

# Investigating Pain Related Medication and Contribution to Polypharmacy in Adults with Intellectual Disabilities: A Systematic Review

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## Background

- Adults with intellectual disability (ID) experience multimorbidity (MM), with many conditions associated with pain.<sup>1,2</sup>
- MM contributes to polypharmacy (PP) but adults with ID are prescribed fewer analgesic medications than the general population.<sup>3,4</sup>
- Barriers to communication in people with ID may mean pain is expressed in atypical or unfamiliar ways.<sup>5,6</sup>
- This presents challenges for recognizing, assessing and diagnosing painful conditions resulting in under-treatment of pain in people with ID, contributing to health inequality experienced by this population.<sup>5</sup>
- There is a paucity of evidence on pain medication prescribing for adults with ID.

## Objectives

This systematic review aims to examine;

- Types of medication used for treatment of pain in people with ID and factors that may affect prescribing.
- Medication use for diagnosed painful conditions.
- Associations with pain medication being prescribed (e.g., MM, PP)
- Use of both pain and other medications to treat underlying health conditions.
- The views of adults with ID, caregivers, and health professionals on pain medication prescribing.

## Methods

- Systematic review methodology is followed.
- Eight bibliographic databases searched using terms for ID, pain, analgesia, and drug therapy.
- Searches restricted from 2000 to March (2023) and studies published in English. Narrative synthesis will be used to describe the findings.
- Inclusion/exclusion criteria are summarised in table 1 using PECO framework

Criteria	PECO FRAMEWORK	
	Inclusion	Exclusion
<b>Population</b>	<ul style="list-style-type: none"> <li>• People with an ID OR a diagnosis associated with ID</li> <li>• Adults diagnosed with Autistic Spectrum Disorder or Cerebral Palsy where at least 50% of the cohort have co-occurring ID.</li> <li>• Participants must be aged 18 years or older or where 50% of the cohort were adults and had separate results reported.</li> </ul>	<ul style="list-style-type: none"> <li>• Adults with cerebral palsy without additional ID.</li> <li>• Adults with autistic spectrum disorder with no additional ID</li> <li>• Studies where participants were under 18 years of age.</li> </ul>
<b>Exposure</b>	<ul style="list-style-type: none"> <li>• Any analgesic or non-analgesic used to manage pain.</li> <li>• Any medication used to treat a painful condition</li> </ul>	<ul style="list-style-type: none"> <li>• Any management related to surgical interventions.</li> </ul>
<b>Comparator</b>	<ul style="list-style-type: none"> <li>• This study is investigating what is currently known about the use of pain medication in adults with ID, there is no comparator or control population being reported on</li> </ul>	
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>• Information about the use of medication for pain and/or painful conditions in adults with ID.</li> <li>• Information about PP/MM and pain related medication in adults with ID</li> <li>• Information on the views of adults with ID, caregivers, and health care providers on pain related medication.</li> </ul>	

Table 1- inclusion/ exclusion criteria using PECOS framework

## Next steps in Systematic Literature Review

- Complete data extraction.
- Narratively synthesise included studies
- Explore data on medication used for pain in adults with intellectual disability
- Highlight gaps in research on pain in adults with intellectual disabilities

**Key findings from this systematic literature review will inform phase 2 data analysis of this PhD project. Electronic health records of a cohort of adults with intellectual disability will be compared to a matched cohort of adults without intellectual disability to examine any key differences in prescribing of medication for pain or painful conditions.**