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Poster Presentations

Swimming pool drownings and near-drownings in Italy: data derived from the public press for the years 2008-2011.

Emanuele Ferretti¹, Marina Torre², Stefania De Angelis¹, Giancarlo Donati¹.

¹ Unit of Inland water hygiene, Department of Environment and Primary Prevention, Istituto Superiore di Sanità Rome, Italy.

² Bureau of statistics , National Centre for Epidemiology, Surveillance and Health Promotion, Istituto Superiore di Sanità, Rome, Italy.

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Abstract

According to the World Health Organization, drowning is a major cause of death, the third leading cause of death in children aged 1–5 years and the leading cause of mortality due to injury. The mortality rates in male children are almost twice as high as those in female children; not all drowning are related to recreational water use, and the percentage that is attributable to swimming pools and similar environments is likely to vary from country to country.

Materials and methods

To analyse accidents occurring in swimming pools, Italian newspaper and websites were browsed for the period 1/1/2008 – 31/12/2011. A search was performed using the web-search engine Google and the keywords “Drowning” and “Near-drowning”. On the basis of the collected information, the recorded events were split up for geographical location of the sport facility, age and gender of the injured subject, cause of the event and assistance received. Chi-square test was used to compare data by gender. The analyses were performed using the statistical software STATA 9.2.

Results

Data on 154 events were collected corresponding to an average of about 38 events/year. 70% of accidents were related to children aged 0-15 years.

Our results confirms a higher incidence (94%) in summer, however this might be due not only to the higher number of people attending the swimming pools in that season, but also to the higher sensibility of the media in such period for this type of events. The same can be applied when the geographical area is considered: the higher number of events occurred in the North can be related both to a greater diffusion of swimming pools in these regions and to a higher sensibility of the media of these regions to the matter.

In agreement with the international literature, males are more likely to drown than females. This is generally attributed to higher exposure to the aquatic environment and to a higher consumption of alcohol (leading to decreased ability to cope and impaired judgment) and their inclination towards higher risk-taking activity.

The “≤4” and “5-15” age classes are those at highest risk because of their lower ability in swimming (baby) and of their tendency to behave inappropriately (children). This result reflect what reported by international literature.

Most of the accidents that didn't receive any kind of assistance (64%) occurred in domestic pools where the highest mortality rate (44%) was measured. For this kind of pools lifeguard assistance was never provided.

Conclusions

In most of the developed countries, drowning is the second or third cause of accidental death for children aged < 15 followed by road accidents and fires.

Currently, people attending swimming pools in Italy account for about 5 million. Swimming is one of the most performed sports by children. Our analysis highlights the severity of the drowning and near drowning problem occurring in swimming pools in Italy. Most of drowning involve children aged <15 and are a public health problem that might be prevented if correct strategies would be adopted by decision-makers.

This is the first study performed in Italy that analyses data relevant to drowning occurred in swimming pools and stratifies them for place and month of occurrence, age and gender of the subjects involved as well as cause leading to the accident.

Aim of this study is to highlight the need to define guidelines and rules that improve the swimmers' safety.