Unintentional Injuries after Spinal Cord Injury: Findings among people in South Carolina

Unintentional injuries (UI) are one of the main reasons for people needing healthcare, including going to the emergency department or unplanned visits to the doctor or other healthcare provider. They may lead to disability or death. The most common types of UI are falls, motor vehicles crashes, poisoning, and burns. For many people, their spinal cord injury (SCI) was due to an unintentional injury. After SCI, people may be at risk for additional injuries because of the effects of SCI.

This fact sheet is based on the responses of a total of 1,018 participants from South Carolina completed a survey that included questions about injuries in the previous year. We defined unintentional injuries as injuries that happen as a result of some type of mishap or event. For the purpose of the study, we only asked about unintentional injuries that were serious enough to receive medical care in a clinic, emergency room (ER), or hospital. There are many other injuries that would not be severe enough to require treatment and many near misses.

The following graphs relate to the results of the unintentional injuries questions:

**Number of injuries in the past 12 months**

Figure 1 breaks down the portion or percentage of people by the number of injuries they had in the last 12 months.

Just less than 3 out of 10 people had at least one unintentional injury in the past 12 months that required treatment. Of these, most people only had one unintentional injury, but just over 1 out of every 10 people had two or more unintentional injuries requiring treatment in the previous 12 months.
Where people received treatment for their unintentional injuries

Figure 2 shows where people received treatment when they had an unintentional injury. Three separate locations were noted – emergency room, outpatient clinic or doctor’s office, overnight stay in the hospital. All percentages were based on the last 12 months. Among people with at least 1 UI, 8 out of 10 people were treated at least once in the emergency room. Five out of 10 reported being treated in a doctor’s office or other outpatient facility and nearly 5 out of every 10 had severe enough injuries to stay overnight in a hospital. Therefore, when UI occur, they can be serious and require significant treatment.

Injuries caused by a fall

Figure 3 summarizes the portion of people who had at least one fall related injury in the past 12 months. Falls resulted in UI for just over half of the people who had at least 1 UI in the last 12 months.

Walking status and the portion of people with 1 or more UI

Figure 4 summarizes the portion of people with at least one UI based on whether somebody could walk and whether they needed help from another person to walk. Those who can walk but need at least 1 person’s assistance were at the highest risk for unintentional injuries. Over 4 out of every 10 people who could walk, but needed someone else’s help, had at least 1 UI. Those who cannot walk or can walk without assistance had risk of less than 3 out of every 10 people.

*Note: an individual may have had more than 1 UI that required treatment.*
Walking status and the portion of people with 1 or more fall-related UI

Figure 5 summarizes the portion of people with at least one fall-related UI based on whether somebody could walk and whether they needed help from another person to walk.

Nearly 3 out of 10 people who can walk, but need someone’s help, had at least 1 fall-related UI. This is more than double the risk of fall related UI compared with those who could not walk at all and nearly double the risk for those who could walk without assistance.

How unintentional injury limited normal activities

Figure 6 shows the relative portion of participants and how they were affected by UI over the past 12 months.

Among people who had UI, just under 4 out of every 10 people (37%) stated that their UI limited normal activities for more than 4 weeks. In contrast, nearly 2 out of every 10 people said that the UI did not limit their normal activities at all (18%). Therefore, when people do have UI, they typically have at least some effect on the individual’s ability to continue normal activities and they have a major effect for just under 4 out of every 10 people.

Prescription medication use for muscle spasms and unintentional injury

Figure 7 summarizes the portion or percentage of participants who had at least one unintentional injury in the last 12 months. Participants were broken down into four groups based on taking prescription medication for spasms – never, sometimes, weekly, and daily.

Those who never use prescription medication for muscle spasms have the lowest rates (20.3%) of UI compared to those who do take prescription medication for spasms.
Prescription medication use for pain and unintentional injury

Figure 8 summarizes the portion or percentage of participants who had at least one unintentional injury in the last 12 months. Participants were broken down into four groups based on taking prescription medication for pain – never, rarely, occasionally and daily.

Those who never use prescription medication for pain have lower rates (14%) of UI compared to those who do take pain medication for pain. Those who take prescription pain medication daily have the highest percentage of people with at least 1 UI (34.5%), more than double the rate for those who never take pain meds.

Summary and Recommendations

About 29% of the participants in our study reported at least one unintentional injury in the 12 months prior to starting. Most of the participants who were injured reported that it affected their normal activities. Thirty-seven percent of the participants stated that their UI limited normal activities for more than 4 weeks. Those who are ambulatory (can walk to some degree) are at a higher risk for UI, particularly related to falls. Injury prevention should target ambulatory individuals who cannot walk independently. Prescription medication use for pain and prescription medication use for spasticity are associated with higher rates of UI.

This fact sheet is not meant to replace the advice of your physician or other healthcare provider. You should always consult your physician or healthcare provider before making changes to behavior, treatment, and particularly the use of medicine. This is only one study. Other studies may have different findings. This fact sheet is a product of grants 2017 SI-02 and 09-001 from the South Carolina Spinal Cord Injury Research Fund.