

Pain in the Emergency Department of a German Hospital

Incidence, Intensity and Localization

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Situation Overview

While pain is the main reason for patients to visit a hospital's emergency department (ED), it is a hardly explored phenomenon in this context.¹ Moreover, while effective pain management is the most important dimension of patient satisfaction in EDs, there is a lack of German-language studies and concepts for the optimization of the deficient pain management in these units.¹⁻³ To develop and implement a structured pain management for EDs, it requires a profound knowledge of pain incidence, intensity and localization in emergency patients.

Research Questions

1. What is the incidence of patients suffering from pain while visiting the emergency department?
2. Do these patients suffer from acute or chronic pain?
3. Are there any differences regarding pain intensity and localization in internal vs. surgical patients?

Methods, Data Collection and Sample

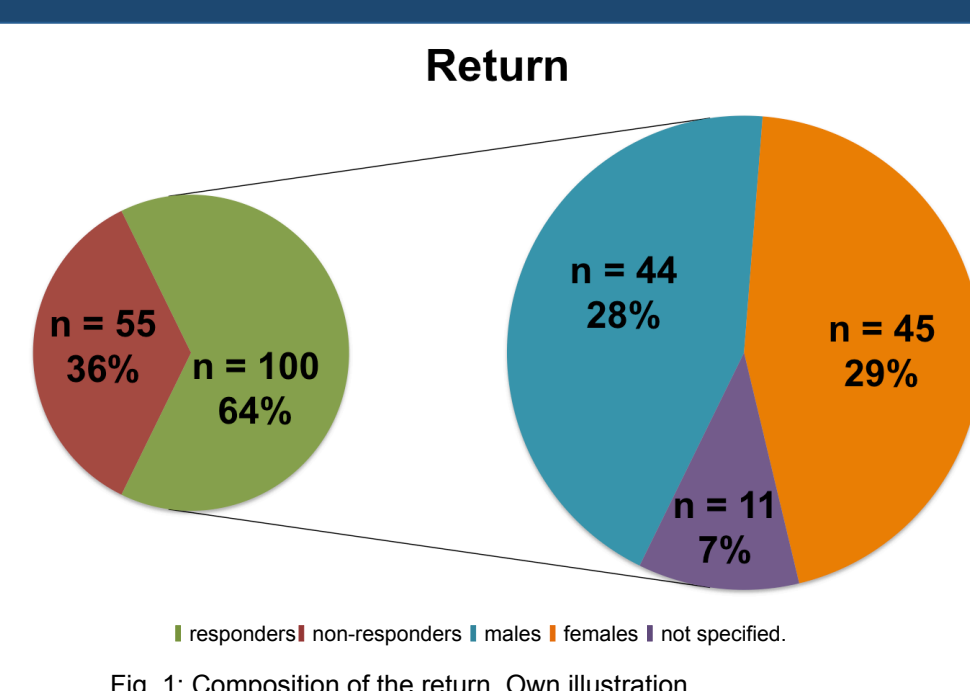
This empirical study is based on a paper-based, quantitative survey. The study population includes patients who were treated during a two-week study period in the emergency department of a primary care hospital in Hessen, Germany. Informed consent was required to participate in the survey.

Ethical Considerations

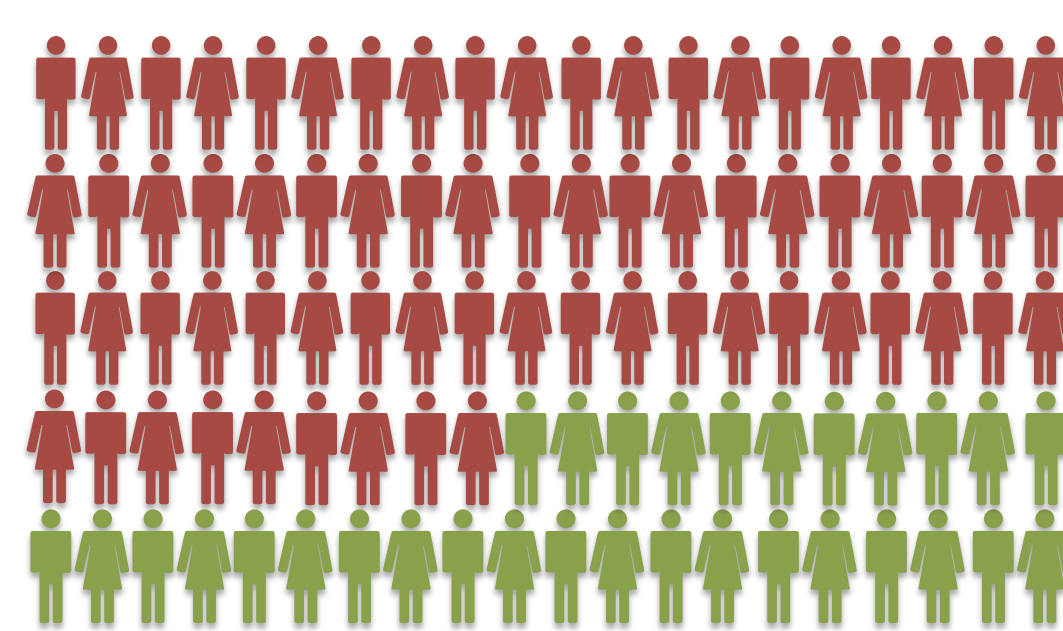
Patients who were treated by one of the somatic disciplines (Internal Medicine, General Surgery, Traumatology) and consented were included in the evaluation, but not those who were either admitted to a palliative or intensive care unit or who were disoriented, confused or suffering from dementia. Furthermore, no children under the age of 14 or patients with limited knowledge of the German language were included. There are no conflicts of interest among the authors.

Return and Patient Characteristics

A total of 155 paper-based questionnaires were handed out to outpatients (immediately after completion of treatment) and inpatients (on the day after their admission). The return is 64.52% (n = 100). 44% of respondents were male and 45% female (Fig. 1). The average age is 54.1 years.



Incidence of Pain in the ED



Across all departments, 69.0% of respondents reported experiencing pain (Fig. 2). Out of these, 79.7% indicated acute and 15.9% chronic pain. 85.5% of all respondents stated pain as the main reason for visiting the emergency department.

Intensity of Pain Before Treatment

The average pain score before analgesic treatment across all departments was 5.9 on a ten-step Numerical Rating Scale (NRS) (Internal Medicine 5.8; General Surgery 7.0; Traumatology 6.2; Fig. 3).

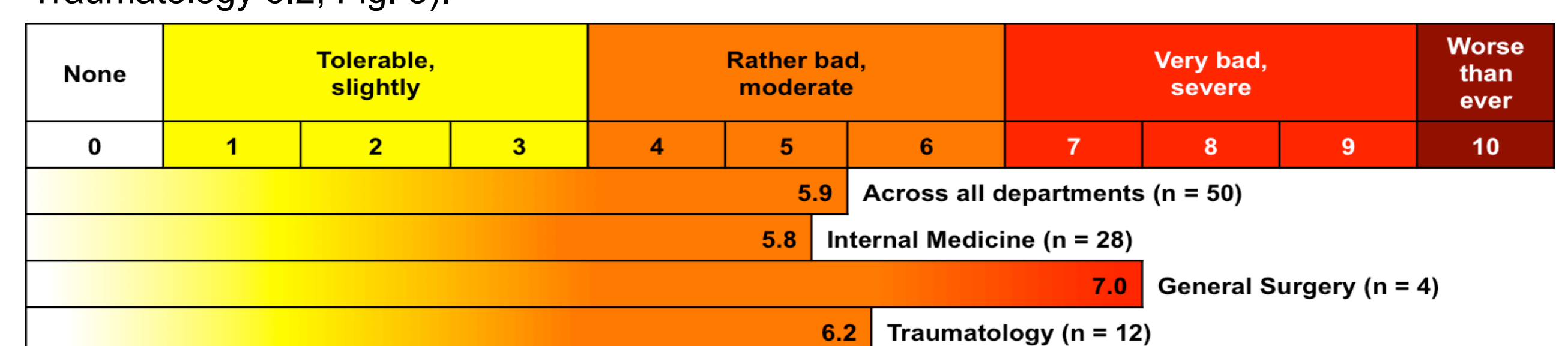


Fig. 3: Intensity of pain before analgesic treatment on a ten-step Numerical Rating Scale. Own illustration.

Pain Localization per Departments

A majority of patients who were treated in the Internal Medicine department complained about abdominal pain (45.7%), pain in various areas of the body (17.1%), or chest pain (14.3%). In the General Surgery department, all patients complained about abdominal pain (100%) and in the Traumatology department mostly about limb (45.5%) or thoracic pain (18.2%) (Fig. 4). There were no differences in pain localization between male and female patients.

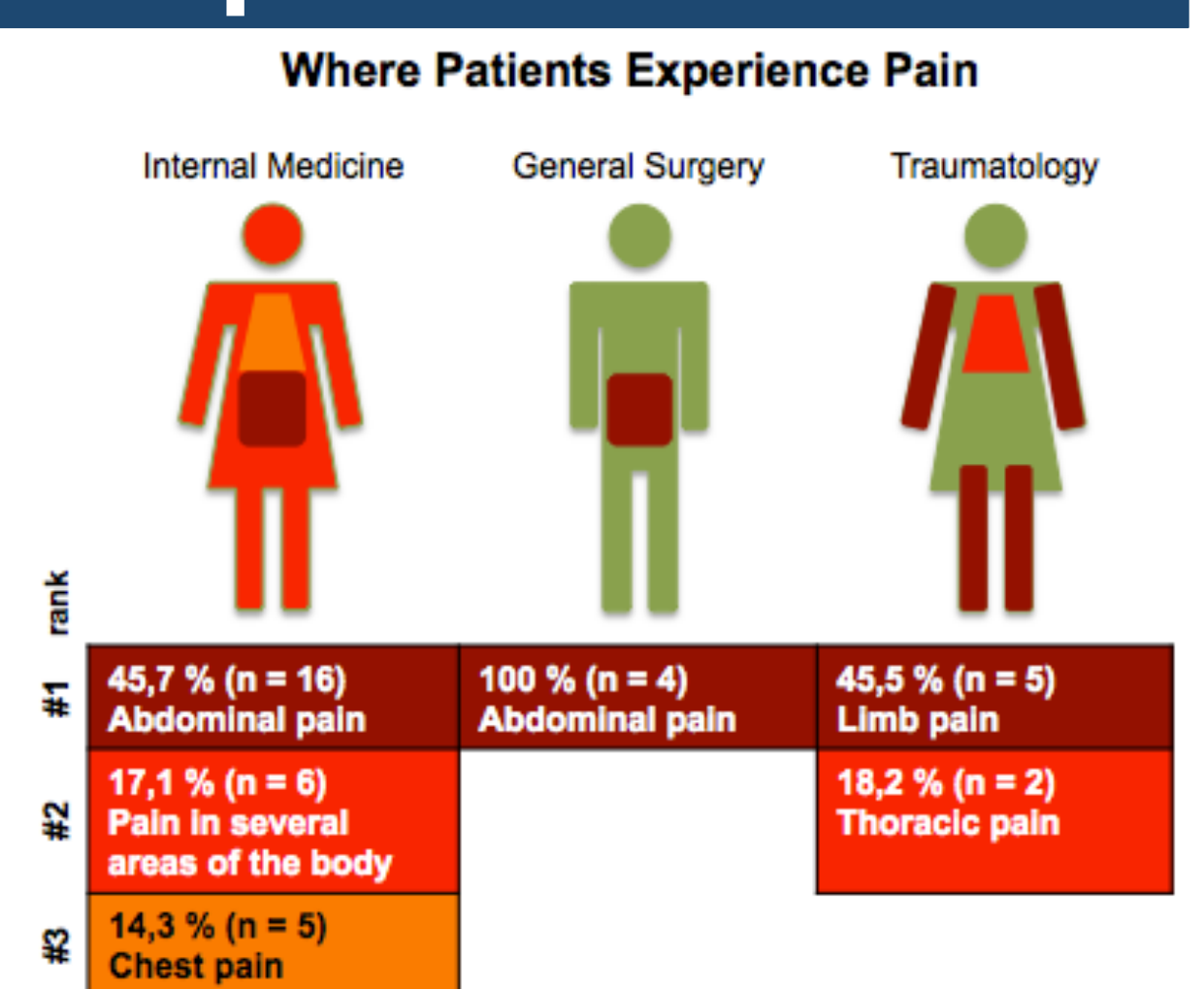


Fig. 4: Localization of pain in various departments. Own illustration.

Conclusions and Recommendations

This study demonstrates the outstanding importance of pain in the emergency department. Most patients in an ED experience pain to some extent and in many cases pain is the reason come to the hospital. In most cases, the pain requires a targeted intervention.

As shown by these findings, developing and implementing an inter-professional and effective pain management concept is crucial and should therefore be driven forward. Furthermore, the implementation of this core process should be subject to an accompanying evaluation in the sense of continuous monitoring. This task can be performed by an academically qualified nurse settled in the management of the ED in close cooperation with the medical management of the unit. Through this process of collaboration, pain management is continually and extensively examined, evaluated and optimized.

References

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