ES2.3

Interdisciplinary systematic education about prevention of pressure injury among patient with spinal cord injury

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People with spinal cord injury (SCI) using wheelchair are at high risk of incurring pressure injury. Obtaining such pressure injury is usually a serious and prolonged condition, which requires systematic monitoring from various participants in the treatment line. Sunnaas Rehabilitation Hospital has extended experience in lifelong-tissues and supporting surfaces [1]. However, the short-term nature of these measures provides limited insight into the temporal changes in pressure during evoked or self-induced movements. We examined the performance of selected parameters derived from continuous pressure monitoring and actimetry to detect the knowledge of SCI and pressure injury risk and prevention among patients and healthcare professionals in our institution, and towards the community healthcare services.

We developed education programs that assess activities within a 24/7 perspective. Develop education programs for patients, next of kin, homecare services and nursing institutions. Utilise Tele rehabilitation as a tool in the collaboration and knowledge translation of the patient with an aim to prevent pressure injury. Which educational method(s) did you use and how did you apply them in practice? Based on interdisciplinary teamwork, clinical experience and literature review, a structured approach has been established, where user participation is crucial.

**Oral communication:** Weekly lecture for in-patients about risks and prevention Twice- a year lectures for the interdisciplinary staff at the hospital

**Written information:** Wallet information cards, brochures and booklets given to the patients Online: Webinar Available on https://www.youtube.com/watch?v=x2Mq38GBzu4, E-learning course available on www.123 https://sunnaas.no and www.123helseosro.no

**Tele-rehabilitation:** Videoconference between Sunnaas Rehabilitation Hospital, the patient and the homecare services. Plastic surgeons included when needed. Group guidance from Sunnaas Rehabilitation Hospital to the municipality Hot Line: Dedicated mobile number operated by a specialized wound nurse. Conferences and meetings: Information share and knowledge transfer.

**What were the results?:** Low threshold for contact from the patients and the homecare services. Early contact when the pressure injury is at grade 1 or 2 Increased possibility to reverse and to prevent further worsening of the pressure injury.

**Discussion and further steps:** Maintain and further develop the outpatient service Need for a competent and dedicated wound team and to continue the work in the hospital. Changing the focus from treatment to prevention. Further develop systematic, predictable multi- and interdisciplinary cooperation

**Clinical relevance:** Prevention of pressure injury should be given even closer attention and top priority in educating hospitalized patients, and also in education of the interdisciplinary staff at the hospital and the local care givers.

**References:**


ES3.1

A novel approach to identify individual positioning in a range of supine postures

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**Introduction:** Pressure mapping provides visual feedback of the interface pressures between vulnerable tissues and supporting surfaces [1]. However, the short-term nature of these measures provides limited insight into the temporal changes in pressure during evoked or self-induced movements. We examined the performance of selected parameters derived from continuous pressure monitoring and actimetry to detect postural changes [2]. This yielded large data sets, which would benefit from intelligent data processing. This motivates the present study, which examines the accuracy of machine learning for the prediction of supine postures.

**Methods:** Nineteen healthy participants adopted supine postures on a standard mattress, movements were evoked using the head of bed (HOB) angle and a tilting system to achieve sagittal (HOB between 0 and 60°) and lateral (left and right) postures, respectively. A series of time-related biomechanical parameters were estimated for the interdisciplinary staff at the hospital and the local care givers.

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