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UNDERSTANDING AND PREVENTION OF CHILDREN'S ACCIDENTS

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ABSTRACT

Accidents are preventable but some say that they are bound to happen. With some extra care or caution, most accidents can be prevented, and even when they do occur, the consequences can be minimal. Children are very vulnerable and do not have the ability to judge between what may or may not be dangerous. They are therefore, more at risk to various forms of accidents both at home and outside. This short review reports two cases and highlights some factors that can be helpful in preventing accidents especially among children.

KEYWORDS: Children, accident, prevention, inequality between the rich and the poor, parental role, storage of medicines

INTRODUCTION

Most accidents can be prevented. Accidents are the commonest cause of death among children aged and results in many children being permanently disabled annually.

Childhood accidents are intimately related to the children's development. An older child can climb a tree and fall, or fall in a play ground. While a crawling child can climb upstairs and fall back.

Accidents are responsible for about eighty percent of deaths in 15 – 19 years olds and sixty percent of death in 10 – 14 years old. On any given day in the United States of America, about 23 teenagers die in motor vehicle accidents while about six are victims of homicide (Ditmar, 1997).

This article is essentially to bring to our attention the urgent need for parents to be more alert to their children's safety and seek improvement in their preventive knowledge.

CASE REPORT

A young family of five children were gently driving around in one of the towns in Delta State, when a close family friend of theirs saw them and pulled over for routine greetings. The family in this report also pulled over across the road and their father ran across the road to great their friend.

After a while, the two year old son of the family opened their car's door, came down and without anyone knowing it ran as fast as his legs could carry him across the tarmac to his father on the other side of the road.

Without any doubt, the boy did not look to check if there were any vehicles coming from either direction. His young mind cannot understand nor comprehend that accident do occur and that running across any road carelessly can result in an accident occurring, which may be fatal.

Fortunately, there were no cars coming from either direction. Except for an "Okada" (commercial motorcyclist) who carefully avoided the on-rushing boy and then verbally abused the parent thoroughly for being so careless and irresponsible. The adults absorbed the insult without saying a word and even thanked the "Okada man" for being careful.

The boy's father quietly carried the boy and explained to him that what he just did was bad and wrong. The boy was made to promise that he will never do it again.

A second family reported that because of the incessant biting of mosquitoes at night in their home, that they bought some locally prepared anti-mosquito agents.

They have to drop this chemical at the corners of their rooms. To guide against wastage, the father of the house got a syringe which they fill with the chemical agent and then carefully spray out this agent at the desired locations within the house.

Little did he know that he was courting problem by using a syringe to spray the anti-mosquito agent. The family's mother usually administers prescribed medicinal syrups to her children with the help of syringes, since this help her to measure the quantity of medicines to be given very accurately.

A young son of the family apparently has been observing his father withdrawing the anti-mosquito agents and probably thought that the agent was another medicine. When no adult was around, the boy possibly withdrew some of the agent into the syringe and possibly drank some before he was noticed to be coughing aggressively, and was salivating copiously, was restless and then becoming breathless. On a closer observation, the odour of the anti-mosquito agent was perceived from the boy's mouth and clothings and they found the abandoned syringe containing some of the agent on the floor of their parent's room.

It was total chaos from this moment as the whole household rushed the boy to a nearby clinic where he was admitted and treated. Of course, the whole family stayed with the boy throughout the duration of his treatment. He did well and was discharged without any complications. As a unit, the family promptly discarded the anti-mosquito agent on arrival from the hospital.

DISCUSSION

Accidents are the commonest cause of death among children aged between 1 – 4 years of life, causing about half of all deaths of children aged between 10 -14 years of life. Accident also results in many children having permanent disability (Southhall, 2002).

Children's accidents are closely related to stage of their development. For instance, a new born baby can only fall if dropped by its caretaker, or if the caretaker falls while holding the baby. And older child can climb a tree or fall in the playground. Also, children under five years of age experience accident mostly at home, while school-aged children experience accident at school, on sports playgrounds, and are of particular danger of accidental deaths as pedestrians (Southhall, 2002).

Accidents are also linked to inequalities in environment. Children from poor homes are twice as likely to die from an accident as compared with children from wealthy families. This does not mean that poor parents care less about their children than rich parents, or that they do not know about accident risks. It may mean that there are many other pressures – over crowding, poor housing and lack of money and therefore being unable to afford safety equipment to make changes for safety. Accidents are more common in homes where there is stress from mental illness or marital discord (Southhall, 2002).

Most accidents can be prevented. The three levels of operation at accident prevention:

1. Accidents can be prevented completely/totally. This is known as primary precaution.
2. The consequences of an accident can be minimized. This is known as secondary prevention. Example is the wearing of a seatbelt which can reduce injury even if a car accident occurs.
3. Then lastly, quick attention by professionals can reduce mortality and morbidity. This is known as tertiary prevention which is seen in the pouring of cold water on burns and scalds.

Accidents are prevented therefore through three main approaches which are:

1. Education, whereby increases in knowledge and changes in attitude and behaviour are achieved.
2. Engineering, with safer designs of building and making drug bottles difficult for children to open.
3. Enforcement, which is the role of legislations, regulations and standards in accident preventions (Southhall, 2002).

The Federal Road Safety Commission was set up essentially to help reduce carnage and loss of lives on highways. They have encouraged the use of seatbelts, advised all drivers to drive carefully past schools and now are campaigning for the use of crash helmets by all cyclists (both motorcycle and bicycle).

The Dean Health System have since 1990 been working to reduce the risk of head injuries by encouraging everyone to wear a crash helmet when riding even a bicycle (Dean Health System)

They have shown that crash helmet when worn correctly acts as a second skull and prevent up to 88% of brain injuries during an accident. They advised that the habit of wearing crash helmets should start early, and also, that adults should set good examples by putting on helmet whenever riding a motorcycle.

A fall from as little as two feet can result in a traumatic brain injury. That is why wearing a helmet while riding a cycle is so important for people of all ages (Dean Health System). Helmets appear to be similarly effective for all age groups, including young children and older adults.

The history of the prevention of accidents to children in England started with the measures taken to improve the safety and health of children who were employed in factories and farms in the 18th – 19th centuries. Before the industrial revolution, children were the victims of accidents of ordinary everyday life.

It was the industrial revolution that changed matters for the best. Large numbers of children were employed into industries with no consideration to their safety, but overtime several legislative acts were passed which focused on the children's safety (Jackson, 1995).

Accidental injuries to infants and children are often serious, but are largely prevented with appropriate information and safe practices. Young children are particularly vulnerable to accidents due to their innate desire to explore their world and the inability to perceive the dangers of their actions. As children learn through experience, minor injuries are therefore inevitable but the provision of a safe environment can reduce the risks, with close supervision and setting limits of safety by guardians and parents (Shendurnikar, N., Internet Journal).

Therefore, the following advice can be helpful to both parents and all guardians everywhere.

1. Always read labels carefully before administering any medicine to a child. All medicines should be kept away from children's reach. Discard all old and partially used medicines.
2. Young children should not play in the road. Teach the "stop, look, listen" code at the roadside whenever you are with the child. Teach your child to look left and right before crossing roads.
3. Keep your cupboards securely locked, as these are one of the favourite places for children to hide. Accidental closure can result in choking.
4. Small objects like beans, buttons, beads and even safety pins must be kept out of reach of children particularly below the age of four years.
5. Young children should be made to sit in the backseat of the car. If they sit in front, the use of seatbelt should be mandatory.
6. Do not allow children to play with plastic bags covering chairs heads and faces, as these can cause asphyxiation.
7. Do not allow children to perform new skills without giving them proper demonstration and training.
8. Do not allow children to play and run with sharp objects in their mouths. Accidental falls can cause severe laceration in the mouth and throat.
9. Do not hold your baby in the lap while drinking anything hot or while cooking.
10. Keep household chemicals and kerosene out of reach preferably in a locked cupboard.
11. Never leave young children alone in the house.
12. Keep matches out of reach of young children.
13. Be particularly careful of pots and kettles containing hot fluids. They can easily be pulled on to children, resulting in severe burns (Southhall, 2002 & Shendurnikar, N., Internet Journal)..

Accidents do occur, but conscious effort must be made to prevent them from occurring. Our children must be protected at all times and all parents are hereby called upon to improve their household and possibly support media campaigns.

REFERENCES

Dean Health System. Crash Helmet Safety Program. <http://www.deancare.com/dhs/crash/>

Ditmar, M. F., 1997: Adolescent Medicin. In: Pediatric Secrets. Polin, R. A., and Ditmar, M. F. (Eds.) 2nd Edition. Hanley and Belfus, Inc Philadelphia (Publ.) pg. 1 – 24.

Jackson, R. H., (1995): The history of childhood accident and injury prevention in England: background to the foundation of the Children Accident Prevention Trust. *Inj Prev.* 1 (1): 4 – 6.

Shendurnikar, N. Accident Prevention in childhood. Available from: <http://www.indiaparenting.com/raising-child/data/raising-child027.shtml>.

Southhall, D., (2002): Childhood accidents and their prevention. In: Southhall, D., Coulter, B., Ronald, C., Nicholson, S., and Parke, S. (eds). *International Child Health Care. A Practical Manual for Hospitals Worldwide.* Child Advocacy International. BMJ Books. United Kingdom, pp 493 – 494.

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