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Review paper

Suicide – definition of the phenomenon and prevalence in Poland

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Abstract

Introduction: Suicide is a serious world public health problem and still an interesting, controversial and difficult subject for theoretical and empirical considerations.

Aim: The aim of this paper is to present the prevalence of suicide in Poland in context of suicidal situation worldwide.

Material and methods: This article is based on the available literature, National Polish Headquarters reports and World Health Organization data.

Results and discussion: Many publications on suicide to date focus on showing the correlation between the suicide act and age, gender, social background, education, place of residence, marital status, season, climate, day of the week, and even a daily cycle. Profiles of a potential suicide are created. Suicide is the most serious cause of death among patients with mental disorders. However, scientific reports among people who commit suicide and attempt suicide also mention people, who are not mentally ill. There is no medical suicide reporting and analysis system in Poland. The National Police Headquarters publish annual report containing the number of suicides committed in Poland.

Conclusions: Based on these statistics, from 1999 to 2018, we observe a variable level of suicide rates. In the discussed years 1999–2018 over 95,000 people have successfully committed suicide in our country. Poland is currently in second place in Europe in terms of juvenile suicides and one of the European countries where the gender disparity (advantage of men over women) in terms of suicides is the highest.

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1. INTRODUCTION

Suicide is a complex phenomenon that for centuries has attracted the interest of specialists in the field of psychiatry and psychology, as well as sociology, philosophy, theology. Suicidal behaviors have accompanied people from the earliest stages of development. Over the centuries, the perception of suicidal acts has changed unevenly depending on the historical period, level of civilization development and sociocultural conditions and religious situation. It was not until the second half of the 20th century that suicide ceased to be a crime, and it was recognized as a medical and psychological problem related to illness or the result of an extreme life crisis.[1]

The World Health Organization[2] defines suicide as a deliberately initiated and prepared act of deprivation oneself of life by a person fully oriented and anticipating his/her effect. A suicide attempt usually occurs when an individual feels suffering due to the situation in which he/she finds himself/herself, experiences helplessness in this situation and lack of hope for its change. Sometimes suicide is not a solitary act, but involves others. Extended suicide is the phenomenon of murder of a family member by a suicidal person when murder is viewed as a way to protect the family member from a life of suffering. Extended suicide is associated with major depression.[3]

More than 800,000 people die from suicide every year.[2,4] This figure, including the unregistered suicides, can certainly be rounded to 1,000,000. The number of suicides in younger age groups (teenagers, young adults, middle-aged adults) has become the leading cause of death in many countries, outweighing traffic accidents. A slow increasing trend in the number of suicides in the world has occurred since the end of the Second World War. This also applies to Poland.[5,6]

2. AIM

The aim of this paper is to present the prevalence of suicide in Poland and worldwide. Additionally, its aim is to present some of the risk factors of suicides.

3. MATERIAL AND METHODS

This article is based on the available literature, National Polish Headquarters reports and World Health Organization data.

4. RESULTS AND DISCUSSION

4.1. Suicide in classifications of diseases

In ICD-10, suicide can be classified in two chapters: External causes of morbidity and mortality (codes X60–X84) and Drugs, medicaments and biological substances causing adverse effects in therapeutic use (codes Y46–Y57), but apart from identifying the methods in this version, there are no separate detailed criteria for recognizing suicidal behavior.[7] In contrast, suicide attempts and self-harm appear in the classification only as a diagnostic criterion in two disease entities: depressive episode ('suicidal thoughts and acts') and borderline personality ('threats of suicide or self-harm').[8,9]

The American DSM-5 classification from 2013[10] introduced new diagnostic solutions. The suicidal risk is already included in several dozen categories (in addition to those according to DSM-4: borderline personality, dissociative amnesia and affective disorders, also in anxiety disorders, anorexia, bulimia, opiate intake, post-traumatic stress disorder or schizophrenia). This classification also includes a new diagnosis – suicidal behavior disorder with the main criterion for increased risk of suicide attempts and death within 24 months after the trial. The attempt is defined as a self-initiated sequence of behaviors by a person who, at the time of their initiation, expected them to lead to his/her death. For this new diagnosis named as an increased suicidal risk syndrome detailed criteria according to DSM-5 is:

(1) suicide attempt in the previous 24 months,
(2) does not meet the criteria for non-suicidal self-injury (NSSI),
(3) not applicable to suicidal thoughts and preparatory actions,
(4) the act is not undertaken in a state of consciousness disorders,
(5) the act is not adopted for political or religious reasons.[10–12]

Among patients with mental disorders, suicide occurs 12 times more often than in the general population. As a result of suicide, most often die patients with affective disorders (depressive disorders and bipolar disorder) and patients with schizophrenia.[3,13] Severe psychotic and depressive episodes increase the risk of suicide by 5–10 times, and an effective suicide attempt is the cause of death for approximately 15% of people diagnosed with recurrent affective disorders. Scientific reports among people who commit suicide and attempt suicide also mention people who are not mentally ill.[8,13] Referring to this concept, there are many factors that indicate the autonomy of suicidal behavior:

– not all suicides can be attributed to a clinical basis,[12]
– and vice versa – most people with severe mental disorders do not commit suicide,[12]
– an analysis of the causes of suicide in Poland, published by the Police,[14] in most cases does not attribute suicide to psychopathological factors.[5]

4.2. Suicide in the world

Every 40 s someone in the world takes their own lives. WHO[2] has been keeping statistics of suicides since the 1950s.[4] The standardized suicide rate in the world in 2016 was 10.53 cases per 100,000 people. Suicide was the 10th cause of death in the world. Suicidal death is considered by sociologists as an indicator of the condition of society. In 2016, 79% of suicides took place in underdeveloped and middle developed countries. The highest suicide rates of over 30/100,000 were recorded in Lithuania and Russia.[2,4] The number of suicidal deaths in these countries is gradually decreasing, in 2000

the standardized rate exceeded 50/100,000 people and was largely associated with changes and social problems that affected the countries of the former USSR. In Poland, for comparison, in 2016 it amounted to 23.9/100,000, giving it the 22th place in the list of countries in the world. Countries with the lowest suicide rates (less than 5/100,000) are Barbados, Bahama, Jamaica, United Arab Emirates, Azerbaijan.[4,15]

In terms of gender, anywhere in the world except Bangladesh and China, on average, men are more than 3 times more likely to commit suicide, while women are more likely to undertake suicide attempts. The differences can be attributed to patterns established for years, their roles, and changes in these roles in recent years. Men have difficulties asking for help, they are less willing to share their problems, it is more difficult for them to accept the loss. Women have a better developed social support network, their protective factor is the sense of responsibility for their offspring.[1,15]

Statistics conducted by WHO,[2,4,16] indicate that currently the most common suicidal methods in the world are: pesticide poisoning (20%), hanging, use of firearms. Depending on the region, other ways of taking life were chosen, often associated with the availability of lethal means. In underdeveloped countries, pesticide poisoning, which predominates in the female population, was a popular method. Hanging represented a particularly high percentage in Eastern Europe.[16] Drug intoxication and use of weapons were chosen in more developed countries. In urban areas of Hong Kong, Malaysia, and Singapore, most suicides were committed by jumping from tall buildings.[17] Everywhere in the world there is a choice of methods with higher brutality (hanging, weapons) in a group of men, while women more often use methods with lower lethality (drug poisoning).[4]

In the world in recent years the highest increase in the number of suicides has been observed in the group of people aged 15–29. Suicide is the second cause of death in this age group. The highest number of suicides was recorded in the group of 15–49 years. High suicide rates in people over 70 have also been maintained for years.[2,5]

In highly developed countries, about 90% of people who commit suicide suffer from mental illness (mood disorders, alcohol addiction). In a recent study conducted in 2017 in the USA: only 10% of people who commit suicide had no mental illness, compared to as much as 37% in China. It may be related to the lower availability of psychological or psychiatric help and underestimation of the phenomenon. Many suicides occur on impulse, due to difficult financial situation, separation in a relationship or experiencing pain in the course of chronic diseases.[3,12]

4.3. Suicides in Poland in the years 1999–2018

There is no medical suicide reporting and analysis system in Poland. There are two data collection systems in practice: via the Police and the Central Statistical Office (CSO). There is a difference of about 1/3 between these data (Police data should be increased by 1/3). This is due to the fact that the Police rely on the reporting system (Themis), which collects data when there is a suspicion of crime. In turn, the CSO system is based on death cards and has a huge, many-year reporting delay. The latest CSO reports stop at 2012 – the rate of 17 suicides per 100,000 inhabitants.[6] In this situation, it should be expected that in 2013–2015 the indicator will exceed 20/100,000, which means that Poland will become one of the leaders among countries with suicide threat – not only in Europe but also in the world.[5] Important information on currently the most important risk factors for suicide in Poland is provided by studies on the causes of suicides carried out by the Department of Analysis of the Police Headquarters. Currently, the most frequently mentioned risk factors related to suicide include: male sex, depression, alcohol or drug addiction, separation, widowhood, divorce, social isolation, recent psychiatric hospital stay, serious physical illness, recent job loss, problems with law, stay in prison.[15]

Since 2013, there has been a significant increase, by about half, in the number of suicides in Poland, from a relatively stable number of about 4,000 suicides per year – in the decade of 2003–2012, to more than 6,000 suicides per year – in the years 2013–2015.[18] In 2014, historically the largest number ever of suicides in Poland was recorded (6155) – comparing it with the entire period of statistics kept since the beginning of the 1970s.[18] It is worth noting that since 2013, the Police have changed the way statistics are collected and generated. Currently, information goes to the register as soon as it is found that the behavior was suicidal, with the proviso that if another cause of death is found within a month, corrections can be made.[14]

We observe a variable level of severity of suicides from 1999 to 2018. From 2006 (from about 4,000 people a year) there is a clear downward trend in the cause of death caused by suicide, until 2013, when there was a significant increase in this number (about 6,100 people). From 2015, a further decline in the number of successful suicides (more than 5,000 people per year) has been observed, which continued until 2018. In the discussed years 1999–2018 over 95,000 people have successfully committed suicide in Poland, of which over 81,000 were men, and only over 14,000 were women. During this time period, the days on which life was most commonly taken were Monday (15,247 suicides), Tuesday (14,373 suicides), and then Wednesday (13,781 suicides).[18] There are no scientific publications describing this trend. The observed discrete advantage of the number of suicide attempts at the beginning of the week may be related to the excess of obligations experienced especially at this time, the difficult situation in the workplace, the symptoms of burnout syndrome. WHO also sets one of the goals to protect mental health in the workplace. At the same time, taking into account that suicide attacks are most often committed by the unemployed – lack of employment and on the other hand the obligation to appear at work on the first business day, can generate especially negative emotions on that day.[4]

The highest absolute number of suicides occurs in middle age (men and women). People effectively taking their own lives in the years (1999–2018) were usually aged 50–54, then 45–49 and 55–59.[14] In turn, the largest number of suicides in relation to still living concerns the oldest. Conversely, the

largest number of suicide attempts concern young people, teenagers. The ratio of suicide men to women in Poland is 5–6 to 1. In the world, this difference is usually much smaller. Most often, suicide in Poland is performed by a lonely man, aged over 50, without work, with low education, living outside large agglomerations, addicted to alcohol.[18,19]

Analyzing the data, it can be seen that the number of suicides in particular age groups increases significantly, starting from 19 years of age. It should be emphasized, however, that in Poland there is no central register to which all suicide attempts would be reported, hence the Police data on suicide attempts that were not fatal may be quite underestimated. It is estimated that there are about 10 times more attempted suicides than completed suicides.[14,15]

Suicides of children and adolescents up to 12 years of age are individual. According to police statistics in Poland in 2016, 466 people aged 13 to 18 took their own lives. Poland is currently in second place in Europe in terms of juvenile suicide. On average, every third teenager after a suicide attempt repeats a suicide attempt within the year.[19] In 2018, the effective suicide in Poland was mostly committed by people aged 55–64 (551 people aged 55–59 years and 565 people aged 60–64 years), the least in age ranges 7–12 years (5 people), 13–18 years (92 people).[18]

The fatal suicide attempts were most often committed on Monday (854 people). In Poland, as in other highly developed countries, a significant disproportion between the group of women and men is noticeable. As in previous years, men (4471) predominate in the suicide population compared to women (711). More suicides were committed in the population of married people (2916) than unmarried (single, 1999 people). Education among suicides dominates in order at the level of basic vocational (467 people), secondary (380 people) and primary (324 people). A statistical suicide who effectively took his own life is usually unemployed (882 people).[15,18]

The most common way to take one's life in 2018 was by hanging (4211 suicides), and then throwing oneself from a height (330 suicides). Suicides were dominated by people with mental disorders (1037 people), and family disagreements and domestic violence (262 people), love disappointment (226) and poor economic conditions (192) prevailed over the presence of serious physical illness (164 people). The identified treatment for mental illness affected 1,051 people and 1,009 people were abusing alcohol. Noting, however, that among all committed suicides, 2916 had no established cause. As many as 2,191 people (out of 5198 suicides committed in total) chose their home/flat as the place to take their lives.[14] Part of the data described are presented in the Figure 1.

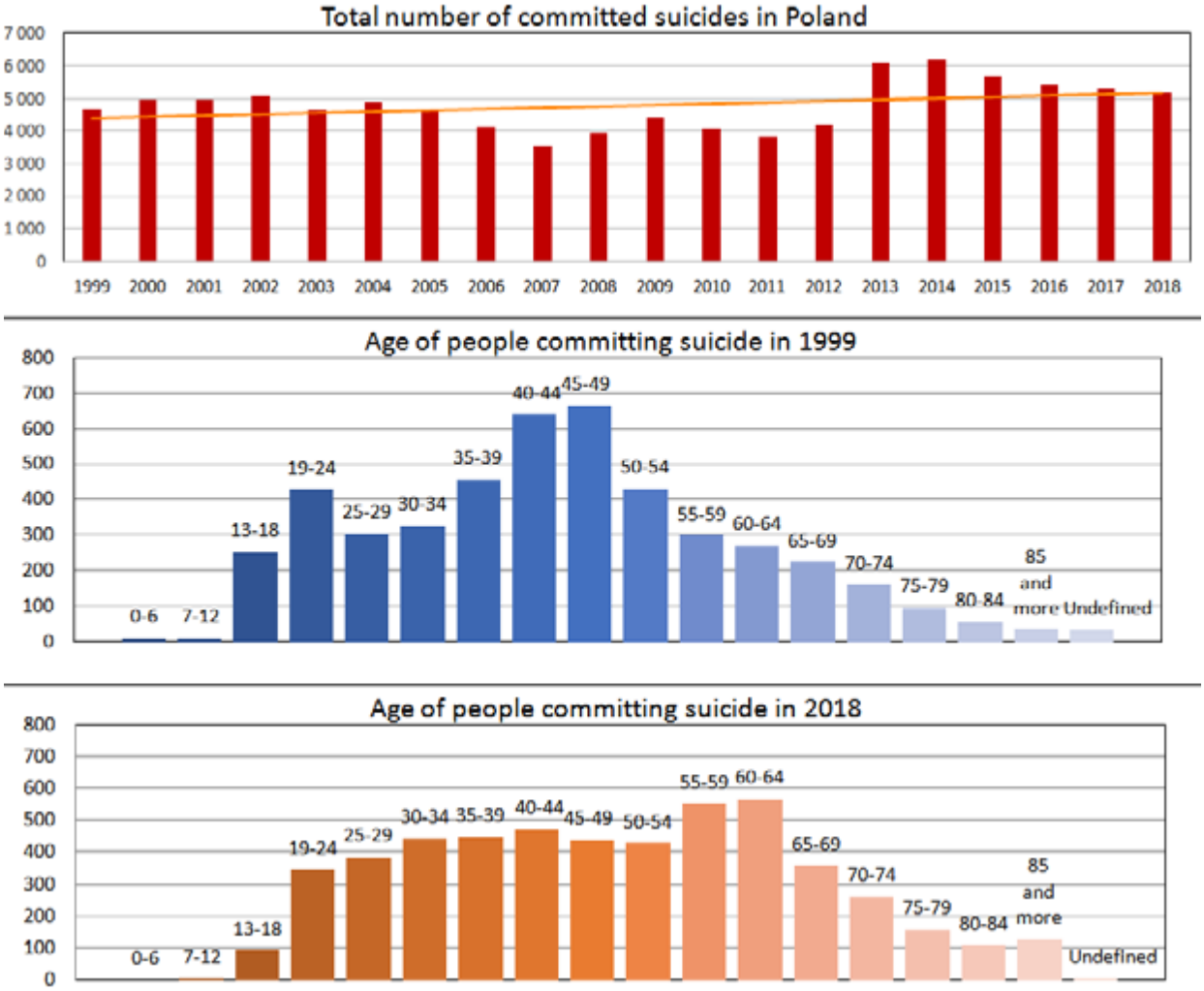

Figure 1. Total number of committed suicides in years 1999–2018 and age of people commiting suicide in 1999 and 2018.

5. CONCLUSIONS

(1) Suicide is a phenomenon that includes cultural, political, religious, ethnic, racial, socioeconomic, gender, age, educational level, family situation and clinical aspects. It is a serious challenge for healthcare professionals, which involves the need to know the risk factors.
(2) Differences in the perception of suicide can be seen in the division into suicides committed as a result of environmental factors and those resulting from mental health disorders. Disorders particularly predisposed to suicide include affective disorders, alcohol dependence, schizophrenia, organic brain diseases and personality disorders.
(3) In a global perspective, men take their lives 1.8 times more often than women.

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