

Project Summary for EPUAP website

Project Title:

DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A PRESSURE ULCER TREATMENT PROTOCOL FOR PATIENTS SUFFERING FROM SPINAL CORD INJURY IN A SPECIALISED DANISH HEALTHCARE SETTING.

Project Team:

Knaerke Soegaard, PhD student, RN, Department of Plastic Surgery at Odense University Hospital and University of Southern Denmark

Jens Ahm Sørensen, MD, PhD, Professor, Odense University Hospital and Department of Clinical Research, University of Southern Denmark

Dimitri Beeckman, RN, PhD, Professor, University Centre for Nursing and Midwifery, Skin Integrity Research Group (SKINT), Ghent University, Belgium

Sofie Verhaeghe, RN, PhD, Professor, University Centre for Nursing and Midwifery, Ghent University, Belgium

Fin Biering-Sørensen, MD, PhD, Clinical professor, Clinic for Spinal Cord Injuries, NeuroScience Centre, Rigshospitalet, and University of Copenhagen, Denmark

Project Focus:

Development, implementation and evaluation of a pressure ulcer treatment protocol for individuals suffering from spinal cord injury.

Introduction:

Individuals suffering from a spinal cord injury have a lifelong increased risk of developing pressure ulcers and up to 95% are experiencing a pressure ulcer during their lifetime. Pressure ulcers have tremendous impact of the individuals as well as economy and current treatment is more based on traditions than evidence.

Project Aim:

The aim of this study is to develop, implement and evaluate a pressure ulcer treatment protocol for patients suffering from spinal cord injury in a specialized Danish healthcare setting.

Key Milestones:

Systematic review with focus on pressure ulcers among the spinal cord injured population

Development of a pressure ulcer treatment protocol for individuals suffering from spinal cord injury in collaboration with clinical experts and representatives from the spinal cord injured population.

Implementation and evaluation of the treatment protocol.

References:

1. Gélis, A., Dupeyron, A., Legros, P. et al. Pressure ulcer risk factors in persons with SCI: part I: acute and rehabilitation stages. *Spinal Cord* 47, 99–107 (2009). <https://doi.org/10.1038/sc.2008.107>
2. European Pressure Ulcer Advisory Panel, National Pressure Ulcer Advisory Panel, Pan Pacific Pressure Injury Alliance. Prevention and treatment of pressure ulcers: quick reference guide. 2nd edn. 2014.
3. Schiffman, J., Golinko, M.S., Yan, A. et al. Operative Debridement of Pressure Ulcers. *World J Surg* (2009) 33: 1396. <https://doi.org/10.1007/s00268-009-0024-4>
4. Brem H, Maggi J, Nierman D, Rolnitzky L, et al. High cost of stage IV pressure ulcers. *Am J Surg*. 2010 Oct;200(4):473-7. Doi: 10.1016/j.amjsurg.2009.12.021.
5. Stroupe K, Manheim L et al. Cost of Treating Pressure Ulcers for Veterans with Spinal Cord Injury. *Topics in Spinal Cord Injury Rehabilitation* (2011) Vol. 16, No. 4, pp. 62-73. <https://doi.org/10.1310/sci1604-62>
6. Hopkins A, Dealey C, Bale S, Defloor T, Worboys F. Patient stories of living with a pressure ulcer. *JAN Leading Global Nursing Research*. 2006 November;56(4)(345-353). <https://doi.org/10.1111/j.1365-2648.2006.04007.x>
7. Mathiesen AS, Norgaard K, Andersen MF, Moller KM, Ehlers LH. Are labour-intensive efforts to prevent pressure ulcers cost-effective? *J Med Econ* (2013), 16, 1238-45.
8. Johnson RL, Gerhart KA, Menconi JC, Whiteneck GG. Secondary conditions following spinal cord injury in a population-based sample. *Spinal Cord* (1998) Jan;36(1):45-50. DOI: 10.1038/sj.sc.3100494
9. Le Fort M, Espagnacq M, Albert T, Lefèvre C, Perrouin-Verve B, Ravaud JF (2018). Risk of pressure ulcers in tetraplegic people: a French survey crossing regional experience with a long-term follow-up. *The European Journal of Public Health*. Vol. 28, No 6, 993-999.
10. European Pressure Ulcer Advisory Panel, National Pressure Ulcer Advisory Panel, Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers /Injuries: Clinical Practice Guideline. 3. edi. 2019
11. Brouwers MC, Kerkvliet K, Spithof K. The AGREE Reporting Checklist: a tool to improve reporting of clinical practice guidelines. *BMJ* 2016;352:i1152. <https://doi.org/10.1136/bmj.i1152>
12. Byrgers J, Smolders M, vander Weijden T, Davis D. Clinical practice guidelines as a tool for improving healthcare. Chapter 6 in: *Improving Patient Care. The implementation of change in health care*. Edited by Grol R, Wensing M, Eccles M and Davis D. BMJ Books, 2. Edition. 2013.
13. Keeney S. The Delphi Technique. Chapter 20 in: *The research process in nursing*. Edited by Gerrish K and Lathlean J. Wiley Blackwell. 7. Edition. 2015.
14. Adker M and Ziglio E. (editors). *Gazing into the Oracle. The Delphi Method and its Application to Social Policy and Public Health*. Jessica Kingsley. United Kingdom 1996.
15. Nilsen P. Making sense of implementation theories, models and frameworks. *Implementation Science* (2015) 10:53. DOI: 10.1186/s13012-015-02420
16. Grol R and Wensing M. Effective implementation of change in healthcare: a systematic approach. Chap. 3 in: *Improving Patient Care. The implementation of change in health care*. Edited by Grol R, Wensing M, Eccles M and Davis D. BMJ Books, 2. Edition. 2013.
17. Lidal IB, Huynh TK, Biering-Sørensen F. Return to work following spinal cord injury: a review. *Disability and Rehabilitation*, 29:17, 1341-1375. <https://doi.org/10.1080/09638280701320839>