

# Aggression Management in General Hospitals: A joint Nursing Science - Design Research Project

## Workshop

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**Keywords:** aggression management, nurse, general hospital, interdisciplinary, methodology, design analysis

## Introduction

Aggressive behaviour of patients towards nursing staff is a subject that has been increasingly discussed over the last 20 years. Internationally, patient aggression is classified as a severe and dangerous problem in health care system, as staff members run a great risk at experiencing patient aggression during their career. In general, nurses report more patient or visitor aggression than other health care professionals. Almost all nurses have been exposed to patient aggression [1]. This has a negative effect on their health, their job motivation and consequently on the patients' quality of care [2, 3]. On this account different organisations, such as the World Health Organization (WHO), call for the development of studies on the issue of aggression in day-to-day care. The aim is to close information gaps, to stimulate the discussion and to improve the cooperation in the field of aggression in the health care system worldwide.

Research on aggression management in general hospitals is still in its beginnings. There is some evidence on the prevalence of aggressive assaults from hospitals in North America and in the United Kingdom. However, evidence from continental European healthcare institutions is still lacking. Nonetheless, guidelines or de-escalation strategies often synthesize findings on violence in the mental health inpatient setting [4, 5]. Although this setting has some similarities with the general health care setting, the remaining differences do not allow a straightforward generalization across settings [6]. This hampers the implementation of efficient management strategies to prevent patient and visitor aggression in general hospitals.

Patient's and/or visitor's health state (e.g. cognitive processing, emotional state), the architectural and organisational work environment in which health care staff is working (e.g. type of ward, organisational procedures), the staff characteristics (e.g. closeness of patient and visitor contact, professional experience, attitude), the interaction process (e.g. frustrating experiences, painful interventions) are seen as important factors in the development of patient aggression in general hospitals [1, 7, 8]. Studies have only partially described these factors related to patient aggression and existing results are conflicting. Furthermore, patient aggression seems to depend on the social context or cultural background of the health care system [9].

Therefore, the present study on patient aggression in general hospitals was conducted in Switzerland with a joint research team from the Department of Health Sciences of Bern University of Applied Sciences and the main research area Communication Design of the Bern University of the Arts. This interdisciplinary research team consists of sociologists, psychologists, nursing experts, communication designers, interior designers and product designers. We investigated the prevalence of aggressive incidents, the consequences for staff members, the nursing interventions following the incidents, and the communication between patients and staff. Furthermore, we

collected data about the situational and the design variables of the sites where the incidents occurred.

## **Aim**

The aim of this ongoing research project is to identify risk factors of patient aggression and to improve both preventive measures and the handling of aggressive assaults in general hospitals with an interdisciplinary methodological approach.

This workshop will...

- sensitise researchers to the problem of violence in a general hospital setting.
- present an interdisciplinary methodological approach and how it could lead to new perspectives
- discuss the pros and cons of new and interdisciplinary research approaches.

## **The Workshop**

Methodologies from different research areas were applied in this study to obtain a comprehensive view of incidents of aggression in general hospitals in Switzerland. We will present this methodological approach and discuss experienced successes and pitfalls. The discussion includes the presentation of study results. Study results will be presented and a vivid description of the interdisciplinary work will be given.

## **Sample and Setting**

A sample of 32 medical, surgical, geriatric, psycho-somatic and mixed wards from 8 different general hospitals in the German-speaking part of Switzerland participated in the study. Only nursing staff in contact with patients and visitors and adequate command of the German language participated in the study.

## **Data Collection**

The study was conducted between August 2008 and April 2009. Data were collected using prevalence measures with incidence forms, qualitative interviews and room inspection. Permission for the investigation was given by the Ethical Commission and by the heads of nursing staff in the participating general hospitals. These head nurses, who had previously been informed about the study by the principal investigator, informed the nursing staff on their wards about the study. On all wards incidence forms along with written information on the study were available.

## **Instruments and methodologies used**

A mixed method approach was used to investigate aggressive behaviour of patients against nursing staff in general hospitals to identify activators, forms of aggression, frequency, nursing interventions following the incident and consequences for staff members. For this purpose different instruments and research methodologies were used. First, the Staff Observation of Aggression Scale – Revised, SOAS-R adapted for general hospitals [10, 11] was applied. This reporting instrument gathers incidents of aggression from the nursing staff's point of view, immediately after the incident has occurred. Second, to better understand aggressive incidents in the specific medical field on the different ward, the design team asked the nursing staff to sketch the situation on a special room-analysis survey. Each staff member drew his/her position, the position of the patient and of other attendant staff members or visitors, similar to filling out an accident report form. Additionally, as a third step, the nursing research team conducted half-structured interviews with nurses following violent incidences. Finally, as a last investigation tool, the design team was

guided by staff members into rooms where aggressive incidents have increasingly occurred. On the basis of photographs (of the room, furniture, materials, view), sketches, semantic differentials and definitions of colours, the rooms have been registered.

## Analysis

In a traditional way each discipline analysed the data with their common methodological approaches. The SOAS-R was analysed with standard descriptive statistics to describe and summarize the data. Associations between categorical variables were tested with chi-square tests. Interviews and room surveys were analysed with qualitative content analysis and the room inspections were analysed by design parameters. In addition, in regularly meetings guided discursive discussions were carried out from which an interdisciplinary methodological approach emerged.

## Results

Based on this interdisciplinary approach the research team developed an optimised communication environment including attentiveness for the situation of the patient (anxiety, confusion, pain), focussing on verbal and non-verbal communication skills (stress and information management) and concern of environmental arrangement (noise, colour, arrangement). As an ongoing work the interdisciplinary solutions was and will be didactically prepared. They will be exemplarily used in educational programs in order to improve communication skills.

## Conclusions

The study allows conclusions beneficial to human resources, organizational practices and development of theory. This research project delivers a fundamental contribution in the fields of assault prevention and intervention by closing information gaps. Finally, we are exploring and developing new ways of communicating knowledge in an interdisciplinary team.

## Acknowledgments

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