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Strategies for Drowning Prevention on the Example of Selected European Countries

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Abstract:

Purpose: The purpose of the article is to present the necessity of the development and scope of the main objectives of drowning prevention strategies using the examples of the United Kingdom (England, Wales and Scotland) and Ireland.

Design/Methodology/Approach: The analysis refers to two case studies - drowning prevention efforts in the UK (England, Wales and Scotland) and Ireland. Available documents were reviewed and analyzed. The article is of a review nature.

Findings: The author conducted a case study and pointed out the importance of developing policy documents in each country. She found that the basis of drowning prevention in selected countries can be regulated by a national drowning prevention strategy created based on the recommendations and specifics of the society and water area. It can be a key document influencing the development of detailed procedures to minimize drownings.

Practical Implications: The conducted research indicates that the development of strategic documents in the analyzed countries is the starting point for comprehensive prevention of the number of drownings. This document should be a strategy that includes a detailed and reliable analysis of the baseline situation made on the basis of accurate data on drownings and the effectiveness and coverage of existing prevention programs.

Originality/Value: The article presents the results of own case study research. The issue presented has not previously been addressed in discussions published internationally.

Keywords: Public health, strategy, drowning, public tasks, regional strategy, case study.

JEL codes: 1120, 1180.

Paper type: Case study.

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1. Introduction

Addressing the issue of security, it should be noted that the maintenance of public safety is one of the oldest, if not the oldest, public task, but also the responsibility of the individual. The sense of security is one of the basic human needs, which is a continuous social process that depends on many factors. The purpose of this process is to satisfy man's needs for survival, security, protection and quality of life.

Regardless of the place of residence, material status, level of education, the sense of threat or sense of security has a direct impact on the human psyche and its subjective feelings (internal sense of security) and objective feelings (actual absence of threats). The issues of civil protection, prevention of the occurrence of incidents and ensuring security are of interest to various circles - from rescue entities and local governments, to economists, scientists, lawyers and educators (BBN, 2014).

The purpose of this article is to indicate the necessity and scope of the main principles of drowning prevention strategies using the examples of the United Kingdom (England, Wales and Scotland) and Ireland.

2. Literature Review

Drowning is defined as "the process of experiencing impaired breathing as a result of immersion in a liquid; outcomes are classified as death (fatal), morbidity (non-fatal) and non-morbidity" (ILSE, 2023). Drowning is a serious problem, accounting for the third most common cause of accidental death worldwide.

Worldwide summaries of drowning incident mortality reported by the World Health Organization (WHO). They flow from national drowning registries assesult of annual reporting of fatal incidents. They indicate that approximately 372,000 people die in the water each year worldwide (WHO, 2019).

In light of the issue raised and such a high number of drownings worldwide, the United Nations (hereafter UN) adopted the first-ever Resolution on Global Drowning Prevention (A/75/L.76) at the 75th session of the United Nations General Assembly on April 28, 2021. This is a historic occasion and a sign that the UN is deeply concerned about the fact that drowning has been responsible for so many preventable deaths over the past decade. It indicates that ensuring the safety of people in water areas is a key task of regional policy around the world, as water accidents are one of the most common causes of accidental injury or loss of life.

The article reviews drowning prevention strategies in countries that are members

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of the UN and the International Lifesaving Federation (ILS). Proposed strategic actions were reviewed. The impact of the proposed strategic changes on drowning reduction was then considered.

Drowning can be prevented, among other things, by taking the measures outlined in the recommendations presented later in this article and, in particular, including: teaching swimming skills, learning and improving cardiopulmonary resuscitation skills, conducting rescue training, flood risk management, and developing national drowning prevention programs - in line with the guidelines of the World Health Organization (World Health Organization hereafter WHO) and the International Lifesaving Federation (ILS) (A/75/L.76).

As an emphasis, the Resolution, signed by 81 member states - including Poland, declared July 25 each year as World Drowning Prevention Day. The aim of the resolution is to guide stakeholders to take coordinated, multi-sectoral action to raise awareness of ways to prevent drowning and to improve the safety of people staying and actively spending time in water areas.

The main recommendations of the resolution are:

- 1. To designate a national drowning prevention focal point. Develop a national drowning prevention plan.
- 2. Develop drowning prevention programs in line with World Health Organization (WHO) recommendations (barriers, surveillance, swimming skills, rescue and CPR training, boating regulations, and flood risk management regulations).
- 3. Determine how to effectively enforce water safety regulations in all sectors, particularly health, education and transportation.
- 4. Maintain statistics, including the inclusion of drowning in population and health registries and the collection of all data on drowning deaths.
- 5. Promote public awareness of drowning prevention through public campaigns to influence behavior change..
- 6. Encourage the integration of drowning prevention into existing disaster risk reduction programs (especially in flood-prone communities).
- 7. Promote international cooperation through the exchange of lessons learned and best practices.
- 8. Promote research and development of innovative tools and technologies to prevent drowning and build capacity through international cooperation.
- 9. Consider introducing water safety, swimming and first aid lessons as part of school curricula.

Therefore, in this work, the drowning prevention models of UN member countries and ILS based on drowning statistics in selected countries that share their experience in preventing the number of drownings are taken under consideration. The research work provides for consideration of the strategic assumptions made in the British and Irish context.

3. Results - British Context and Irish Context

Historically, water and swimming safety promotion has been undertaken by a number of independent institutions and volunteer associations. There is no entity established by law or government department tasked with providing services on behalf of the government in promoting water and swimming safety.

Following a government review on water safety, the National Water Safety Forum (NWSF) was established in 2004. It is an umbrella body that brings together a number of pre-existing national groups promoting water safety in the UK, including expert organizations such as the Royal Society for the Prevention of Accidents, RNLI, Royal Life Saving Society, Canal & River Trust, British Sub-Aqua Club, British Swimming, Chief Fire Officers Association and many others.

The ambition was to create a "single contact center" for drowning prevention, promoting water safety in the UK. The National Water Safety Forum's coordination group consists of: Independent Chair, HM Maritime and Coastguard Agency, Royal National Rescue Authority, Royal Society for the Prevention of Accidents, Inland Waters Advisory Group, Public Health Representative, Recreation Advisory Group, Coastal Group. Communications, Independent person/proxy, National Council of Chief Fire Officers, Royal Rescue Society UK, Coastal Target Group, Swimming Advisory Group, Evidence, Data and Knowledge Group, Suicide Prevention Theme Group, SAR representative, Reference members Water Safety Scotland, Water Safety Wales, Northern Ireland Group.

3.1 United Kingdom - Drownings and Strategy

Initially, the main goal was to combine the 3 different systems used to collect drowning statistics and create a single database that would be trusted by all the bodies that create and use it. This database was named WAID (Water Incident Database) and has been collecting information on fatalities and all water-related incidents in the UK since 2007.

By 2014, the NWSF was engaging 100 organizations in the UK to bring a holistic and targeted approach to reducing drowning and promoting water safety. Following the 2014 WHO report on drowning, NWSF was asked by the UK government to coordinate the development of a national drowning strategy. The average number of drowning deaths between 2004 and 2013 was 393 per year.

In 2016, the NWSF published the UK's first drowning prevention strategy,

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through which the goal was to achieve a 50% reduction in accidental drowning fatalities in the UK by 2026 and to reduce risk among the highest-risk populations, groups and communities. The strategy's vision is to reduce accidental drowning fatalities in the UK by 50% by 2026 and to reduce risk among the highest risk populations, groups and communities.

UK 2016 - 2026 Drowning Prevention Strategy - priority goals include:

- Every child should have the opportunity to learn to swim and be provided with water safety education at elementary school (children ages 5 to 11) and if needed at key stage 3 (children ages 11 to 14).
- Every community with water hazards should have a risk assessment and water safety plan at the community level.
- Better understanding of water-related self-harm.
- Increased awareness of everyday dangers in, on and around water.
- All organizations involved in recreational activities should have a clear strategic risk assessment and plans that address key hazards.

UK 2016 - 2026 Drowning Prevention Strategy - progress towards the goals includes the following activities:

- Every child should have the opportunity for swimming lessons and water safety education.
- Review of swimming lessons and water safety education completed and submitted to UK government. A mandatory part of the elementary school curriculum in England, Wales and Northern Ireland, implemented in 27 of Scotland's 31 local authorities.
- Every community with water risks should have a community-level risk assessment and water safety plan.

Wales and Scotland have developed their own drowning prevention strategies.

- Work undertaken using WAID data to identify high rate sites (measured by incidence).
- Workshops led by RoSPA/ RNLI in 2019 and another ROSPA water safety conference in 2023.
- In 2020, RLNI launched a new Local Ambassador program to get local coastal businesses to deliver safety messages. Volunteers receive basic training and resources including key water safety messages to share through social media channels and posters to display.

All recreational activity organizations should have a clear strategic risk assessment and plans that address key risks.

Many NWSF members have conducted risk assessment activities and developed action plans to address risks and/or issues raised.

In November 2021, RoSPA published a report on local authorities' approaches to water safety management in the UK. Responses were received from 25% of local authorities, suggesting that 74% of respondents were aware of the UK's drowning prevention strategy, but leaving questions on the majority.

3.2 Irish Context

A cross-sectional survey of the Irish public diagnosed the following problems. 58% of Irish people surveyed are not comfortable swimming or don't know how. 26% describe swimming as an unnecessary life skill. 32% of respondents never swim. 55% responded that "at least one of my children can't swim." 58% said they have poor knowledge of water safety. This assessment of the situation has led to the creation of directions for a 10-year strategy to prevent drowning in Ireland. The key pillars of the plan are:

- Education, which aims to ensure that every child in Ireland has the opportunity to learn basic water safety skills in both primary and secondary schools.
- Awareness, meaning paying attention to all aspects of drowning prevention at both the national and community levels.
- Training, is understood by increasing the number of trained experts in: community water safety, Rescue Boat, Lifeguarding Pool Safety and Swim Instruction.
- Interventions, by emphasizing the promotion, maintenance and improvement of public drowning prevention equipment and environments.

Events, by encouraging all volunteers and stakeholders to take ownership of the Irish National Drowning Prevention Plan and play their part in its implementation.

4. Discussion

It is the duty of the state's governing bodies to provide conditions for development, protect against hazards and ensure safety, including, in particular, protection against threats to the life and health of its residents (Telak, 2018).

Drownings do not have a single cause or one way to prevent and solve the problem. But they can be prevented (WHO, 2023). One way to do this is to have water competencies, which are key in the context of drowning prevention. The indicated competencies are the sum total of all personal water movements that help prevent drowning, as well as related water safety knowledge, attitudes,

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values, judgments and behaviors that facilitate safety in, on and around the water Moran (2013).

Surf life saving New Zealand, at the 2019 World Conference on Drowning Prevention (WCDP) in Durban, presented research on the types of actions taken by lifeguards. The results show a clear preference for preventive actions (99.8%) over typical rescue actions (0.1%) related to equipment rescue, searching and securing the victim, and providing appropriate care (0.2%), such as performing CPR (cardiopulmonary resuscitation) (Szpilman, 2014).

5. Conclusions

Based on the analysis of drowning prevention activities in selected countries, it can be concluded that a national drowning prevention strategy created on the basis of recommendations and the specifics of society and the water area can be a factor in minimizing the number of drownings. It should begin with a thorough analysis of the situation based on accurate data of drownings, effectiveness and coverage of existing prevention programs.

Both the strategy and the prevention law should be based on European and national laws (Law, 2011), involving employers, operators, manufacturers, education and training in their development. It is essential that the national water safety plan be guided by a steering council, and should include representatives of water safety NGOs.

In terms of informing the public, it is necessary to:

- Pay special attention to the use of standardized flags and signage in accordance with ISO standards.
- Standardize ILS information boards for beach access points.
- Implement the dissemination of public information via television and radio stations in the event of storms, floods or other emergencies.
- Inform the public about governmental and non-governmental activities for civil protection and disaster prevention.
- Allow public access to the websites of rescue or swimming federations and clubs.

Risk estimation awareness-building programs for target groups should be implemented. Such programs should include information on water safety and proper behavior related to age/social groups (preschools, elementary school, secondary schools, parents, teachers, swimming teachers) and proper behavior during water activities (surfing, windsurfing, kayaking, rowing, sailing, fishing, open water swimming, lifeguarding) (WHO, 2020). In terms of social skills and competencies, it is recommended to implement training lessons for target groups. Suggested solutions are age-appropriate swimming courses (children, adults), swimming lessons for certain social groups (migrants, people with disabilities, women, religious groups, tourists in certain languages).

References:

- Adamczyk, M. 2020. Rola i efektywność projektów profilaktycznych w strategii poprawy bezpieczeństwa osób na terenie województwa zachodniopomorskiego W: Aspekty rozwoju regionalnego: czynniki, instrumenty, zarządzanie / pod redakcją naukową Grażyny Rosy i Agnieszki Smalec; (autorzy Małgorzata Gorzałczyńska-Koczkodaj, Rafał Koczkodaj, Urszula Chrąchol-Barczyk, Igor Kavetskyy, Joanna Wierzowiecka, Sara Kuraj, Maria Adamczyk, Agnieszka Rak, Marzena Wanagos, Maria Adamczyk). - Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Biuro Bezpieczeństwa Narodowego, Strategia Bezpieczeństwa Narodowego Rzeczypospolitej Polskiej (National Security Strategy of the Republic of Poland). 2014. Warszawa. Available online: https://www.bbn.gov.pl/ftp/SBN%20RP.pdf.
- Constitution of the Republic of Poland, the Act of April 2, 1997 (Journal of Laws No. 78, item 483).
- OECD Regional Outlook 2016: Productive Regions for Inclusive Societies. Available online: https://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-regional-outlook-2016 9789264260245-en.
- Rezolucja ONZ 75. Zgromadzenie Ogólne ONZ, A/75/L.76, Available online: https://documents-dds-

ny.un.org/doc/UNDOC/LTD/N21/091/81/PDF/N2109181.pdf?OpenElement.

- Szpilman, D., Tipton, M., Wooler, A. 2016. The Science of Beach Lifeguarding. CRC Press, 294 pages, ISBN 1482245981.
- Szpilman, D., Webber, J., Quan, L., Bierens, J., Morizot-Leite, L., Langendorfer, S.J., ... Lofgren, B. 2014. Creating a drowning chain of survival. Resuscitation, 85(9), 1149-1152.
- Telak, J., Telak O. 2018. Bezpieczeństwo na polskich śródlądowych obszarach wodnych współczesne uwarunkowania. Przedsiębiorczość i zarządzanie, T. 19, z. 8, cz.
 2. Bezpieczeństwo i zagrożenia kryzysowe. Źródła i rodzaje zagrożeń bezpieczeństwa publicznego, 247-259. Wyd, SAN.
- Ustawa z dnia 18 sierpnia 2011 r. o bezpieczeństwie osób przebywających na obszarach wodnych (Act of 18 August 2011 on the safety of people staying in water areas Journal of Laws of 2011, No. 208, item 1240).
- Ustawa z dnia 8 września 2006 r. o Państwowym Ratownictwie Medycznym (Act of September 8, 2006 on the State Medical Rescue, Journal of Laws No. 2019 item 993).
- Utonięcia. Available online: https://statystyka.policja.pl/st/wybrane-statystyki/utoniecia.
- Water Safety Scotland. 2022. Interim Review. Scotland's Drowning Prevention Strategy (Strategia zapobiegania utonięciom w Szkocji) 2018-2026.
- World Health Organization. Global report on drowning: preventing a leading killer. Available online:

https://www.who.int/violence_injury_prevention/global_report_drowning/en/.

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- World Health Organization. Preventing drowning: an implementation guide. Available online: https://www.who.int/publications/i/item/preventing-drowning-an-implementation-guide.
- World Health Organization. 2023. World Drowning Prevention Day. Available online: https://www.who.int/campaigns /world-drowning-prevention-day/.