

## **Solving the mystery of why a wheelchair is comfortable in clinic but not at home!**

### **Introduction**

As a newly qualified occupational therapist (OT) working in wheelchair services, it was recommended by my manager that I join PMG and also that I should apply for a bursary for the 2015 conference in Leeds. I was delighted to be awarded the bursary to attend this event that works to promote and encourage research and good practice in the area of posture and mobility.

The event featured speakers from a variety of different professional backgrounds, ranging from the motivational speaker who had trained to be an OT following a spinal cord injury and spoke about his work in developing countries, to service commissioners. Along with this, many companies that provide equipment to the UK and European mobility market showcased new products in the exhibition and these could be perused throughout the conference.

### **“Solving the mystery of why a wheelchair is comfortable in clinic but not at home”**

The above titled presentation, delivered by Kim Chaney, was one which I found particularly interesting and potentially beneficial to my practice. Kim discussed how wheelchair users often sit for more than 8 hours at a time, but that comfort remains difficult to define. Without the ability to quantify and provide evidence about comfort using outcome measures, it is difficult to ascertain whether issues surrounding comfort have been addressed. While pressure mapping can document pressure distribution over an area, it does not assess overall comfort for the patient.

Kim drew upon ergonomic research and the effects of vibration and shock on seated discomfort in vehicles, where a seat is perceived to be more uncomfortable when in motion. While there is research evidence to support this, there is not enough detail to form the basis of objective comfort evaluations. This area requires more research.

Kim also discussed how the Wheelchair Seating Discomfort Assessment Tool (WcS-DAT) serves to contribute to the assessment of discomfort/comfort (Crane, et al., 2004). Discomfort descriptors include: aches and pains; need to move; pressure points; feeling poorly positioned; unable to concentrate; instability; not comfortable; feeling too hot, cold or damp. Comfort descriptors include: absence of discomfort; feeling good; having no pain; able to concentrate; feeling stable. The WcS-DAT also includes general information, such as the amount of time spent sitting, and whether the individual has been transferred into the chair properly, both factors that are thought to affect ratings of discomfort intensity. The WcS-DAT is considered a comprehensive tool for quantification of wheelchair seat discomfort.

### **Reflection**

As a clinician working in wheelchair services, the goal is to assess and create a seating system that provides the necessary support for the client, to meet their specific seating needs such as postural support, and to consider skin protection, whilst also balancing the goals of the team and service.

Comfort is an important factor because it crosses all aspects of seating provision. It may increase compliance, therefore posture may be improved; deterioration and secondary complications may be reduced; increased independence in activities of daily living may be experienced; and participation in occupations which improve and promote wellbeing may be increased.

The WcS-DAT has the potential to provide quantifiable measures of comfort. This would enable a more evidence-based approach and allow interventions to draw upon research to achieve a better outcome for the service user. This could include a wider evaluation of the wheelchair within the home or community environments, rather than just the clinic setting.

**Limitations for use of the tool**

Wheelchair services often have long waiting lists and financial constraints which may limit how much a therapist can put into practice. In addition, the WcS-DAT relies on users having intact sensation and the ability to communicate their discomfort.

**Conclusion**

The conference, seminars and product demonstrations, as well as the information displayed in the poster presentations, provided valuable knowledge and encouraged information gathering to improve my practice as a wheelchair occupational therapist. In our service, we are also currently exploring how the WcS-DAT can be implemented to improve our assessment and documentation of comfort.

**References**

Crane, B. A. et al., 2004. Development of a consumer-driven Wheelchair Seating Discomfort Assessment Tool (WcS-DAT). *International Journal of Rehabilitation Research*, 27(1), pp. 85-90.

**Kerry Laniewski**

**Occupational Therapist**

**Millbrook Healthcare**

**Plymouth and West Devon Wheelchair Service**