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## IMPLEMENTATION OF SLIDING SHEETS IN PATIENT REPOSITIONING

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**Aims:** The aim of this work is 1) to examine the effect of using sliding sheets when moving a bed-ridden passive patient on the prevalence of work-related musculoskeletal disorders, sense of workload, burnout and job satisfaction amongst nurses and nursing assistants; 2) to examine the factors influencing the implementation of sliding sheet use in nursing practice.

**Methods:** An interventional prospective repeated measurement study using self-reported questionnaires, physical evaluation scores of low-back pain, disability and morning stiffness (BADIX), in addition to a qualitative study examining the optimal way of implementing the use sliding sheets. The convenience sample included 52 nurses and nursing assistances (all female) from three internal medicine departments, Bnai-Zion Medical Center, Haifa, Israel. Participants were asked to complete a 5-section questionnaire, 4 times, reporting on basic demographics, neck, arms, shoulders, hands and low back pain disability and an estimation of job satisfaction, workload and burnout at work. Repeated measures ANOVA with Bonferroni posthoc comparisons identified significant factors. A discussion group was formed for the qualitative study.

**Results:** Neck, arms, shoulders, hands, low back pain and disability decreased and job satisfaction increased after three (end of the intervention phase) and six (end of the follow up phase) months of using the sliding sheets (P<0.001; P=0.041; P<0.001; P<0.001 accordingly). Perceptions of the workload and burnout level were not associated with the use of the sliding sheets.

**Conclusions:** Implementation of sliding sheet use generates a clear influence on the reduction of prevalence rates of symptoms in the neck, arms, shoulders, hands and lower back and increased job satisfaction. Management efforts to maintain ongoing training in order to establish a culture that encourages the use of sliding sheets in patient handling, is crucial in reducing the risk of musculoskeletal disorders and promoting nursing staff job satisfaction.



#### **Recent Publications**

- Alperovitch Najenson D et al. (2010) Low back pain among professional bus drivers: Ergonomic and occupational-psychosocial risk factors. Isr. Med. Assoc. J. 12(1):26-31.
- Alperovitch Najenson D, Treger I and Kalichman L (2014) Physical therapists versus nurses in a rehabilitation hospital: Comparing prevalence of work related musculoskeletal complaints and working conditions. Arch. Environ. Occup. Health. 69(1):33-39.
- Alperovitch Najenson D et al. (2014) Rehabilitation versus nursing home nurses' low back and neck shoulder complaints. Rehabil. Nurs. 40:286-293. Doi:10.1002/rnj.172.
- Kalichman L, Alperovitch Najenson D and Treger I (2016) The impact of patient's weight on post-stroke rehabilitation. Disabil Rehabil. 38(17):1684-1690. Doi: 10.3109/09638288.2015.1107640.
- Weiner C, Kalichman L, Ribak J and Alperovitch Najenson D (2016) Repositioning a passive patient in bed: Choosing an ergonomically advantageouassistive device. Appl Ergon. 2017 Apr; 60:22-29. Doi:10.1016/j. apergo.2016.10.007.

#### **Biography**

Deborah Alperovitch Najenson is a Physical Therapist. Her expertise is Ergonomics. She has completed her PhD from the Faculty of Medicine, Tel Aviv University and Postdoctoral studies from School of Physical Therapy, Ben Gurion University of the Negev, Israel. She lectures in the Department of Physical Therapy at the same university and in the Department of Environmental and Occupational Health, Tel Aviv University, Israel. She does research in the field of ergonomics and guides students in their thesis. She also directs a physical therapy department in a large geriatric hospital.