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Multiple sources of pain in patients attending chronic pain clinics

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Abstract

Introduction

Identifying the source of pain is of major importance in treating chronic pain. The treatment outcome for chronic pain, is impacted if multiple pain sources are present. The aim of this study was to determine how common were multiple pain sources in patients attending chronic pain clinics.

Methods

This retrospective study included 300, randomly selected, adult patient charts from three pain management centers in Ireland. We recorded patient demographics, the sources of pain and injury.

Results

Patients, age ranged between 18 to 92 years of age (Mean/SD) (56 years ±15.75). Sixty one percent of patients (184) were women. Our study showed that 63**%** (188) had more than one source of pain. The most common source of pain was back pain 119/300 (39.7%) followed by joint pain 117/300 (39.0%), back and leg pain 103/300 (34.3%) and neck pain 76/300 (25.3%). Twenty percent of patients (59), had injuries caused by road traffic accidents, work related injuries and post-surgical.

Conclusion

Diagnosing the source and mechanism of pain is fundamental in the treatment of chronic pain conditions. The majority of patients attending chronic pain clinics have more than one source of pain.

Introduction

Chronic pain is pain that lasts longer than the normal healing time [1]. It is pain, that lasts more than three months [2]. Twenty per cent of the population suffers from chronic pain and it accounts for 15-20% of physician visits[3,4,5,6].

Knowledge that patients may have multiple sources of pain can explain poorer outcomes with individual treatments. Physician's would be aware to look for multiple pain sources in their history taking, physical examination and diagnostic imaging. It would allow better communication with patients regarding diagnosis and treatment.

Chronic pain patients attend chronic pain clinics. It is important to identify the percentage of patients who have multiple sources of pain attending chronic pain clinics and to characterize these. This is a study that has not previously been done. The information provided would be helpful in terms of the care of these patients.

Methods

This is a retrospective, multi-centre study, from hospitals that collectively serve a population of 762,690 people in Ireland. The study was approved and conducted in accordance with local hospital ethical committee standards.

The study was conducted in 2021, on 300 randomly selected adult patient charts, from three pain clinics in Ireland (100 from each). The inclusion criteria were that patients were attending the clinics for more than six months and were over 18 years of age. The study recorded: patient demographics, sources of pain and mechanisms including injuries.

The statistical analysis was summarized in percentages and counts. The numerical data was checked for normality and introduced as mean (standard deviation). All data analysis was performed using Microsoft Excel.

Results

Demographics

Patient ages ranged between 18 to 92 years of age (56+/-16). Out of the 300 randomly selected patients 63% (118/300) had multiple sources of pain. Sixty-one percent of patients were female. The most common source of pain was back pain (39.66%), followed by joint pain (39%), back and leg pain (34.33%), neck pain (25.33%), back and neck pain (6%) and headaches (4.33%). Eighteen percent of patients, were after an injury (road traffic accident, work related injury or post-surgical).

Multiple pain sources

This study indicates that the majority of patients (63%) attending chronic pain clinics have multiple sources of pain. The patients were categorized based on the pain source they presented with and the data was gathered for those that had more than one source of pain. Using Venn diagrams, it was determined that there was coexisting back and joint pain in 57 patients (24.15%) [**Figure 1**];

coexisting back and leg pain with joint pain in 28 patients (12.72%); coexisting neck, back and joint pain in 13 patients (4.16%) and coexisting injury related pain with back and joint pain with 8 patients (2.76%) (**Figure 2**).

Figure 1. Venn diagram depicting coexisting back and joint pain.

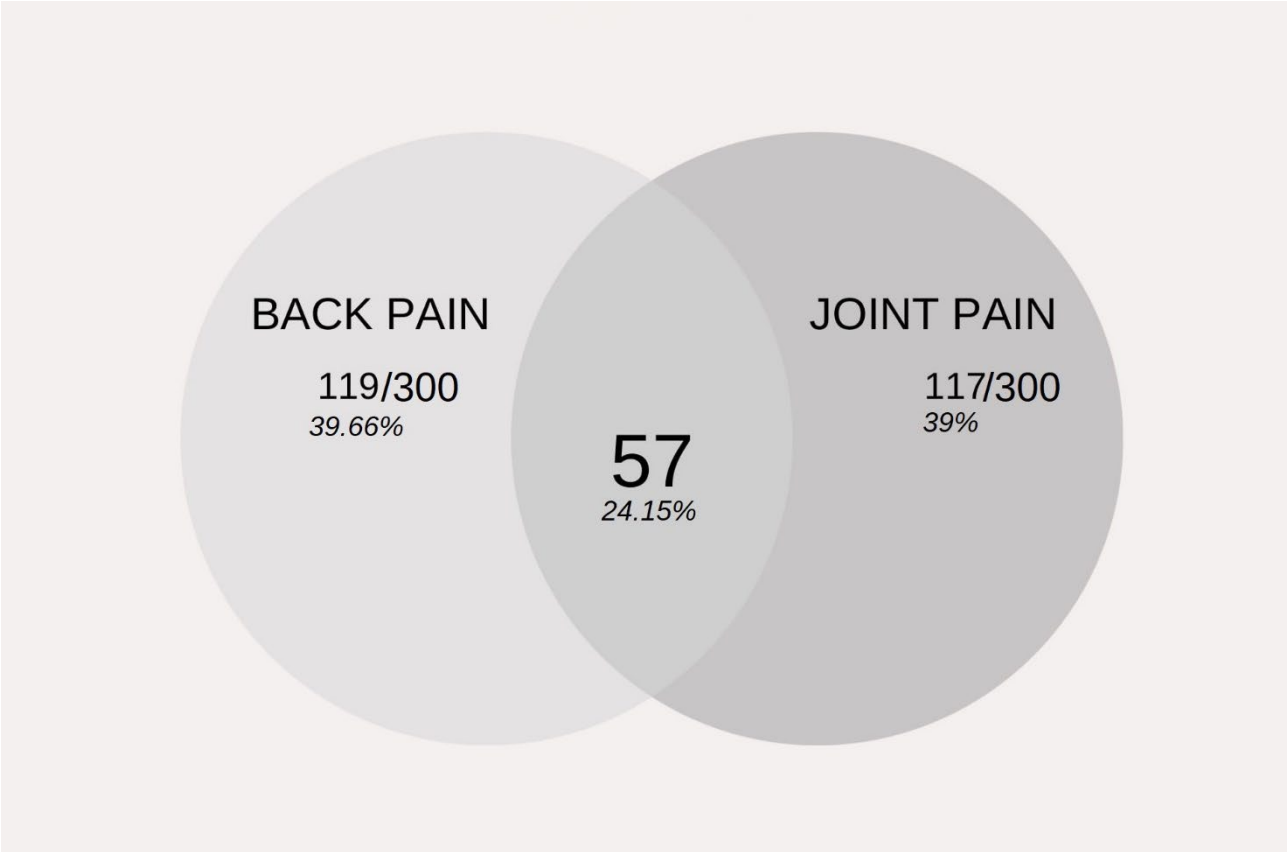
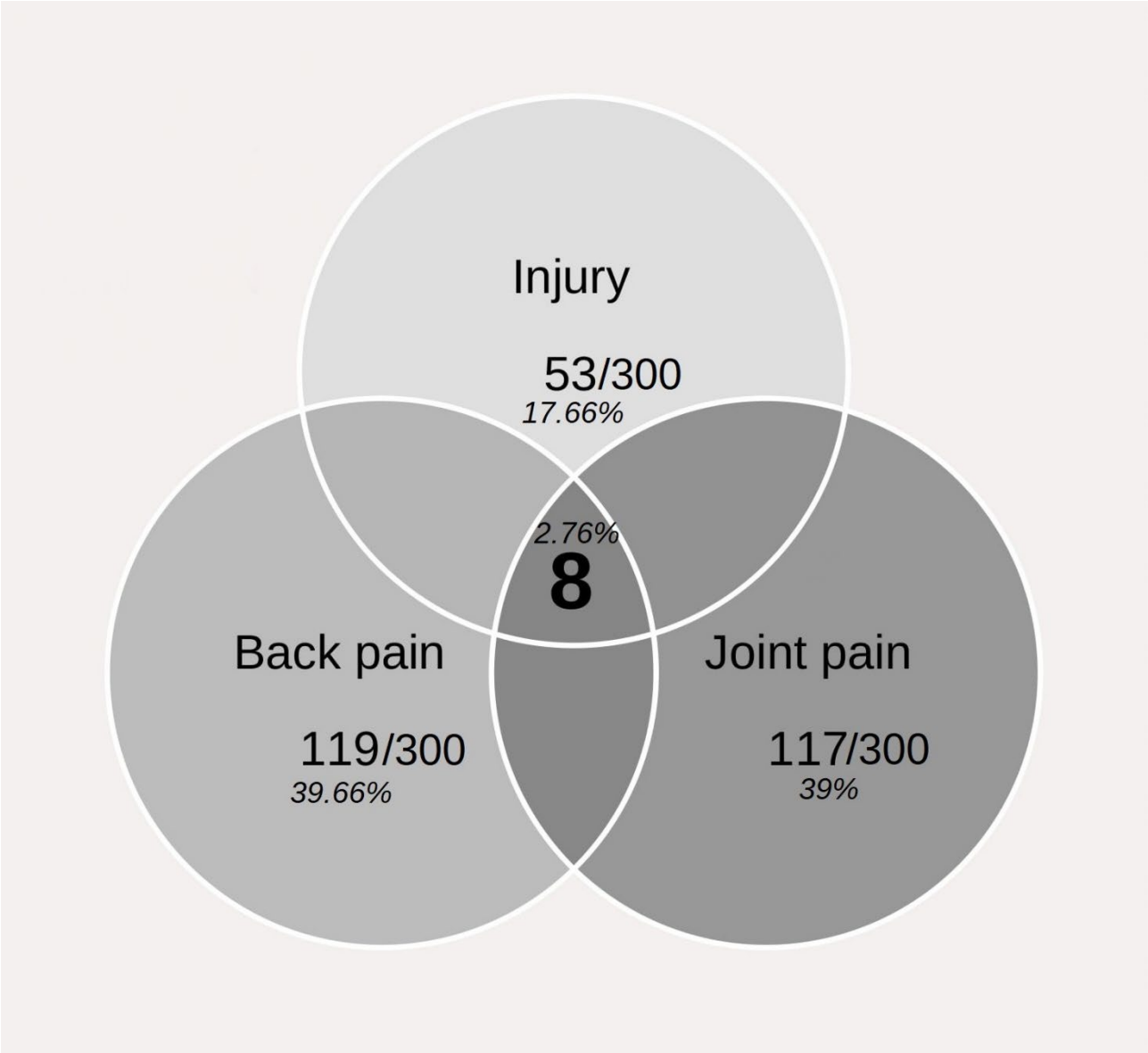


Figure 2. Venn diagram depicting coexisting injury related pain (RTA/ Work related injury/ Post-surgical intervention), back and joint pain.



Discussion

This study found that the majority of patients who attend chronic pain clinics have multiple sources of pain. This knowledge should facilitate and improve the future care and assessment of patients. This will include history taking, physical examination and the use of diagnostic tests to find multiple sources of pain. Finding the multiple sources of pain and providing the correct treatments for these sources will provide the best outcomes.

Clinicians face a dilemma when diagnosing the source of pain. It is important to educate doctors involved in the care of these patients. Doctors need to have a wide knowledge in finding pain sources and work collaboratively with other specialties (Pain Medicine/Orthopaedics/Rheumatology/Radiology/Neurology/Psychology). One of the biggest barriers to interprofessional education and health care is physicians resisting the idea of working with other specialties [7].

Most doctors (71%) have a strong dissatisfaction regarding their musculoskeletal education, as there is insufficient undergraduate teaching [8]. The majority of doctors (44.6%) are not confident enough to recognize or diagnose the most common musculoskeletal conditions [8]. Pain that is not managed adequately can have a serious negative effect on patients and their families, both physical and psychological.

Poor pain management can cost a hospital and doctor both profit and reputation. Poor satisfaction with care during ambulatory settings or hospitalization is linked with higher levels of pain and depression among patients [9].

Conclusion

The study concluded that a majority of patients attending chronic pain clinics had multiple sources of pain. This study suggests the importance of pain management services in finding the sources and mechanisms of pain and the need for doctors to refine diagnostic skills and techniques in determining the pain sources. All specialties that are involved in the care of chronic pain patients need to focus on diagnostic skills and a multidisciplinary care should focus on finding the sources of pain. This knowledge should facilitate and improve the future care of patients and will have an impact in the assessment of these patients. Finding the multiple sources of pain, that a patient has, and providing the correct treatments for these sources will provide the best outcomes.

Conflict of Interest:
None declared.

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