

## **SUICIDAL DEATHS IN A WATER ENVIRONMENT**

Iwona Michniewicz, Romuald Michniewicz

The President Stanisław Wojciechowski State Higher Vocational School, Kalisz, Poland

### **ABSTRACT**

Unexpected, abrupt death is always a great tragedy, both for a victim, as well as, for their family, friends, society or even country. However, death as a result of a suicide always seems to be unnecessary and difficult to accept by relatives. Every 40 seconds someone dies on the globe due to a kind of an auto-destruction act. Out of all suicides, the biggest group are adult men, frequently with mental disorders, who commit suicide by hanging themselves. The only suicide method where women are almost on the par with men is drowning (by many authors referred to as death by drowning).

**Keywords:** drowning, auto-aggression, suicide.

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## INTRODUCTION

Each year more than 800,000 people take their own lives. An indicator which is several times higher (though it is difficult to provide an explicit estimation) is related to failed suicide attempts.

Suicide is a tragedy which affects families, society and entire nations. Such self-annihilation is attempted by persons representing almost each age group, from different locations and for many different reasons. What seems tragic is the fact that death as a result of suicide is the second most common cause of death among 15-29-year-olds all around the world [1].

Every 40 seconds one person on Earth takes his/her life [2].

Historically, suicidal death was treated as a foul and disgusting act. In accordance with Athenian law a suicide's hand was to be cut off and buried separately. Also, the right to a funeral ceremony was refused [3].

By Roman law, suicide was punished by property confiscation [4]. Similar provisions regarding the property of persons committing suicide (confiscation) were applied in the period between the 13th and the 17th century in France, Prussia, England, Austria and Sweden [5].

In Poland until the 18th century it was a common practice to defile the corpses of suicides, pierce them with a spear, bury them at the crossroads and/or drag them naked [4].

Today, common opinions of those who commit suicide are that they reveal immature, infantile, asocial, self-centred, egotistic personalities. Often, suicidal people live by the moment, are incapable of adopting forward, logical thinking and are driven by emotional impulses rather than a deepened reflection. Any expectation that requires patience is felt to be unbearable and their unrealistic wishes keep multiplying. The basic principle of such a person's actions is "to have everything immediately – here and now". People with suicidal tendencies are characterised by a lack of sense and purpose in life, they lose any sense of their own value, become overwhelmed by the feeling of hopelessness, anxiety, alienation, threat and resignation. In such a situation, the tendencies of auto-destruction amplify. In essence, the value of life is no longer the superior one [6].

Suicide is categorised as a sudden death, alongside personal accidents and homicide [7].

Abrupt death as a result of drowning is known (in forensic medicine) as "sudden suffocation". One characteristic which links such cases – is sudden deprivation of sufficient amounts of oxygen in man's environment. The causes include strangulation, closure of nasal and oral cavities or airway obstruction by a foreign body, prevention of respiratory movements necessary for the performance of a gas exchange in the lungs, lack of oxygen in the surroundings or lack of oxygen supply from the air, lack of oxygen in the atmosphere, human suffocation in a confined, enclosed space, indoor death in places where oxygen has been replaced with a different gas [8], and drowning as a result of an airway obstruction with a liquid, usually water [9].

Every year in Poland more than five thousand people take steps toward ending their lives with more than four thousand such attempts resulting in death (approx. 75% efficiency). The majority of suicide attempts involve adults aged between 45-59 years, followed by

people at the age between 20-44 years, and 15-19 years [10].

The most unpleasant and painful incidents involve young people who do not find understanding and acceptance among their relatives, friends or environment. And the number of such situations is growing. This is due to new forms of bullying emerging – for instance among peer groups (through electronic channels), which in some cases lead the victim to the edges of psychological resilience and drives him/her towards the final resolution – taking their own life.

On the one hand, the causes of suicide seem to be obvious, while on the other, nearly 40% of cases constitute decisions whose reasons are never determined. According to different authors [11,12] the most significant factors include: personality disorders, states of frustration, stress caused by personal failure, hardships of everyday life, incorrect evaluation of one's own capabilities of goal implementation, anxiety (e.g. before an accomplishment of a particular success in life), a lack of adequate methods of satisfying the need for one's purpose of life, loneliness, crisis of recognised values, inadequate social relations (e.g. defectively functioning social structures, improper relations between culture and society).

Among the selected suicide methods, death by drowning (1,188 cases) makes up the third most frequent way of taking one's life right after hanging oneself (34,107 cases) and throwing oneself from a height (2,970 cases) [13]. Also in the case of repeated attempts (when the first failed), drowning is the third most commonly chosen means of self-annihilation [14].

## SUICIDAL DEATHS IN WATER ENVIRONMENTS

One of the most well-known stories of a suicidal death as a result of drowning is the case of ancient lovers, Hero and Leander. The woman (Hero) committed suicide by throwing herself into water after the loss of the loved one (Leander drowned while swimming to her) [15].

In Ireland, the most common methods of committing suicide include hanging oneself (41% among men), whilst drowning constitutes the choice of "only" 29% of men and "as many as" 39% of women [16].

Croatian studies [17], on the other hand, indicate that drowning is the most popular method of taking one's life among women aged over 65 years. As much as 10% of all suicides in Croatia are drownings, with the following percentage share of particular bodies of water: sea (57%), well (34%), river (6%), bath (3%).

On the basis of a study conducted in England on 14 victims having the average age of 66 years, the author [18] reached the following conclusions:

- victims chose their home bath as the place of suicide,
- they entered the bath while fully clothed,
- the assumed position was face down to the bottom,
- nearly half of them (6 people) were under the influence of alcohol or other substances,
- exactly half of them were individuals with diagnosed psychiatric conditions who had previously attempted to self-mutilate.

In Poland, the most reliable source, presumably quoted by all the authors dealing with the issue of suicide, are the

police statistics. It is possible to analyse these data in various contexts, with the consideration of a number of indicators. In a review of basic data from the last five years – available in an aggregate form at [www.statystyka.policja.pl](http://www.statystyka.policja.pl), it is possible to draw conclusions regarding certain constant values in relation to the phenomenon of suicide and suicidal death in water environments.

The review of police data, shown below, presents the categories and certain tendencies with regard to all suicides in Poland, as well as suicides as a result of drowning.

The first table contains the summary of deaths occurring as the result of a successful suicide attempt in the period of five years (2010-2014), and suicidal deaths in a water environment.

In the analysis of data contained in table 1, we may note that in the discussed period of five years the total number of suicides significantly changed. Between the period characterised by the lowest (year 2011) and the highest indicator (year 2014) the increase reaches over 60%. In the same period the highest (year 2013) and the lowest (year 2010) suicide rate in water differed by slightly more than 34%.

Tab. 1.

Total number of successful suicidal attempts and suicide deaths as a result of drowning (based on: [www.statystyka.policja.pl](http://www.statystyka.policja.pl) [19]).

Total number of suicide deaths					Number of suicide deaths – drowning				
2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
4087	3839	4177	6101	6165	88	100	105	118	113

A shocking conclusion can be drawn while considering the total number of suicidal deaths with regard to gender. In general, the decision to take this dramatic step is much rarer in females than in males,

however when it comes to choosing water environments as the place of death, the number of men and women is nearly the same.

Tab. 2.

The division between the number of deaths as a result of a successful suicide attempt in the last five years and suicidal deaths as a result of drowning based on gender (source: police statistics [19]).

Total number of suicide deaths			Number of suicide deaths – drowning		
Year	Number of women	Number of men	year	Number of women	Number of men
2010	570	3517	2010	33	55
2011	555	3294	2011	49	51
2012	608	3569	2012	63	105
2013	905	5196	2013	No data available, in total 118	
2014	928	5237	2014	No data available, in total 113	

Due to the fact that since 2013 police statistics no longer differentiate between males and females when it comes to a chosen suicide method, further analysis was performed on preceding years (2008 and 2009) in order to enable juxtaposition of five-year periods. Table 3 shows a percentage distribution of deaths among men

and women in the total population of suicides, as well as constitutes a comparison (by percentage) of deaths with regard to gender – in water.

Tab. 3

The percentage share (rounded up to the nearest unit) of deaths in the last five years with gender division and reference to the suicide method.

Total number of suicide deaths			Number of suicide deaths – drowning		
Year	Number of women	Number of men	year	Number of women	Number of men
2010	570	3517	2008	48	43
	14%	86%		53%	47%
2011	555	3294	2009	46	62
	14%	86%		42%	58%
2012	608	3569	2010	33	55
	15%	85%		38%	62%
2013	905	5196	2011	49	51
	15%	85%		49%	51%
2014	928	5237	2012	42	63
	15%	85%		40%	60%
The average for years 2010-2014			The average for years 2008-2012		
14,6%			44,4%		
85,4%			55,6%		

The following conclusions may be drawn while analysing the data contained in all three tables:

1. Women take their own life much rarer than men (out of 100 suicidal deaths only approximately 15 concern women and 85 – men).
2. The percentage share of suicides among men and women in total number of all suicides in the period of 5 years remains at a nearly identical level (14-15% of women and 85-86% of men).
3. In the total number of suicidal deaths by drowning, women make up nearly half of the cases (in the analysed period between 2008-2012 from 38 to 53%, which gives the average of 44.4%).

## CONCLUSION

Due to a lack of certainty whether a victim committed suicide or their death was a result of an unfortunate incident or homicide, the data presented in the material are certainly not complete. Similarly, as not all motives are known and described.

Suicide is the third most common cause of death among adolescents in the United States after unintentional injuries and homicide [20]. The percentage of suicides among young people in the United States tripled over several decades of the 20th century [21].

In western societies, the probability that a man will commit suicide is three times higher as compared to the probability of a woman taking her own life. The number changes depending on age, however the risk is usually higher in the case of men [22].

In England and Wales men commit suicide four times more often than women [23], whereas individuals with dementia choose drowning as the second (after poison consumption) method of taking their own life [24].

Among all English suicides at an older age, death in water occupies the third position [25].

Taking one's own life in a water environment seems very unobvious. The victim retains consciousness – its loss occurs after 2-3 minutes [10]. At that time defence mechanisms occur/activate in a drowning person (a phase known as the period of conscious resistance).

Why do women, who in the general statistical portrait commit suicide significantly more seldom than men – decide to die in water? None of the authors of the analysed publications provides an answer to this question. In the cases of unintentional drownings, 6-10 times fewer women than men lose their lives. Hence, we may adopt an assumption that due to weaker swimming skills women choose the water environment as the certain place (guaranteeing the effectiveness) of suicidal death. Such a choice may also find justification in the following facts:

1. it is bloodless,
2. it does not require possession of any devices (e.g. weapon),
3. it does not involve any costs,
4. it is commonly accessible.

Thus, we may assume that choosing water as a place of suicide is involved with an emotional decision on taking one's own life. Women may decide on such a resolution under some sort of a sudden stimulus (quarrel, breaking up of a relationship, information of pregnancy, etc.). When men plan this desperate move – they do so in a certain advance, by planning and preparing proper tools and circumstances.

If we wished to characterise a "typical Polish suicide" in a single sentence, we would write: a married man with elementary to upper-secondary education, aged between 35-55 years, taking his life by hanging himself due to a mental illness, family disagreements, heartbreak or economic conditions, under the influence of alcohol or other substances, at home or in its proximity.

Suicide prevention is a complex process. It requires specialised training, experience, knowledge, patience and courage [26].

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**Iwona Michniewicz**

The President Stanisław Wojciechowski State Higher Vocational School  
62-800 Kalisz, ul. Nowy Świat 4,  
501 655 518