Brain Injury And The Elderly

Each incidence of brain injury is unique, requiring individualised treatment, therapy and rehabilitation. Methods of brain injury treatment depend on several factors including:

- degree of severity,
- source of injury,
- pre-injury health and age (Patrick, 1996).

While a four-year-old girl and her grandfather may sustain the same type of brain injury, the treatments and outcomes are vastly different.

There are physical changes in older individuals that make their brains more vulnerable to injury and reduce their chances to recover (Patrick, 1996). Generally speaking, older individuals have longer hospital stays, take longer to recuperate, need more time and effort to reach the same level of recovery that younger individuals attain and often have a less positive prognosis, recovery and outcome (Pilisuk & Feinberg, 1996). Studies have shown that the incidence of brain injury goes up sharply after age 70 (Pilisuk & Feinberg, 1996).

CAUSES

Falls
People over the age of 65 have a very high rate of injury due to falls. In fact, falls are the leading cause of brain injury in the elderly. There are several factors that contribute to the great danger of falls to older individuals, including:

- Some elderly people take medications that may affect perception and/or balance, therefore increasing the risk of falling (Patrick, 1996).
- Many individuals over the age of 65 also may have other medical conditions, apart from a brain injury, that make falls likely (i.e. visual limitations, orthopaedic problems).
• External factors associated with falls among the elderly include a history of one or more prior falls, lack of exercise, improper footwear and hazards in the home.

**Preventing Falls**

• Even older people (ages 65 and up) should exercise regularly, as daily physical activity will increase a person’s strength and sense of well being.
• There are many exercises that improve balance, and health care providers can guide individuals to the exercise program that is best for them.
• Another important preventative measure is home safety checks. During these checks, items that may pose potential trip hazards like magazines and shoes should be removed from stairs and all walking areas. Frequently used items should be stored in easy-to-reach places where using a step stool or chair is not necessary.
• Improved lighting in the house can help elderly people see better and reduce falling.
• Handrails and lights should be installed on all stairs and outside areas, as well as bathrooms.

**MOTOR VEHICLES AND OLDER DRIVERS**

Today’s senior citizens are mobility-minded and electing to drive longer. Some older drivers, however, are unable or unwilling to correctly assess their driving capabilities to continue operating a motor vehicle safely. Changes in visual perception, ability to focus on daily occurrences, reaction time, coordination under stress and ability to effectively react to stress-related situations are common factors in the aging process. The changes in driving habits that occur as a result of aging can be directly attributed to physical changes.

**Preventing Motor Vehicle Injury**

• Elderly individuals that have difficulty driving can be referred to a local assistance agency that can coach and counsel them on safe driving habits.
• Elderly individuals should be encouraged to reduce the amount that they drive and the conditions they drive in (i.e. night time, inclement weather).

PEDESTRIANS
Pedestrians (age 70 and older) have the highest pedestrian fatalities, accounting for approximately 18%. The pedestrian fatality rate among this group is higher than that of any other, with the second highest pedestrian fatality rate coming from the next older group of 55-to 64-year-old individuals.

Factors contributing to these pedestrian casualties include:

1) a lack of many elderly walkers;
2) improper pedestrian behaviours;
3) the physical impairments of many elderly walkers and
4) alcohol involvement of driver and/or pedestrian.

Preventing Pedestrian Injury
To prevent pedestrian injury and death, people should remember to:

• Use sidewalks. If no sidewalk is available, walk in the street facing traffic.
• Cross only at intersections and crosswalks. Never cross the street between parked cars.
• Look right, left and right again for traffic before stepping off of the curb.
• Walk where you are visible to drivers.
• When walking after dark, always wear reflective clothing.