Health-Related Warning Message Processing ⓐ

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Summary and Keywords

Warnings are risk communication messages that can appear in a variety of situations within the healthcare context. Potential target audiences for warnings can be very diverse and may include health professionals such as physicians or nurses as well as members of the public. In general, warnings serve three distinct purposes. First, warnings are used to improve health and safety by reducing the likelihood of events that might result in personal injury, disease, death, or property damage. Second, they are used to communicate important safety-related information. In general, warnings likely to be effective should include a description of the hazard, instructions on how to avoid the hazard, and an indication of the severity of consequences that might occur as a result of not complying with the warning. Third, warnings are used to promote safe behavior and reduce unsafe behavior. Various regulatory agencies within the United States and around the globe may take an active role in determining the content and formatting of warnings.

The Communication-Human Information Processing (C-HIP) model was developed to describe the processes involved in how people interact with warnings and other information. This framework employs the basic stages of a simple communication model such that a warning message is sent from one entity (source) through some channel(s) to another (receiver). Once warning information is delivered to the receiver, processing may be initiated, and if not impeded, will continue through several stages including attention switch, attention maintenance, comprehension and memory, beliefs and attitudes, and motivation, possibly ending in compliance behavior. Examples of health-related warnings are presented to illustrate concepts. Methods for developing and evaluating warnings such as heuristic evaluation, iterative design and testing, comprehension, and response times are described.

Keywords: human factors, safety, warnings, risk communication, cognition, perception, decision-making, motivation, beliefs, design, C-HIP model