Analysis of the opinions of adolescents on the risk factors of suicide

Aleksandra Kielan¹, Ilona Cieślak², Joanna Skonieczna¹, Dominik Olejniczak¹, Karolina Jabłkowska-Górecka¹, Mariusz Panczyk², Joanna Gotlib², Bożena Walewska-Zielecka¹

¹ Department of Public Health, Faculty of Health Sciences, Medical University of Warsaw
² Division of Teaching and Outcomes of Education, Faculty of Health Sciences, Medical University of Warsaw

Summary

Aim. The aim of this paper was to identify the opinions of adolescents aged 16–19, attending public high schools in Warsaw, on the risk factors of suicide.

Material and method. The study group consisted of adolescents who were aged 16–19 in the year 2015 (M = 17.29; SD = 0.94). The respondents attended eight public high schools in Warsaw, from eight different districts of the city. The study group was representative. 1,439 respondents participated in the study – 821 girls (57.1%) and 592 boys (41.1%). PAPI method was used in the conducted study. The questionnaire consisted of 34 questions divided into three sections – concerning epidemiology, risk factors and prevention of suicidal behaviors.

Results. According to 37.0% of respondents, the main problem occurring in a family that could become a risk factor in committing suicide is lack of understanding from the parents. The respondents indicated that conflicts between peers are school-related situations that could be the source of suicidal thoughts (48.6%). More than half of respondents (59.1%) believed that being rejected by close and important persons was the main factor related to the feeling of loneliness that could contribute to a suicidal act.

Conclusions. 1) An important element in the prevention of self-destructive behaviors of young people should be parental training in understanding and accepting their children. 2) It is advisable to conduct classes developing psycho-social skills of adolescents, in particular their ability to solve interpersonal problems, in order to reduce the number of conflicts with peers that occur in the school environment.

Key words: adolescents, suicidal behaviors, risk factors
**Introduction**

Suicide is an act of killing oneself on purpose; this act belongs to the group of deaths caused by external factors [1]. Globally, more people commit suicide each year than die as a result of wars or in road accidents. The scale of suicide cases is dependent on age, gender, place of residence, marital status, education, religion, and social status [2]. Although suicide rates differ in various countries, the general number of suicides has increased in the last 50 years by 60% [3]. In Poland, suicide is the seventh most frequent cause of death among both men and women (in the year 2015, the rate of deaths by suicide was 15.0 per 100,000 people) [4, 5]. Development trends of suicide in Poland, projected on the basis of an analysis of suicides committed in the years 1951–2014, present a quantitative increase of this phenomenon in the entire population, including rapid growth in the number of suicides among the inhabitants of rural areas and increased suicide rates among adolescents and women [6]. Suicides are one of the main causes of death of adolescents in Poland. In the group aged 15–19, suicide was the cause of nearly one in five deaths (26% of deaths among boys and 16% among girls). In 2008, suicides of children and adolescents constituted 12.2% of all suicides in Poland [7].

The analysis of the problem of suicides in the population of children and adolescents is a separate position in the literature on suicide. The period of adolescence, filled with intense transformations in biological, psychological and social aspects, may lead to attitudes such as rebellion, negation, searching for purpose in life, and separation from the family [8]. Moreover, the growing number of suicides in this group demonstrates the necessity of conducting scientific research.

The aim of this paper was to identify the opinions of adolescents aged 16–19, attending public high schools in Warsaw, on the risk factors of suicide.

**Material**

The study group consisted of adolescents aged 16–19 ($M = 17.29$; $SD = 0.94$), attending public high schools in Warsaw. The study group was representative. 1,439 respondents participated in the study – 821 females (57.1%) and 592 males (41.1%). Less than 2% of respondents did not answer the question about their gender. Among the respondents, 145 people (10.1%) were aged 19, 436 people (30.3%) were aged 18, 491 people (34.1%) were aged 17, 327 people (22.7%) were aged 16, and 40 people (2.8%) did not provide information on their age. More than 70% of respondents were inhabitants of Warsaw, 19.5% – of a city other than Warsaw, 109 people (7.6%) lived in villages, and 31 respondents (2.1%) did not answer the question about their place of residence. Respondents attended high schools in the following districts: Żoliborz (28.8%), Targówek (18.8%), Wilanów (18.4%), Wawer (15.4%), Rembertów (8.5%), Ursus (5.1%) and Praga Północ (5.0%).
Method

The study was conducted between February and December of 2015. A sampling frame was created on the basis of data available on the website of the Bureau of Education of the Capital City of Warsaw. It included all public high schools in Warsaw (91 units) grouped by district. Units selected to the study group were selected using stratified random sampling method. The first stage of selecting the study group was sampling of districts qualified to participate in the research. Seven districts of Warsaw were selected at random: Praga Północ, Rembertów, Targówek, Ursus, Wawer, Wilanów and Żoliborz.

The next step consisted of selecting one high school in each district. When the headmaster of the high school did not agree to conduct the study, another unit in a given district was drawn. Sampling within each individual stratum was performed using simple random sampling. The questionnaire was filled in by high school students who had the consent of their parents to participate in the study. The study was coordinated and personally conducted by the author of this paper, in cooperation with a pedagogue and a school psychologist, and it was voluntary and anonymous. A detailed plan for conducting the study in each high school was determined by the Head Office of the school. The study was conducted during school hours in each class.

PAPI method was used in the study, with the use of a questionnaire created by Malicka-Gorzelańczyk, adapted and applied for the purposes of this study with the consent of the author of this tool. The questionnaire consisted of four parts: questions about the scale of the problem, conditions, prevention of suicidal behaviors, and demographic questions. It contained 34 questions. The duration of the study was approximately 20 minutes. Collected data were analyzed with the use of statistical software IBM SPSS Statistics 23. It was verified whether the Cochran-Cox conditions are met. For the verification of hypotheses, the non-parametric Pearson’s $\chi^2$ test and the Fisher-Freeman-Halton test were used. These tests were used to assess the differences in response rates based on the respondent’s gender, the respondent’s place of residence, and the district in which the respondent’s secondary school was located. The strength of associations was determined on the basis of Cramér’s $V$. For all analyses, the value of $p < 0.05$ was considered statistically significant.

Results

The respondents most frequently believed (37.0%) that the main problem that could become a factor in the risk of committing suicide occurring in the family is lack of being understood by the parents. The least frequent answer (1.1%) was lack of any influence of this variable. Results of the analysis of the relationship between the frequency of responses to the question “Which of the problems listed below that occur in the family could be the main cause of suicide?” and the respondents’ gender is presented in Table 1 ($\chi^2(6, N = 1,358) = 11.789; p = 0.67$); (Cramér’s $V = 0.093$).
Regardless of their gender, the respondents stated that conflicts with peers were school-related situations that could be the cause of occurrence of suicidal thoughts (48.6%). Girls (48.7%), more frequently than boys, (48.6%), believed that conflicts with peers were the most serious risk factor in committing suicide related to school failures. The smallest number of respondents (0.3%) suggested the suicidogenic influence of frequent school changes (Cramér’s V = 0.15) (Table 2).

### Table 1. Frequency distribution of answers to the question “Which of the problems listed below that occur in the family could be the main cause of suicide? by gender of respondents

<table>
<thead>
<tr>
<th>Gender (n/%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
</tr>
<tr>
<td>Conflicts with parents/siblings</td>
</tr>
<tr>
<td>Lack of being understood by the parents</td>
</tr>
<tr>
<td>Parents’ lack of time</td>
</tr>
<tr>
<td>Being hurt by the closest family members</td>
</tr>
<tr>
<td>Death of one or both parents</td>
</tr>
<tr>
<td>Family breakdown</td>
</tr>
<tr>
<td>No influence</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>( p^* )</td>
</tr>
</tbody>
</table>

* Significance of the \( \chi^2 \) test; Source: own study.

### Table 2. Frequency distribution of answers to the question “Which of the following situations causing school failures are factors that could induce suicidal thoughts?” by gender of respondents

<table>
<thead>
<tr>
<th>Gender (n/%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
</tr>
<tr>
<td>Difficulties in learning</td>
</tr>
<tr>
<td>Conflicts with teachers</td>
</tr>
<tr>
<td>Conflicts with peers</td>
</tr>
<tr>
<td>Threat of repeating a school year</td>
</tr>
<tr>
<td>Lack of will to subordinate to the requirements</td>
</tr>
<tr>
<td>Frequent changes of school</td>
</tr>
<tr>
<td>Other factors</td>
</tr>
<tr>
<td>No influence</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>( p^* )</td>
</tr>
</tbody>
</table>

* Result of the Fisher-Freeman-Halton test; Source: own study
Regardless of independent variables, the most respondents (59.1%) believed that being rejected by close and significant people is the main factor related to the feeling of loneliness that could be the cause of a suicidal act. Negative judgments by other people (29.3%) were the second most frequent situation that could lead to a decision to commit suicide. Independent variables: gender and place of residence did not differentiate the least frequent answers given by respondents: gender ($\chi^2 (5, N = 1,390) = 8.723; p = 0.1206$); (Cramér’s $V = 0.079$), place of residence of the respondents ($\chi^2 (10, N = 1,390) = 9.567; p = 0.4792$); (Cramér’s $V = 0.059$), district of the respondents’ school ($\chi^2 (30, N = 1,390) = 31.405; p = 0.3957$); (Cramér’s $V = 0.067$).

**Discussion of results**

Family is the greatest value for many people and everything related to its functioning, disintegration, or disorganization, influences the wellbeing and mental state of its members [9–11]. Holyst lists the following factors rooted in the family that could affect undertaking dangerous health behaviors: parents’ divorce, overstated requirements imposed by the parents, violence, alcoholism of the father or the mother, or strong conflicts in the family [12]. In their study, Makara-Studzińska and Koślak [13] compared the value systems of adolescents who survived suicidal attempts with a control group. The results indicated that both among people in the study group and in the control group, one of the most appreciated values was good family life.

Effective communication in the family is one of the most important conditions of its proper functioning. An indispensable condition of good communication is ease of having conversations that shows lack of barriers and mutual accessibility of family members. Ease of communication with parents is an important indicator in evaluating relations within a family and at the same time it is a factor that prevents engaging in dangerous behaviors and increases adolescents’ satisfaction with life [14]. In recent years, adolescents have evaluated their contacts with parents in an increasingly negative way [15]. The HBSC study (Health Behaviour in School-aged Children) shows that the rate of adolescents who describe their conversations with their mother and father about disturbing issues as easy or very easy keeps decreasing in older age groups [16]. A study by Gmitrowicz et al. [17] conducted among psychiatric patients aged 13–19 suggests that in case of occurrence of a problematic situation 31% of respondents would seek help in their friend, 24% would not tell anyone about such situation, 13% would search for solutions online, and only 8% would ask their parents. The study also indicates that respondents showed more trust in their mothers than in their fathers.

In our study, lack of being understood by the parents was the most suicidogenic family-related factor according to respondents (36.7%). In the study by Malicka-Gorzelańczyk, lack of being understood by the parents was not the most frequent answer given by respondents (12.1%). The main family-related factor that could contribute the most to a decision about committing suicide indicated by them were conflicts with parents (16.6%) [18]. The way adolescents perceive family-related situations that could be a risk factor in suicidal behaviors has changed over 23 years. A comparison of the results of both studies confirms the prevailing opinion of sociologists on the
weakening of social bonds in recent years [19]. Determined to provide a better life for their children, parents invest their time in professional careers and tend to forget what truly matters the most to their children. Development of modern technologies has contributed to more frequent interactions between people with the use of the Internet than in real life [20]. In the recommendations for the prevention of suicide, the World Health Organization suggests that parents should establish closer relations with their children, try to understand them and provide them with support [21].

Apart from family, school is one of the main environments of adolescents. There are numerous factors in the school environment that could increase the risk of suicidal behaviors. Orientation on achievements in learning (high expectations and lack of support), negative social climate (non-personal relations between teachers and students, indifference or hostility, lack of knowledge on the problems and needs of students), disintegration of class groups (chaos, lack of discipline, or excessive discipline and restrictions), peer violence without teachers’ strong reactions, tolerating or failing to notice psychoactive substances use by students, lack of offered activities to develop students’ interests and lack of offered psychological and pedagogical help, are the most frequently occurring circumstances that can negatively affect students [22, 23]. Subjective perception of school environment by students shapes their behaviors and attitudes, and influences their engagement in the learning process and school achievements. Negative experiences at school can contribute to engaging in risky health behaviors [24]. A study by Pawlowska et al. [25] implies that self-harm coexists, among others, with difficulties at school and conflicts with peers. In a study by Makara-Studzińska and Koślak [13], adolescents indicated that, according to them, one of the determinants of happiness was having a large circle of friends.

Participants of our study most frequently believed that a school-related situation that could contribute to suicidal thoughts was usually conflict with peers (48.7%), and the least frequent answer given by respondents was that frequent changes of school could contribute to that (0.3%). In turn, respondents taking part in the study by Malicka-Gorzelańczyk most frequently believed that the threat of repeating a school year was a school-related situation that could cause suicidal thoughts (20.5%). The least frequent potential risk factor of committing suicide according to them were frequent changes of school (3.4%) [18]. The difference in adolescents’ perception of school-related situations that could be the cause of suicidal behaviors, based on a comparison of the results of our study with the study by Malicka-Gorzelańczyk, suggests that for contemporary adolescents situations related directly to school, such as: difficulties in learning, threat of repeating a school year, recurring conflicts with teachers or frequent changes of school, do not constitute clear motives for undertaking suicide attempts. Respondents associated serious problems at school with conflicts between peers, which could indicate an increase in the significance of peer group in the lives of young individuals. In the study by Malicka-Gorzelańczyk, students claimed that problems in the process of gaining knowledge were the most serious suicidogenic school factors [18].

According to Seeman, alienation occurs when an individual perceives certain important parts of the reality they live in as strange, impeding the fulfillment of their needs [26]. One of the dimensions of alienation is the feeling of isolation and lone-
liness related to lack of satisfying relationships with meaningful persons from the environment of an individual [27]. Factors such as: characteristic traits of a person (personality traits), characteristic traits of a situation (family environment, social and demographic conditions, upbringing conditions, peer group, school environment), and environmental values and norms, contribute to a high level of the feeling of alienation [12]. Any disturbances in the above-mentioned factors could lead to feelings of lack of security, love, belonging, or low level of self-acceptance [28]. The more negative factors influence an individual, the higher the risk of high level of alienation. Actions taken by the individual to deal with this situation can be constructive (e.g., all kinds of creativity, engaging in therapeutic groups, social and professional activity) or destructive (e.g., escaping into an addiction, rebellion, or criminal activity). Suicide attempts are the highest level of destructive coping with alienation [12].

In the opinion of high school students in Warsaw, being rejected by close and important persons could constitute a situation related to the feeling of loneliness that could most frequently become the cause of undertaking a suicide attempt (62.1%). In the study by Malicka-Gorzelańczyk, respondents believed that the awareness of being negatively evaluated by others had the strongest influence on suicidal behaviors related to the feeling of loneliness (27.8%) [18]. In our study this variable was rated as the second most suicidogenic situation related to the feeling of loneliness. Analyzing the results of both studies one could assume that, according to adolescents analyzed by Malicka-Gorzelańczyk, negative attitudes of people close to an individual, who as a result demonstrates high levels of loneliness and social isolation, would in consequence constitute a risk of losing the will to continue living [18]. Over the years, the opinion of adolescents in this aspect has changed – currently the feeling of being accepted by the loved ones is more important than the opinions of other people about them. This indicates that when a person is accepted by their closest social circle, the opinions of other people become less significant.

Conclusions

1. An important element in the prevention of self-destructive behaviors of young people should be parental training in understanding and accepting their children.
2. It is advisable to conduct classes developing psycho-social skills of adolescents, in particular their ability to solve interpersonal problems in order to reduce the number of conflicts with peers that occur in the school environment.

References

Analysis of the opinions of adolescents on the risk factors of suicide


Address: Aleksandra Kielan
Medical University of Warsaw
Faculty of Health Sciences
Department of Public Health
02-097 Warszawa, Banacha Street 1a