

Appendix 1: Literature review process: keywords, limits, and inclusion and exclusion criteria.

Pain:

("Intellectual Disability"[MeSH] OR "Autism Spectrum Disorder"[MeSH] OR "Cerebral Palsy"[MeSH]) AND ("Pain Measurement"[MeSH] OR "Pain"[MeSH])
 ("Intellectual Disability"[MeSH] OR "Autism Spectrum Disorder"[MeSH] OR "Cerebral Palsy"[MeSH]) AND (("Analgesics"[MeSH]) OR ("Pain"[MeSH] AND "Drug Therapy"[MeSH]))

Sleep disorders:

("Intellectual Disability"[MeSH] OR "Autism Spectrum Disorder"[MeSH] OR "Cerebral Palsy"[MeSH]) AND ("sleep" OR "sleeping")

Gastro-intestinal disorders:

("Intellectual Disability"[MeSH] OR "Autism Spectrum Disorder"[MeSH] OR "Cerebral Palsy"[MeSH]) AND ("Gastrointestinal Diseases"[MeSH] OR "Signs and Symptoms, Digestive"[Mesh] OR "Helicobacter pylori"[MeSH] OR "Gastroesophageal Reflux"[MeSH] OR "Microbiota"[MeSH])

Challenging behaviours:

("Intellectual Disability"[MeSH] OR "Cerebral Palsy"[MeSH] OR "Autism Spectrum Disorder"[MeSH]) AND ("Stereotyped Behavior"[Mesh] OR "Compulsive Behavior"[Mesh] OR "Problem Behavior"[Mesh] OR "challenging behaviour" OR "challenging behavior" OR "Self-Injurious Behavior"[Mesh] OR "Aggression"[Mesh])
 ("Intellectual Disability"[MeSH] OR "Cerebral Palsy"[MeSH] OR "Autism Spectrum Disorder"[MeSH]) AND ("Drug Therapy"[Mesh] OR "intervention" OR "interventions" OR "management")

Deprescription:

("Intellectual Disability"[MeSH] OR "Autism Spectrum Disorder"[MeSH] OR "Cerebral Palsy"[MeSH]) AND ("Polypharmacy"[MeSH] OR "Deprescriptions"[MeSH] OR "Drug-Related Side Effects and Adverse Reactions"[Mesh] OR "Drug Interactions"[Mesh])
 Articles on deprescription in the general or geriatric populations were also retrieved.

The limits used were: "review", "abstract", "10 years" and "humans".

The table below summarizes the inclusion and exclusion criteria applied.

| | Inclusion criteria | Exclusion criteria |
|------------------------|--|---------------------------|
| Type of article | Guidelines, reviews or cohort studies. If not available, clinical trials. | Case reports |
| Subjects | Individuals with ID | Children only |

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|-----------------------------|--|--|
| Topic of the article | <ul style="list-style-type: none">• Prevalence of the health issue (pain, gastro-intestinal problems, sleep disorders, challenging behaviours or polypharmacy)• Origin of the health issue• Assessment of the health issue• Pharmacological treatments for the health issue | Non-pharmacological interventions only |
|-----------------------------|--|--|

For each domain, when information on evidence-based treatments for adults with ID could not be found in the literature, we completed the review by searching for evidence-based treatments in the general population.