

## Analysis of adolescents' opinions on suicide prevention

Aleksandra Kielan<sup>1</sup>, Ilona Cieślak<sup>2</sup>, Joanna Skonieczna<sup>1</sup>,  
Dominik Olejniczak<sup>1</sup>, Karolina Jabłkowska-Górecka<sup>1</sup>,  
Mariusz Panczyk<sup>2</sup>, Joanna Gotlib<sup>2</sup>, Bożena Walewska-Zielecka<sup>1</sup>

<sup>1</sup> Faculty of Health Sciences, Department of Public Health, Medical University of Warsaw

<sup>2</sup> Faculty of Health Sciences, Division of Teaching and Outcomes of Education,  
Medical University of Warsaw

### Summary

**Aim.** The aim of the study is to investigate the views of adolescents aged 16–19, attending public high schools in Warsaw, on effectiveness of suicide prevention.

**Material and method.** The studied population covered adolescents aged 16–19 back in 2015 ( $M = 17.29$ ;  $SD = 0.94$ ). The respondents attended eight public high schools in Warsaw in eight different districts. 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.

**Results.** In most cases respondents did not know whether there was an organized system of suicide prevention in Poland (42.0%), however, a large proportion of the respondents (39.7%) was aware of nonexistence of such a system in Poland. The respondents considered the activity of a school (46.7%), the Church (38.3%) and the police (55.9%) in the field of suicide prevention ineffective, the activity of health care institutions (47.7%) and the media (46.6%) hardly effective, while the family was considered effective (70.9%). Persons who perceive significant role of the Church in suicide prevention at the same time indicate considerable share of the family and a much lesser role of the remaining institutions.

**Conclusions.** 1) More than 1/3 of studied adolescents realize that there is no integrated system of suicide prevention; 2) The family, according to high school students, plays the greatest role in preventing self-destructive behaviors; 3) There is a need of greater involvement of schools, the Church, the police, health care institutions and the media in education and raising adolescents' awareness in the field of self-destructive behaviors.'

**Key words:** adolescents, suicidal behaviors, prevention

### Introduction

The large scale of suicides and the fact that suicides can be prevented provides the grounds to undertake actions aiming at helping people who are experiencing crisis

situations. A suicide attempt can be a form of requesting help rather than a desire for death. Forms of operation should be adjusted to the cause of suicide attempt as well as to the biological, psychological, sociological, cultural, economic, and spatial condition of the person that found himself/herself among those threatened with suicide [1]. According to the World Health Organization, development and implementation of the National Program of Suicide Prevention constitutes basic intervention of proven effectiveness [2]. The National Program for Mental Health Protection stipulated that by 2015 the National Program of Suicide Prevention will be developed and implemented in Poland [3, 4]. To date, the objective has not been met, but three local programs for suicide prevention have been conducted in Poland so far:

1. Regional Program for Adolescent Suicide Prevention in Lodz (between 2006 and 2008),
2. Warsaw Educational-Prevention Program in the area of self-aggressive behaviors of adolescent (between 2007 and 2009),
3. Prevention of Suicide and Depression in the Tatra County between 2009 and 2013 [5].

While creating a prevention program, particular attention should be given to appropriate selection of the target group. The first stage of creating a prevention program should be conducting a study and social inquiry that would allow designing activities adjusted to their addressees [6]. There is a necessity of creating and implementing a National Program of Suicide Prevention in Poland that will be based on actual needs of the Polish society.

The aim of the study is to investigate the views of adolescents aged 16–19, attending public high schools in Warsaw, on effectiveness of suicide prevention<sup>1</sup>.

## Material

The study population covered adolescents aged 16–19 ( $M = 17.29$ ;  $SD = 0.94$ ), that attended public high schools in Warsaw. The study sample was representative for Warsaw. 1,439 respondents participated in the study – 821 females (57.1%) and 592 males (41.1%). 145 (10.1%) persons were aged 19, 436 (30.3%) persons were aged 18, 491 (34.1%) persons were aged 17, 327 (22.7%) persons were aged 16, and 40 (2.8%) persons did not submit information on their age. Over 70% of respondents lived in Warsaw, 19.5% – in cities other than Warsaw, 109 (7.6%) persons – in villages, and 31 (2.1%) respondents did not provide an answer to the question on the place of their residence. Respondents attended high schools in the districts of: Żoliborz (28.8%), Targówek (18.8%), Wilanów (18.4%), Wawer (15.4%), Rembertów (8.5%), Ursus (5.1%), and Praga Północ (5.0%).

<sup>1</sup> The article presents the second part of the results of the study described in the article of Kielan et al., *Analysis of the opinions of adolescents on the risk factors of suicide*. Psychiatr. Pol. ONLINE FIRST No. 86: 1–9.

## Method

The study was carried out in the period from February to December 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. Entities assigned to the study group were selected according to stratified random sampling method. The first stage of selecting the study group was sampling of districts qualified to participate in the study. The following seven districts of Warsaw were drawn: Praga Północ, Rembertów, Targówek, Ursus, Wawer, Wilanów, Żoliborz. The next stage consisted in drawing one high school from every district. When the school headmaster did not agree to participate in the study, another school from the district was drawn from the sampling frame. Sampling within each individual stratum was performed using simple random sampling.

The questionnaire was filled in by high school students who had their parents' consent to participate in the study. The study was coordinated and conducted by the author of the present paper in person, with the help of the school psychologist and guidance counselor. The study was voluntary and anonymous. A plan for conducting the study in a given high school was assigned by the school headmaster. The study was conducted during school hours in selected classes. The study was conducted using the Paper and Pen Personal Interview method, with the use of the questionnaire by Malicka-Gorzelańczyk, adapted to and used for the purpose of the study with the author's consent. The questionnaire consisted of four parts: questions concerning the scale of the problem, conditions, suicide behavior prevention, and personal information, altogether forming 34 closed, semi-closed and open questions. The study lasted 20 minutes.

The collected data were analyzed with the use of statistical software IBM SPSS Statistics 23. For the purpose of hypotheses verification for variables expressed on a nominal scale, the non-parametric Pearson's  $\chi^2$  test was used (Cochran's condition was taken into consideration) [7]. In the case of ordinal scale, depending on the number of comparable groups, either the nonparametric Mann-Whitney  $U$  test (2 groups) or Kruskal-Wallis ANOVA (>2 groups) with Dunn's post hoc test was used. The strength of correlation, depending on the used test, was determined with the use of Cramér's  $V$  coefficient, Glass biserial correlation ( $r$ ) or eta-square ( $\eta^2$ ) [8]. In order to estimate the interdependency between opinions on the roles of various state institutions, the Church and the family in suicide prevention, the exploratory factor analysis was employed [9]. For all analyses, the  $p$  value < 0.05 was considered statistically significant.

## Results

Students attending high schools in Wawer (46.2%), Wilanów (45.3%), Ursus (44.3%), and Rembertów (42.6%) demonstrated ignorance of the existence of organized system of suicide prevention in Poland. The respondents from high schools in Praga Północ (45.8%), Targówek (45.5%) and Żoliborz (46.1%) most often were convinced

that such a system does not exist ( $\chi^2(12, N = 1,430) = 43.678; p < 0.001$ ); (Cramér's  $V = 0.124$ ) (Table 1).

**Table 1. Frequency distribution of answers to the question “Is there, in your opinion, an organized system of suicide prevention in Poland?” depending on the high school district of the respondents**

Is there, in your opinion, an organized suicide prevention system?	District (n%)							
	Wawer	Wilanów	Ursus	Praga Północ	Targówek	Rembertów	Żoliborz	Total
Yes	38/17.0%	64/24.0%	17/24.3%	9/12.5%	27/10.2%	32/26.2%	75/18.2%	262/18.3%
No	82/36.8%	82/30.7%	22/31.4%	33/45.8%	120/45.5%	38/31.2%	190/46.1%	567/39.7%
I don't know	103/46.2%	121/45.3%	31/44.3%	30/41.7%	117/44.3%	52/42.6%	147/35.7%	601/42.0%
Total	223/100.0%	267/100.0%	70/100.0%	72/100.0%	264/100.0%	122/100.0%	412/100.0%	1,430/100.0%
p*	< 0.001							

\* $\chi^2$  test significance result. Source: own study.

Regardless of the respondents' sex, they claimed that the school is inefficient in suicide prevention (46.7%). Both females and males similarly perceive the role of school as an institution that can influence suicide prevention ( $Z = 0.126; p = 0.889; r = 0;003$ ) (Table 2).

**Table 2. Frequency distribution of answers to the question “Is school effective in suicide prevention?” depending on the respondents' sex**

Is school effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	59 / 7.1%	57 / 9.6%	116 / 8.2%
Little effective	337 / 40.8%	207 / 35.0%	544 / 38.3%
Ineffective	384 / 46.4%	278 / 47.0%	662 / 46.7%
Total	780 / 100.0%	542 / 100.0%	1,322 / 100.0%
p*	= 0.899		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

Students attending high schools in Wawer (36.0%), Wilanów (35.7%), Ursus (41.1%), Targówek (41.3%), Rembertów (33.3%), and Żoliborz (44.8%) were convinced that the Church does not contribute to suicide prevention. However, half of respondents attending the high school in Praga Północ believed that the Church was successful in suicidal behavior prevention. The opinion is not shared by the majority of students from the remaining districts of Warsaw ( $H = 50.822; p = 0.000; \eta^2 H = 0.036$ ) (Table 3). Probability values for Dunn's post hoc test indicated the highest rank mean for respondents from Praga Północ ( $R = 888.01$ ) (the greatest prevalence of the answer

“effective”), and the lowest for respondents from Ursus ( $R = 579.98$ ) (the greatest prevalence of answer “ineffective”).

**Table 3. Frequency distribution of answers to the question “Is the Church effective in suicide prevention?” depending on the district of the respondents' high school**

Is the Church effective in suicide prevention?	District (n / %)							
	Wawer	Wilanów	Ursus	Praga-Północ	Targówek	Rembertów	Żoliborz	Total
Effective	55/24.8%	54/20.5%	9/12.3%	36/50.0%	38/14.7%	26/21.2%	66/16.3%	284/20.1%
Little effective	65/29.3%	82/31.2%	25/34.3%	15/20.8%	85/32.8%	40/32.5%	116/28.7%	428/30.2%
Ineffective	80/36.0%	94/35.7%	30/41.1%	10/13.9%	107/41.3%	41/33.3%	181/44.8%	543/38.3%
Total	200/100.0%	230/100.0%	64/100.0%	61/100.0%	230/100.0%	107/100.0%	363/100.0%	1,255/100.0%
p*	= 0.000							

\* the result of Kruskal–Wallis rank ANOVA. Source: own study.

Respondents who were the only children (42.2%), had only one brother or sister (37.7%) or had two siblings (37.8%) thought that the activities of the Church in terms of suicide prevention were ineffective. Respondents with three or more siblings considered the Church as an effective institution in the field of suicides (33.3%). In comparison to students with two or less siblings, students who had three or more siblings more often perceived the Church as an institution effectively influencing suicide prevention ( $H = 10.671$ ;  $p = 0.014$ ;  $\eta^2H = 0.006$ ) (Table 4). Probability values for Dunn's post-hoc test indicated the highest rank mean for respondents with three or more siblings ( $R = 704.66$ ) (the greatest prevalence of the answer “effective”), and the lowest for respondents with no siblings ( $R = 583.01$ ) (the greatest prevalence of the answer “ineffective”).

**Table 4. Frequency distribution of answers to the question “Is the Church effective in suicide prevention?” depending on the number of siblings**

Is the Church effective in suicide prevention?	Siblings (n / %)				
	Yes, one brother/ one sister	Yes, two siblings	Yes, three or more siblings	I am the only child	Total
Effective	146 / 19.8%	46 / 19.1%	42 / 33.3%	48 / 16.0%	282 / 20.1%
Little effective	229 / 31.1%	76 / 31.5%	32 / 25.4%	88 / 29.2%	425 / 30.3%
Ineffective	278 / 37.7%	91 / 37.8%	42 / 33.3%	127 / 42.2%	538 / 38.3%
Total	653 / 100.0%	213 / 100.0%	116 / 100.0%	263 / 100.0%	1,245 / 100.0%
p*	= 0.014				

\* the result of Kruskal–Wallis rank ANOVA. Source: own study.

Regardless of the respondents' sex, they most often voiced the opinion that suicide prevention activities performed by the Church are ineffective (38.3%). Males, as opposed to females, more often perceive the Church as an institution effectively influence suicide prevention ( $Z = 3.810$ ;  $p = 0.000$ ;  $r = 0.108$ ) (Table 5).

Table 5. Frequency distribution of answers to the question "Is the Church effective in suicide prevention?" depending on the respondents' sex

Is the Church effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	134 / 16.3%	148 / 25.3%	282 / 20.0%
Little effective	253 / 30.7%	173 / 29.6%	426 / 30.3%
Ineffective	338 / 41.0%	202 / 34.6%	540 / 38.3%
Total	725 / 100.0%	523 / 100.0%	1,248 / 100.0%
p*	0.000		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

Regardless of their sex, the respondents claimed that the family was effective in suicide prevention (70.9%). The respondents' opinions on the role of the family in suicide prevention did not differ significantly between males and females ( $Z = 0.393$ ;  $p = 0.694$ ;  $r = 0.011$ ) (Table 6).

Table 6. Frequency distribution of answers to the question "Is the family effective in suicide prevention?" depending on sex of the respondents

Is the family effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	571 / 70.7%	417 / 71.3%	988 / 70.9%
Little effective	185 / 22.9%	119 / 20.3%	304 / 21.8%
Ineffective	26 / 3.2%	25 / 4.3%	51 / 3.7%
Total	782 / 100.0%	561 / 100.0%	1,343 / 100.0%
p*	= 0.694		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

Irrespective of the respondents' sex, they claimed that healthcare institutions are little effective (47.7%) ( $U = 220,027.0$ ;  $Z = 2.943$ ;  $p = 0.003$ ) (Table 7), and the police is ineffective (55.9%) ( $U = 231,850.5$ ;  $Z = 1.626$ ;  $p = 0.104$ ) in terms of suicide prevention (Table 8). Females perceived the media as little effective (46.6%), while males considered them ineffective in this area (56.1%) ( $U = 201,930.5$ ;  $Z = 5.845$ ;  $p = 0.000$ ) (Table 9).

**Table 7. Frequency distribution of answers to the question “Are healthcare institutions effective in suicide prevention?” depending on the respondents' sex**

Are healthcare institutions effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	243 / 32.1%	144 / 27.1%	387 / 30.0%
Little effective	368 / 48.5%	247 / 46.4%	615 / 47.7%
Ineffective	147 / 19.4%	141 / 26.5%	288 / 22.3%
Total	758 / 100.0%	532 / 100.0%	1,290 / 100.0%
p*	= 0.003		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

**Table 8. Frequency distribution of answers to the question “Is the police effective in suicide prevention?” depending on the respondents' sex**

Is the police effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	60 / 7.9%	52 / 9.8%	112 / 8.7%
Little effective	288 / 38.1%	167 / 31.6%	455 / 35.4%
Ineffective	408 / 54.0%	310 / 58.6%	718 / 55.9%
Total	756 / 100.0%	529 / 100.0%	1,285 / 100.0%
p*	= 0.104		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

**Table 9. Frequency distribution of answers to the question “Are the media effective in suicide prevention?” depending on the respondents' sex**

Are the media effective in suicide prevention?	Sex (n / %)		
	F	M	Total
Effective	112 / 14.6%	37 / 6.9%	149 / 11.5%
Little effective	356 / 46.6%	197 / 37.0%	553 / 42.6%
Ineffective	297 / 38.8%	299 / 56.1%	596 / 45.9%
Total	765 / 100.0%	533 / 100.0%	1,298 / 100.0%
p*	= 0.000		

\* the result of the Mann-Whitney  $U$  test for statistical significance. Source: own study.

The respondents' opinions on the importance of individual institutions spread over two factors. Persons who perceive a significant role of the Church at the same time indicate a considerable share of the family in suicide prevention and to a much smaller degree the share of all other mentioned institutions. Persons who perceive a significant role of the police, the media, school and healthcare institutions constitute a separate factor (Table 10).

*table continued on the next page*

Table 10. Analysis of interdependencies for respondents' opinions on the effectiveness of institutions on suicide prevention

Are individual institutions effective in suicide prevention?	Factor 1	Factor 2
School	<b>0.618</b>	0.115
The Church	-0.045	<b>0.832</b>
Family	0.293	<b>0.669</b>
Healthcare institutions	<b>0.606</b>	0.275
The police	<b>0.717</b>	0.082
The media	<b>0.631</b>	-0.114

\* factor loadings after orthogonal rotation with Varimax method. Source: own study.

## Discussion

The largest part of respondents of our study (42.0%) has revealed that they did not know whether there was an organized system of suicide prevention in Poland, 39.8% stated that there was no such system, while 18.2% believed that such a system existed. In a study by Malicka–Gorzelańczyk, more respondents believed that such a system did not exist (42.6%), 30.7% of respondents admitted that they knew nothing about it, and 26.7% claimed that such a system existed [10]. Over the last few years, suicide prevention has not improved in Poland. Although the statistics indicate a growing trend in the discussed phenomenon, the issue is not a priority in the health and social policies of Poland. Both contemporary adolescents and the ones surveyed by Malicka–Gorzelańczyk in the years 1992–1993 correctly assessed that Poland did not have a suicide prevention system. A large proportion of adolescents indicated that they did not know whether such a system existed.

School is responsible for education and socialization of children and adolescents, which in consequence means that it has more tools that can potentially contribute to positive changes in health behaviors of students [11]. According to the report of the World Health Organization based on Health Evidence Network, which contains an analysis of available suicide prevention strategies, school prevention programs focusing on behavioral change and strategies of dealing with problems belong to activities that have a proven high effectiveness [12]. A good example of an effective large-scale suicide prevention school program is the program *Saving and Empowering Young Lives in Europe* (SEYLE), which has a proven large effectiveness when carried out in a group of adolescents in 11 European countries (a 50% drop in attempted suicides was observed among adolescents participating in it in comparison with a control group) [13]. In our study, the school operations within suicide prevention turned out ineffective (46.6%), or little effective (38.4%) for students. The respondents of Malicka–Gorzelańczyk also considered school operations little effective (37.8%) and ineffective (34.7%) [10]. Despite scientifically proven effectiveness of school in suicide prevention, this institution is perceived by the surveyed students as not fulfilling the role assigned to it. The current

situation may be caused by negative experiences of high school adolescents, associated with programs in which they participated, or lack thereof. The opportunities of school prevention programs have never been, and still are not adequately used in Poland.

The Church plays an important role both in suicide prevention and postvention. Religious life is most often lived in a group of people sharing similar views, who support each other in case of spiritual problems. Social factors (mutual care of the congregation members), ethical considerations (human being has no right to take his/her life) and the fear of divine wrath, provide remedial effects of religiousness. Coefficients of committed suicides are lower in countries considered as very religious than in secularized countries [1]. Results of our study indicate that the significantly greatest number of students perceived preventive actions of the Church, conducted in the sphere of suicides, as ineffective (38.3%) or little effective (30.2%). A positive opinion on the preventive actions of the Church was voiced by students from Praga Północ (50%), and students with three or more siblings (33.9%), which may in turn suggest that the percentage of believers who attach great value to the Church, is higher among them than in the overall sample. In the study by Malicka–Gorzelańczyk, the majority of adolescents also stated that the actions of the Church in the field of suicide prevention are either ineffective (29.7%) or little effective (29.7%) [10]. It can be presumed that respondents do not recognize the Church as an entity bearing responsibility for implementing preventive activities aiming at improving the mental well-being of adolescents. The data indicate that between 1992 and 2015, evaluation of the preventive role of the Church by adolescents deteriorated.

Our study also indicated that persons who perceived the Church as an entity effective in suicide prevention also indicated the importance of the family in this area. Males more often perceive the Church as an institution effectively influencing suicide prevention in comparison to female opinions voiced on this issue. This relationship may stem from sex differences in terms of religion [14], but it may as well be the failure to take into account the religious belief variable.

For children, the family is a place where they should feel safe, from which they draw positive values, and where they prepare for the future, adult life. It is vital that the adults forming the family are aware of the significant role they play. It is useful to draw attention of young people to moral authorities, adequate values, and to care for their proper mental and social development. Parents may play a significant role in helping children with suicidal tendencies, because as conscious observers, aware of their own children's problems, they will turn to professionals for help at the right moment [15]. More than 2/3 of respondents in our study (70.9%) admitted that they perceived the family as effective in the area of suicide prevention. In the study by Malicka-Gorzelańczyk, adolescents (51.5%) also pointed to the importance of the family in the prevention of self-destructive behaviors [10]. Comparing these two studies, the family strengthened its position as the most effective entity preventing suicidal behaviors. These results are confirmed by placing the family high in the ranking of entities of proven effectiveness in preventing suicides [2].

In the case of presuicidal prevention, healthcare system offers the help of both general practitioner and public health nurse, who are the first people that a person with physical or mental problem turns to. In Poland, there is little awareness that psychiatric

care does not require referral from a GP, so one can go to a psychiatrist immediately when he/she notices worrying symptoms, also when it comes to the symptoms of a relative. Our study demonstrated that adolescents (47.7%) recognize healthcare institutions as little effective in suicide prevention. In the study by Malicka-Gorzelańczyk respondents (38.9%) also assessed them as little effective [10]. Adolescents can only associate medical help with an already existing suicidal situation, and they do not know about or do not assess positively the preventive activities that could be conducted by healthcare personnel. Help received from a GP constitute one of the suicide prevention strategies with proven effectiveness [2].

As stems from the Act on the police, its tasks cover, among others, human health and life protection, initiating and organizing actions aiming at crime prevention, as well as cooperation with state, regional and local authorities and NGOs in this respect [16]. One of the aim of the Prevention Department of the Police Headquarters is initiating and implementing systemic police actions in the field of crime prevention, including offenses committed by minors and phenomena of social pathology. For an effective prevention, the Prevention Department of the Police Headquarters should conduct educational programs on threats in schools, as well as therapeutic and educational activities in schools and clinics, create and support the activity of recreation and educational centres for children and adolescents, conduct information and educational activities for adults, children and adolescents on how to avoid threats, and integrate environments in order to improve safety [15]. In our own study, over a half of respondents (55.9%) think that the police is not an entity that is able to prevent suicides.

Over 23 years ago the opinion of adolescents differed between females and males. Females perceived the police as little effective, while males as ineffective in preventing suicidal behaviors. The difference was motivated by the female belief that the institution is obliged to prevent all manifestations of negative behaviors, including self-destructive behaviors [10]. Currently, the social image of the police, created by the media to a large extent, is negative. As it results from the study of Fil, persons who had direct contact with police officers evaluate their actions positively, while persons who do not have such an experience, create their opinions on the basis of stereotypes and criticize the work of police officers [17].

The mass media play an important role in the modern society providing information in a very broad scope. They influence the convictions and behaviors of a society. Reporting a suicide by the media in a responsible and not sensational way may, in many cases, prevent self-destructive behaviors [18]. Young people underestimate the role of the media in suicide prevention – females perceived them as little effective (46.6%), and males as ineffective (56.1%). Identical tendency was observed in the study by Malicka-Gorzelańczyk – 42.3% of females assessed the media as little effective, and 40.0% of males as an ineffective form of help for people with suicidal tendencies [10]. The opinion of adolescents may be associated with the fact that inappropriate transfer of information on suicides, aiming at creating sensation, may generate negative effect and lead to the Werther Effect<sup>2</sup>. Educating societies in

<sup>2</sup> *Werther Effect, or copycat suicides – one suicide influence suicide attempts made by other people [1].*

the field of available forms of help in a mental crisis situation and informing about signals that precede suicide intentions are issues that should be addressed more often by the media in Poland [18].

### Conclusions

1. More than 1/3 of studied adolescents realize that there is no integrated system of suicide prevention in Poland.
2. According to high school students, the family plays the greatest role in preventing self-destructive behaviors.
3. There is a need of greater involvement of schools, the Church, the police, healthcare institutions and the media in education and raising awareness of adolescent in the field of self-destructive behaviors.

### References

1. Hołyst B. *Suicydologia*. Warsaw: Lexis Nexis; 2012.
2. Scott A, Guo B. *For which strategies of suicide prevention is there evidence of effectiveness?* WHO; 2012.
3. Ministry of Health. *Narodowy program Ochrony Zdrowia Psychicznego*. Regulation of the council of Ministers of 28 December 2010. Warsaw; 2011.
4. Supreme Chamber of Control. *Realizacja Zadań Narodowego Programu Ochrony Zdrowia Psychicznego*. 2016.
5. *Problematyka samobójstw w II dekadzie XXI wieku*. Medycyna Praktyczna – Psychiatria. 2015; Special edition 1.
6. Kaczor P. *Zasady tworzenia programów profilaktycznych*. Medycyna Ogólna i Nauki o Zdrowiu. 2012; 18(47): 1.
7. Yates D, Moore D, McCabe G. *The practice of statistics*, 1<sup>st</sup> ed. New York: W.H. Freeman; 1999. p. 734.
8. Nakagawa S, Cuthill IC. *Effect size, confidence interval and statistical significance: A practical guide for biologists*. Biol. Rev. Camb. Philos. Soc. 2007; 82(4): 591–605.
9. Thompson B. *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. Washington: American Psychological Association; 2004.
10. Malicka-Gorzelańczyk H. *Opinie młodzieży o samobójstwie*. Bydgoszcz: Kazimierz Wielki University Press; 2000.
11. Miller DN, Eckert TL, Mazza JJ. *Suicide Prevention Programs in the Schools: A review and public health perspective*. School Psychology Review. 2009; 38(2): 168–188.
12. World Health Organization. *Public health action for the prevention of suicide*. 2012.
13. Brent DA, Brown CH. *Effectiveness of school-based suicide prevention programmes*. Lancet. 2015; 385(9977): 1489–1491.
14. Walesa Cz. *Różnice w zakresie religijności kobiet i mężczyzn*. Horyzonty Psychologii. 2014; 4: 45–66.

15. Bąbik A, Olejniczak D. *Uwarunkowania i profilaktyka samobójstw wśród dzieci i młodzieży w Polsce*. Dziecko krzywdzone. Teoria, badania, praktyka. 2014; 13(2): 99–121.
16. Act of 6 April 1990 on the Police. Dz. U. (Journal of Laws) of 2017, item 2067.
17. Fil K. *Wizerunek policji w opinii mieszkańców Lublina*. Annales Universitatis Mariae Curie-Skłodowska Lublin-Polonia. Sectio K. 2004.
18. World Health Organization, Polish Suicidological Society. *Zapobieganie samobójstwom. Poradnik dla pracowników mediów*. Geneva–Warsaw. 2003.

*Financial support: Medical University of Warsaw mini-grant for students*

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