



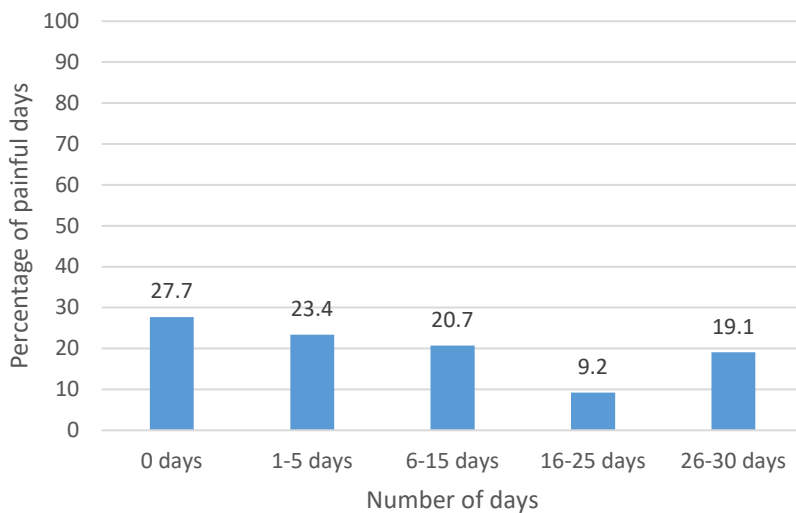
## Pain and Spinal Cord Injury

Pain is a common issue for people with spinal cord injury (SCI) and is typically more severe in those with SCI than in the general population. As with the general population, people with SCI may have nociceptive pain, which is joint or muscle pain (e.g., aches, soreness). This includes things like shoulder pain and pain from pushing a wheelchair or using a walker. People with SCI may also have neuropathic pain, or nerve pain. This is more of a burning, tingling, or shooting sensation, even in places where the individual does not have actual feeling. Pain can affect quality of life and function. Having more pain also means people may be more likely to take opioids to treat pain.

This fact sheet is based on a self-report study of 4,670 people with SCI. Participants answered several questions about pain and how it affected their lives.

### Number of painful days in a month

**Figure 1**



**Figure 1** shows the portion or percentage of participants who had a certain number of painful days in the last month. We grouped number of painful days into five categories.

Nearly 3 out of every 10 participants had no painful days reported. Two out of 10 participants reported pain 1-5 days a month, and another 2 out of 10 reported pain 6-15 days a month. Nearly 2 out of 10 participants reported pain on 26-30 days of the month. The average days of pain was 10.6 days.

## Number of painful conditions

Figure 2

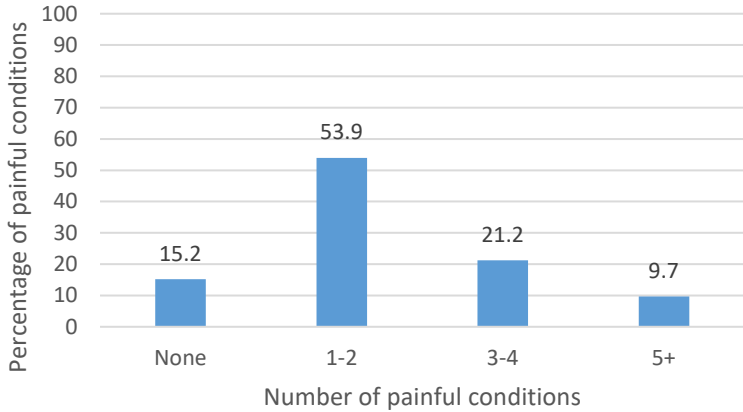


Figure 2 shows the portion or percentage of participants who had a certain number of painful conditions. We regrouped the number of painful conditions into four categories.

**Over half of participants reported having 1-2 painful conditions.** Just over 2 in every 10 people reported 3-4 conditions. There were fewer participants who had either no painful conditions or five or more painful conditions.

## Rating of pain on average (scale of 0-10)

Figure 3

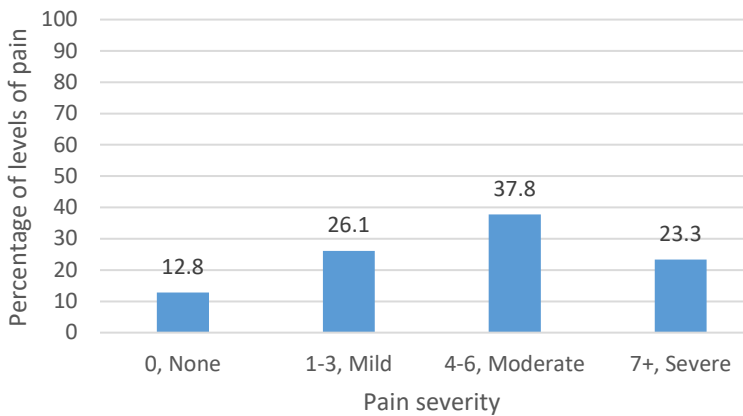


Figure 3 shows the portion or percentage of participants who reported different levels of pain on a scale from 0 – 10. We regrouped the pain severity variable into four categories: no pain, mild, moderate, and severe pain.

The largest group reported moderate pain (4-6 on a scale of 0-10). **Only about 1 out of every 10 participants reported no pain, with nearly twice the number of people reporting severe pain.** Therefore, there is a large portion of people with SCI for whom pain is a major problem.

## Portion of people using prescription medications for pain

Figure 4

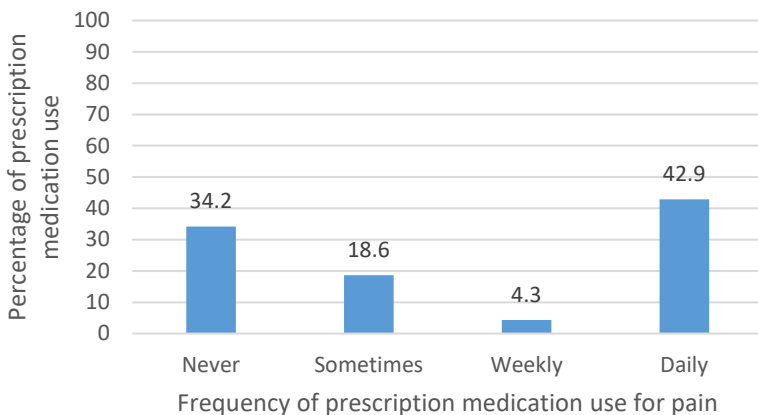


Figure 4 shows the portion of people who use prescription meds to treat pain and is broken down by how often they use them.

**Just more than 4 out of every 10 participants (42.9%) indicated they use prescription medications daily for management of their pain.** More than 3 out of every 10 people take no prescription medication at all for pain and less than 1 out of 10 take it less than weekly.

## Pain on average in those who use medications daily for pain

Figure 5

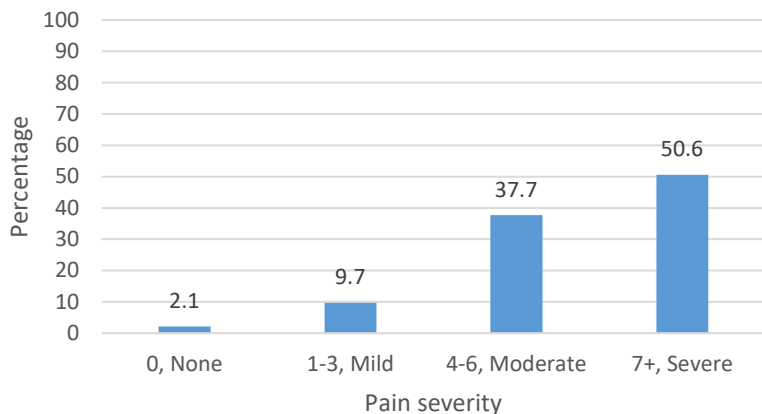


Figure 5 shows the portion or percentage of participants reporting no pain, mild, moderate, or severe pain, among those who use daily pain meds.

In those who take prescription medication daily for pain, 2% reported no pain. Just over half of the participants reported severe pain and about 4 out of every 10 reported moderate pain. **So, roughly 9 out of every 10 people taking daily prescription medication continue to have significant pain.** This suggests that pain medications do not appear to be working very well for most people. They still report a lot of pain.

## Elevated depressive symptoms as related to number of painful conditions

Figure 6

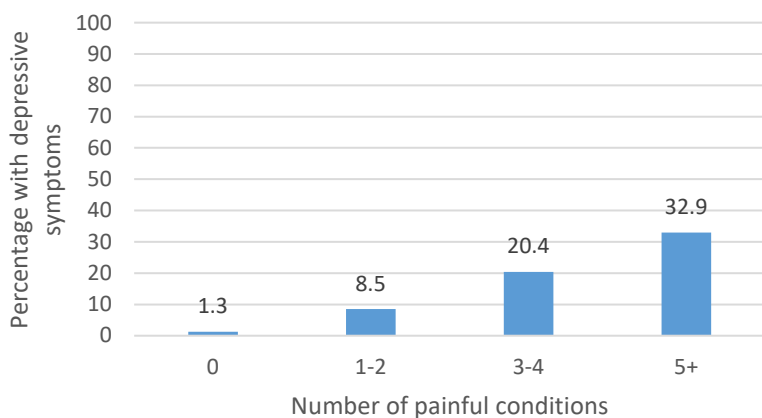


Figure 6 shows the portion or percentage of participants who had elevated depressive symptoms broken down by the number of painful conditions.

The number of painful conditions was strongly related to elevated depressive symptoms. **Only 1.3% of participants who had no painful conditions reported elevated depressive symptoms.** About 2 out of every 10 people who had 3-4 painful conditions had elevated depressive symptoms, while about 3 out every 10 people who had 5 or more painful conditions reported elevated depressive symptoms.

## Elevated depressive symptoms related to pain severity

Figure 7

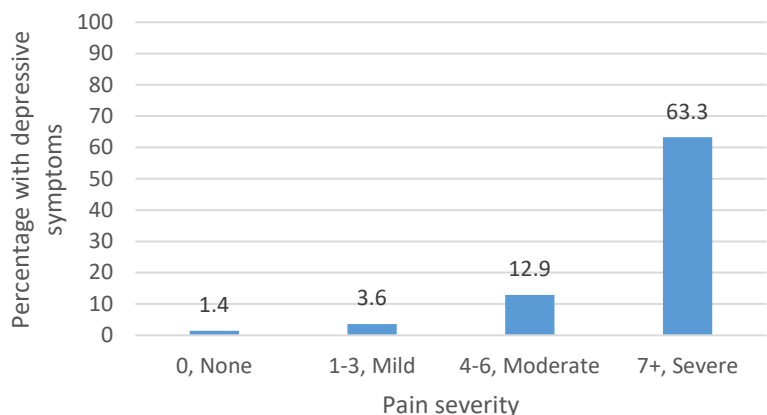
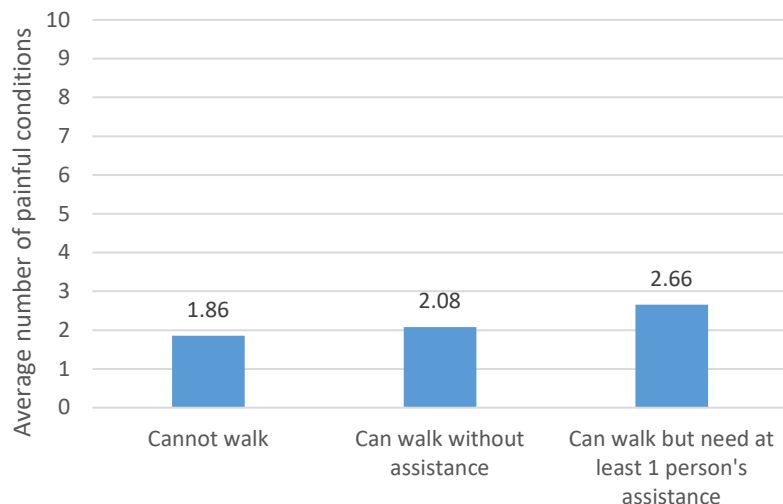


Figure 7 shows the portion or percentage of participants who had elevated depressive symptoms broken down by the severity of their pain.

Pain severity was highly related to depressive symptoms. Only 1.4% of the participants with no pain had elevated depressive symptoms. The portion of people with elevated depressive symptoms increased as pain severity increased. **About 6 out of every 10 people who reported severe pain also had elevated depressive symptoms.**

## Number of painful conditions by ambulatory status

Figure 8



**Figure 8** shows the average number of painful conditions among participants who either could not walk at all, they could walk without anyone's assistance, they could walk but they needed assistance from at least one other person.

**People who could not walk at all reported the fewest painful conditions.** People who could walk and did not require assistance, on average, reported slightly more painful conditions than those who could not walk at all. **Those who walked, but required assistance, had the most painful conditions.**

## Summary and Recommendations

On average, in the past month, participants reported that for about one-third of the days (10.6), pain made it hard for them to do their usual activities, such as self-care, work, or recreation. Of those participants who had at least one painful condition, over 4 out of 10 reported daily prescription medication use to treat pain. Among those participants who used pain medication every day to treat pain, the majority still had a lot of pain. So the pain medication clearly was not eliminating all or most of the pain.

There was a very strong relationship between the number of painful conditions, how severe the pain was, and the percentage of people who have elevated depressive symptoms. People without pain were rarely had elevated depressive symptoms in this study. Among people who reported severe pain, 6 out of every 10 appeared to have elevated depressive symptoms. This stresses how important it is to find ways of treating pain for people with SCI. It is clear that prescription meds alone do not take care of the pain for many people.

**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 from the US Department of Health and Human Services Administration for Community Living, NIDLIRR grant number 90RT5003, and the South Carolina Spinal Cord Injury Research Fund (SCIRF) grant numbers 2017 SI-02 and 09-001.**