

## Executive summary

This report was commissioned by the Swedish government and is a scoping review of the literature on gender dysphoria in children and adolescents. The report can be a basis for further evaluation of risk of bias and evidence.

### Conclusions

- ▶ We have not found any scientific studies which explains the increase in incidence in children and adolescents who seek the health care because of gender dysphoria.
- ▶ We have not found any studies on changes in prevalence of gender dysphoria over calendar time, nor any studies on factors that can affect the societal acceptance of seeking for gender dysphoria.
- ▶ There are few studies on gender affirming surgery in general in children and adolescents and only single studies on gender affirming genital surgery.
- ▶ Studies on long-term effects of gender affirming treatment in children and adolescents are few, especially for the groups that have appeared during the recent decennium.
- ▶ The scientific activity in the field seems high. A large part of the identified studies are published during 2018 and 2019.
- ▶ Almost all identified studies are observational, some with controls and some with evaluation before and after gender affirming treatment. No relevant randomised controlled trials in children and adolescents were found.

- ▶ We have not found any composed national information from Sweden on:
  - the proportion of those who seek health care for gender dysphoria that get a formal diagnosis
  - the proportion starting endocrine treatment to delay puberty
  - the proportion starting gender affirming hormonal treatment
  - the proportion subjected to different gender affirming surgery

### Background

The number of persons below age 18 who seeks the health care for gender dysphoria in Sweden has increased during the last decade. There is a debate as to why this happens and how it should be managed.

### Aim

To assess the scientific literature for explanations of the increased number of children and adolescents seeking for gender dysphoria and to make an inventory of the literature on management and long-term effects.

### Method

The following questions were assessed.

### Are there any scientific studies explaining the increase in numbers seeking for gender dysphoria?

**Population:** Children and adolescents with gender dysphoria up to 18 years of age.

**Intervention:** Not applicable.

**Control:** Not applicable.

**Outcome:** Studies on incidence and prevalence of gender dysphoria and pattern of self-referral or referral.

## Are there any scientific studies on long-term effects of treatment for gender dysphoria?

**Population:** Persons with gender dysphoria.

**Intervention:** Treatment for gender dysphoria.

**Control:** Any.

**Outcome:** Studies reporting long-term effects such as mental health, suicide attempts, suicide, cardiovascular effects, cancer development, bone health and regrets.

## What scientific papers on diagnosis and treatment of gender dysphoria has been published after the National Board of Health and Welfare in Sweden issued its national support for managing children and adolescents with gender dysphoria in 2015?

**Population:** Children and adolescents with gender dysphoria up to 18 years of age.

**Intervention:** Diagnosis and treatment for gender dysphoria.

**Control:** Any.

**Outcome:** Studies on diagnosis and treatment.

This review is limited to peer reviewed papers with primary data and systematic reviews following PRISMA-standards. Case studies, meeting abstracts and editorials were not included. Only studies written in English or Scandinavian languages were eligible.

A structured systematic literature search in the following databases CINAHL (EBSCO), Cochrane Library (Wiley), EMBASE (Embase.com), PsycINFO (EBSCO), PubMed (NLM), Scopus (Elsevier), SocINDEX (EBSCO). The searches were finalised September 19, 2019.

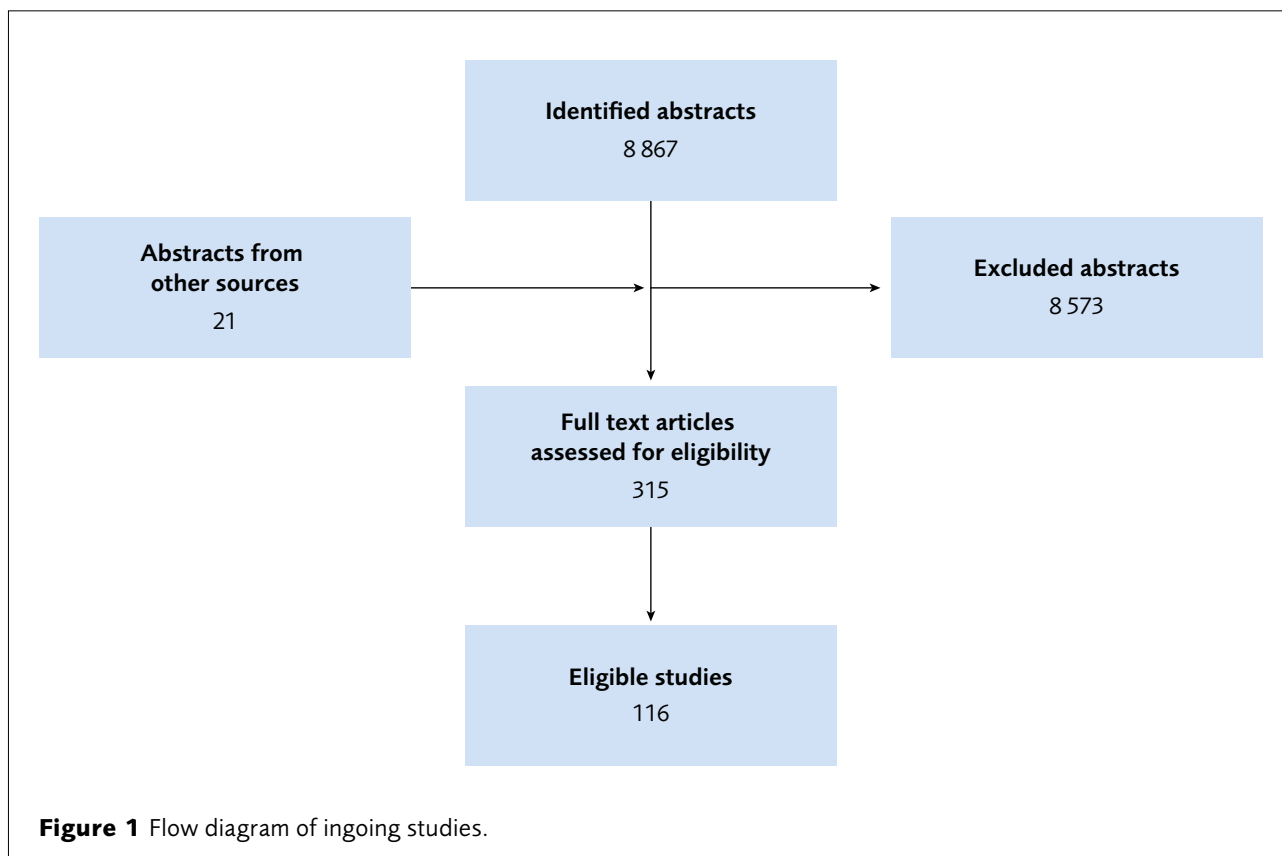
The studies were assessed for their relevance to the questions by two reviewers independently. Assessment of risk of bias, compilation of data or grading of evidence was not done.

## Results/discussion

No studies explaining the increase of children and adolescents seeking for gender dysphoria were identified. The literature on management and long-term effects in children and adolescents is sparse, particularly regarding gender affirming surgery. All identified studies are observational, and few are controlled or followed-up over time. Much of the data in the literature are from the University Medical Centre in Amsterdam based on their management tradition. A large part of the literature that was considered relevant was published during 2018 and 2019.

## Appendices

For search strategies, excluded articles, references and tables, see [www.sbu.se/307e](http://www.sbu.se/307e)



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Patient representatives were not involved in the work.

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