World Conference on Drowning Prevention (WCDP) – Vancouver – Canada – 17-19 October 2017

“You can lead a horse to water, but you can't make it drink” - Drowning risk perception table, a way to claim for more attention to the general public

Theme conference: Prevention (research)

Drowning is a major public health problem in Brazil where 17 people die daily. Freshwater venues are responsible for 75% of all deaths. The extensive hydrographic network used all year round mainly to daily basis activities such as transportation and work expose population to one of the highest rates of drowning deaths in the world.

Preventive education is key to reduce drowning, but “you can lead a horse to water, but you can't make it drink”. So, the major challenge to reduce drowning is convincing people that it can happen to anyone, so they are eager to learn about and adopt preventive behaviors.

This work aims to call peoples´s attention for the possibility that everyone can drown if the enviromment overhelmed thir ability/skills to cope with the event. Hopefully people will change their risk perception and behaviors to look for prevention and avoid drowning.

Metodology

Experts on drowning and swimming education gathered and discussed at two meetings, aiming to pinpoint the critical factors affecting the risk of drowning. This task force was the basis to build a table that could easily impact the general public to the possibility of drowning and it’s most important factors including the swmimng skills, water float ability, the risk analysis and rescue training, and different aquatic scenarios.

Result

The risk perception involves essentially 4 topics.

1. **Swimming skills** - stratified into 4 levels (I-low to IV-high) based on yes or no: water adaptation, swim one stroke, swim more than one stroke, swim 4 strokes.

2. **Water float and respiratory control ability** - stratified into 3 levels: No water float, basic floating (ability to float vertically), and advanced floating (ability to float vertically and in dorsal position and respiratory control).
3. **Drowning risk perception and rescue training** – yes/no.
4. **Aquatic scenarios** - stratified into 3 levels: Swimming pool, lakes and dams, and rivers/beaches.

Considering all 4 factors described, a drowning risk level was attributed and colors associated: High(red), medium(yellow) and low(green).

Discussion

A "drowning risk perception table" has a number of variables. Authors focused on making it as simple and visual as possible to reach the lay public. All variables that didn't affect much the public perception were left out. Aquatic scenarios for example, could be further stratified and explored, e.g.: rivers with strong flow vs slow flow, but this would only divert public's attention from the main topic. The main goal was to easily depict that for example, a person can have a low risk at the pool, medium risk at lakes and still have high risk at the beaches and rivers. The risk table is calling attention to the fact that everyone can drown, even a proficient swimmer, so, it's crutial to be aware of prevention tips for each scenario. Future studies need to be conducted to test this model, including a larger number of stratification levels for a more accurate risk level calculation.

The full table will be presented at the conference.

DROWNING risk table

Learn how to swim – be aware of the risks – keep your limits!

David Szpilman (SOBRASA), Ana Maria Gaino Pinheiro (MGB) e Sandra Rossi Madormo (INATI)

Levels	Definition	Risk		
		Pool	Dam & Lakes	River & Beach
I	Swimmer or water athlete – Swim 4 strokes and has risk analysis and rescue training	Low	Low	Low
II	Swimmer or water athlete – Swim 4 strokes	Low	Medium	Medium
III	Swim more than one style and have advanced floating skills(1)	Low	Medium	High
IV	Water basic floating skills(2)	Medium	High	High
V	NO water basic floating skills	High	High	High

Notes: (1) Float vertically and at the backs and submersion respiratory control; (2) Float vertically. The drowning risk table is a simplify way to tell the public what are the level of their risk in different water scenarios. Variables to be considered are: swimming skills, basic and advanced floating ability, the risk analysis and rescue training to help him and others in water trouble, and different aquatic scenarios. Beaches, rivers, pools, and other scenarios has different risks and hazards demanding specifics skills, knowledge and training. I.e.: A person level III can have LOW RISK in pools, MEDIUM at Dams, and still HIGH risk at beaches.

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