

Exploring the comorbidity of musculoskeletal and personality disorders among adults

A scoping review

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Introduction

There is growing awareness of the **comorbidity between mental and musculoskeletal disorders (MSDs)** and their associated burden. Together, they account for just over one third (33.9%) of the global years lived with disability (YLDs)^[1].

“However, there has been no broad-level exploration or synthesis of the comorbidity between personality disorder (PD) and MSDs”^[2]

Why we conducted a scoping review

To **explore and understand** what is known from the existing clinical- and population-based literature about:

- The comorbidity of PD and MSDs and associated burden
- Knowledge gaps in relation to this topic
- What recommendations for future research can be made.

How we conducted the scoping review

We conducted the scoping review according to a pre-designed **protocol**^[2], current methodological guidance from the **Joanna Briggs Institute**^[3], and the **PRISMA-ScR**^[4].

A wide range of **evidence sources** including peer-reviewed published and unpublished grey literature were considered. Eligible study designs were **cohort, case-control, and cross-sectional studies**, and **existing reviews of observational studies**.

A comprehensive search strategy was developed and implemented for **Medline Complete, CINAHL, and PsycINFO** via the EbscoHost platform. Grey literature was searched in **Google**.

Two reviewers independently screened records. A data extraction form was tested and piloted before extracting relevant information from eligible studies.

A descriptive synthesis of the findings was undertaken.

Eligibility

The eligibility criteria was developed using a **‘Population–Concept–Context’ framework**.

Populations. People aged ≥ 15 years with categorical PD or features of PD according to DSM-III/IV/5 or ICD 9/10, identified by a relevant health, medical record, diagnostic interviews or self-administered questionnaires/self-reports

Concept. MSDs included:

- Conditions of the back
- Conditions of the joints
- Soft tissue conditions
- Disorders of bone density and structure

Concept. Measures of burden in relation to the comorbidity of PD and MSDs

Context. Clinical or population-based settings.

*Altogether, 2,776 records were considered
10 reviews and 47 individual analyses were eligible*

What we found in clinical and population settings

- Evidence of comorbidity of PD and **chronic back/spine/neck pain** from seven cross-sectional analyses and one longitudinal analysis from a prospective cohort
- Evidence of comorbid PD and **arthritis** from six cross-sectional analyses and one one longitudinal analysis from a prospective cohort—three cross-sectional analyses and one longitudinal analysis from a prospective cohort reported weak or no significant associations
- Evidence of comorbid PD and **fibromyalgia/muscular pain** from four cross-sectional analyses, four case-control analyses—one cross-sectional analysis reported no significant association
- Evidence of PD and **reduced bone mineral density** from three cross-sectional analyses.

The comorbidity of PD and MSDs was associated with:

- ↑ Opioid medication use
- ↑ Psychological symptoms
- ↑ Hospital admissions for MSDs
- ↑ Treatment non-completion for MSDs.

Knowledge gaps

- No studies examined **mortality** with MSDs as underlying cause among people with PD
- Limited evidence on **financial costs** associated with PD and MSD comorbidity
- Limited **grey literature** detected, and none from government agencies
- No **systematic reviews** undertaking critical appraisals and meta-analyses.

What should be considered when interpreting the findings

The studies varied according to study design, populations, and settings. Therefore, we provided a descriptive overview of the evidence sources and key findings in this field only.

What’s next?

The authors are developing protocols for studies to address identified knowledge gaps including epidemiological studies and systematic reviews.

These insights may lead to improved understanding of the experiences of people with these comorbidities and treatment targets

References

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