

SUICIDE – A RISK BEHAVIOR IN TEENAGERS FROM RURAL AREAS, IN BIHOR COUNTY

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REZUMAT

Objective: Obiectivul studiului a fost identificarea suicidului ca și comportament cu risc la adolescenții dintr-o zonă rurală și de a evalua relația cu maturitatea emoțională, nivelul depresiei și riscul suicidar. **Material și metode:** Studiul a fost realizat pe un eșantion format din 57 adolescenți, omogen (29 fete și 28 băieți, cu vârsta între 15-17 ani) și reprezentativ statistic, dintr-o zonă rurală - satul Suplacu de Barcău, în județul Bihor. Metoda a fost ancheta epidemiologică transversală cu aplicarea a 4 chestionare: Friedman, BDI (Inventarul de depresie Beck), CORT 2004 (itemii care măsoară comportamentul suicidar) și Scala disperării (Beck). **Rezultate:** Media nivelului de maturitate la adolescenți a fost de 17.92 și un procent ridicat de adolescenți (33%) au avut nivelul de maturitate 18-20, iar 29.82% subiecți 16-18. Nivelul de depresie la fete a fost 0.80 (moderată) și la băieți a fost 0,35 (fără depresie). Un procent ridicat (36,84%) de adolescenți au avut un nivel moderat al depresiei (26,31% fete, 10,62% băieți) și 10,52% au avut depresie severă (numai fete). În eșantionul investigat riscul suicidar a fost moderat la 28.80% (13,78% fete, 7,02% băieți) și sever în 3,5% cazuri (numai fete). Suicidul, comportament cu risc, este prezent în eșantionul investigat, 19,2% (15,7% fete, 3,5% băieți) au avut gânduri suicidare, din care 12,28% și-au făcut un plan și 2 adolescenți au avut tentative de suicid. **Concluzii:** Adolescenții investigați au prezentat maturitate cu dezechilibru, simptome depresive, comportamente cu risc suicidar și risc suicidar. Există o relație inversă maturitate-risc suicidar și o relație directă depresie-risc suicidar. **Cuvinte cheie:** suicid, adolescenți, maturitate emoțională, depresie

ABSTRACT

Objective: The objective of the study was to identify suicide as risk behavior in teenagers in rural areas and to assess the relation between maturity, depression level and suicidal risk. **Material and methods:** The study was performed on a sample consisting of 57 teenagers, homogenous (29 girls and 28 boys, with ages between 15–17 years) and statistically representative, from a rural area - the village Suplacu de Barcău, in Bihor county. The method was an epidemiological transversal inquiry with 4 questionnaires applying: Friedman, B.D.I (Beck Depression Inventory), CORT 2004 (items which measure the suicidal behavior) and Despair Scale (Beck). **Results:** The average maturity level in teenagers was 17.92, and a great percent of teenagers (33%) had the maturity level 18-20, and 29.82% subjects 16-18. The depression level with girls was 0.80 (moderate) and with boys it was 0.35 (no depression). A great percentage (36.84%) of teenagers had moderate levels of depression (26.31% girls, 10.52% boys) and 10.52% had severe depression (only girls). In the investigated sample-group the suicide risk was moderate at 20.80% (13.78% girls, 7.02% boys) and severe in 3.5% of cases (only girls). Suicide as risk behavior was present in the investigated sample-group, 19.2% (15.70% girls, 3.5 boys) had suicidal thoughts, from which 12.28% made a plan and 2 teenagers had a suicidal attempt. **Conclusions:** Investigated teenagers presented a misbalanced maturity level, depression symptoms, suicidal risk behaviors and suicidal risk. There is an inverse relation maturity-suicidal risk and a direct relation depression-suicidal risk.

Key Words: suicide, teenagers, emotional maturity, depression

INTRODUCTION

Depression is an unpleasant affective state, connected with feelings of sadness and sometimes with anxiety and feelings of guilt. When we discuss about depression we consider four types of symptoms: emotional manifestations (rejecting, joyless and decreased self esteem), cognitive manifestations (hopelessness), motivational symptoms (apathy and boredom), vegetative and physical features (lack of appetite, sleeplessness and lack of energy). Depression as a mild form of psychological reaction is the most frequently met in teenagers. Suicide is a disturbance of

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the survival instinct, through which a person destroys herself with a physical chemical method (hanging, drowning, electricity exposure, poisoning etc.)¹. In Romania, between 1996-2002, 23,545 peoples killed themselves. Romania occupies the 29th position among 99 investigated countries for suicide in men and the 46th for women (WHO). At national level, the average is 15.5 suiciders/100,000 inhabitants and year. The 1st to 4th are occupied by people from Transylvania, the most frequent suicide frequency being in the Harghita county (58.7 cases/100,000 inhabitants)². The aims of teenagers' development (growing and becoming mature) are: new relation with the peers, gender role taking, the proper body scheme accepting, emotional independence from parents and adults, preparing for marriage and family life and for economical self-sustaining, a value and ethical system and a guide for behavior obtaining. The risk factors for suicidal behavior in teenagers are: biological, psychological, cognitive, environmental factors, alarm signs, and negative events of life.¹ Clinicians working with young people must assess the presence of suicidal ideation, suicidal behavior, and other risk factors, in order to determine the level of risk.^{2,3}

The risk factors could be connected with immaturity in teenagers. Problems in teenagers' development can disturb the quality of life. The family and peer-group have a crucial role in the teenager developing process.

MATERIAL AND METHODS

The performed study consisted of an epidemiological transversal inquiry, with four questionnaires applying: Friedman Questionnaire, BDI (Beck Depression Inventory), CORT 2004 (Comportamente cu Risc la Tineri – Risk Behaviors in Young People) – the items which measure the suicidal behavior, and Despair Scale (Beck) in a sample with 57 teenagers, homogenous (29 girls and 28 boys; age groups: 15 years – 22 subjects, 16 years – 19 subjects, 17 years - 16 subjects) and statistically representative, from rural area, in the village Suplacu de Barcau, Bihor County.

The Friedman Questionnaire assesses the emotional maturity. It has 25 items with dichotomy answers. It has an etalon/standard that is interpreted as follows: 0-9.99 (infantile), 10-11.99 (childish emotional reactions), 12-13.99 (psycho affective reactions), 14-15.99 (slight emotional immaturity), 16-17.99 (tendency for misbalance), 18-19.99 (slight emotional maturity), 20-21.99 (corresponding maturity), 22-23.99 (good maturity) and over 24 (perfect emotional maturity).

BDI is a self assessment scale that indicates the

presence and severity of the depressive symptoms. These questionnaires consisted of statements grouped each four in 21 categories, characteristic for depression: A – sadness, B – pessimism, C – failure feeling, D – discontentment, E – guiltiness, F – punishment feeling, G – self nuisance, H – self accusing, I – self aggression, J – weeping, K – irritability, L – social withdrawal, M – hesitation, N - changes in self esteem, O - work difficulty, P - sleep disorders, R – fatigability, S – anorexia, T – weight lost, U – physical state preoccupation, W - absence of libido.

The CORT Questionnaire 2004 was applied in a study in Timis County and we selected from it only 6 items specific for suicidal behavior (suicidal thoughts, plans and attempts, severity of suicidal effects and the existence of suicide in family). The Despair scale (Beck) is used to assess the negative expectations of the person and the suicidal risk (no risk, slight, moderate and severe). It has 20 items of self assessment of one person's future. As statistical methods we used SPSS program to investigate relation inside phenomenon.

RESULTS

The maturity level emerges from the psycho-affective reactions specific for teenagers to a good maturity level. In the investigated sample the average maturity level for the sample was 17.92, that means a tendency for misbalance. The greater percent of teenagers (33.34%) had a maturity level between 18.00 and 20.00 (slight decreased maturity level) and 29.82% had a maturity level between 16.00 and 18.00, with tendency for misbalance (Fig. 1). These results suggest difficulties for teenagers to cope with stressful situations and the possibility to choose escape doors when they fail. One of these escape doors is suicide.

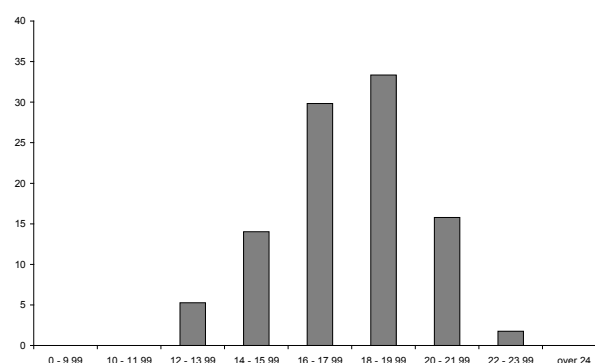


Figure 1. Distribution of teenagers (%) depending on maturity level.

Depression symptoms offer through their presence the possibility to assess the depression level. The average level of depression for the entire investigated

sample was 0.58 that means a moderate depression (0.5–1.2). The depression level was 0.80 for girls (moderate depression) and 0.35 for boys (no depression). 36.84% of teenagers had moderate level of depression (26.31% girls and 10.52% boys). We found severe depression in 10.52% of teenagers, all girls. A hierarchy of symptoms could be seen: irritability (average – 1.07, girls - 1.37 and boys – 0.75), weeping (average – 0.84, girls – 0.96, boys – 0.67), fatigability (average 0.77, girls – 1.07, boys – 0.50), failure feeling (average – 0.75, girls – 1, boys - 0.5), punishment feeling (average – 0.73, girls – 1, boys - 0.46), discontentment (average – 0.66, girls – 0.82, boys - 0.5), pessimism (average – 0.64, girls – 1.06, boys - 0.21), self accusing (same values as for discontentment). (Fig. 2)

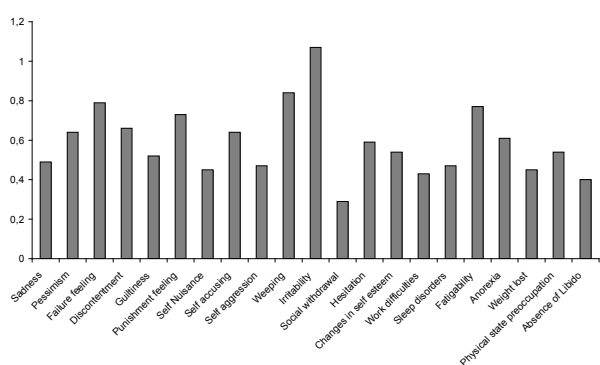


Figure 2. Distribution of teenagers (%) depending on depression symptoms.

If we achieve a hierarchy of symptoms according to sex we find the following moderate-intensity symptoms in girls: irritability, fatigability, pessimism, discontentment, self accusing, weeping, failure feeling, and punishment feelings. In boys there are less moderate depressive symptoms such as: irritability, weeping.

As frequencies of cases (%) for these symptoms, 36.89% of the teenagers get annoyed easier now than before and 21.05% sustain that what annoyed them before, in present do not annoy them anymore. 26.31% of the teenagers declare that now they weep easier than before, and 15.78% sustain they were in habit of weeping, but now they can no longer weep. 31.57% teenagers become tired now easier than before, and 10.52% are now too tired to do something. 21.05% say that they have more failures than most people, 19.29 see their life as being full of failures and 10.52% feel that they are being punished. 36.84% of the teenagers are not as happy now as before for usual things and events. 22.80% teenagers feel discouraged when they think to the future and 15.78% feel they have no expectation for the future.

Suicidal risk level is minimal in 33.34%, slight in 40.35%, moderate in 20.80% and severe in 3.5% teenagers from the investigated sample. There is an observed difference between girls and boys referring to suicidal risk: moderate for 15.78% girls as compared to 7.01 boys and severe for 3.5% girls in comparison with 0% boys. (Fig. 3) A statistical comparison of suicidal risk between boys and girls indicates a significant statistical difference only for minimal or no suicidal risk interval (0-2) with chi square = 3.58, degree of freedom = 1 and probability - 0.05. Boys have more frequent minimal or no suicidal risk. Despair is the most important predictor for suicidal ideation and behaviors. Frequently the death appears after unwished events especially interpersonal conflicts. Minor conflicts could increase in amplitude and represent the crucial moments in the teenager life.

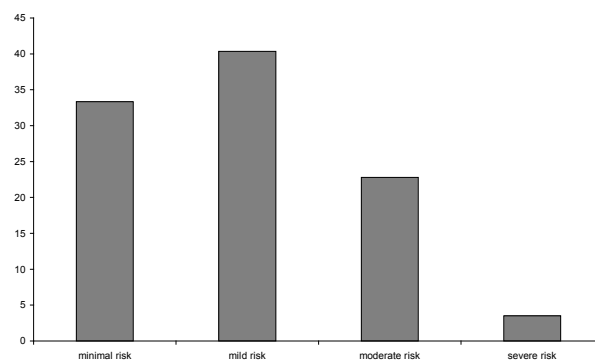


Figure 3. Distribution of teenagers (%) depending on suicidal risk level.

Suicide as risk behavior occurs as characteristic types depending on intensity of manifestation, such as: activity withdrawal (a quiet person), thinking about suicide, suicidal plans and suicidal attempts. In the investigated sample, in the last 12 months, 42.10% teenagers (29.82% girls and 12.28% boys) withdrew to activities because they were sad almost each day two or more weeks consequently. (Fig. 4) Suicidal thoughts which appeared in the last 12 months were registered in 19.3 % teenagers (15.76% girls and 3.5% boys). (Fig. 5) Suicidal plans made in the last 12 months were registered at 12.28% teenagers (8.77% girls and 3.5 boys). (Fig. 6) Suicidal attempts were registered once (1.75% boys) and three times or more (1.75% girls). (Fig. 7) The presence of the suicidal phenomenon in the origin families was investigated and 14.03% teenagers (8.77% girls and 5.26% girls) sustained this experience. (Fig. 8)

The relation between maturity level, depression and suicidal risk in teenagers was investigated. There is a negative correlation between maturity level and suicidal risk in investigated teenagers

($r = -0.760, p < 0.001$) and a positive correlation between depression and suicidal risk ($r = 0.682, p = 0.001$) which is statistically significant. An increased level of association degree ($r^2 = 46.5\%$) between depression and suicidal risk indicates a powerful connection. This suggests that moderate level of depression symptoms could be a predictor for suicidal risk. Linear regression analysis (SPSS 13) of the maturity level as predictor factors of suicidal risk indicates an inverse relation maturity-suicidal risk (regression coefficient $B = -0.775, t = -8,664, \text{Sig.} < 0.001$).

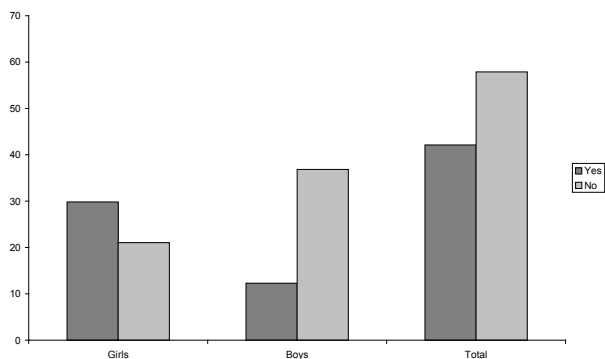


Figure 4. Distribution of teenagers (%) depending on activities withdrawal.

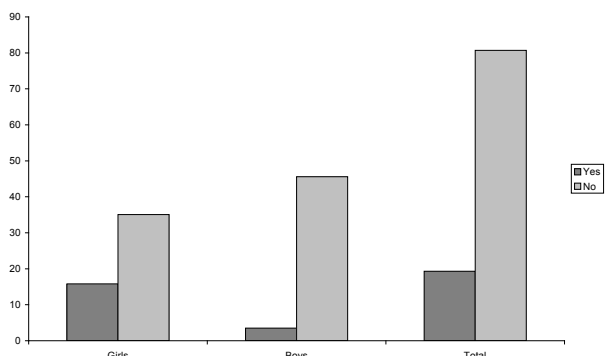


Figure 5. Distribution of teenagers (%) depending on suicidal thoughts.

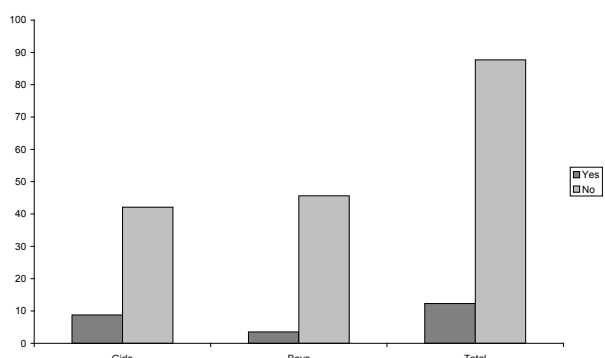


Figure 6. Distribution of teenagers (%) depending on suicidal plans.

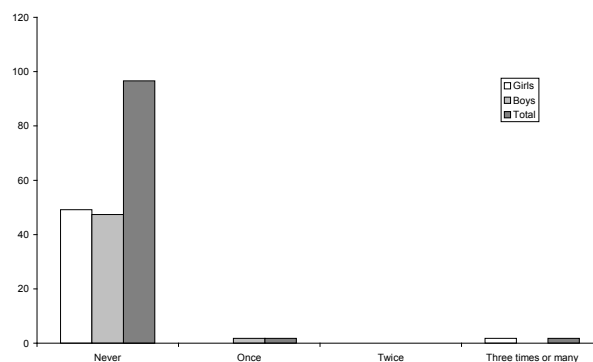


Figure 7. Distribution of teenagers (%) depending on suicidal attempts.

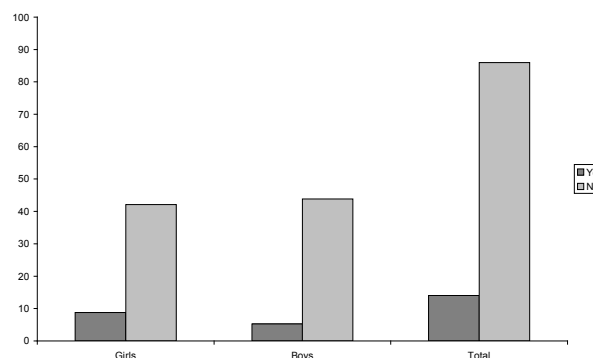


Figure 8. Distribution of teenagers (%) depending on suicidal attempts in the family.

DISCUSSIONS

Adolescence is a period of life specific for „identity crisis”. Teenagers choose models for proper identity building. A difficulty in identity establishing creates difficulty in developing skills for beating stress. Teenagers need to think analytically for complex situations and the incapacity to solve some problems create holes in their self esteem. Failure has a very powerful impact at the affective level, especially when the maturity level is misbalanced. As they increase in chronological age (15–17 years) the problematic situations also increase and the group pressure for long term objectives. These increase the stressful situations which require an emotional balance to cope with.⁴ The maturity level of teenagers in the investigated sample sustains this approach, the limits of the indicator being situated between 12-14 and 22-24 and the frequency of subjects was greater in two intervals: 16-18 and 18-20, which suggests the predominance of misbalanced and slight maturity level. The average of maturity level sustains the misbalanced maturity level too.

An interesting finding is the predominance of depression symptoms in girls (irritability, fatigability, pessimism, discontentment, self accusing, weeping,

failure feeling, and punishment feeling) with levels between 0.5 – 1.2 (moderate depression) in comparison with boys (irritability, weeping) with the same levels. Severe depression (1.2 – 2) appeared only in girls. These results suggest also an increased predominance of depression in teenage-girls. This result is also sustained by the average of the depression level (0.80 for girls – moderate depression and 0.35 for boys – no depression). An important result is the first symptom of depression (irritability), which suggests a decreased frustration threshold and self aggression. The teenagers' aggression was obviously connected with depression and suicide in a recent personality study about teenagers risk behaviors and personality features.⁵ The self esteem of teenagers is decreased despite their tendency to fight with adults or to keep the others' attention on them. They verify their own value through others' estimations or by comparison to patterns.

The suicidal risk in the investigated sample varies from slight to moderate in 63.15% teenagers. This percent is very high. There is a predominance of moderate suicidal risk in girls (15.78%) in comparison with boys (7.01%), and the severe suicidal risk is exclusive in girls (3.5%). The main characteristic which defines the suicidal risk is hopelessness, the future is vague and insecure and this disturbs the long-term objectives established in teenage. Hopelessness and helplessness come from difficulties to find solutions for life, which overload the person with responsibility. The emotions which explain very well suicides are: shame, guilt, despair and helplessness. Teenagers need help but they do not ask for it because they consider that parents and teachers do not understand them. They discuss frequently with a friend who has the same period of insecurity. Despair is the greatest predictor of suicidal ideation and behavior.⁶ Individuals experiencing negative and potentially traumatic life events are at increased risk for suicidal thoughts and behaviors. Beliefs about the origin, pervasiveness, and potential recurrence of a negative life event may affect psychological outcomes.⁷ Sometimes, events without significance for adults could be for teenager a trigger for suicidal attempt.

If we investigated the maturity level, depression and suicidal risk level as predictors for suicide, the teenagers' behavior could be an image of this phenomenon from the beginning to the end. First, the activity withdrawal is a clear sign that the teenage has affective problems. Unfortunately, many adults consider that quietness is a sign for a good education. In the investigated sample this "quietness" occurred in 42.10% teenagers. Half of them affirmed that they had suicidal thoughts, and more than half of the teenagers with suicidal thoughts

made a plan to suicide. The number of teenagers which attempted to suicide was 1.75% (boys) for once and 1.75 (girls) three or more times. In the investigated sample the phenomenon of suicide appear from the beginning not to the end. It stopped to the suicidal attempts. Suicidal attempts in the origin family seem to be an important factor of prediction for suicide. In the investigated sample 14.03% teenagers sustained the presence of suicidal attempts in their families. The family offers a life pattern which in most of cases is transmitted to the children.

There is a relation between predictors (decreased level of maturity and depression) with suicidal risk, which sustain the necessity of the preventive measures in teenagers: psychological counseling and therapy of teenagers in schools and psychological counseling for teenagers origin families (a systemic approach). Optimistic explanatory style was associated with reduced suicide ideation, whereas pessimistic explanatory style was associated with increased thoughts of suicide.⁸ Suicide is preventable by early screening of the risks. But the risk assessment is a complex task due to involvement of multiple predictors, which are highly subjective in nature and varies from one case to another.⁹ Attention should be paid to their mental health, and the importance of asking directly regarding suicide is emphasised.⁷

CONCLUSIONS

Investigated teenagers presented a misbalanced maturity level, depression symptoms (irritability, fatigability, pessimism, discontentment, self accusing, weeping, failure feeling, and punishment feeling) and a suicidal risk that varies from slight to moderate. Depression symptoms and suicidal risk were observed more frequent in girls than in boys. A significant differentiation of minimal and no suicidal risk between boys and girls in favor of boys resulted from analysis.

All forms of suicidal behavior (activity withdrawal, suicidal thoughts, suicidal plans and suicidal attempts) occurred more frequent in girls than in boys and the suicidal pattern was present in the families of origin of investigated teenagers.

There is an inverse association maturity level – suicidal risk and a direct association depression-suicidal risk.

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