SPLINTERS & FRAGMENTS

Determinants of parent and child safety behaviour

Just how do parents teach safety behaviour and how do children learn it? Why do they have differing perceptions of what is safe and unsafe? And what do parents base their teaching on? A Swedish study of the safety behaviours of 870 mothers of children aged 3, 4 and 9 years, found that they derived safety behaviours from their own relatives and friends, not from child health or school nurses. Part of the problem was that the information given by professionals was "standardised" rather than being tailored to individual family needs. Injury prevention programs need to work much more within the context of families' lives, as many of the community safety programs do, supplemented by strategies to alter social norms in the long term (*Acta Paediatrica* 1996;85:702-7). Another study gleaned information from the maltreatment literature to learn more about the processes of training children in safety, arguing that the limited environmental modification approach to injury prevention does not aid our understanding of how children actually learn to negotiate their world safely. Parents' safety practices and teaching of safety rules to children have been little researched, but supervision, parent-child interactions, and family rules to internalise control in children are all important elements of how children learn self responsibility. A child's ability to recite rules such as "Don't touch, it's hot" does not mean the child has any understanding of the concepts involved. To believe that they do can lead to serious misperceptions about child behaviour (*Behaviour Research and Therapy* 1997;35:179-90).

What is supervision and is it the answer?

We think we know what it means, but rarely is it defined adequately. The "Chicago children's supervision taxonomy" (Accident Analysis and Prevention 1997;29:133-7) goes part of the way to providing an answer. The "supervisor must have both responsibility for the child and the opportunity to interact with the child in a corrective or protective manner", will be familiar to the child, at least 12 years of age or three years older than the child, and can see, hear, and approach the child within the 5 seconds before an injury incident. Applying the taxonomy to 142 cases of childhood pedestrian injury demonstrated that in the 36% of cases where children were being supervised, supervision was less than ideal. Instances included children running ahead or turning back suddenly, being told to cross the road or to run to meet the supervisor, jumping from or into a vehicle being driven by an adult, or the supervisor being distracted by social interaction with their peers. Not surprisingly children don't fare any better on their own, and they're not always prepared to be candid about their experiences either. In a study of injuries and close calls of 60 girls and boys aged 6, 8, and 10 years over two weeks, boys reported more injuries and close calls, were more likely to be with peers at the time, attributed injuries to bad luck and repeated behaviours which had

resulted in injury previously. They were also less likely to tell their parents and to rate injury severity lower than did girls, thus indicating an increased liability for injury among boys (*Journal of Pediatric Psychology* 1997;22:499-502).

Faulty product design may contribute to electrical injuries

Household electrical cords were responsible for the majority of the electrical injuries to 102 children under 12 years of age (*Archives of Pediatric and Adolescent Medicine* 1997;151:696-700), principally from oral contact. Introducing mandatory standards for the cords, and fitting safety switches into home electrical switchboards are viable options. The 42 adolescents (12-18 years) were more frequently exposed to high voltages while climbing trees, telephone and power poles. Fourteen children were injured after inserting objects into wall sockets, but wall socket protectors may not be the answer either. The effectiveness of these devices is questioned by another study (*Perceptual and Motor Skills* 1997;84:387-92) in which all the adults (43) and children (37) could remove one of the models in 9.5 seconds. The other two styles were more difficult to remove but 18% and 31% of 2 year olds and 47% of 4 year olds could remove one or the other. Age recommendations were not provided on the packaging, nor are US standards mandatory. The author points out that using these inadequate products may give parents a false sense of security.

Regulating firearms one way or another

While it may not be possible to regulate the guns, it may be possible to regulate their advertising. This interesting proposal comes from Johns Hopkins' School of Public Health (*JAMA* 1997;277:1391-7). The advertising of firearms to promise home protection, described as "homeowner's insurance" and "self-protection is more than your right... it's your responsibility" (the latter accompanied by a photograph of a mother tucking a young child into bed), may be unlawful, given that the risk of ownership "outweighs the potential benefits of relatively rare opportunities for defensive gun use". The US Federal Trade Commission has the power to prohibit deceptive or unfair advertising.

Home visiting by nurses may reduce injuries

The factors of interest in this RCT were pregnancy outcomes, childhood injuries and ingestions, immunisation, development and behaviour, and repeated childbearing (*JAMA* 1997;278:644-52). Mostly positive outcomes were associated with home visits from nurses in the prenatal period and for two years afterwards. Children from the case group (1139 women with two or more risk characteristics) had fewer "health care encounters" for injuries and ingestions and were admitted to hospital less often, and for fewer days, than controls ($p < .001$). The effects were greater among children of women with few psychological resources, thus the "program diminished risks posed by limited intellectual functioning, psychological distress, and impaired sense of mastery".

JAN SHIELD
Royal Children's Hospital Safety Centre,
Melbourne