
Children's Environmental Health Research Findings
October 2010

Topic: Paraffin (kerosene) poisoning prevention

Title: Paraffin-related injury in low-income South African communities: knowledge, practice and perceived risk

Conclusion: To develop successful paraffin safety interventions, it is necessary to understand baseline levels of knowledge, practice and perceived risk of injury among at-risk populations

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Context: Capetown, South Africa

Abstract: **OBJECTIVE**: To explore what individuals at risk of injury from using paraffin (also known as kerosene) know about paraffin safety, what they do to protect themselves and their families from paraffin-related injury, and how they perceive their risk for such injury. Also, to explore interrelations between these factors and age, sex, education and income. **METHODS**: A sample of 238 individuals was randomly recruited from low-income housing districts near Cape Town, South Africa in 2007. Trained research assistants interviewed participants to explore their knowledge about paraffin-related safety and their perceived risk of injury from using paraffin. Researchers inspected participants' homes to evaluate paraffin safety practices. Descriptive and correlational analyses were conducted. **FINDINGS**: Participants had relatively low levels of knowledge about paraffin-related safety. They had high levels of unsafe practice and their perceived risk of injury was moderate. Knowledge of paraffin safety and safe practices were positively correlated with each other. Greater knowledge showed a negative correlation with the perception of being at risk for injury, but safe practices showed no correlation with perceived risk of injury. Formal education, the number of children in the home and frequency of paraffin use were positively correlated with knowledge but not with safe practices. The only significant correlate to safe practices was greater income, perhaps a reflection of the impact of financial resources on paraffin safety practices. **CONCLUSION**: To develop successful paraffin safety interventions, it is necessary to understand baseline levels of knowledge, practice and perceived risk of injury among at-risk populations. Our findings could be of value for

designing interventions that will increase knowledge, improve safe practices and lead to the accurate perception of the risk of injury from using paraffin.

Policy Implications: Baseline knowledge is low. Standards for safe packaging of paraffin may help prevent child poisonings.

Keywords: kerosene, poisoning