causative factor of suicides was pharmaceuticals, sometimes in combination with alcohol, which often determined the severity of poisoning and deepness of toxic coma.
- The statistical analysis conducted by means of chi-square (χ^2) test did not show significant differences with respect to marital status, motivation of acute poisonings and deepness of toxic coma, between the compared groups of adolescents from various environments.
- A statistically significant difference was noted in the group of unemployed. Unemployment as a motivation for poisoning more often occurred in urban than rural females ($p=0.05$).

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