

EPIDEMIOLOGICAL † DEMOGRAPHIC CHARACTERISTIC OF SUICIDE ATTEMPTS IN ADOLESCENS TREATED AT THE INSTITUTE FOR MENTAL HEALTH IN NIS IN PERIOD OF 1999†2003

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The topic of this work is an epidemiological research of the suicide attempts of adolescents treated at the Institute for Mental Health Nis. The investigation comprises the period from 1999 up to 2003 year. The number of adolescents suicide attempts is increasing, and it is the highest one in 2003 year. Suicide attempt is most frequent with elderly female adolescents aged 17. A suicide attempt is preceded with manifestation in a form of mood disturbance in the scope of reactive situations. A dysfunctional family is the suicidal adolescent's framework within which he moves while as, a means for the attempt, benzodiazepin's group of medicaments is chosen by him. *Acta Medica Medianae; 2004; 43(3): 23-27.*

Key words: *epidemiological characteristic, demographic characteristic, suicide attempts, adolescents*

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Introduction

Suicide or a suicide attempt is a complex problem calling for not only the psychiatrist's attention but also standing as a challenge to philosophers, theologian and sociologist, as well as for constant permanent attention of broad social community. As a serious health problem it requires the whole range of activities from immediate treatment of mental problems up to providing some conditions necessary for normal maturation of the youth. Informing the community with clear data on suicide problems present the base of any good, solid preventive programme. Epidemiological data and their full understanding are more than necessary in order to define successfully the target group in the population bearing the risk. These data obtained in a few recent years point out to suicide in the world as holding the second place among the causes of adolescents death. The data that might be encountered with in our environment indicate to growth of the suicide number, as well as of suicide attempts although, due to the lack of continued epidemiological research, they contain numerous shortages. These lacks however are noticed in preventive actions which are randomly undertaken in incident situations and which disturb the public

enormously. Without sufficient preparation and knowledge of the development trend of this problem, short-time lasting preventive actions often provoke an adverse effect.

General epidemiological data

Suicides of the persons younger than 25 years of age present 15% of all suicides in the world (1). Since 1980 to 1998 the number of suicide attempts in the world increased for 11% with the persons aged 15 to 19 years, while with those aged 11 to 14, the number increased for 109%. In 1998 more teenagers died of suicide rather than of cancer, heart diseases, innate anomalies, pneumonia, and influenza, as well as chronic heart disease altogether (2). There occurred yearly 10-20 million of suicide attempts, and among them there was a million of the realized ones. Even with multitude of studies on adolescent suicides, the exact number cannot be known. Many of them do not and fatally and are never recorded (3). The rise of suicides in adolescents in the course of last ten years is estimated as critical (4). Among 200.000 suicide attempts in America every year 10 and fatally, so that the incidence of 2000 was 10,66 attempts at 100.000 inhabitants. In the previous period from 1974 to 1998 there were recorded 732.000 suicides in America, and 4.4 millions of suicides attempts. Nowadays there have been 764.000 of suicide attempts in adolescents at one attempt of an adult. It is only Europe that records 100.000 suicide attempts yearly and 45.000 suicides performed. The data differ in different countries in Europe. The referential literature (5,6)

points out to the difference in incidences of suicide attempts in North European countries and Mediterranean countries. Finland has the highest rate of 27,2 at 100.000 inhabitants, while the lowest rate of 3,6 is in Greece at 100.000 inhabitants. The reason for such a high incidence of suicide attempts is assumed to come from similar historic circumstances as well as similar characteristic cultural, social of these countries. The suicide rate in Eastern Europe for the 1998 year was 26,9 for adults ranging from 14 to 19 years of age, and 1,2 for the 5 to 14 years of age, and 1,2 for the 5 to 14 years of age group. The data concerning Croatia show that the incidence there is 15,9 in Bulgaria it is 15,07, in Slovenia 26 at 100.000 inhabitants. The rate of suicide attempts in regard to performed suicides is 50:1 up to 100:1. The most frequent way of suicide attempts is poisoning by medicaments. The outstanding risk factors for adult's group are (7):

- psycho-social problems and stresses especially with the children that were brought up in large communities, or in different institutions,
- children that were physically or sexually abused,
- failures at school,
- dysfunctional families,
- misuse of psycho-active substances,
- psychiatric diseases,
- already attempted suicide,
- impulsive or aggressive behavior, and
- stress.

Epidemiologists' special attention is directed to registration of suicide attempts in adolescents. The two main reasons for such a follow up are the established facts that by such an attempt some adolescents try to turn the environment's attention to their problems and the fact that the possibility of a repeated suicide attempt significantly increases if there exist some previous attempts.

The objective

As the objective of the work the study of a typical adolescent † suicide's profile was set, more exactly, which would be epidemiological-demographic adolescent-suicide's characteristics? The objective of the examination were the following incidents:

The number of attempts in regard to age, sex, family situation (dysfunctional family), success at school, kinds of announced suicides attempts, immediate reasons, the way of performance.

The method

The research was conveyed on the basis of the data obtained at the Institute for Mental Health, Nis. The data come from the period of 1999 to 2003. They were analyzed based on the insight that:

- a. The register of suicide attempts at the Institute of Mental Health, Nis.
- b. Catamnestic follow up the documentation, anamnesis, health cards of the adolescents treated at dispensary.

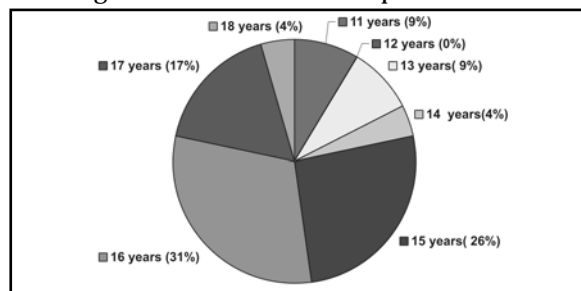
c. Immediate insight using Structural clinical interview (SCID).

Methodological difficulties: All the subject were not sufficiently clearly showing intentional behaviour to committed suicide were committed. A number of adolescents, after the suicide attempt avoids institutional treatment owing to social prejudices, which offers some possibility for an assumption that the number of suicides in the region covered by the Institute for Mental Health is significantly higher.

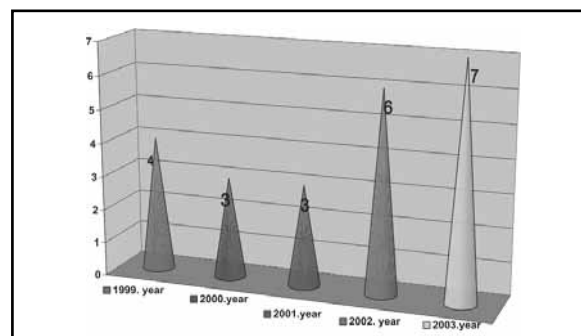
The results

Total number of suicide attempts in adolescents in the period of 1999 to 2003 year is 28. Out of that number, 23 suicide attempts of female and 5 are of male (Graph 1,2,3,4,5,6,7,8,9,10,11,12,13).

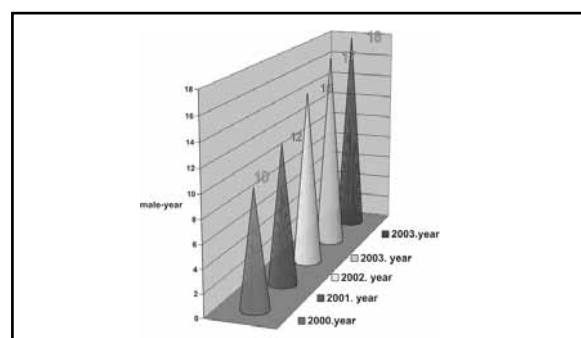
The results point to the fact that the most frequent client trying to commit suicide is an older adolescent of female sex, with prodroms of depressive disposition, from a dysfunctional family, with a poor social support in the situations of exterior frustrations choosing medicaments at an attempt of suicide.



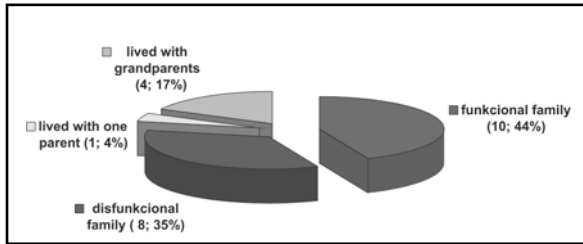
Graph 1. The number of suicide attempts in relation to age of adolescent who attempted suicide



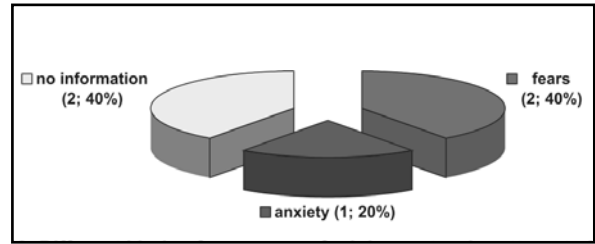
Graph 2. The number of adolescent suicide attempts per year † female



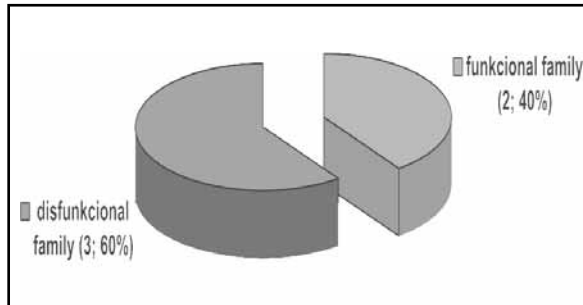
Graph 3. The number of adolescent suicide attempts per year † male



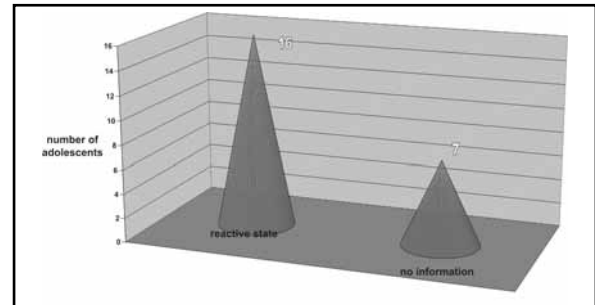
Graph 4. The family situations of adolescent who attempted suicide-female



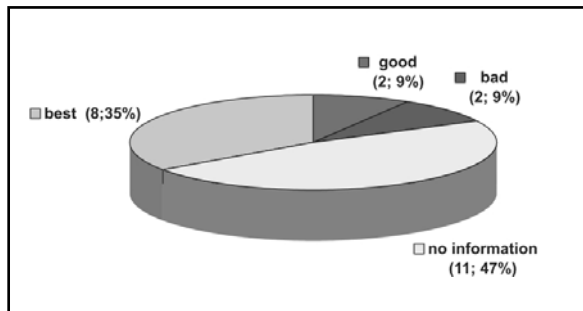
Graph 9. Different kinds of announce of adolescents who attempted suicide & male



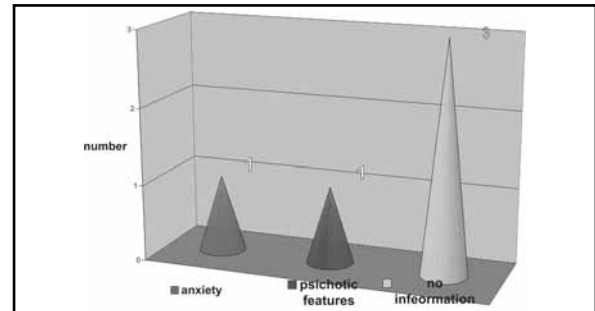
Graph 5. The family situations of adolescent who attempted suicide-male



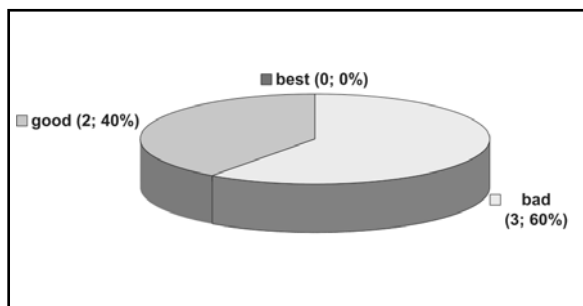
Graph 10. Direct reasons for suicide attempts & female



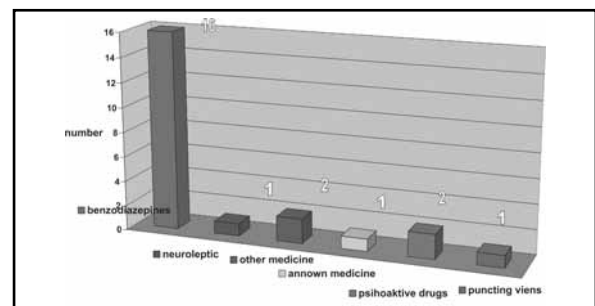
Graph 6. The success in school of adolescent who attempted suicide & female



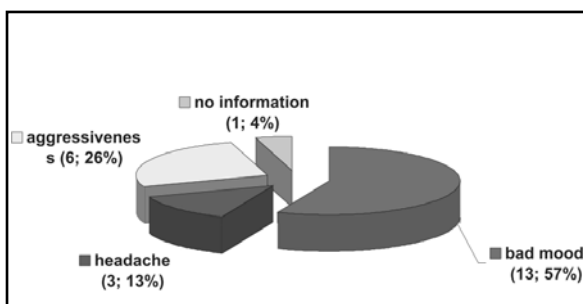
Graph 11. Direct reasons for suicide attempts & male



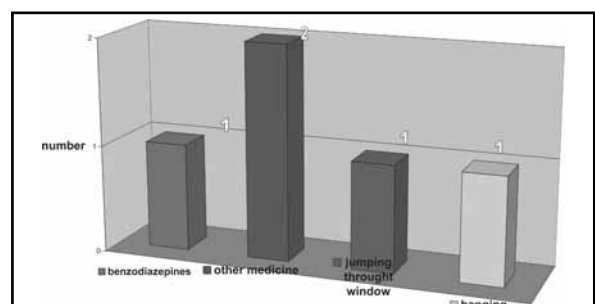
Graph 7. The success in school of adolescent who attempted suicide & male



Graph 12. Different ways of suicide attempts of adolescent & female



Graph 8. Different kinds of announce of adolescents who attempted suicide & female



Graph 13. Different ways of suicide attempts of adolescent & male

Discussion

The results obtained by the sample's analysis point out that the adolescents' group trying to commit suicide is basically heterogeneous.

Within the sample of the adolescents who most frequently attempt suicide, older adolescents of female sex dominate, of the age group of seventeen. These data are in accordance with general data that were recorded in the world literature. At that age group, men more frequently exhibit aggressive and impulsive behaviour directed to the exterior environment, while in girls, as an expression of infirmity to respond exterior challenges autodestructive forms of behavior are manifested more frequently. Prodromal signs of bad mood do not point to the phenomenon of familiar load so much as to some states that appear in the structure of unpleasant powerful exterior occurrences which an adolescent is unable to overcome. Anyway, unfavorable other, exterior events, disagreement in the sentimental relations represent the trigger for a suicide attempt. In the sample a mind trend of motion of the phenomenon of suicidal attempts toward the age group up to 13 years is noticed but it is remarkable that these phenomena can still be ranked into incidental situations. In regard to the data recorded in the referential literature, the trend of suicide attempts in older adolescents is 3,8 times bigger than in the ones who form the age group of 10 to 14 years. In relation to the data one can conclude that the age limit in our sample does not move toward for other countries, alarming direction.

The way of realization of suicide attempts in our sample coincides with the other milieu which record the same way in 75% cases. Widely used benzodiazepines in adolescents' families was recorded in the last decade of big shocks in this region, especially after bombarding by the Nato forces making this means accessible for a large number of adolescents. A significant datum is the adolescents belonging to the dysfunctional family, 36% in adolescents of female sex and 60% in male adolescents. In the terms of the upsetting economic situation, a great deal of family members decides to do alternative businesses that do

not provide permanent existence and make one often absent from home. Such a position in many family influences upon an insufficient presentation of help and support in crises situations for adolescents and also brings to ruined family relation. The only solution for adolescents in that case that remains is to ask for advice in their encirclement but the latter is sometimes unable to respond to these demands or it devotes greater attention sporadically and occasionally.

The conditions of life often make difficulties for the integration into the society that has great transformation and polarization on the ground of economic inequality. The insight into epidemiological demographic characteristic enables formation of assumption for conveyance of the plan for preventive activities that is necessary to convey according to the plan and in some continuity, in campaigns for a better life in the family, better education at schools on the topic of suicide, especially on early detection of suicidal prodroms, together with ways to enable adolescents master social skills and get included in everyday life in an affirmative way. The first step in prevention from every suicide is the possibility of open and sincere communication in all important segments of adolescents life while there mustn't be any prejudice on the plan of social care and its sincere concern should be present.

Conclusion

The number of suicidal attempts in adolescents is at increase for the studied period time. The greatest number of suicide attempts is recorded in the course of 2003 year. The most frequent attempts are noted among older adolescents of female sex. The prodroms of suicidal behaviour are manifested with the appearance of changes of mood born in socially provocative situations. As a means of realization of the attempts medicaments from the benzodiazepines group are the most common used. In a significant degree, 30-60% of adolescents belong to dysfunctional family. Thus epidemiological demographic data can be the good ground for formation of prevention suicidal plans and their inclusion toward risk groups.

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**EPIDEMIOLO[KO-DEMOGRAFSKE KARAKTERISTIKE
POKU[AJA SAMOUBISTVA ADOLESCENATA
LE^ENIH U KLINICI ZA MENTALNO ZDRAVLJE
U NI[U ZA PERIOD 1999 † 2003.**

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Predmet rada je epidemiolo{ko istra`ivanje poku{aja suicida adolescenata le~enih u Klinici za mentalno zdravlje u Ni{u. Ispitivanje obuhvata period od 1999. do 2003. godine. Broj poku{aja samoubistva adolescenata je u porastu i najve}i je 2003. godine.

Poku{aj suicida naj~e}i je kod starijih adolescenata `enskog pola uzrasta od 17 godina. Poku{aju prethode prodromi u vidu poreme}aja raspolo`enja u okvirima reaktivnih stanja. Disfunkcionalna porodica okvir je u kojem se kre}e suicidalni adolescent, dok kao sredstvo za poku{aj naj~e}e bira medikamente iz grupe benzodiazepina. *Acta Medica Medianae 2004; 43(3): 23-27.*

Klju~ne re~i: epidemiolo{ke karakteristike, demografske karakteristike, poku{aj samoubistva, adolescencija