14th - 15th January - 2025

# Emergency Medical Service Nurses' Experiences and Perspectives on a Protocol Change of Pre-Hospital Preventive Immobilization of Spinal Injuries After Trauma: A Qualitative Study

# Otto J. van de Breevaart \*

University Medical Centre Utrecht, Utrecht, the Netherlands Maasstad Hospital, Emergency Department, Rotterdam, the Netherlands

#### Nancy E.E. Van Loey

Amsterdam University of Applied Sciences, Research Group Integrated Complex Care, Faculty of Health, Center of Expertise Urban Vitality, Amsterdam, Netherlands

Utrecht University, Department of Clinical Psychology, Utrecht, the Netherlands

#### Luke P.H. Leenen

University Medical Centre Utrecht, Utrecht, the Netherlands

# Lisette Schoonhoven

Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, the Netherlands

School of Health Sciences, Faculty of Environmental and Life Sciences, University of Southampton, UK

# Wietske H.W. Ham

University of Applied Nursing Science of Utrecht, the Netherlands

### Abstract:

**Objective:** In 2016, a selective preventive spinal immobilization protocol for emergency medical service (EMS) nurses was introduced in the Netherlands. This protocol leaves more room for autonomous decision-making in the pre-hospital phase regarding preventive spinal immobilization (PSI), compared to the previous strict pro tocol. In this study, we explored the experiences and perspectives of EMS nurses on decisionmaking about PSI after the change from a strict to a selective PSI protocol.

**Methods:** We used a qualitative design with semi-structured face-to-face interviews. Thematic analysis was applied. The capability-opportunity-motivation-behavior-model was used to interpret the experiences and perspectives.

**Results:** Thirteen EMS nurses from three emergency medical services were interviewed. Respondents appreciated autonomous decision-making as there was more room for patient-centered informed decision-making. However, autonomous decision-making required optimized knowledge and skills and elicited the need to receive feedback on their decision not to apply PSI. When nurses anticipated resistance to selective PSI from receiving hospitals, they were doubtful to apply it.

**Conclusion:** Nurses appreciate the increased autonomy in decision-making, encouraging them to focus on patient-centered care. Increased autonomy also places higher demands on knowledge and skills, calling for training and feedback. Anticipated resistance to receiving hospitals based on mutual protocol discrepancies could lead to PSI application by EMS nurses while not deemed necessary.