

layout, clarity, accuracy, and relevance were all rated high; and a vast majority (85%) considered the GBR “highly valuable” for prioritising, developing, and monitoring burn prevention programs.

Conclusions The GBR was shown to be simple, flexible, and acceptable to users. Enhanced regional and global understanding of burn epidemiology may help prioritise the selection, development, and testing of primary prevention interventions for burns in resource-limited settings.

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WHAT INFLUENCES PARENTS OF CHILDREN UNDER 5 YEARS OF AGE TO TAKE SAFETY MEASURES

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Background Children under 5 years of age are at high risk for sustaining burn injuries. In the Netherlands, 26.8% of the patients with burn injuries who require admission to a burn centre, are under 5 years of age. Most burns in children under 5 years of age are scalds. The majority of scalds can be prevented when appropriate measures are applied. To apply these measures, parents must know about the risks of scalding, the ability to perform precautionary measures and parents must be willing to perform these measures. The aim of this study was to identify the underlying determinants that influence the desired behaviour

Methods Parents of children under 5 years of age, recruited by a Facebook advertisement, completed an internet survey. The questions in the survey described 9 measures, that are effective to prevent the most common causes of scalds. The parents were first asked whether they performed the particular safety measure, after which an explanation of the safety measure was given followed by a question about the parents motivation to perform/not perform this measure. Knowledge and attitude were measured by using a multiple choice question. Other determinants of behaviour were examined by an open-ended question.

Results One of the important outcomes of the survey was that parents think that it is important for a young child to learn to cope with dangerous situations and thereby overestimate the cognitive capacities of children. In addition, parents think that their child is too small to be in danger and do not take into account their sudden development of physical skills. Furthermore, parents overestimate their own ability to keep a constant eye on their child.

Conclusions In order to develop effective prevention interventions, it is necessary to gain insight into the motivation of parents to perform safe or unsafe behaviour formed by the determinants of behaviour. Our outcomes provide a theoretical base for future prevention strategies aimed at the prevention of burn injuries in children.

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PARENTS' RISK PERCEPTION ABOUT CHILDRENS' INJURIES AND BURNS: A MULTIDIMENSIONAL UNFOLDING TECHNIQUE

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Background Unintentional injuries are a significant issue of public health, accounting 60% of infant mortality around the globe. In Mexico, burns are the most frequent injury at home. This research explores parents risk perceptions about children's injuries and burns.

Methods Multidimensional unfolding is a technique that maps ranking data into a low-multidimensional space that allows for a visual comprehension of the data. 28 parents of Guadalajara, Mexico (15 mothers, 13 fathers), were asked to sort three series of cards (adverse events, agents that could cause a burn, and people who take care of a child) by two different criteria: probability and severity. The last series was sorted only by probability.

Results The five perceptual maps have two dimensions, which show two sets of objects each: the subjects (the sample of 28 parents) as numbers, and the objects (either adverse events, agents that could cause a burn or people who take care of a child) as labels. The closer a number is to a label, the more probable or severe the label is considered by that number. Unfolding also permits for sub-dimensions or clusters in the configuration. Parents perceived as more probable to happen: fall, choking, and cut. They did not considered cut and fall as severe. Sun, hot liquids, and hot objects were the most probable agents. None perceived sun, ice, hot objects, smoke, and steam as severe agents. Mother and father were considered the least probable to experience a children's injury.

Conclusions Multidimensional unfolding is an exploratory technique; ideal for research for the first time in Mexico, parents perceived risks or not. For example, smoke was perceived as not probable to cause a burn and ignore as severe. According to the World Health Organisation, burns include the respiratory damage resulting from smoke, being the most frequent cause of death. Parents were omitting important information. This is only the first step, is essential further investigation in this area.

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FAST AND AGILE FIRE EXTINGUISHING METHODS FOR FIRE & RESCUE FIRST RESPONSE

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Background New agile fire extinguishing methods could be used instead of, or in combination with, traditional fire hose method in a number of situations, such as small fires in large buildings (Hospitals, Shopping malls), where the traditional fire hose method is rather slow.

In rural areas the first unit to respond is often a command unit that has neither the crew nor the equipment to carry out the traditional fire hose extinguishing. Provisioning fast and lightweight units with agile and lightweight fire extinguishing methods would speed up the process of getting the help. The improvement in the countryside service level would be obvious.

Methods We surveyed and evaluated new, innovative fire extinguishing methods in order to find out if they are useful as complementary methods. Sometimes these new methods are sufficient as such, but most often best used in combination with the traditional fire hose.

We investigated the usefulness of these methods through standardised burn experiments as well as field tests in actual house fires.

The test setup was based on research of most common causes and sources of house fires based on the statistical data. A comparison was also carried out also from the performance perspective,