Parent Supervision to Prevent Injuries

Barbara A. Morrongiello, PhD, Brae Anne McArthur, MA
University of Guelph, Canada
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Introduction

Caregivers must assume responsibility for the safety of infants, toddlers and preschoolers because children at these developmental stages have limited abilities to appraise risk and differentiate unsafe from safe situations. Historically, research on child safety has focused on what safety practices caregivers adopt, why they do so, and how to motivate them to enact better safety practices. More recently research has begun to examine caregiver supervision practices, how these influence young children’s risk of injury, and what messaging approaches are best to motivate caregivers to improve their supervision practices. These issues will be addressed herein.

Subject

Generally, for young children (< 6 years) researchers have defined caregiver supervision in terms of behaviours that indicate attending to the child (watching, listening), whereas for older children and teens they define supervision in terms of more general ‘monitoring’ or knowledge of the child (e.g., child’s whereabouts, expectations for how the child will behave based on past experiences or who they are with and what they are doing). In research targeting injury risk for young children a popular conceptual model of supervision considers three dimensions: attention (watching, listening), proximity (within vs. beyond reach), and extent of continuity in attending and proximity (constant, intermittent, not at all).

Problems
Epidemiology studies reveals that young children are frequently injured when in their homes, which is surprising given one would assume there is an adult caregiver monitoring children at these young ages. An essential question then is what constitutes ‘adequate supervision’ for ensuring a child’s safety? Examining how caregivers supervise and how various patterns of supervision differentially influence children’s risk of injury is an essential first step for determining what constitutes adequate supervision.

Research context

Historically, progress in exploring links between supervision and injury risk has been hampered by the difficulty of measuring supervision in scientifically rigorous ways. Asking parents to report on how they might supervise in different circumstances may or may not accurately reflect how they will do so in real life circumstances. More recent studies have used direct observations (e.g., parents with children in public places like parks), and self-monitoring techniques in which parents record their own supervisory practices at home throughout the day, and have substantially advanced our understanding of factors that influence supervisory practices and how these practices impact children’s risk of injury. Another popular approach involves the use of ‘contrived hazards’ – hazards that appear real but that have been modified to pose no real risk of injury in laboratory settings. With this approach one creates a ‘simulated’ risk situation, and supervisors’ reactions can be unobtrusively recorded via videotape, providing a more accurate index of typical supervision practices. These observation-based methods are time- and labor-intensive but have yielded the greatest insights regarding links between supervision and child injury risk.

Key Research Questions

1. How often are children ‘out of view’ of supervisors when at home, and are there parent or child attributes that influence this?
2. What patterns of supervision do caregivers show when at home with young children, and are some patterns more effective than others to prevent children from being injured?

Recent Research Results

In research exploring how caregivers routinely supervise it was found that when young children (< 6 years) are at home with mothers they are supervised (in view, attended to) more than unsupervised but are completely out of view of supervisors about 20% of their awake time, and extent of supervision is poorer when they are out of view and alone than with other children. Thus, in the course of their daily lives, parents routinely supervise in ways that can elevate children’s risk of injury by allowing them to be unsupervised and out of view. Time children spend out of view of supervisors generally increases with age as parents assume older children know and will follow safety rules better than younger children. When sex differences emerge, girls are more closely supervised than boys during the preschool years, which may partly explain why boys routinely experience more injuries than girls.

Mothers who score higher in conscientiousness and those with children having behavioural attributes that are likely to lead to risk behaviours (i.e., impulsivity, sensation seeking), keep their children in view more of the time. Thus, parents seem to adjust the level of supervision based on both parent and child attributes. Importantly, research has shown that children who scored high in behavioural intensity (i.e., show high activity and intense
reactions to new situations and events) had a history of more medically-attended injuries when their parents reported reduced supervision but not when their parents reported closely supervising (see Figure 1). Thus, close supervision can counteract the elevated risk of injury typically found for temperamentally-difficult children. On the other hand, the child attribute of inhibitory control (e.g., child can exercise self control and resist doing things prohibited by a caregiver) serves a protective function and predicts a history of fewer medically-attended injuries even under conditions of reduced supervision (see Figure 1). Hence, whether lower levels of supervision lead to increased risk of injury depends, in part, on the child’s behavioural attributes. Risk of injury to children, therefore, reflects an interaction of many factors, including child characteristics x supervision practices x level of environmental risk.

Figure 1. Supervision moderates the relation between child behavior characteristics and injury. For High Intensity Behavior, high scores predicted injury when parents showed low and moderate levels of supervision (p < .05) but not when they showed high levels of supervision. A similar pattern of significant differences was found for low scores in Inhibitory Control.

At time points when children acquire new developmental milestones (e.g., learn to climb), which often occurs unexpectedly for parents, injury rates show temporary peaks. Thus, when children behave unpredictably, and parents have not had sufficient time to adjust the level of supervision those children need to ensure their safety, then children more frequently get injured, especially at younger ages and in high-hazard contexts like farms. Studies have documented that lax supervision is associated with increased risk of medically-attended injuries for young children. And particular patterns of supervision differentially relate to frequency of injury, highlighting the importance of closely supervising children, particularly boys. As shown in Figure 2, injury rates for boys and girls differed significantly when mothers used the strategy of intermittently going to check on the child, with boys experiencing more injuries than girls. In fact, injury rates for boys when mothers intermittently listened in were as high as when mothers left their sons unsupervised, and rates for girls were as low as when mothers provided direct and close supervision; just the threat a parent might appear to check on what the child was doing was sufficient to deter girls from taking risks, but not boys. Hence, anything less than constant supervision was associated with high injury rates among boys. Generally, the research has shown that boys engage in more risk taking than girls and require more frequent and effortful supervision practices than girls to ensure their safety.

Research Gaps
Most research examining supervision and its impact on injury risk has focused on mothers, but fathers and siblings also often supervise young children at home. A few studies have compared mothers’ with fathers’ beliefs about the need for supervision of their young children and reactions to their toddler’s risk-taking behaviours, and found no differences, however, more extensive research is needed. Similarly, sibling supervision in which an older child in the family (e.g., 5-12 years) looks after a younger one (e.g., <5 years) occurs often when children are at home together and has been shown to elevate risk of injury for young children compared to parent supervision. Recent research examining the supervisory practices of older siblings compared with mothers revealed that supervisees were allowed to engage in more risk behaviours when supervised by older siblings than by mothers and the behaviours of both the sibling supervisors and young supervisees contributed to increased risk of injury to the young child (Morrongiello BA, Schell S, Schmidt S, unpublished data, 2010). Assessing for differences based on children’s ages and/or sexes, however, would be an important next step.

Surprisingly, despite how often supervision is mentioned as a risk factor for injury in the pediatric literature, there are no prevention programs targeting parent supervision. A recent study aimed at testing parental reactions to different types of messages about supervision, revealed a variety of strategies that may prove useful in developing programming to motivate caregivers’ to supervise young children more closely. A major focus in future research needs to be on developing injury prevention programs targeting parent supervisory practices. Such programs would not only be relevant to preventing injuries but could also be relevant to child neglect because inadequate supervision is a cornerstone in defining neglectful parenting.

Conclusions

Recent developments in defining and measuring supervision have paved the way for research on caregiver supervision, including exploring how this factor influences young children’s risk of injury. Research has confirmed past speculation that poor supervision can elevate risk of injury to children, but the findings also highlight variation in this process depending on parent and child characteristics, as well as level of environmental risk. To date, the evidence suggests that mothers and fathers are more similar than different in supervising young children, but that sibling supervision is more lax than parental practices and this contributes to elevated injury risk for young supervisees when supervised by older siblings.

Implications
An important aspect of raising young children is preventing unintentional injuries and supervision is a strategy that has been shown to achieve this goal. The supervision needs of children, however, are influenced by a multitude of factors, including child characteristics (age, sex, behavioural attributes), parent characteristics (conscientiousness, parenting style) and level of environmental risk. Such complexity suggests that it may not be realistic to aim to develop specific ‘supervision guidelines’ that can apply broadly. Developing interventions that target caregiver supervision beliefs and behaviours and can be broadly applied, therefore, is essential. The focus now has to be on knowledge translation, including identifying effective ways to counteract parents’ commonly held belief that childhood injuries are ‘accidents’ and to enhance their motivation for and self efficacy beliefs that they can more closely supervise their children. Extending these programs to address supervision by siblings is also important given this is a common occurrence and these supervisory practices elevate risk of injury to young children (Morrongiello BA, Schell S, Schmidt S, unpublished data, 2010).

References

18. Morrongiello BA, Corbett M, McCourt M, Johnston N. Understanding unintentional injury-risk in young children I. The nature and scope of


