# Poster Abstract submission –NORNA 2023

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# Presenter

Magnhild Vikan has worked as an operating room nurse since 2006 in various positions. She had her postgraduate education at Aker University Hospital, and her clinical and administrative experience is from Aker and the Department of Day Surgery at Ullevål University Hospital. Magnhild worked in the Norwegian Armed Forces Joint Medical Services for a few years, before she went to Oslo Metropolitan University as an Associate Professor at the Master’s Programme in Advanced Practice Nursing to Acute and Critically Ill Patients -Operating Theatre Nursing in 2018. Since January 2023, she has been a PhD candidate and is in the research field of patient safety culture and adverse events in the surgical context.

A close-up of a person smiling

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Trestakkveien 20

2016 FROGNER

Norway

## Preferred type of presentation

Oral presentation of paper

# Abstract

## Title

The association between Patient Safety Culture and Adverse Events- a scoping review

## Background

Adverse events (AEs) affect 10% of in-hospital patients, causing increased costs, injuries, length of hospital stays, disability, and mortality. More than 50% of in-hospital AEs have been associated with surgery.

## Research problems

The purpose is to summarize the evidence of the association between Patient Safety Culture (PSC) and AEs and map the applied research methodology.

## Method

A scoping review with the PRISMA-ScR checklist for transparency in reporting. Systematic searches in Embase, PsycINFO, Cinahl, Cochrane Library and Epistemonikos. Blinded screening using Rayyan Software.

## Results

We included 34 of 1,737 screened articles. Most studies had a multicentre design, conducted in hospitals in high-income countries. Seventy-six per cent of the studies demonstrated an inverse association where increased PSC scores showed reduced AEs rates. Methodological approaches varied, including missing reports on the validation of the used tools, variation in participants, medical specialities, and work unit level of measurements. In 24% of the articles, no inverse association between PSC and AEs was found. How contextual factors are addressed, and which concepts are used in the research, might partly explain this discrepancy in the evidence. We identified a lack of eligible studies for meta-analysis and further synthesis. This review demonstrated a need for prospective longitudinal studies utilizing a more uniform research methodology to reduce the discrepancy in the evidence on the association. Conclusively, the evidence indicates an inverse association between PSC and AEs. However, we still need a broader understanding of PSC and efforts to reduce AEs in surgery and other hospital contexts.

Keywords: Patient safety culture, adverse events, healthcare services research