

Cancer risk related to intellectual disabilities: a systematic review

Radboudumc

Background information



People with intellectual disabilities (ID) face barriers in cancer care contributing to poorer oncological outcomes. Yet, understanding cancer risks in the ID population remains incomplete.

Therefore we **aimed** to provide an overview of cancer incidence and cancer risk assessments among individuals with ID.

Material & Methods

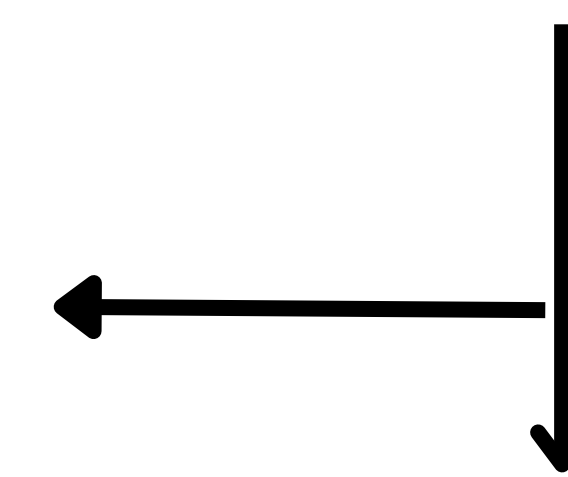
Literature search: systematic search in PubMed (MEDLINE) and EMBASE



- Date range: January, 2000 - July, 2022
- Keywords: Terms related to cancer, incidence, and intellectual disabilities
- Selection criteria: Studies assessing cancer risks in the general ID population or specific ID-related syndromes

In total **14.303 records** identified and screened on title and abstract

6503 case reports excluded



55 full text included

7 studies on ID population
48 studies on ID related syndromes or specific genetic mutations

Key findings

For the general ID population, studies report **lower to similar cancer rates** compared to the general population

Specific ID-related disorders (e.g. Down-syndrome) and certain genetic mutations **may elevate the risk** for particular cancers

Discussion and conclusions

- Heterogeneity within the ID population complicates precise cancer risk assessment.
- Distinct cancer risk patterns emerge within specific subgroups, such as individuals with particular genetic disorders.
- Based on the variability and small sizes, case reports were excluded. Future reviews and larger studies are essential to provide better guidance for cancer care.

More awareness, and personalized approach in cancer screening within the ID population is necessary.



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