Editorial

Baby walkers — friend or foe

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Injury is a leading cause of death and morbidity during childhood. It is estimated that 90% of childhood injuries are preventable. Why, then, are 1 in 8 hospital admissions of children the result of injury, and why do injuries remain as the leading cause of death among children globally?

Baby walkers are devices that support perambulatory children so that they can use their feet to move around. Children using walkers usually range in age from about 6 to 15 months. The use of baby walkers is widespread, and about quarter of these infants experience an injury related to their use.[1] Surveys of parents in North America indicate that 77% to 86% of infants and toddlers use a walker for some period of time. It is used in the UK by 50% of parents of infants, while in urban Turkey its prevalence is about 75%.A home visitation programme involving a random sample of 340 families with children aged 1-4 years revealed a use rate of baby walkers of 46% in urban Karachi.[2]

Although used in the western world for several centuries, infant walkers have only become a household item within the last several decades to enable infants to mobilize before being able to walk. The hazards associated with their use have been recognized increasingly during the past 3 decades. Previous studies have suggested that parents do not perceive walkers as dangerous, and that even the occurrence of a walker related injury does not prevent future use in the same child or siblings.[3] Parents like infant walkers because they believe baby walkers help young children learn to walk.[4] There is also a strong perception that baby walkers are a source of entertainment for children. They also state that walkers give their child enhanced mobility and serve as a baby-sitter. However, infant walkers allow infants mobility beyond their natural capability, thus providing them with a means of getting into dangerous situations. Moving at 1 m/second, an infant can be across the room and down a flight of stairs before the caregiver has time to react.

The overall evidence shows significant developmental delays associated with baby walkers.[5]

Anecdotal reports note adverse effects from the use of baby walkers in a child with cerebral palsy and even the development of cerebral palsy-like symptoms in apparently normal children. There is no published scientific evidence that baby walkers advance the baby's ability to walk, but many parents nevertheless welcome the use of these devices. Contrarily, a controlled study in 15 pairs of twins, with one twin allocated to a baby walker and the other not, revealed no difference in age at walking.

Despite parents' good intentions, in 1993, 25 000 children aged 5-15 months were treated in American hospital emergency units for walker related injuries. In addition, population surveys reveal that there may be as many as 10 times that number of injuries not serious enough to warrant a visit to the hospital. Injuries with baby walkers are common, if usually minor. However, deaths and serious injuries (skull fracture, concussion, intracranial haemorrhage, fractures of the cervical spine, and other fractures) occur. The majority of serious injuries to infants in infant walkers involve falls down stairs. Other mechanisms of injury include walker tip-over, finger entrapment, and allowing the infant to gain access to such hazards as oven doors, hot and/or heavy objects, and poisonous substances. A rate of 8.9 injuries needing attendance in emergency departments per 1000 children less than 1 year of age and 1.7/1000 for serious injuries has been reported.[6] Similar rates were found at a university hospital in Athens: 16 injuries per 1000 user years, or 3.5 injuries per 1000 babies per year.[7]

Despite implementation of prevention strategies, such as public education and warning labels, children continue to be treated in emergency departments (EDs) for infant walker-related injuries. The American Society for Testing and Materials' (ACTM) approved a set of stair-fall requirements for infant-walker standard. Baby walkers were certified to these requirements beginning in June 1997 and requires that the walker meet 1 of 2 standards: (1) the base of the walker must be too wide to fit through a standard 36-inch doorway, or (2) the walker must incorporate features to stop the walker at the edge of a step to prevent falling down the stairs.

By 2002, five years after the stair-fall requirements of the voluntary standard went into effect, the number of baby walker injuries treated in hospital emergency departments was an estimated 4,000, a decline of 85% from the 1991 level of 26,200 injuries. This decline appeared to be related to the replacement of the old-style walkers with new walkers meeting the requirement. In spite of increasing number of reports of injuries from walkers and the recommendations from the American Academy of Pediatrics not to use them,[8] parents continue to purchase walkers. Parents may buy them, as they do infant formula in some countries, in the mistaken

belief that they benefit children, while unaware of the risks.

There have been repeated calls for a ban on baby walker manufacture and sale[4,9,10] and as health professionals we should support such campaigns. However, such a ban, if introduced, would not have an immediate effect due to the large number of walkers in the population and the tendency for families to use them with subsequent children.[10] Thus other measures are also needed.[11] Health professionals should inquire about walker use as part of their routine child health surveillance programme and discuss with parents, in as sensitive a manner as possible, their reasons for use of a walker. They must then attempt to address the needs currently being met by walkers in other ways, for example by recommending playpens. Without public education campaigns, parents in many countries will continue using baby-walkers despite government regulations.

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