

## **Systemic drowning prevention: A theoretical framework for the development of evidence-based regulations, interventions and decisions in the public and policy-making domain**

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Background: Drowning is a multifactorial, systemic issue. In order to enable evidence-based, widely justifiable decisions and policies, an overarching theoretical framework is necessary that is capable of describing the complexity of this issue. This serves two purposes: Firstly, to be able to define and consistently use terminology, and secondly to have a common toolbox that can capture and deal with all the various aspects of drowning prevention. Furthermore, a theoretical framework may help to identify parallels and overlaps to other prevention fields.

Methods: We describe a systemic drowning prevention framework based on the main tenets of Luhmann's systemic theory [1, 2]. With respect to four different levels from which drowning prevention can be viewed (i.e., population level, impact factors level, target systems level and methods level), theory-driven methods are derived for acquiring information, potential challenges are flagged and an outline is provided how the application of this theory can be combined with a process of evidence-based practice.

Conclusions: This framework presents, in an organized manner, the basic principles which a practitioner or governing body might use to reach a decision about evidence-based drowning prevention actions. The framework does not provide specific solutions to problems. It is there to help a person or provider understand the complexity of their problem and encourage them to see and address the problem on each level (or, if not, to make an informed decision not to do so).

### **References**

1. Luhmann, N. (1995). Social Systems. Translated by J. Bednarz, Jr. with D. Baecker. Stanford, California: Stanford University Press.
2. Hafen, M. (2005). Systemische Prävention. Grundlagen einer Theorie präventiver Massnahmen. Carl Auer. Heidelberg.