

Keeping the Safety Messages Simple: The International Task Force on Open-Water Recreational Drowning Prevention

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Globally, many organizations addressed the risk of drowning associated with aquatic recreation by promoting a plethora of drowning prevention messages. Preliminary discussion among drowning prevention advocates suggested that messages could be contained within simplified generic messages applicable to all settings. Using a modified Delphi technique to harness expert opinion, the Task Force finally agreed on 16 key messages that would foster open water drowning prevention. Messages were categorized into 'Care of self' and on the 'Care of others'. Learning swimming and water safety survival skills was the dominant message in both categories. It is hoped that by providing simple and consistent prioritised safety messages that are applicable to a range of communities and settings, the ultimate goal of saving lives will be achieved.

Introduction

Drowning as a consequence of aquatic recreation is a significant cause of unintentional death worldwide. In many countries, aquatic recreation is an integral part of the lifestyle, especially where there is easy access to a wide range of water environments such as beaches, rivers, lakes, and other waterways. In many countries, the highest proportion of drowning deaths occurs in open waters.

Globally, many organizations have attempted to address the risk of drowning associated with aquatic recreation in open water by promoting a diverse plethora of drowning prevention messages. This diversity reflects the multifaceted nature of the drowning problem and has invariably resulted in specific water safety advice relative to particular environments (such as surf beaches or rivers) or specific activities (such as swimming or surfing). International and national organizations have disseminated information and advice on a wide range of water safety issues. Other organisations have developed expertise in, and engaged in the promotion of, specific aspects of water safety (such as Surf Life Saving Australia for surf safety or New Zealand Coastguard for boat safety), while others have focused on particular at-risk groups (such as Safe Kids, for children).

While site-, activity-, and group-specific water safety messages are valued components of any targeted promotion, their multiplicity has the potential to obfuscate or dilute critical messages or confuse intended recipients. Our purpose was to establish simplified water safety guidelines to prevent open water recreational drowning.

Method

The process of developing generic open water drowning prevention messages started with the Washington State Drowning Prevention Network. It met to develop water safety messaging for recreational open water settings for parents and families, focused on in-water activity (such as swimming and playing in water) rather than aquatic sports (such as fishing or diving) or water craft-related activity (such as boating or surfing). A brainstorming workshop during the World Water Safety Conference 2007 in Oporto, Portugal added to the initial list of messages and identified the need to base the process on drowning experts' recommended best practices. Eighteen drowning prevention advocates from 16 countries were both invited and agreed to participate in a Task Force to develop and prioritize open water safety messages.

From initial rounds of teleconferencing among Task Force members, a list of 65 and 66 water safety messages respectively was compiled into two categories: 'Care of Self' and 'Care of Others'. Using a modified Delphi technique to distill the opinions of experts, Task Force members rated the messages by assigning a total of 100 points to messages in each category. After the first round, points were totaled and only the top 50% of messages were retained in each category. Messages were reviewed and refined by the group. The second round, using the same scoring point system, identified the top remaining 50% of messages.

Two subsequent rounds of voting occurred to approve the wording, combine or delete messages due to lack of supporting information. Final messages had to receive at least 80% approval by Task Force members. Finally, a brief reader friendly rationale was developed for each message based on content developed during the message generation process (available at: www.drowning-prevention.org).

Results

A total of eight messages for each category—‘*Care for Self*’ and ‘*Care for Others*’—was ultimately approved (Tables 1 and 2).

Table 1: Open-water Drowning Prevention: ‘*Care of Self*’

Key Messages

1. Learn swimming and water survival skills
2. Always swim with others
3. Obey all safety signs and warning flags
4. Never go in the water after drinking alcohol
5. Know how and when to use a life jacket
6. Swim in areas with lifeguards
7. Know the weather and water conditions before getting in the water
8. Always enter shallow and unknown water feet first

Table 1 shows, in descending order of priority, the designated eight most important messages related to ‘*Care of Self*’ during recreation in open water environments. Learning swimming and water safety survival skills was seen as paramount in keeping one’s self safe. Another three messages were well supported by Task Force members: always swim with others, obey all safety signs and warning flags, and never go in the water after drinking alcohol.

Table 2 shows that, as was the case with ‘*Care of Self*’ messages, the learning of swimming and water safety survival skills was again the dominant message to prevent drowning when caring for others. Other messages receiving strong support in the ‘*Care of Others*’ category related to safe supervision and included the need to swim under lifeguard supervision, to set and follow rules. These reflected the need for general awareness about water safety and thoughtful preparation prior to arrival at the recreational site.

Table 2: Open-water Drowning Prevention: ‘*Care of Others*’

Key Messages

1. Help and encourage others, especially children, to learn swimming and water safety survival skills
2. Swim in areas with lifeguards
3. Set water safety rules
4. Always provide close and constant attention to children you are supervising in or near water
5. Know how and when to use a life jacket, especially with children and weak swimmers
6. Learn first aid and CPR
7. Learn safe ways of rescuing others without putting yourself in danger
8. Obey all safety signs and warning flags

Discussion

From an original database containing over 60 messages related to ‘*Care of Self*’ and ‘*Care of Others*’ during swimming-related, open water recreation, the Task Force members agreed on 16 key messages they believed would prevent drowning. Task Force members had long standing drowning prevention experience, were mostly surf/beach based and lifeguard/rescue based, and from primarily high income countries. Thus, another group of experts might develop different prevention messages. Furthermore, while the recommendations may represent best practice they are not entirely evidence based. The lack of strong evidence for many recommendations serves as a research mandate for prevention of open water drowning.

While learning swimming and water safety survival skills was the dominant message in both ‘*Care of Self*’ and ‘*Care of Others*’ categories, the Task Force reiterated that swimming ability alone is no guarantee of safety. They recognized that learning to swim in a pool or calm water setting does not fully prepare swimmers for open waters such lakes, rivers or beaches; even good swimmers can encounter life-threatening problems. Task Force members agreed that water safety is more than just swimming competency; it is also about having the knowledge and attitudes to be safe in and around water. It was further reasoned that encouraging others, especially children, to learn swimming and water safety survival skills is a prime responsibility, especially for parents and caregivers.

Another strongly supported message in both ‘*Care of Self*’ and ‘*Care of Others*’ categories related to swimming with lifeguard supervision. While recognizing that no water is ever completely free from risk and the lack of strong evidence of the efficacy of lifeguard supervision in drowning prevention, Task Force members agreed that lifeguards promote safe behavior around the water and prevent drowning by providing rescue and medical assistance. Furthermore, the Task Force recommended them as a resource of safety advice before people enter the water. This and other messages focused on making informed decisions about one’s safety.

Importantly, the messages provided a more expanded definition of adequate supervision. Not only do the messages recommend that those supervising should have before-hand knowledge of an open water recreational site and use its resources (lifeguards and signage), but that supervisors should provide close, constant, and undistracted supervision even when a lifeguard is present. Moreover, the supervisor should have the skills to safely respond to someone in distress in the water.

The only technology recommended was the use of approved lifejackets. Traditionally associated with boating and land-based fishing safety, lifejackets were deemed valuable in open water swimming activities especially for children, weak, or unsure swimmers. Open water fencing was not considered as this would be the responsibility of an organization vs an individual.

While our goal was to develop widely usable messages, lack of universally agreed terminology and language constraints limit their meaning. We anticipate that various cultures and languages will need to interpret the recommendations with caution. Hopefully the generic water safety messages provide a comprehensive, concise and universal framework for communicating open water drowning prevention messages at an international, national, regional, and community level.

Conclusion

The recommendations have established informed, consistent, and concise messages that promote safe recreational use of open water. It is hoped that they will improve the clarity of communication between drowning prevention organizations and the public they serve as well as provide a framework for safety messaging that is applicable to a range of communities and settings with the ultimate goal of saving lives.

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