

Childhood Injuries and Their Prevention

Jhuma Sankar

Abstract

Injuries are the leading cause of death in children surviving beyond their first birthday. The most important step in the science of injury control is prevention of injuries followed by minimization of damage and post injury care. For prevention of childhood injuries an understanding of the risk factors and the mechanisms of injury in various settings such as at home, at play and on road is essential. This article is therefore an attempt to address these concerns related to prevention of childhood injuries.

Keywords: Injuries; Accidents; Injury control; Childhood injuries.

Introduction

Injuries are the most common cause of deaths during childhood and adolescence beyond the first few months of life and represent one of the most important causes of preventive pediatric morbidity and mortality. Injuries are the end result of innumerable factors such as age and gender of the child, personality, stage of development, intelligence, the result of imitation of others and the example set by his parents and friends.[1,2] Over the years advances in medical research have identified the risk factors for injuries and have developed successful programs for prevention and control. In this article we shall discuss the simple ways of preventing common injuries that occur in infants and children.

Definition

An injury is defined as “a bodily lesion at the organic level, resulting from acute exposure to energy (mechanical, thermal, electrical, chemical or radiant) in amounts that exceed

the threshold of physiological tolerance; in some cases (e.g. drowning, strangulation, freezing), the injury results from an insufficiency of a vital element”.[3]

Injuries vs. accidents

Perhaps the single most important barrier to progress in injury control is the perception that injuries are random, chance occurrences that cannot be predicted or prevented. The use of the term ‘accident’ implies this unpredictability. Hence the term accident prevention has been replaced by injury control as most injuries occur under fairly predictable circumstances in high-risk children and adults. [4]

Magnitude of the problem

The World Health Organization (WHO) estimates that, in 2002, around 875 000 children under the age of 18 years died as the result of an injury; recent community-based studies suggest that this number could be much higher. This places injuries among the leading causes of death in children who survive beyond their first birthday.[5] Worldwide, road traffic crashes and drowning are the most common causes of injury deaths among children, followed by burns and falls. More than 95% of all unintentional childhood injury deaths occur in low- and middle-income

Author Affiliation: *Associate Professor, Department of Pediatrics, PGIMER, Dr RML Hospital, New Delhi.

Reprint request: Jhuma Sankar, Associate Professor, Department of Pediatrics, PGIMER, Dr RML Hospital, New Delhi.

E-mail: jhumaji@gmail.com

countries.

Apart from the high death toll, injuries during childhood and adolescence are also associated with high morbidity: for every injured child who dies, several thousand more survive with varying degrees of disability. Therefore, the impact of these injuries on society is tremendous.[5]

Model of epidemiology of injury

The agent-host-environment model which has long been used to describe the epidemiology of communicable diseases can be extended to the understanding of childhood injuries (Figure 1).

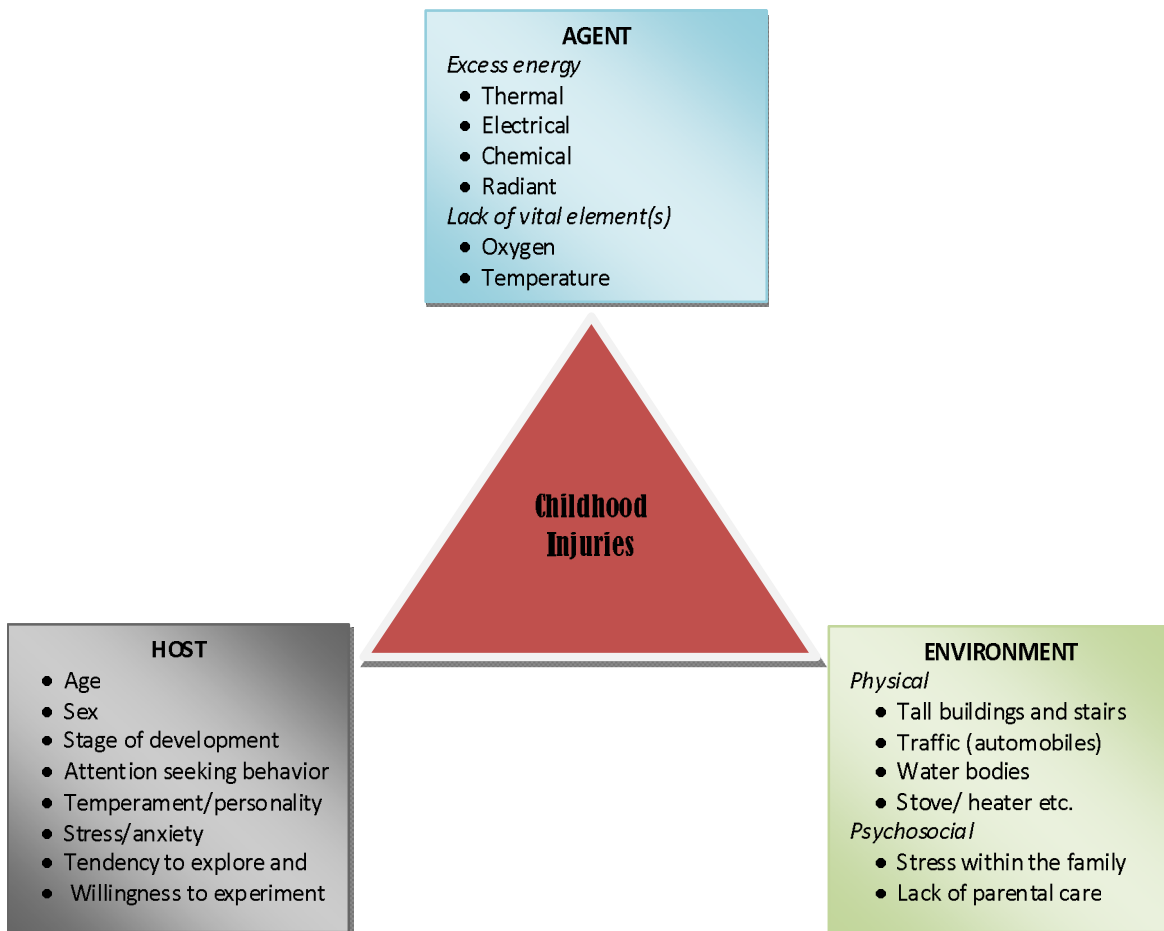
The agent of injury is the form of energy that damages body tissues. For example in a flame burn, thermal energy damages cells, tissues, blood vessels and other structures. The host, or injured individual, can be described not only

by age and sex, but also by developmental level: from crawling infants and toddlers exploring their new environments to kindergartens walking to school for the first time, to adolescents taking new risks on motorcycles. Finally the environment includes not only the physical situation in which injuries occur, but also the psychosocial one. This includes automobiles, stairs, and scalding tap water. Serious stresses within the family, moving to another house are among the psychosocial factors described in which a child is more likely to be injured.[6]

Risk factors for childhood injuries

Risk factors for childhood injuries include host factors like age, sex, attention seeking behavior, insecurity, desire for independence, attempt to seek sympathy; environmental factors like poor socio-economic status,

Figure1: Model of epidemiology of injury



overcrowding or absence of adequate play space; psychosocial factors like domestic conflict, broken home and parental behavior related factors like alcoholism, lack of discipline or excessive discipline, submissive or over-protective mother.[4,7]

1. *Age:* Toddlers are at greatest risk for injuries at home falls, trapped fingers, drowning, suffocation etc. As these children acquire mobility and exploratory behavior, they are also at risk for poisonings. Young school age children are at greatest risk for pedestrian injuries, bicycle related injuries, motor vehicle occupant injuries, burns and drowning.
2. *Sex:* Beginning at 1-2 years of age and continuing until the seventh decade in life, males have higher rate of injuries than females. Variation in exposure to risk may account for the male predominance in certain types of injuries.
3. *Socio-economic status:* Poverty increases the risk of injury to children, at least in part through its effect on the environment. Children who are poor are at increased risk of injury because they are exposed to more hazards in their living environments. For example, they may live in poor housing conditions, which is more likely to be dilapidated and overcrowded, thus increasing the likelihood of fire and burn injuries. Mortality from fires, motor vehicle crashes and drowning is two-to four fold higher in poor children. Other factors are single parent families, multiple providers, family stress and multiple siblings.
4. *Environment:* The focus on the environment is important because it directs attention to factors that can be changed through interventions.
5. *Parental factors:* Accidents are liable to happen when the mother is out at work, is attending to another ill child, when her attention is momentarily distracted by door bell or telephone call. Mother on tranquilizing drugs is likely to be less

alert and her child is likely to be more prone to injuries. Other factors include parental failure to understand what to expect of children at different ages, alcoholism, imitation of parents, anger directed against the parent, negativism and emotional deprivation.[7]

The science of injury control

Injury control attempts either to prevent the injury from occurring or to minimize its effects. Injury control operates in 3 phases: prevention, minimization of damage, and post injury care. In planning injury prevention strategies, 3 principles deserve emphasis.[8]

1. Passive injury prevention strategies are generally preferred because they are more likely to be used than active strategies, which require repeated, conscious effort. For example, seat belts that automatically engage with closure of the car door (passive restraint) may ultimately protect more occupants of motor vehicles than restraints that require occupants to engage the locking mechanism (active restraint) every time they ride in the car.
2. Specific instructions (e.g. keep water heater temperature lower than 120° F) are more likely to be followed than general advice (e.g. reduce the temperature of hot water tap in your home)
3. Individual education reinforced by community-wide education programs will be more effective than isolated education sessions.

Prevention of common infant, child and adolescent injuries

Most of the injuries can be prevented with wise discipline. However, the importance of discipline in accident prevention has not received sufficient emphasis. Discipline will not prevent the young toddler from getting into trouble: but it can do much to prevent the older child from becoming involved in accidents.

Over-indulgence and lack of discipline on the one hand, and excessive strictness on the other hand, are both factors which lead to accidents. The child brought up without discipline is selfish, thoughtless and disobeys. The child brought up with excessive discipline and over-strictness may rebel against restrictions and become involved in accidents. Wise discipline includes the immediate stopping of all dangerous practices, such as door-banging, throwing objects around the room and playing on the stairs. It does not include over-protection, which prevents the child from experiments and which gives him an exaggerated and wrong idea of danger.

It is difficult when teaching caution to avoid implanting fear. The average child of 1 and ½ years can be taught some degree of caution. He can usually be trained to keep away from

the kitchen stove or electrical connections. The ease with which forbidden acts are repeated as attention-seeking devices must be remembered. The greatest ingenuity has to be used to stop such dangerous habits as turning the gas taps on and other acts which cannot be dealt with simply by ignoring them.[7]

Types of injuries and their prevention

Injuries are of 2 types - *unintentional* and *intentional*. Unintentional injuries can be broadly divided into three categories - injuries at home, sports injuries and road accidents. Intentional injuries though rare are not an exception and include homicide and suicide. In this section we will be dealing with the preventable injuries, that is unintentional injuries. Different types of unintentional

Table 1: Types of injuries and their causative agents

Type of injury	Common causative agents/ situations when injuries occur
A. Injuries at home <i>Falls</i> <i>Cuts</i> <i>Eye injuries</i> <i>Trapped fingers</i> <i>Dog bites</i> <i>Burns, scalds, electrocution</i> <i>Inhaled or ingested foreign substances</i> <i>Poisoning</i> <i>Drowning</i> <i>Injuries due to suffocation</i> <i>Injuries due to mechanical devices</i>	Baby walkers, steps and bunk beds (beds without rails) Sharp objects - knives, scissors, compass, broken bottles, nails, etc. Sticks, bow and arrow, glass, stones, scissors, compass, needles, catapults, fireworks, etc. Doors, windows, car doors, etc. Teasing/playing with stray dogs Hot water/milk, hot pans/ utensils, electrical iron, fireworks, etc. Nuts, buttons, batteries, coins, whistle, uninflated balloons, etc. Kerosene/petrol, chemicals, medications, dishwashing bars, etc. Bathtub, bucket, swimming pool Plastic bag over head, inhalation of foreign body Fans, electric mixers, sewing machines, etc.
B. Road injuries <i>Pedestrian injuries</i> <i>Bicycle injuries</i>	High traffic volumes, lack of parental vigilance Losing control on irregular/smooth surface, skidding on gravel, hitting an object (e.g. dog, car, person or edge of the road), speeding, etc.
C. Injuries at play <i>Playground injuries</i> <i>Swimming</i> <i>Kite flying</i>	Swing, climbing frame, rocking horse, roundabout, etc. Natural water bodies, swimming pools, diving in shallow water, etc. Unsupervised kite flying especially on unprotected roof tops

injuries and their causative agents/situations when they occur are given in *Table 1*.

A. Injuries at home

Falls

The Child Accident Prevention Trust reported that falls accounted for 70 to 80 deaths per year, 16000 admissions to hospital in 1982 and 240000 attendances in Accident and Emergency departments. Several papers have referred to injuries related to 'baby walkers'. [9] In one study 97% of injuries involved the head, face or teeth; 68% were due to falls down steps as a result of the baby walker.

A study of 52 injuries resulting from falls from bunk beds showed that in 42% there was no protective rail, in 35% the fall occurred during sleep, in 35% the fall occurred during play and in 15% it occurred when getting in or out of bed. It was suggested that side rails should be mandatory and that the minimum age at which bunk beds should be used was 6 years. [10]

Steps to prevent fall related injuries

- Set a good example. Do not stand on a rocking chair or other unsafe place to fasten curtains.
- Have a safety gate at the top and bottom of the stairs. There should never be horizontal bars on a balcony or on a stair gate. When he is old enough to climb out of the cot, he should be in a bed.
- The window of the child's bedroom must be safe, so that he cannot fall out, but not so safe that in the case of fire, no-one can get out.
- The carpet or linen must not be torn or frayed. If the floor is polished, the rug should have a *non-skid* device under it.
- Grease/oil on the floor should be removed immediately.
- Children should never be allowed to play on the stairs.
- The child should not carry objects when

going up or down stairs alone.

- Side rails should be mandatory and the minimum age at which bunk beds should be used must be 6 years.

Cuts

Cuts are mostly due to leaving of sharp objects such as scissors, knives and nails carelessly about the house especially after the baby has started to crawl or creep. Sharp objects such as those mentioned above must not be left about. No child should be allowed to run about with a lollipop stick in his mouth. If he falls it may break and perforate the palate. Rusty nails should not be left in pieces of wood. Broken bottles must not be left about. Stone throwing must be discouraged. The child must not be allowed to walk about when carrying a glass or other glass object. One must teach the child the right and the wrong way to handle tools and mechanical instruments. [10]

Eye injuries

The common causes of eye injuries and loss of an eye are glass, knives, stones, scissors, a compass, pens, needles and forks. Air-guns, bows and arrows and catapults 'should not be given to children. Other injuries are caused by fireworks, splinters from wood chopping and metal work. The indelible pencil and ball point pens can cause serious eye injuries. Parents should be constantly aware of the danger of a sharp pointed object in a child's hand. [10]

Trapped fingers

The door-banging game should be stopped immediately and firmly, because of the risk to fingers. Parents should get into the way of opening and closing doors gently and of looking to see where the child's hands are before closing a door. This applies not only to doors at home, but especially to car doors. Rocking chairs are best avoided due to the risk of finger injuries to the creeping/crawling infant. [10]

Dog bites

In our country dog bite is a common complaint of presenting to the emergency. Though the exact incidence is not reported, it is an important cause of morbidity in our country. Dog bites may cause a wide variety of infections including rabies. Children should be warned not to tease or play with stray dogs and to beware of dogs at home.[10]

Scalds, burns and electrocution

The likelihood of burn injury is strongly related to low socio-economic status with highest rates seen among the poor and the less educated. The kitchen is the most dangerous place for burns and scalds. Burns are more common in males than females. Scalds account for 40% of the burn injuries in children requiring hospitalization, and a substantial proportion of these burns involve hot tap water.[4] In developing countries where poverty is rampant and so is overcrowding, all the household activities take place under the same roof in a small room with thatched roof thus increasing the likelihood of not only burn but all other kinds of injuries. Education programs and community participation is needed to bring about awareness in these families and prevent these injuries from occurring. Fireworks are a seasonal injury and over 40% of those injured by fireworks are children younger than 15 yr of age.[4] Prevention of child labor in firearm manufacturing units and strict legislative action against those not complying with the law may help prevent many fireworks related injury in our country. Apart from this, parental supervision of use of all fireworks and community restriction on certain types of fireworks may reduce these injuries. Children should put on flame retardant or non-flammable fabrics at the time of usage of these fireworks to prevent flame burns.

Specific advice includes the following:

Burns

- Never leave a small child alone in the

house even for a few minutes.

- If there is an open fire, electric or gas fire, have an adequate fireguard hooked in place so that it cannot be knocked or pulled out of place.
- Don't allow the child to play with fire or matches.
- Don't let him enter the cooking area of the kitchen to recover a toy.
- Do not leave hot utensils/pans around the kitchen within the child's reach.
- Parents should keep children far away from the stove while cooking, not to cook with child in the lap or to make arrangements to cook outside the house in case of small overcrowded rooms.
- Remember the danger of portable stoves. They may be knocked over. A Christmas tree is highly flammable; see that electric lights on it are properly wired by an expert.
- Do not leave an electric iron where a child may come into contact with it: never leave it plugged on.
- Never allow any child to ignite fireworks except under supervision. Light fireworks well away from flammable material. Never allow him to hold or throw fireworks. Never allow younger children to play with fireworks.
- Don't let him bend over a firework to light one - or let him see you do it. Don't let him put a rocket or other firework into a milk bottle to light it. Never let him put a firework in the pocket.

Scalds

- Parents should avoid passing or drinking hot tea or coffee while holding infant and should keep children away from pots cooking on the stove to prevent many of these injuries.
- Don't leave a hot teapot or similar object near the edge of the table at meal times.

- Always check the temperature of the milk before feeding the child
- The table-cloth should not hang over the edge of the table.
- Always turn pan handles away from the front of the stove.
- Never leave a hot bottle in the child's bed. It may burn by contact, or burst in the bed, scalding him.
- Never leave the young child alone in the bath. The cold water should be run in before the hot.
- Children should immediately be inhibited from the dangerous practice of throwing peanuts into the air and catching them in the mouth.
- A broken rattle should be discarded immediately because of the contents which may be inhaled.
- Children should not be allowed to run about with food in the mouth, or to play when eating.

Poisons

A retrospective study from a tertiary care teaching hospital in Kolkata revealed 3.6% of total pediatric admissions were due to poisoning. Majority of the cases included oral/chemical poisoning followed by biological/ envenomation. Kerosene was the commonest among all poisoning agents. Most of the cases were accidental.[13] In a recent study from our institute on childhood poisoning by Kajala P *et al*[14] we found that the incidence of childhood poisoning was 1.2% (140/10800) of the total number of emergency admissions. The median age of the enrolled children was 3.5 years and majority were boys. Hydrocarbons and pharmaceutical products were the most frequently implicated agents similar to previous studies from our country.[13,15] In comparison to all such studies over the last 2 decades we found a higher incidence of suicidal poisoning in our study cohort (10%), with girls being the predominant victims. Majority required only observation and there were no deaths. In a previous Indian study, analysis of 250 cases of childhood poisoning revealed most cases occurring in age group of 1-4 years. Most cases were due to food poisoning followed by kerosene, pesticides, chemicals, medications and animal bites. Of the chemicals and medications responsible for poisoning dettol and opium topped the list followed by phenobarbitone, chlorpromazine, metoclopramide and iron.[15]

Childhood deaths by unintentional poisoning have decreased over the past 2 decades. Prevention of drug-related poisoning

Electrocution

- All electric paints should be of the safe variety, so that the child cannot receive a shock by insertion of a lead pencil or other object through a hole. Do not have an electric fire in the bathroom.
- Keep all flex in good condition.
- Always unplug electric equipment when it is out of use.
- Electric cables should be out of reach.

Inhaled or ingested foreign substances

Inhalation or ingestion of dangerous objects is the cause of many visits to the accident and emergency department. In a review of 230 cases of inhaled foreign bodies seen in an Australian hospital; almost half the objects inhaled were nuts.[11] The ingestion or inhalation of button batteries is particularly dangerous. Most of the batteries may pass through the alimentary tract but an occasional one may become impacted in the esophagus or cause gastric erosion. Batteries have also been inserted into the nose. Ingested small coins are usually passed safely but may become impacted and require surgical intervention.[12] Un-inflated balloons are dangerous.

Specific advice includes the following:

- Parents have to be constantly aware of the danger of inhalation or ingestion of foreign bodies.

depends usually on passive strategies like child restraint packaging and dose limits per container.

In developing countries where kerosene is used as the cooking fuel in many households, community based education programs should be undertaken to create awareness about the hazards of kerosene ingestion and parents should be strictly advised to keep the containers tightly closed and in unreachable places. The incidence of kerosene ingestion has been decreasing over the past few decades and a drop of 50% was noted between the 70's and 80's in the study quoted above.[14,15] Iron poisoning was common in our country because of the freely available brightly colored iron and folic acid tablets in homes of pregnant women, dispensed in easily accessible bottles in the past decades. But now with the availability of these medications in blister packs the incidence of this poisoning is decreasing, though isolated cases still occur. Parental education and vigilance is required to a great extent in preventing these poisonings in our country.

Animal/insect bites are another health hazard in our country with majority living in crowded, dilapidated conditions and agriculture being our main occupation (most of these bites occur in the fields). Scorpion and snake bites in particular are common among these. Protective clothing, wearing footwear while visiting fields, supervising children while playing to make sure they do not dwell into crevices are some of the measures to prevent these bites.

Specific advice includes the following:

Poisons

- Remember that the older child may pick up poisonous materials and give them to his young brother.
- Wherever possible, cleaning agents, drugs, kerosene and certainly pesticides should be locked in a cupboard and the key should be removed.
- Never leave medicines in the child's bedroom. All medicines should be kept out of reach of children. Destroy all discarded medicines.
- Do not let the child see you take a medicine; he is liable to imitate.
- Refer to the medicine as medicine and not as sweets.
- Never store inedible products on the food shelves.
- Keep all poisons in their original containers and not in fruit juice bottles or colored bottles.
- Don't leave camphor balls about; they are poisonous. Wax crayons are dangerous; they should not be given to a small child who may eat them.
- Colors must be fast. Home decoration with lead paint must be avoided – a child may bite the paintwork.

Drowning at home

Drowning ranks second as a cause of unintentional trauma deaths. The cause of drowning death varies with age and geographic area. In young children, bathtub and swimming pool drowning predominate, whereas in older children and adolescents, drowning occurs predominantly in natural bodies of water while swimming or boating.[4]

Childcare providers should be aware of water hazards for children of all ages. Young children and children with seizure disorders should never be left unattended in bath tubs or near swimming pools, ponds or beaches. If the telephone or door bell rings when the child is in the bath, remove him from it before answering the call. Never leave water on the floor in a bucket. Some submersion injuries may be completely prevented by surrounding the pool with appropriate fencing, including gates with secure latching mechanisms.

Other home injuries include suffocation, injuries with tools, gas accidents and injuries with mechanical devices.

Suffocation may be the result of play with a plastic bag over the head, accidental

strangulation or inhalation of a foreign body.[16] Electric mixers, electric fans, electric iron and sewing machines are possible sources of serious injury, they should be kept out of reach of the child when in use.

Specific advice for parents should include the following:

- Children must always be forbidden to play with plastic bags over the head. They must not play with elastic or a cord round the neck.
- The parent should not play with a child who has food in his mouth. The danger of the child shutting another (or himself) in the refrigerator must be remembered.
- See that all gas taps are of the safety variety, so that if the tube is disconnected, no harm is done if the gas is turned on.

B. Road Accidents

Road accidents include pedestrian injuries, injuries due to motor vehicles, and cycle mishaps. Motor vehicle injuries are the leading cause of death at all ages. They account for more than 50% of unintentional trauma mortality in this age group.[8]

Pedestrian injuries typically occur when a child darts into the street, crossing between intersections. Most injuries occur during the day, with a peak in the after school period. The risk of pedestrian injury is greater in neighborhoods with high traffic volumes, absence of play space adjacent to the home, household crowding and low socio-economic status. One important risk factor for childhood pedestrian injuries is the age and developmental level of the child. Children younger than 5 year are at risk of being run over in the driveway. Young children have poor ability to judge the distance and speed of traffic and are easily distracted by playmates or other factors in the environment. Many parents are not aware of this potential mismatch between the abilities of the young school age child and the skills needed to cross

the road safely.[7,8]

Specific advice includes the following:

- See that the street door is kept closed when the child is in the house.
- The danger of children running out into the street after a ball or behind the car when reversing, and the likelihood of the child doing this, must be remembered.
- The child should be taught where to cross the road in a safe place.
- Younger children should be taught never to cross the streets when alone; major streets should not be crossed alone until the child is 10 yr of age or older.
- Education of the child in pedestrian safety should be initiated at an early age by the parents and continue into the school-age years. Although educational programs aimed at improving children's street related behavior hold promise, roadway interventions including adequate lighting, construction of sidewalks, and roadway barriers, must also be pursued in areas of high pedestrian traffic.

Car injuries

Many injuries to children in cars could be avoided by simple precautions. They should never be allowed to stand in front of or (still less) on the front seat. It is now illegal to allow a child to sit on the passenger's knee in the front of the car and to fasten the seat belt around the passenger and child. Seat belts should be properly attached, as standard equipment for both front and rear seats.[7,8]

Further specific advice should include the following:

- The car door should have a door handle of the safety type which is locked so that the door will not open when the car is in motion.
- The parents should always set the example of wearing a seat belt.

Cycle injuries

Cycle injuries are due to a wide variety of causes - losing control on a hill or corner, skidding on gravel, hitting an object (dog, car, cycle, person or edge of the road), a hole in the drive or road, doubling (having another child on the bicycle), speeding, slipping off (handlebars, saddle, pedal), mechanical faults and especially tricks (speeding, riding on one wheel ('wheelie'), showing off). Some accidents are due to the child using a bicycle to which he is not accustomed, or which is too big for him. Most common injuries encountered are fractures, concussion, broken teeth; and head and neck injuries.[7,8]

Specific advice should include the following:

- Children should wear properly fitting approved cycle helmets.
- See that the child's bicycle is maintained in good condition, is of a suitable size, and has non-slip handlebars, saddle, pedals.
- Forbid 'doubling' - two riding together on the same bicycle.
- Try to avoid dangerous drain holes in the drive.
- Be sure that the child is not riding when he is receiving tranquillizing drugs.

C. Games and Sports related Injuries

Play

However careful the design and maintenance of playground equipment, and however adequate the supervision, playground accidents are to a considerable extent unavoidable. These factors are important and have been the subject of extensive research; but more important are the normal child's boisterous activities, experimentation, imitateness and competitiveness. Most common injury is a fracture. Injuries on the climbing frame are more severe than those on other equipment. The younger child is at special risk on a swing, rocking horse and roundabout when the speed is controlled by older children. Many of the

injuries are knocks resulting from a child walking behind a swing.[17]

Swimming

An important preventive measure is swimming instruction; children should be taught to swim as soon as they are old enough. Children should be taught to swim only in a safe place, to pay full attention to warning notices and never to swim alone. They should not swim immediately after a large meal. Children in a sailing boat or any small boat should wear a life jacket: children in a rowing boat should not be allowed to stand up and change places. Over-ventilation prior to swimming under water should not be practiced as it may lead to sudden death due to lowering of CO₂ levels.[7]

Kites and lightning

Kite flying should always be supervised at least until adolescence. Children should not be allowed to fly kites during a thunderstorm. In a storm they should avoid walking on a hilltop or sheltering under a tree.

Do's and Don'ts of injury prevention

To summarize the do's and don'ts of injury prevention of common childhood injuries is described below (see panel 1)

Educating parents about injury prevention

Parents should be educated about the risk factors that predispose their children to childhood injuries and provide them with guidelines (handwritten) to protect their children from such injuries. At every well child visit their awareness and vigilance should be reassessed and the preventive strategies should be stressed upon. Parents have to balance the need for protection against the need for the child to learn, beginning with absolute protection at birth, finishing with nearly complete independence by about 10 years of age. In the intervening years the completely protected totally dependent infant has to

DO'S

- Use beds with rails for children aged < 6 years
- Have safety gates at the top and bottom of the stairs, vertical bars on balconies
- Teach older children how to cross the road safely
- Ensure that your child's bicycle is maintained in good condition
- Teach the child how to handle tools and mechanical instruments safely
- Keep children far away from the stove while cooking
- Always turn off the gas after use
- Allow him/her to ignite fireworks only under supervision
- Always have an adequate fireguard hooked in place
- Check the temperature of the milk before feeding the child
- Use electric points of the safe variety so that the child cannot insert a lead pencil or other object through the hole
- Avoid giving nuts, seeds, etc. to infants
- Keep all medicines out of reach of children
- Keep all poisons in their original containers and not in fruit juice/colored bottles
- Keep cleaning agents/ drugs/ kerosene/pesticides in a properly locked cupboard
- Keep plastic bags, scarves, ropes, cords out of reach of children

DON'TS

- Leave a small child alone in the house even for a few minutes
- Allow children to play on the stairs
- Keep the door open when the child is at home
- Allow younger children to cross the streets alone
- Allow doubling on the bicycle
- Leave any sharp objects near the vicinity of the child
- Leave hot utensils/pans in the kitchen within the child's reach
- Leave an electric iron switched on where a child may come into contact with it
- Drink/pass hot tea/coffee while holding the infant
- Keep electric equipments plugged on when not in use
- Allow children to run about with food in the mouth or to play while eating
- Leave any medicines in the child's bedroom
- Take medicines in front of your child
- Leave young children unattended in bath tubs or near swimming pools/ponds/beaches
- Leave cupboards/wardrobes/refrigerators unlocked
- Let the child play with gas tap

undergo the transition to a self-confident, reasonably behaved, sensible school child. If absolute protection is maintained too long the child is prevented from learning, he may rebel and become accident prone. If not sufficiently protected, the result again is accident proneness. The young child has at all times to be protected from severe burns or scalds, from poisons, dangerous falls and other hazards which he lacks the experience to anticipate. Wise discipline should be practiced in bringing up children. As pediatricians it is our duty to reassure parents that every child passes through these stages in life and parents have to strike a balance between practicing wise discipline while allowing the necessary freedom that a child is entitled to at his/her age.

Conclusion

Injuries are a common cause of childhood morbidity and mortality. Most injuries are unintentional and commonly include household injuries, sports related injuries and road accidents. Most of these injuries are preventable with a little forethought and by practicing wise discipline. Parents of small children must train themselves to anticipate danger and to guess what the child can be expected to do in a particular situation. They must remove the hazard and teach him how to handle it. They must remember his climbing powers, his inquisitiveness and his inability to anticipate the consequences of what he is doing. As physicians it is our duty to guide

them with specific instructions regarding each type of injury and reassure them that this is all a part of growing up.

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