

**Samuelsson KAM, Tropp H, Gerdle B (2004) Shoulder pain and its consequences in paraplegic spinal cord-injured wheelchair users. *Spinal Cord* 42: 41-46.**

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This summary is written for practitioners working with wheelchair users. The aim of the summary is to describe the article mentioned above and how a practitioner can use the findings in the article. The article describes the consequences of shoulder pain on activity and participation in spinal cord-injured paraplegic wheelchair users. There were 89 subjects asked to participate in the study, 56 answered and out of them the 21 that reported shoulder pain were asked to participate in further examinations and interviews. The study is a cross-sectional study.

### **Background**

The purpose of this study was to describe the consequences of shoulder pain on activity and participation in spinal cord-injured paraplegic wheelchair users. The article also describes the prevalence and type of shoulder pain.

The researchers want to investigate this because a paraplegic wheelchair user uses their upper extremities in many activities such as moving the wheelchair and themselves in and out of the chair and also in all other daily activities such as activities of daily living (ADL-activities) and household activities. These activities put much load on their muscles and joints that may cause pain.

### **Methods**

The subjects were people with paraplegia due to a spinal cord injury. They had lived with their injury of more than one year and were living in Uppsala or Linköping. They were contacted by mail and asked to fill out a questionnaire. There were 89 subjects contacted. 56 replied and those who reported that they had shoulder pain were asked to participate in further examination and interviews. There were only 21 who reported shoulder pain. The assessment tools used in the study were the Wheelchair Users Shoulder Pain Index (WUSPI), the Klein & Bell ADL-index and the Canadian Occupational Performance Measure (COPM). These assessment tools are valid and reliable. They are also well described in the text. The collected data was analysed using statistical software. The data was analysed using descriptive and comparative statistics. The analyses are not really countable because the group is really small (only 21 subjects).

### **Results**

The main finding was that 37.5% had had shoulder pain during the last month. The findings were not very clearly shown with tables and figures in the article. The type of pain is well described in the text. The most common identified problem was transferring the wheelchair in and out of the car and the second most common identified problem was propulsion of wheelchair.

## **Conclusion**

This study has one limitation and that is the very small sample group. There were only 21 subjects examined and interviewed. This is too small to be able to draw any conclusions from or to generalize the findings. This study raises the importance of correct seating, if one sits correct there is a bigger chance that shoulder pain will not be suffered. However, as stated, more research is needed to investigate the impact of the seating interventions and how these affect activity and participation of the person with spinal cord injury and shoulder pain.