## **Guideline report**

To the AWMF guideline

## Gender incongruence and gender dysphoria in childhood and adolescence - diagnosis and treatment

Lead AWMF specialist society:

German Society for Child and Adolescent Psychiatry, Psychotherapy and Psychosomatics (DGKJP)

registered as S2k guideline, AWMF register number: 028 - 014

Authors of this guideline report:

Prof. Dr. med. Georg Romer & Matthias Wiech (M.Sc.)<sup>1</sup>

### Key questions of the report:

What goals, target groups and care areas does the guideline address?

What was the composition of the steering group for drawing up the guidelines? Are there any financial influences or other conflicts of interest?

What methodology was used in the development of this guideline? How were

recommendations formulated and agreed?

How is dissemination planned? How long is the guideline valid? How could an update take place?

<sup>&</sup>lt;sup>1</sup> Acknowledgements: Mr. Thomas Nonhoff (B. Sc) provided valuable support in the preparatory scientific editing of the guideline report as a research assistant until his retirement in 2019.

#### Mandated members of the Guideline Commission

- Prof. Dr. med. Georg Romer (DGKJP, Coordinator)
- Dipl.-Soz.päd. Michael Bastian (bkj)
- Dr. phil. Inga Becker-Hebly (DGfS)
- Dipl.-Psych. Bernhard Breuer (BDP)
- Dr. med. Heiko Dietrich (BKJPP)
- Dr. med. Werner Ettmeier (DÄVT)
- Dipl.-Psych. Saskia Fahrenkrug (DPG)
- Dr. med. univ. Martin Fuchs (ÖGKJP)
- Dipl.-Päd. Matthias Gallei (KJPVT)
- Christian Gredig (TraKiNe)
- Dr. med. Annette Güldenring (DGfS/DGPNN; until 12/2022)
- Mari Günther (BVT\*)
- Karoline Haufe (TraKiNe)
- PD Dr. med. Thomas Hildebrandt (DGGG)
- Malte Janzig (BVT\*)
- Dr. med. Martin Jung (BAG)
- Dr. med. Susanne Junginger (DGE)
- Dr. med. Alexander Korte (DGSMTW)
- Prof. Dr. med. Susanne Krege (DGU)
- Dipl.-Psych. Thomas Lehmann (VAKJP)
- Dr. med. Lieselotte Mahler (DGPNN; since 12/2022)
- Dipl.-Psych. Sabine Maur (BPtK)
- Dr. med. Dagmar Pauli (SGKJPP)
- Prof. Dr. phil. Hertha Richter-Appelt (BPtK)
- Prof. Dr. med. Annette Richter-Unruh (DGKJ)
- PD Dr. rer. nat. Kurt Seikowski (GSW)
- Dr. med. Andreas Stage (VLSP)
- Prof. Dr. phil. Bernhard Strauß (DGMP)
- Dipl.-Psych. Ingeborg Struck (DGPT)
- Prof. Dr. med. Claudia Wiesemann (AEM)
- Dr. med. Achim Wüsthof (DGPAED)

## Other members of the steering group without a voting mandate in the consensus conferences

- Dr. med. Thomas Lempp (DGKJP, deputy coordinator)
- Dr. med. Bernd Meyenburg (DGKJP, until 06/2020)<sup>2</sup>
- Prof. Dr. phil. Birgit Möller-Kallista
- Dr. med. Annette Güldenring (from Dec 2022)
- Prof. Dr. med. Florian Zepf3 (DGKJP, 2020-2022)

#### Scientific secretariat for the guideline commission

- PD Dr. phil. Birgit Möller-Kallista (until 12/2019)
- Matthias Wiech, M.Sc. (from 11/2019 to 08/2020 and 04/2023 until the end)

#### Moderation by the AWMF

Dr. rer. biol. hum. Cathleen Muche-Borowski

- Moderation of the constituent working session of the guideline commission and the initial hearings with patient representative organizations
- Methodological advice for the steering group
- Moderation of all consensus conferences

### **Contact address**

Prof. Dr. med. Georg Romer Director of the Clinic for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy at Münster University Hospital Schmeddingstrasse 50 48149 Münster sekre.romer@ukmuenster.de

<sup>3</sup> Prof. Dr. med. Florian Daniel Zepf left the steering group at his own request after two years on the steering group due to his stated professional ethical concerns and "concerns regarding aspects of child and youth protection". At no time was he entitled to vote in consensus conferences.

<sup>&</sup>lt;sup>2</sup> Dr. Bernd Meyenburg left the steering group in 2020 for reasons of age. Up to this point, he was the first author of the previous S1 guideline

<sup>&</sup>quot;Gender Identity Disorders in Children and Adolescents" accompanied the phase of systematic literature reception with his experienced advice. At no time was he entitled to vote in consensus conferences.

## Table of contents

| 1  | Sele | ection of the guideline topic and objectives of the guideline                    | 5  |
|----|------|--|----|
|    | 1.1  | Justification for the selection of the guideline topic                           | 5  |
|    | 1.2  | Objectives of the guideline  | 6  |
|    | 1.3  | Target group of the guideline  | 6  |
|    | 1.4  | Area of care and advice  |    |
|    | 1.5  | Target group of users  | 7  |
| 2  | Con  | nposition of the guideline group   | 8  |
|    | 2.1  | Participating professional societies, associations and organizations             |    |
|    | 2.2  | Persons involved in the preparation of the guidelines                            | 9  |
|    | 2.3  | Representativeness with regard to occupational groups                            |    |
|    | 2.4  | Participatory involvement of people seeking treatment                            | 10 |
| 3  | Met  | thodical accuracy  | 11 |
|    | 3.1  | Research and selection of existing guidelines                                    |    |
|    | 3.2  | Formulation of key questions   | 14 |
|    | 3.3  | Research, selection and evaluation of scientific studies                         | 16 |
|    | 3.4  | Derivation of statements and consensus-based recommendations                     | 19 |
|    | 3.5  | Finding consensus and dealing with dissent                                       |    |
| 4  | Edit | orial independence   | 22 |
|    | 4.1  | Financing of the guideline   | 22 |
|    | 4.2  | Conflicts of interest  | 22 |
| 5  | Plar | nned consultation phase  | 23 |
| 6  | Ado  | ption by the boards of the issuing professional societies/organizations24        |    |
| 7  | Exte | ernal assessment, dissemination, implementation and monitoring                   | 24 |
| 8  | Peri | od of validity and updating  | 24 |
| 9  | Bibl | iography   | 26 |
| 10 | Арр  | endix A: Search for existing guidelines  | 27 |
| 11 | Арр  | endix B: Cross-topic literature research and selection                           | 28 |
| 12 | Арр  | endix C: Topic-specific literature research and selection                        | 30 |
| 13 | Арр  | endix D: Tabular declarations of interests and handling of conflicts of interest | 45 |

### 1 Selection of the guideline topic and objectives of the guideline

#### Preliminary remarks on the publication of the guideline as an S2k guideline

This guideline was originally registered as an S3 guideline. It is based on a systematic search, selection and evaluation of the literature in accordance with the methodological requirements of the S3 classification according to AWMF regulations. Due to a lack of controlled proof of efficacy and an overall weak evidence base with regard to uncontrolled evidence of efficacy from case-cohort studies, the following recommendations are made for individual interventions in the treatment of gender incongruence and gender dysphoria. Gender dysphoria did not produce any evidence-based recommendations, but only recommendations based on expert consensus. In consultation with the AWMF, this led to the decision to publish the guideline as an S2k guideline.

The critical evaluation of the systematically received evidence is nevertheless an important basis for the literature-based preparation of the consensus recommendations. This is made transparent in the guideline by highlighting relevant statements on the state of knowledge in the individual chapters, whereby the systematic evaluation of the evidence behind a statement is presented with details of the studies consulted.

#### 1.1 Justification for the selection of the guideline topic

The use of clinical treatment and counseling services for children and adolescents with gender incongruence (GI) or gender dysphoria (GD) has increased significantly in recent years (Aitken et al., 2015; Chen et al., 2016; Wood et al., 2013). When a person's sex assigned at birth due to anatomical-biological conditions does not permanently match their perceived gender identity, combined with a persistent desire to lead a socially accepted life in accordance with their perceived gender identity, this is referred to as *gender incongruence* (GI) in the ICD-11 (WHO, 2018), which describes a condition related to sexual health that can justify a need for medical treatment, but is not understood as a mental illness or disorder per se, but as a normative variant of human development. According to the American diagnostic system for mental illness DSM-5, on the other hand, gender dysphoria is referred to when such incongruence is present and the person affected suffers from a persistent psychological condition that is worthy of illness.

Both the ICD-11 and the DSM-5 operationalize a special identical diagnosis (GI or GD) for prepubertal childhood in addition to the respective diagnosis for adolescents and adults, which can generally only be made after the onset of puberty (WHO, 2018; American Psychiatric Association, 2013).

In the past, Germany only had an S1 guideline for the now obsolete ICD-10 diagnostic category "Gender identity disorders in childhood and adolescence", which was first drawn up in 1999 and updated in 2013.

German Society for Child and Adolescent Psychiatry, Psychotherapy and Psychosomatics and was developed by a group of four experts in a consensus process<sup>4</sup>. A new version of this outdated guideline was initially scheduled for 2018. This was intended to reflect the paradigm shift towards the depsychopathologization of non-conforming gender identities that is taking place with the ICD-11, which is already reflected in the new

S3 guideline for adulthood "Gender incongruence, gender dysphoria and trans health" (Nieder & Strauß, 2019) in the light of the current state of scientific and medical knowledge, evaluated on a broad interdisciplinary consensus basis and thus made accessible for the best possible informed care practice (*best practice*). In accordance with the AWMF regulations (AWMF, 2012), the guideline was registered as an S3 guideline (i.e. as an evidence-based and consensus-based guideline, prepared according to systematic methodological rules).

#### 1.2 Aims of the guideline

The aim of the guideline is the revision of current treatment standards for GI and GD in children and adolescents with the best possible evidence-based approach and the broadest possible consensus among the professional organizations involved with the participatory participation of patient representative organizations, with the aim of achieving the best possible quality-assured care practice in a field in which there are still significant professional uncertainties and resulting uncertainties and controversies. On the one hand, the aim is to describe the professional framework conditions for the best possible quality-assured care in terms of *structural quality*.

This includes, among other things, specifications for qualification requirements for specialists who are responsible for determining indications for somatomedical interventions. In addition, the *process quality* in counseling and treatment is to be improved. Indicators for this are in particular the validity of diagnostic *assessments*, the provision of evidence-based information on treatment options for those seeking <sup>treatment5</sup> and the quality of psychological counseling and/or psychotherapeutic treatment. These requirements for best-informed care practice should ultimately contribute to improving the health situation of the target group, reducing their psychiatric morbidity and increasing their treatment satisfaction and health-related quality of life (quality of *outcome*).

## 1.3 Target group of the guideline

The target group of this guideline is all those seeking treatment (i.e. patients and their guardians) who make use of healthcare services or counseling services:

<sup>&</sup>lt;sup>4</sup> The members of the guidelines working group at the time represented the largely independent specialized child and adolescent psychiatric treatment centers at four German university hospitals: Dr. Bernd Meyenburg, Frankfurt am Main (coordinator); Dr.

Alexander Korte, Munich; Dr. Birgit Möller-Kallista, Hamburg; Prof. Dr. Georg Romer, Münster

<sup>&</sup>lt;sup>51n the</sup> overall text of the guideline, the terms *patient are used* in the social law sense for minors who use healthcare services, regardless of their illness status. The term *person seeking treatment* is used when patients and their guardians are meant together.

- Minors with a diagnosis of gender incongruence according to ICD-11 (HA60, HA61 or HA6Z),
- As long as coding is still according to ICD-10: Minors with a diagnosis from the spectrum of "gender identity disorders" (F64, possibly also coded under F62 for adolescents) in ICD-10.
- Minors with indications of one of the above-mentioned diagnoses and resulting questions justifying the use of health services.

#### 1.4 Area of care and advice

- Child and adolescent psychiatry, psychosomatics and psychotherapy
- Psychiatry and psychosomatics
- Psychotherapy / Child and adolescent psychotherapy
- Pediatrics, Pediatric Endocrinology
- Internal Medicine / Endocrinology
- General medicine
- Sexual medicine
- Urology
- Gynecology
- Andrology
- Plastic surgery
- Reproductive medicine

Both outpatient and (partially) inpatient facilities are addressed.

#### 1.5 Target group of users

The guideline is aimed at

- Specialists in gynecology,
- Specialists in internal medicine (especially endocrinology),
- Specialists in child and adolescent psychiatry and psychotherapy,
- Specialists in pediatrics,
- Specialists in psychiatry and psychotherapy,
- Specialists in psychosomatic medicine and psychotherapy,
- Specialists in urology,
- Licensed psychological psychotherapists,
- Licensed child and adolescent psychotherapists,
- Patients

and serves as information for

- Specialists in general medicine,
- Specialists in surgery,
- Psychological and psychotherapeutic specialists in counseling services,

- Educational professionals within and outside the school service,
- Professionals in health management and public health,
- political decision-makers and
- Courts6 and experts.

## 2 Composition of the guideline group

#### 2.1 Participating professional societies, associations and organizations

#### AWMF specialist societies:

- German Society for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy (DGKJP, in charge)
- Academy for Ethics in Medicine (AEM)
- German Medical Association for Behavior Therapy (DÄVT)
- German Society for Endocrinology (DGE)
- German Society for Gynecology and Obstetrics (DGGG)
- German Society for Pediatrics and Adolescent Medicine (DGKJ)
- German Society for Pediatric and Adolescent Endocrinology and Diabetology (DGPAED)
- German Society for Medical Psychology (DGMP)
- German Society for Psychiatry and Psychotherapy, Psychosomatics and Neurology (DGPPN)
- German Society for Psychoanalysis, Psychotherapy, Psychosomatics and Depth Psychology (DGPT)
- German Society for Sexual Research (DGfS)
- German Society for Sexual Medicine, Sexual Therapy and Sexology (DGSMTW)
- German Society for Urology (DGU)
- German College of Psychosomatic Medicine (DKPM)

#### Other participating professional societies and associations:

- Professional Association of Child and Adolescent Psychotherapists (bkj)
- Professional Association of German Psychologists (BDP)
- Professional Association for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy (BKJPP)
  - Federal Working Group of Chief Clinicians for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy (BAG)
  - Federal Chamber of Psychotherapists (BPtK)
  - German Society for Systemic Therapy, Counseling and Family Therapy (DGSF)
  - Society for Sexology (GSW)

<sup>&</sup>lt;sup>6</sup> Family courts come into question, e.g. if the decision on a medically indicated treatment is disputed between guardians, as well as social courts if the assumption of costs for a treatment deemed necessary according to the latest medical knowledge is disputed.

- Child and Adolescent Psychotherapy Behavioral Therapy (KJPVT)<sup>7</sup>
- Austrian Society for Child and Adolescent Psychiatry (ÖGKJP)
- Swiss Society for Child and Adolescent Psychiatry and Psychotherapy (SGKJPP)
- Association for lesbian, gay, bisexual, trans\*, intersex and queer people in psychology (VLSP)
- Association of Analytical Child and Adolescent Psychotherapists in Germany (VAKJP)

Participating representative organizations of treatment seekers:

- Federal Trans\* Association (BVT\*)
- Trans\* Children's Network (TraKiNe)
- 2.2 Persons involved in the preparation of the guidelines

**Table 1:** Co-authors of the guideline text, indicating their relationship to the sending organizations.

| <b>Professiona</b> | <u>l associations o</u> | or organizations | with res | pective time | period |
|--------------------|-------------------------|------------------|----------|--------------|--------|
|                    |                         |                  |          |              |        |

| Person                                 | Function                                | Time span       |
|--|---|-----------------|
| Prof. Dr. med. Georg Romer             | Mandate DGKJP                           | Start - End     |
|  | Guideline coordinator                   | Start - End     |
| Dr. med. Thomas Lempp                  | DGKJP, steering group                   | 06/2020 - End   |
|  | Deputy Guidelines Coordinator           | Start - 06/2020 |
| DiplSoz.päd. Michael Bastian           | Mandate bkj, psychotherapy chapter      | 06/2020 - End   |
| Dr. phil. Inga Becker-Hebly            | Mandate DGfS, Steering Group            | 09/2018 - End   |
| Dr. med. Heiko Dietrich                | Mandate BKJPP, psychotherapy<br>chapter | 06/2020 - End   |
| DiplPsych. Saskia Fahrenkrug           | Mandate DPG, Steering Group             | Start - End     |
| Dr. med. univ. Martin Fuchs            | Mandate ÖGKJP, steering group           | 09/2019 - End   |
| Christian Gredig                       | Mandate TraKiNe, steering group         | 10/2017 - End   |
| Mari Günther                           | Mandate BAT*, steering group            | 10/2017 - End   |
| Karoline Haufe                         | Mandate TraKiNe, steering group         | 10/2017 - End   |
| Malte Janzing                          | Mandate BAT*, steering group            | 10/2017 - End   |
| Dr. med. Martin Jung                   | Mandate BAG, steering group             | Start - End     |
| DiplPsych. Thomas Lehmann              | Mandate VAKJP, psychotherapy<br>chapter | 06/2020 - End   |
| DiplPsych. Sabine Maur                 | Mandate BPtK, psychotherapy chapter     | 06/2020 - End   |
| Prof. Dr. phil. Birgit Möller-Kallista | Steering group                          | Start - End     |
|  | Scientific secretariat                  | Start - 12/2019 |
| Dr. med. Dagmar Pauli                  | Mandate SGKJPP, steering group          | Start - End     |
| Prof. Dr. med. Annette Richter-Unruh   | Mandate DGKJ, steering group            | Start - End     |
| PD Dr. rer. nat. Kurt Seikowski        | Mandate GSW, steering group             | Start - End     |
| Dr. med. Andreas Stage                 | Mandate VLSP, steering group            | 03/2019 - End   |
| DiplPsych. Ingeborg Struck             | Mandate DGPT, Psychotherapy Chapter     | 06/2020 - End   |
| Prof. Dr. med. Claudia Wiesemann       | Mandate AEM, steering group             | 10/2017 - End   |
| Dr. med. Achim Wüsthof                 | Mandate DGPAED, steering group          | Start - End     |
|  |   |                 |

<sup>&</sup>lt;sup>7</sup> Renamed from previously "Bundesvereinigung Verhaltenstherapie im Kindes- und Jugendalter" (BVKJ)

#### 2.3 Representativeness with regard to occupational groups

As can be seen from the last section, the users were extensively involved by the relevant professional associations. The German Society for General Practice and Family Medicine (DEGAM) was contacted twice and invited to participate, but no response was received. At their own request, the representatives of the DGGG and DGU only took part in meetings of the guideline commission relating to surgical treatment and the consensus conferences. The following professional groups should also be involved in future guidelines: Phoniatrics (voice equalization treatment), plastic surgery, reproductive medicine (fertility protection).

In addition, other relevant groups (also in the sense of interfaces) were involved in hearings of the steering group, each with detailed discussions to determine the needs in the following areas:

- "Primary care in pediatrics" (31.03.2017 in Frankfurt am Main) with invited representatives of the Professional Association of Pediatricians and Adolescent Doctors (BVKJ)
- "Psychotherapeutic care" with invited representatives of psychotherapeutic professional associations and the Federal Chamber of Psychotherapists (31.03.2017 in Frankfurt am Main and 06.06.2020 via video conference)
- "Needs of people seeking treatment" with invited representatives of advocacy organizations for trans\* people (open to all their members; on 01.04.2017 in Frankfurt am Main)
- "Medical ethics and medical law" with invited expert speakers (12.10.2017 in Munich)
- "Current status of the practice of surgical procedures" with mandated members of the consensus conference from gynecology and urology (19.03.2018 in Münster)
- Social law implications of the non-disease value of gender incongruence according to ICD-11 and associated consequences for care practice with invited speakers (in particular Prof. Huster and colleagues, University of Bochum; 23.11.2022 via video conference)

#### 2.4 Participatory involvement of those seeking treatment

From October 2017, four representatives of organizations representing the interests of people seeking treatment participated regularly and continuously in the steering group until the guideline was completed. The formal organization of this active participation was carried out in accordance with AWMF regulations in consultation and coordination with the AWMF moderator with regard to qualified participation in the guideline process. By resolution of the guideline commission in a meeting externally moderated by the AWMF on 1 April 2017, in which, among other things, the previous experiences with structured and qualified participation in the development of the S3 guideline for adulthood were reported from various perspectives, the interest group organizations were formally granted four voting rights in the guideline commission, for which the two participating organizations BVT\* and TraKiNe each mandated two persons. The mandated persons worked as co-authors in various working groups on individual chapters of the guideline and were thus also involved in the content of the texts and recommendations proposed to the consensus conference in advance.

This form of participation was criticized by the mandated representative of the DGSMTW and this criticism was repeated by the DGSMTW Executive Board in October 2020:

"[It is] an experience gained through participation in various guideline groups that the inclusion of other interest groups and patients, as recommended in the AWMF regulations, is not always ideally achieved through direct authorship in the guideline group. In contrast to the inclusion of affected AWMF member societies, the completely legitimate question of the professional legitimacy of the representatives of the other groups involved arises time and again"

The reservations of the DGSMTW regarding the participation of patient representatives in the guideline commission were rejected by the guideline commission with reference to the corresponding vote in the steering group, the regulations of the AWMF and the advice and moderation provided by the AWMF in this regard for this decision.

In addition, a hearing with those affected took place on April 1, 2017, including a subsequent internal discussion (see hearings above). In addition, the steering group was subsequently provided with the results of a qualitative survey of focus group interviews with trans\* minors and their guardians on their experiences in the healthcare system as well as their needs and expectations of appropriate healthcare, which was conducted at the University of Münster. The results of the interviews were reported to the guidelines group on 24.09.2018 and discussed there. The results of the survey are published in Pierce et al. (2022)<sup>8</sup>.

#### 3 Methodical accuracy

#### 3.1 Research and selection of existing guidelines

Initially, the following portals were searched for thematically relevant guidelines in August 2015:

- guidelines.com
- guideline.gov
- sign.ac.uk
- nice.org.uk

The search terms and inclusion criteria used can be found in Appendix A.

Also in August 2015, a broad systematic literature search was conducted on the topic of gender dysphoria in children and adolescents. The search strategy and the selection of relevant literature can be found in Appendix B. Guidelines and similar documents found there were also taken into account. In this way, three guidelines (or similar) were identified:

• American Academy of Child and Adolescent Psychiatry (AACAP): Adelson et al. (2012). Practice Parameters on Gay, Lesbian, or Bisexual Sexual Orientation, Gender Nonconformity, and Gender Discordance in Children and Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*, 957-974. https://doi.org/k5bh

<sup>&</sup>lt;sup>8</sup> Pierce, S., Mazziotta, A., & Möller-Kallista, B. (2022). Experiences of children with gender dysphoria/gender incongruence and their parents with the health care system in Germany. *Practice of Child Psychology and Child Psychiatry*, *71*(7), 597-619.

- World Professional Association for Transgender Health (WPATH): Coleman et al. (2012). Standards of Care, for the Health of Transsexual, Transgender, and Gender Nonconforming People, Version 7. International Journal of Transgenderism, 13, 165-232. https://doi.org/gc3dw8
- Endocrine Society: Hembree et al. (2009). Endocrine treatment of transsexual persons. *The Journal of Clinical Endocrinology and Metabolism, 94*, 3132-3154. https://doi.org/frq5rr

The Endocrine Society guideline was updated in 2017. Only the updated guideline has been used since 2017:

• Hembree et al (2017). Endocrine treatment of gender-dysphoric/gender-incongruent persons: An endocrine society clinical practice guideline. *The Journal of Clinical Endocrinology and Metabolism*, *102*, 3869-3903. https://doi.org/gckrqf

A new version of the WPATH Standards of Care was published in 2022. All assessments of current evidence relevant to adolescence and updated recommendations were included in this guideline:

• Coleman et al (2022). Standards of Care for the Health of Transgender and Gender Diverse People, Version 8. International Journal of Transgender Health, 23(sup1), S1-S259. https://doi.org/gqxbzz

In addition, the following more recent guidelines and similar documents appeared during the period in which the guidelines were drawn up and were also received:

- Royal Australian and New Zealand College of Psychiatrists (RANZCP, 2021): Recognising and addressing the mental health needs of people experiencing Gender Dysphoria / Gender Incongruence. https://www.ranzcp.org/clinical-guidelines-publications/clinical-guidelinespublications-library/recognising-and-addressing-the-mental-health-needs-of-peopleexperiencing-gender-dysphoria
- American Psychological Association. APA, 2015. Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist*, *70*(9), 832-864. https://doi.org/10/gc3dw7
- American Pediatric Association (AAP): Rafferty et al, 2018 Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents. *Pediatrics*, 142(4), e20182162. https://doi.org/gmnfgn

In the course of the systematic reception of the international guideline discourse, all of the abovementioned guidelines were evaluated with regard to the methodological quality of their preparation according to the DELBI criteria (AWMF & ÄZQ, 2008). This rating was carried out by two persons (M. Wiech and Prof. Georg Romer). The results of the rating were as follows:

Table 2: DELBI rating of guidelines and similar publications used

| Institution (year)                                      | AAP<br>(2012) | AACAP<br>(2018) | АРА<br>(2015) | Endocrine<br>Society<br>(2017) | RANZCP<br>(2017) | WPATH<br>(2022) |
|---|---------------|-----------------|---------------|--------------------------------|------------------|-----------------|
| <b>Domain 1:</b><br>Scope and purpose                   | 0,33          | 0,33            | 0,33          | 0,44                           | 0,33             | 0,61            |
| <b>Domain 2:</b><br>Participation of<br>interest groups | 0,13          | 0,17            | 0,25          | 0,25                           | 0,04             | 0,42            |
| <b>Domain 3:</b><br>Methodological<br>accuracy          | 0,31          | 0,07            | 0,24          | 0,40                           | 0,05             | 0,55            |
| <b>Domain 4:</b><br>Clarity and<br>Design               | 0,38          | 0,13            | 0,29          | 0,63                           | 0,17             | 0,63            |
| <b>Domain 5:</b><br>General<br>applicability            | 0,00          | 0,06            | 0,11          | 0,22                           | 0,06             | 0,28            |
| <b>Domain 6:</b> Editorial independence                 | 0,42          | 0,33            | 0,42          | 0,50                           | 0,08             | 0,50            |
| <b>Domain 7:</b><br>Applicability in<br>Germany         | 0,19          | 0,08            | 0,11          | 0,42                           | 0,11             | 0,44            |

#### 3.2 Formulation of key questions

Based on the three guidelines initially identified and the initial literature search (see 3.3.1 and Appendix B), the guideline commission developed initial key questions. These were relevant questions for guideline recommendations that could not yet be clearly answered from the existing literature. These topics were proposed by the chair of the guideline commission on October 31, 2016 on the basis of the literature reviewed and were adopted by the guideline group following discussion and amendments. The topics to be clarified and the associated key questions can be found in the following table:

| Subject area        | Key question(s)  |
|---------------------|--|
| Variant development | -What are the findings on the spectrum of variant developmental  |
| processes           | trajectories of children and adolescents with gender   |
|                     | nonconforming behavior and on children and adolescents with  |
|                     | indications of gender incongruence?  |
|                     | Is there evidence for prognostically relevant characteristics in   |
|                     | children and adolescents with signs of gender incongruence or  |
|                     | gender dysphoria that can be used in the future to identify so-  |
|                     | called   |
|                     | "Desisters" can be distinguished from "persisters"?  |
| Social role change  | -What implications for further development can r e s u l t from a  |
| in childhood        | social role change in childhood?   |
|                     | -What findings are there with regard to a possible   |
|                     | accompanying social determination to a gender role in  |
|                     | adolescence?   |
|                     | <ul> <li>What are the findings with regard to possible favorable or</li> </ul>   |
|                     | unfavorable effects of a social role change in childhood on the  |
|                     | child's psychosocial and health development?   |
|                     |  |
|                     |  |
| Involvement of      | - Which family constellations and influencing factors should be  |
| family              | given particular attention with regard to the need for their   |
|                     | exploration and any resulting action steps?  |
|                     |  |
| Psychotherapy       | <ul> <li>How bindingly can/should psychotherapy be recommended to</li> </ul>   |
|                     | those seeking professional support?  |
|                     |  |
| $\mathbf{V}$        | -What differentiations between psychotherapy and low-  |
| $\sqrt{0}$          |  |
| 70.                 | -What differentiations between psychotherapy and low-  |
| 70.                 | -What differentiations between psychotherapy and low-<br>frequency mental health counseling can be specified?  |
| 70.                 | -What differentiations between psychotherapy and low-<br>frequency mental health counseling can be specified?<br>What does guideline-based professional support look like for  |
| 70.                 | -What differentiations between psychotherapy and low-<br>frequency mental health counseling can be specified?<br>What does guideline-based professional support look like for<br>patients who do not want or need psychotherapy? |

Table 3: Open topics and associated key questions in the preparation of the guideline

| Indication        | What specialist expertise should be assumed for the   |
|-------------------|---|
|                   | indication of body-modifying medical measures in cases of   |
|                   | gender incongruence in adolescence?   |
|                   | -What is important in the diagnosis of gender incongruence?   |
|                   | Gender dysphoria in adolescence with regard to an indication  |
|                   | for body-modifying medical measures?  |
|                   | -What needs to be considered in the diagnosis and treatment of  |
|                   | associated mental disorders with regard to the indication for   |
|                   | medical measures?   |
|                   | -What developmental diagnostic considerations should be taken   |
|                   | into account when determining the indications for medical   |
|                   | interventions?  |
|                   | -What recommendations can be given for the gradation and  |
|                   | sequence of indications for different medical treatment steps?  |
|                   | <ul> <li>At what age or maturity stage of pubertal development can<br/>which medical treatment steps generally be recommended?</li> </ul> |
|                   | What requirements must be checked for the informed consent  |
|                   | of underage patients and their legal guardians before an indication   |
|                   | for body-modifying measures is given?   |
|                   |   |
|                   |   |
|                   |   |
|                   |   |
| Hormone treatment | -What somatic aspects need to be considered in the  |
|                   | endocrinological part of the indication, education and individual   |
|                   | planning of hormonal interventions in adolescence?  |
|                   | -Can treatment with GnRH analogs for pubertal suppression in  |
|                   | adolescents with persistent gender incongruence/gender  |
|                   | dysphoria be considered sufficiently safe with regard to known  |
|                   | risks?  |
|                   | -Can sex reassignment hormone treatment with testosterone   |
|                   | or estrogen in adolescents with persistent gender   |
|                   | incongruence/gender dysphoria be considered sufficiently safe   |
|                   | in view of the known risks?   |
|                   |   |
| associated        | -Which psychopathological problem areas beyond gender   |
| Psychopathology   | incongruence or gender dysphoria in childhood and adolescence   |
|                   | should be given particular attention by practitioners?  |
|                   | <ul> <li>What influence do associated mental health problems have<br/>on treatment?</li> </ul>  |
| -                 | -What are the implications for the diagnostic and treatment   |
|                   | procedure for a coincident Austism Spectrum Disorder in   |
|                   | underage patients with gender incongruence or gender  |
|                   | nonconformity?  |
|                   | Gender dysphoria?   |
|                   | -What is the recommended diagnostic procedure for indications   |
|                   | of gender incongruence, taking into account possible concomitant  |
|                   | psychiatric or psychosomatic diagnoses that need to be  |
|                   | considered?   |
|                   |   |

Subsequently, working groups were formed from members of the steering group, based on the thematic areas and key questions. Due to their proximity in terms of content, some topics were grouped together in a working group, each of which was to be dedicated to a future chapter of the LL. The members of the steering group were able to participate in one or more working groups of their choice. The following working groups were formed:

- Development trajectories (persisters vs. desisters)
- Social role change in childhood
- Dealing with discrimination sensitively
- Associated psychopathology (including autism spectrum disorders)
- Psychotherapy
- Family dynamics
- Indications for body-modifying measures/age limits
- Somatic aspects of hormonal treatment

#### 3.3 Research, selection and evaluation of scientific studies

#### 3.3.1 Cross-thematic literature research and selection

Following the search for existing (international) guidelines described in section 3.1, a cross-topic literature search was first carried out. The aim was to obtain an overview of the topic area relevant to this guideline. The results of the search were then checked for relevance in accordance with the AWMF guidelines. The search period, the search syntax, the other selectors and the databases used (MEDLINE and PsycINFO) were determined by the guideline committee at the suggestion of the guideline secretariat. The period of literature considered was initially set from 1998 to August 2015 (time of the first search run). The search syntax and the other selectors can be found in Appendix B.

The literature search and selection was carried out by the guideline secretariat. A total of 995 original articles (including case reports, etc.) and 160 reviews were identified as relevant in principle to the topic of "GD/GI in children and adolescents". A flow chart for screening the literature found in accordance with the PRISMA statement (Moher et al., 2009) can also be found in Appendix B. Due to the high number of literature references, not all of the literature was made available to the guideline commission as full text. The relevant literature was stored in a literature database, which was made accessible to all members of the guideline commission via a protected cloud.

#### 3.3.2 Topic-specific systematic literature research

Following the definition of open key questions for the guideline and the formation of working groups, further topic-specific literature searches were carried out. These were intended to answer the key questions and provide an evidence base for the chapters to be prepared by the working groups. The following sources were used for the topic-specific literature searches:

- 1. Literature relevant to the subject area from the cross-thematic systematic search (see 3.3.1),
- 2. systematic topic-specific literature research and
- 3. Literature proposed by members of the Guideline Commission or by experts at or following hearings

The systematic literature searches thus each covered a period from 1998 to August 2015 (time of the first search run of the cross-topic literature search) and in the two subsequent years up to 2019 extended repeated search runs of the respective topic-specific search. It was carried out by the guideline secretariat. In addition to GD/GI terms, topic-specific terms were also used as selectors. As for the cross-topic search, the MEDLINE and PsycINFO databases were searched. The search syntaxes and the other selectors are listed in Appendix C.

For the three publication years 2020 to 2022, the renewed effort of a new systematic literature search would not have been feasible with the Commission's resources. In order to ensure that relevant new original work is nevertheless received in a targeted manner for the individual chapters under review, all members of the guideline commission were continuously required to report relevant new publications that came to their attention to the guideline secretariat. As several members of the guideline commission are continuously active in the respective subject area, this pragmatic approach ensured t h a t relevant new original work was adequately recorded. In addition, the authors of the individual chapters were encouraged to pay particular attention to newly published original research. In addition, the new international guideline published in 2022 by the World Professional Association for Transgender Health (WPATH, Coleman et al., 2022), which was based on an extensive externally commissioned and independent systematic literature review by John Hopkins University, was screened for relevant citations of more recent original research that had not yet been received by us. These were each researched and also systematically reviewed and methodically evaluated and made available to the authors of the individual chapters for an updated revision of the draft chapters.

The results of all systematic searches were screened by the guideline secretariat and selected with regard to their relevance to the key questions. If there were any uncertainties regarding the relevance of articles, the relevant working group was asked for an assessment. The inclusion criteria were

- Relevance for the formulated key question(s)
- Sample consisted of children and/or adolescents (up to 18 years) and, in addition, young adults (up to 25 years) if applicable
- Language of publication German or English
- for guidelines: current version of the guideline

Publications that could not be obtained via online retrieval, interlibrary loan or a request to the authors could also not be included. These were mainly English-language textbook chapters whose references were stored in Medline. The

The course of the screening and the assessment of suitability according to the PRISMA statement (Moher et al., 2009) is also listed in Appendix C.

#### 3.3.3 Systematic processing of the evidence base

Narrative reviews and other publications without original data were also examined. However, these were only made available to the respective working groups for their information. A method-critical evaluation of the informative value of these publications was not carried out separately.

The guideline committee decided to classify the level of evidence of the original studies taken into account analogously to the r "Levels of Evidence" of the Oxford Centre for Evidence-Based Medicine (OCEBM Levels of Evidence Working Group, 2011). According to this system, the level of evidence is graded from 1 (best level of evidence) to 1 (best evidence) mainly on the basis of the study design. 5 (lowest level of evidence). As no randomized controlled trails or meta-analyses were available in the literature identified as relevant, the evidence level of the studies for this guideline ranged between 3 and 5. The following is a tabular overview of the criteria for the evidence levels according to the Oxford Centre for Evidence-Based Medicine:

| Question   | (Level 1*)   | (Level 2*)   | Step 3<br>(Level 3*)  | Step 4<br>(Level 4*)   | Step 5 (Level 5)             |
|--|--|--|---|--|------------------------------|
| How common is the<br>problem?  | Local and current random sample<br>surveys (or censuses)   | Systematic review of surveys<br>that allow matching to local<br>circumstances**    | Local non-random sample**   | Case-series**  | n/a                          |
| Is this diagnostic or<br>monitoring test<br>accurate?<br>(Diagnosis) | Systematic review<br>of cross sectional studies with<br>consistently applied reference<br>standard and blinding  |  | Non-consecutive studies, or studies without<br>consistently applied reference standards**   | Case-control studies, or<br>"poor or non-independent<br>reference standard**             | Mechanism-based<br>reasoning |
| What will happen if<br>we do not add a<br>therapy?<br>(Prognosis)    | Systematic review<br>of inception cohort studies   | Inception cohort studies   | Cohort study or control arm of randomized trial*  | Case-series or case-<br>control studies, or poor<br>quality prognostic cohort<br>study** | n/a                          |
| Does this<br>intervention help?<br>(Treatment Benefits)              | Systematic review<br>of randomized trials or <i>n</i> -of-1 trials   |  | Non-randomized controlled cohort/follow-up<br>study**   |  | Mechanism-base<br>reasoning  |
| What are the<br>COMMON harms?<br>(Treatment Harms)                   | Systematic review of randomized<br>trials, systematic review<br>of nested case-control studies, <i>n</i> -<br>of-1 trial with the patient you are<br>raising the question about, or<br>observational study with dramatic<br>effect | or (exceptionally) observational<br>study with dramatic effect                     | Non-randomized controlled cohort/follow-up<br>study (post-marketing surveillance) provided<br>there are sufficient numbers to rule out a<br>common harm. (For long-term harms the<br>duration of follow-up must be sufficient.)** | Case-series, case-control,<br>or historically controlled<br>studies**                    | Mechanism-base<br>reasoning  |
| What are the RARE<br>harms?<br>(Treatment Harms)                     | Systematic review of randomized<br>trials or <i>n</i> -of-1 trial  | Randomized trial<br>or (exceptionally) observational<br>study with dramatic effect | •   |  |                              |
| Is this (early<br>detection) test<br>worthwhile?<br>(Screening)      | Systematic review of randomized<br>trials  |  | Non -randomized controlled cohort/follow-up<br>study**  | Case-series, case-control,<br>or historically controlled<br>studies**                    | Mechanism-base<br>reasoning  |

#### Figure 1: Levels of evidence according to the OCEBM Levels of Evidence Working Group (2011)

\* Level may be graded down on the basis of study quality, imprecision, indirectness (study PICO does not match questions PICO), because of inconsistency between studies, or because the absolute effect size is very small; Level may be graded up if there is a large or very large effect size.

\*\* As always, a systematic review is generally better than an individual study.

Accordingly, evidence level 5 was assigned if conclusions of an original study could not be systematically derived from the underlying data or the generalizability could not be assessed because no inferential statistical tests and/or effect sizes were given (e.g. for case reports). Evidence level 4 was assigned if

conclusions could be systematically derived from cross-sectional data and this was proven with inferential statistical tests. Evidence level 3 was only awarded for studies with a longitudinal design in order to understand the effects over time (without a control group).

The guideline secretariat carried out an initial assessment of the level of evidence. The original studies and the associated reviews were then made available to the working groups. The methodological assessment was carried out in these working groups and they assessed the relevance of the studies for the key questions. The relevance was also graded on a scale from 1 (highest relevance) to 5 (lowest relevance).

#### 3.4 Derivation of statements and consensus-based recommendations

The working groups of the individual chapters presented the results of their topic-related systematic literature review in the plenary session of the steering group, in which the conclusions to be drawn from the evidence presented and its existing gaps for future guideline recommendations were discussed in detail (see 3.5.). The authors of the individual chapters were only asked to prepare draft texts on the corresponding topic area and to draft proposals for recommendations to be agreed upon after the literature reception presented had been discussed in the plenary session of the steering group. After the discussions on the literature-based evidence situation, it was clear to the steering group that there would be no evidence-based recommendations on individual interventions in the treatment of gender incongruence or gender dysphoria in this field due to a lack of controlled evidence of effectiveness and an overall weak evidence situation with regard to uncontrolled evidence of effectiveness from case-cohort studies. On the other hand, it was found that there is good empirical evidence for a whole series of statements relevant to the guideline questions, which in turn are relevant for the development of consensus-based recommendations (e.g. on the known extent of discrimination experienced by treatment seekers in the healthcare system, on the prevalence of mental health problems in untreated native situations, on the importance of support for underage patients by their families, or on the safety of hormonal treatments). In order to make it clear in the guideline what evidence underlies individual statements extracted from the systematic literature review, these statements were highlighted in the individual chapters and marked with the indication of strong, moderate or weak evidence. This is intended to make it clear to users of the guideline how the systematically reviewed evidence relevant to the guideline questions was taken into account in the preparation of the guideline recommendations, which are all consensus-based.

The **consensus-based recommendations** proposed to the consensus conference by the steering group were therefore **informed** to the best possible extent by the systematically prepared study situation. As **no evidence-based recommendations** were produced for the reasons mentioned above, only the **strength of consensus was** stated for the **consensus-based recommendations**. No indication of the strength of a particular **recommendation grade** beyond the strength of consensus was provided

#### 3.5 Finding consensus and dealing with dissent

In view of the largely uncertain evidence situation in this field, which is unlikely to change fundamentally for some time to come, in the interests of acceptance of the guideline

In view of openly controversial debates, the aim was to achieve the broadest possible expert consensus on the individual recommendations, which would be convincing for healthcare practice. For this reason, an attempt was already made during the guideline development process to achieve a broad consensus on the recommendations made. Once the review of the literature on a topic area had been completed, the results of the literature review were presented and discussed by the working group in the plenary session of the guideline commission. With the exception of the preamble, the draft texts produced by the working groups were first commented on by voluntary peer reviewers from the members of the Guidelines Commission. The revised draft texts were then sent to the entire Guidelines Commission and discussed again at one of the following meetings. All comments on draft texts were acknowledged by the respective authors and a revised version was then sent to the entire commission. Specialist societies that were unable to support recommendations even after multiple feedback loops within the guideline commission were given the opportunity to submit reasoned dissenting votes.

Some fundamental points of disagreement emerged within the guideline commission early on in the drafting process. As some of these points of disagreement concerned very fundamental medicalethical attitudes as well as the new conceptualizations of non-conforming gender identities and their de-psychopathologization in the WHO ICD-11, a formal way was sought in close consultation with the AWMF to clarify the consensus basis for important professional attitudes to be conveyed by the guideline in a transparent manner at the earliest possible stage of guideline development. To this end, a preamble to the guideline was drawn up and agreed in the steering group, which was later also agreed in the first consensus conference. This preamble was intended to clarify elementary principles for the medical-ethical foundation of the guideline as well as for a professional attitude oriented towards the well-being of patients, which the guideline commission used as a guide. A draft of this preamble was discussed point by point several times and revised twice more following feedback from the guideline commission in the run-up to the vote. This was intended to provide the opportunity to reach a broad consensus and to present the otherwise divergent views of the professional societies and other participating organizations on the medical ethical foundation in a structured manner. The preamble was pre-consented in the steering group after prior announcement on September 23, 2019 with 12 yes votes, 0 no votes and 1 abstention (100% approval). The DGSMTW representative was not present for the vote. The DGSMTW subsequently declared its non-approval in a letter. The text of the preamble was later approved in unchanged form at the first consensus conference on 1.4.2022 with the participation of 26 specialist societies and two organizations representing the interests of people seeking treatment with a strong consensus (> 95%).

This positioning, which was clarified at an early stage in the drafting process, made it clear that the DGSMTW, which was the only one of the 17 specialist societies originally involved in the S3 guideline for adulthood "*Gender incongruence, gender dysphoria and trans\* health*" published in 2018, did not agree with the basic consensus within the guideline group and represented fundamentally different professional positions. Irrespective of these professional differences, particularly with regard to the basic medical ethical positions held by the other members of the guideline commission, care was taken throughout the further development process of the guideline to address each justified objection individually in controversial professional discussions and to discuss them according to scientific standards, as well as to scientifically justify the rejection of the objection if necessary.

The consensus conferences took place at the following times via ZOOM:

#### 01.04.2022, 04.06.2022, 03.12.2022, 04.12.2022, 23.11.2023

The conference was moderated externally and by the AWMF by Dr. Muche-Borowski (AWMF-certified guideline consultant). It was organized according to the **nominal group process.** 

The participants of the invited consensus conferences were provided in advance with the full texts of the chapters on which the proposed **statements** on the state of knowledge and **consensus-based recommendations** were based in their current text version, together with a list of the statements and recommendations to be voted on in the wording proposed by the steering group. In the chapters, the statements and the

These recommendations, among others, were used to derive and elaborate literature-based recommendations. Where necessary, the clinical experience of the clinical experts involved in the development of the guidelines was dedand explicitly named.

The statements and recommendations prepared in this way were read out individually by the moderator in the conference in the form of the nominal group process and any open questions about their origin were asked and explained in the plenary session. Before each vote, the time required for this w a s u s e d to ask for and discuss requests for changes and suggestions for amendments to each individual recommendation/statement in the plenary session by circulation until a formulation that appeared to be largely consensual was released for the final vote.

As recommended by the AWMF, the consensus strength of the recommendations was recorded and stated in the guideline. Their classification also follows the AWMF guidelines:

| Starker Konsens          | Zustimmung von > 95 % der Teilnehmer    |
|--------------------------|---|
| Konsens                  | Zustimmung von > 75–95 % der Teilnehmer |
| Mehrheitliche Zustimmung | Zustimmung von > 50–75 % der Teilnehmer |
| Kein Konsens             | Zustimmung von < 50 % der Teilnehmer    |
|                          |   |

#### Figure 2 Classification of consensus strength (AWMF, 2012)

If members were unable to attend, written comments were requested in advance on the statements and recommendations submitted for discussion and voting. Members of the consensus conferences who were not present on individual dates were asked to submit their votes on the statements and recommendations agreed following detailed discussion in the final version of the wording with the options offered for each individual statement.

"Approval, abstention or vote against" obtained in writing.

## 4 Editorial independence

#### 4.1 Financing of the guideline

Funding for the guideline work was distributed. The commission members worked on a voluntary basis. Some of them were released from work by their employers for the meetings of the LL Commission. Travel and any accommodation costs for members of the guideline commission were covered by the members themselves or by the respective professional associations, organizations or employers. Since 2020, all working meetings and conferences have been held exclusively via the online conference platform "Zoom", which has minimized the costs incurred since then.

Costs were also incurred for the work of the guidelines secretariat and for the organization of the steering group meetings at various locations. Catering costs for coffee breaks were covered from the current budget of the host institution. These were covered as follows:

- Clinic for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy at Münster University Hospital
  - Personnel costs for the guideline secretariat: In addition to the staff positions funded by the DGKJP (see below), various student and research assistants, who were financed for a wide range of tasks from our university's research and teaching resources, were assigned to support the guideline secretariat as required over the entire guideline development period.
- German Society for Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy
  - Subsidy for personnel costs of the guidelines secretariat: €10,000
    - Costs for moderation by the AWMF

The content of the guideline was not influenced by the funding bodies. In particular, therewere no financial contributions to the guideline work from third parties with specific content-related or financial interests. The only donors of resources were the DGKJP as the lead AWMF specialist society and the public university institution of the guideline coordinator or guideline secretariat.

### 4.2 Conflicts of interest

Following a request via the AWMF portal, all members of the guideline commission submitted a declaration of interests in accordance with the AWMF rules and regulations form.<sup>9</sup> No conflicts of interest were found that would have been considered problematic with regard to the involvement of the members of the guideline commission in the consensus process. The assessment of

<sup>&</sup>lt;sup>9</sup> There is no declaration of interest from Dr. Bernd Meyenburg. He left the steering group in 2020 for reasons of age. Up to this point, he had been the first author of the previous S1 guideline

<sup>&</sup>quot;Gender Identity Disorders in Children and Adolescents" accompanied the systematic literature review phase with his experienced advice. He left before the literature review was completed and was was no longer involved in the content of the recommendations that were later approved.

Conflicts of interest were assessed individually by the coordinator of the LL Commission, the deputy coordinator and the mandated member of the professional association of child and adolescent psychiatrists in private practice independently of each other. For the coordinator and the deputy coordinator, the assessments were accordingly carried out exclusively by the other two named members of the LL Commission without their own assessment. In accordance with the AWMF regulations, conflicts of interest were classified a s low, moderate or high.

For the appointed members of the self-representation organizations of treatment seekers, an intended interest situation in the sense of the desired participatory representation of interests was assumed by definition and without distinction of the individual persons. Since these are general patient interests to be represented (e.g. self-determination, low-threshold care services, etc.), but do not concern economic interests, these potential conflicts of interest were classified as *low. As a* result, the persons concerned were not nominated to head the commission or individual working groups. In any case, this was not envisaged for the participatory involvement of patient self-advocacy organizations.

Three members of the LL Commission stated that they had received training fees, some of which were financed by companies in the pharmaceutical industry. The companies stated were individually checked to see whether they sell preparations that are commonly used in the subject area of the guideline or for which a market advantage could result from some of the later recommendations of the guideline. In each individual case, this could be comprehensibly denied, so that there was no indication of a conflict of interest related to the guideline from these training fees

## 5 Planned public consultation phase

Once the guideline documents had been formally reviewed by the AWMF, they were made available to the executive boards of all participating specialist societies for comment for a period of four weeks in a version agreed in advance with the executive board of the lead specialist society DGKJP and recommended by the latter for consensus, to forward this opportunity to view the guideline documents and their comments via a link in a specially set up online portal (Lime Survey) to all members of the respective specialist society, who can participate in this commentary by registering by name. The comments received will be collected and sorted by chapter, reviewed by the teams of authors of the individual chapters and checked for their relevance for a revision of the chapter. The content of the prepared comments will be evaluated and discussed at a meeting of the steering group, which has yet to be scheduled. The comments received will be summarized in a table, along with how they were dealt with. These will then be taken into account in an editorial revision of the guideline text on the basis of a joint assessment by the steering group.

Should the discussion in the evaluation by the steering group on the comments received result in a need to reformulate some of the agreed recommendations, a further consensus conference will be prepared and held accordingly, at which any amended recommendations can be agreed again.

## 6 Adoption by the boards of the publishing professional societies/organizations

The version of the guideline text, which may be revised again after the non-public comment phase, will be agreed with the board of the issuing professional society DGKJP so that it is submitted to all boards of participating professional societies/organizations/associations with the recommendation of the guideline commission and the DGKJP board for final approval. All participating boards should be informed well in advance, i.e. during the consultation phase, that the consensus should be reached within a given period of time, after which the guideline should be published.

Both in the commenting phase and in the process of final adoption, the executive boards of the participating specialist societies are informed of the possibility of submitting a dissenting special vote on individual recommendations with substantive reasons. This presupposes that the professional society in question approves the guideline as a whole

# 7 External assessment, dissemination, implementation and monitoring

The non-public commenting phase described in paragraph 5, which is restricted to members of the participating specialist societies, was chosen as an existing option in the AWMF regulations for an external review of the guideline.

It was not possible to analyze barriers in the application of the guideline, which is why this could not be discussed in the guideline. Similarly, there was no analysis of the costs of applying the guideline, which is why this area is not discussed in the guideline.

For the implementation of the guideline, interdisciplinary symposia are to be organized at the specialist congresses of the participating AWMF specialist societies to present the guideline.

## 8 Validity period and updating

The period of validity is to be 5 years from the date of publication (planned for June 2024), i.e. until May 2029. Following an analysis of the current situation and requirements, the new steering group is to determine the further updating procedure after just 3 years. Among other things The systematic literature searches carried out in this guideline will be updated at a later date. For the update to be planned thereafter, the new guideline commission of the S3 guideline for adulthood "Gender incongruence, gender dysphoria and gender dysphoria" will be consulted. Trans\*Health" (AWMF register number 138 - 001), the revision of which has just begun, will be reviewed to determine whether there should be an integrated guideline for all age groups.

The contact person for the update is

Prof. Dr. med. Georg Romer Director, Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Münster University Hospital Schmeddingstrasse 50 48149 Münster sekre.romer@ukmuenster.de

#### 9 Bibliography

- Aitken, M., Steensma, T. D., Blanchard, R., VanderLaan, D. P., Wood, H., Fuentes, A. ... Leef, J. H.
   (2015). Evidence for an altered sex ratio in clinic-referred adolescents with gender dysphoria. *The Journal of Sexual Medicine*, *12*, 756-763. https://doi.org/gfvksv
- American Psychiatric Association (APA). (2013). Diagnostic and statistical manual of mental disorders. 5th edition (DSM-5).
- Association of the Scientific Medical Societies in Germany (AWMF). (2012). AWMF Guidelines. 1st edition. https://www.awmf.org/leitlinien/awmf- regelwerk.html
- Association of the Scientific Medical Societies in Germany (AWMF) & Medical Center for Quality in Medicine (ÄZQ). (2008). German instrument for methodological guideline evaluation (DELBI), version 2005/2006 + domain 8. https://www.leitlinien.de/leitliniengrundlagen/leitlinienbewertung/delbi
- Chen, M., Fuqua, J. & Eugster, E. A. (2016). Characteristics of referrals for gender dysphoria over a 13year period. *Journal of Adolescent Health, 58*, 369-371. https://doi.org/f8bkjn
- GRADE Working Group. (2004). Grading quality of evidence and strength of recommendations. *BMJ,* 328, 1490. https://doi.org/bgq3mj
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS med*, *6*, e1000097. https://doi.org/bq3jpc
- Nieder, T. O. & Strauß, B. (2019). S3 guideline on diagnosis, counseling and treatment in the context of gender incongruence, gender dysphoria and trans health. *Journal of Sex Research*, *32*, 70-79. https://doi.org/k464
- Pierce, S., Mazziotta, A. & Möller-Kallista, B. (2022). Experiences of children with gender dysphoria/gender incongruence and their parents with the health care system in Germany. *Practice of Child Psychology and Child Psychiatry*, 71, 597-619. https://doi.org/k5bh
- OCEBM Levels of Evidence Working Group, Howick J., Chalmers, I., Glasziou P., Greenhalgh, T., Heneghan C. ... Hodgkinson, M. (2011). The Oxford 2011 Levels of Evidence. Oxford Centre for Evidence-Based Medicine. https://www.cebm.net/index.aspx?o=5653
- Wood, H., Sasaki, S., Bradley, S. J., Singh, D., Fantus, S., Owen-Anderson, A. ... Zucker, K. (2013).
   Patterns of referral to a gender identity service for children and adolescents (1976-2011):
   Age, sex ratio, and sexual orientation. *Journal of Sex & Marital Therapy, 39.* 1-6.
   https://doi.org/ggjm5m

## 10 Appendix A: Search for existing guidelines

A search for relevant existing guidelines was carried out on the following internet portals in August 2015:

- awmf.org
- guidelines.com
- guideline.gov
- sign.ac.uk
- nice.org.uk

The search terms used were (possibly connected by the operator "OR"):

Gender Dysphoria, Gender identity, transsexual, transsexualism, trans\*, transident, transgender, Gender Identity Disorder, gender variance, male-to-female, female-to-male, MTF, FTM, gender nonconformity, genderqueer, gender reassignment, gender variant, Sexual and gender disorders, gender atypical gender dysphoria, gender identity, transsexualism, transsexuality, transident, transgender, gender identity disorder GIS, male-to-female, female-to-male, MTF, FTM, gender reassignment

The inclusion criteria were:

- Current version of the respective guideline (no more recent version found)
- evidence-based guideline (e.g. for German guidelines S2e or S3 level)
- entire period up to the search was taken into account

## 11 Appendix B: Cross-topic literature research and selection

The MEDLINE and PsycINFO databases were used for the cross-topic literature search. The searches took place separately and were both conducted in August 2015. The search syntax was structured as follows:

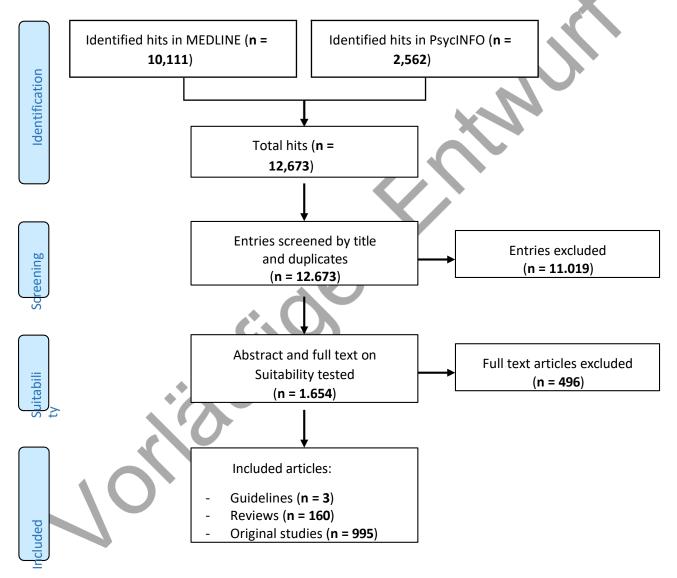
- In MEDLINE, MeSH keywords were used for gender dysphoria (<u>M1</u>) and age range (<u>M2</u>).
- In PsychINFO, keywords according to the APA Thesaurus of Psychological Index Terms were used for the subject area (<u>P1</u>) and the age range (<u>P2</u>).
- In addition, identical search terms were used for the full text on the subject area (T1) and age range (T2) for both searches.
- The respective keywords and text words were linked within a range using the "OR" operator (in Table B1 instead of commas).
- The keywords and text words for age were also linked by "OR". The keywords and text words for the subject area were also linked by "OR".
- The syntax for the subject area and the age range were linked by "AND".
- The syntax was accordingly: (M1 OR T1) AND (M2 OR T2) or (P1 OR T1) AND (P2 OR T2)

|                                  | MEDLINE   | PsycINFO  |
|----------------------------------|---|---|
| Keywords<br>(MeSH/<br>Thesaurus) | Terms on the topic ( <u>M1</u> ):<br>Transsexualism, Transgendered<br>Persons, Health Services for<br>Transgendered Persons, Gender<br>Identity<br>Terms for the age group ( <u>M2</u> ):<br>Child, Minors, Adolescent  | <ul> <li>Terms on the topic (P1): Transgender, gender identity disorder, gender identity</li> <li>Terms for the age group (P2):</li> <li>Adolescent Development, Childhood Development, Development, Human Development</li> </ul> |
| Text words                       | Terms on the topic ( <u>T1</u> ):<br>Gender Dysphoria, Gender identity, transsexual, transsexualism, trans <sup>*</sup> ,<br>transident, transgender, Gender, Identity Disorder, gender variance, male-to-<br>female, female-to-male, MTF, FTM, gender non-conformity, gender discordance,<br>genderqueer, gender reassignment, gender variant, sexual and gender disorders,<br>gender atypical, role change, hormone replacement therapy, transidentity in<br>adolescents, gender dysphoria in adolescents, gender identity disorder in<br>adolescents, transidentity in adolescents, treatment guidelines for adolescents<br>with gender identity disorder, gender dysphoria in adolescents, gender identity<br>disorder in adolescents transgender adolescents gender dysphoria gender |   |
| Period                           | 1998 - August 2015  |   |

Table B1: Search terms and search period of the cross-topic literature search

The results of the two searches were combined and cleaned of duplicates. In addition, the titles were screened for relevance. The abstracts and, if necessary, the full-text articles were then checked for eligibility. Articles were excluded if they violated the inclusion criteria (including language; see 3.3.1) or if the publication could not be obtained via online retrieval, interlibrary loan or a request to the authors. This is shown quantitatively in the following flow chart based on the PRISMA statement (Moher et al., 2009):

**Figure B1:** Flow chart for hits, screening, eligibility check and articles identified as relevant in the cross-topic literature search



## 12 Appendix C: Topic-specific literature research and selection

At least one further topic-specific systematic literature search was conducted for each working group. The timing of these searches was between August 2017 and April 2020. The period taken into account was the beginning of 2014 up to the time of the respective topic-specific searches. For the working groups "social role change in childhood" and "persisters vs. desisters (developmental trajectories)", joint searches were conducted due to the overlap in content and a decision was made during the review on assignment to one or both working groups. For the Hormones and Psychotherapy working groups, follow-up searches were carried out in July 2020 using the same search syntax but covering the period between the first topic-specific search and July 2020. This served to update this body of literature.

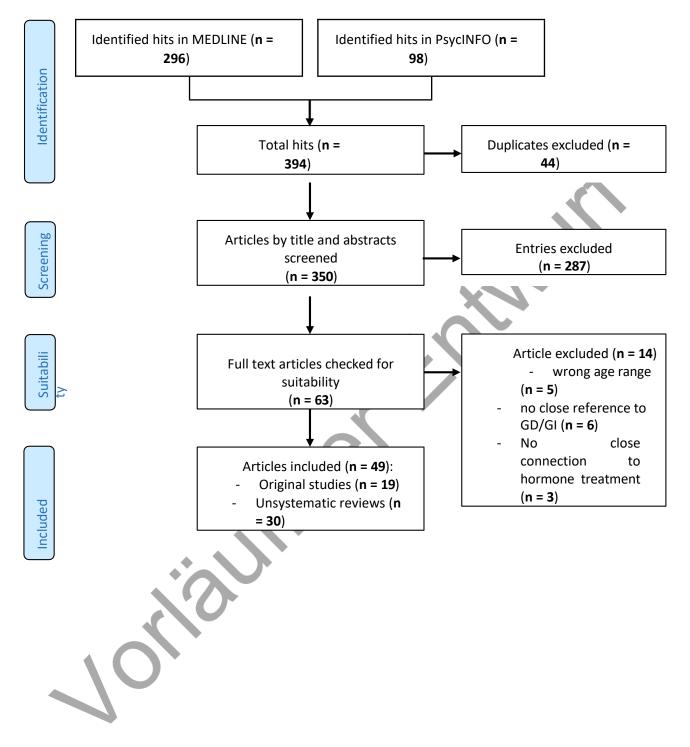
The MEDLINE and PsycINFO databases were also used for the topic-specific searches. Again, keywords according to MeSH or the APA Thesaurus as well as text words were used to narrow down the overarching topic of gender dysphoria. The text words were modified compared to the cross-thematic search (see Appendix B), partly because the term "gender incongruence" has since been introduced in the draft ICD-11. The search terms for gender dysphoria were linked with other keywords and text words depending on the subject area.

- The various keywords and text words were linked within a range using the "OR" operator (instead of commas in the tables in this appendix).
- MeSH keywords on gender dysphoria are referred to below as M1 and MeSH keywords on the respective subject area of the research as M2.
- APA Thesaurus keywords on gender dysphoria are referred to below as <u>P1</u> and APA Thesaurus keywords on the respective subject area of the search as P2.\_\_\_\_
- The same text words were used in MEDLINE and PsycINFO for each working group. The text words on gender dysphoria are abbreviated as T1 and the text words on the respective topic area of the research as T2.
- The syntax in each case was: (M1 OR T1) AND (M2 OR T2) or (P1 OR T1) AND (P2 OR T2)
- The restriction to articles in English or German was carried out using filters in the MEDLINE and PsycINFO search mask.
- The age range was also restricted using filters in the MEDLINE or PsycINFO search mask. The following age ranges were selected for inclusion:
  - In MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12 years" and "child, preschool: 2-5 years"
  - In PsycINFO: "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age (6-12 yrs)" and "preschool age (2-5 yrs)"

The results of the searches in MEDLINE and PsycINFO were summarized for each working group. The duplicates were then deleted. The articles were then screened for relevance using the titles and, if ambiguous, the abstracts. The positively screened articles were then checked in full text for fulfillment of the inclusion criteria (see 3.3.2). Even if a publication could not be obtained via online retrieval, interlibrary loan or a request to the authors, it was excluded. The search syntaxes, the filters used and the search time can be found in the following tables. A quantitative overview of the literature searches according to the conventions of the PRISMA statement (Moher et al., 2009) can be found in the figures in this appendix.

**Table C1:** Search terms, filters and search period of the search runs for the "Hormone treatment" working group

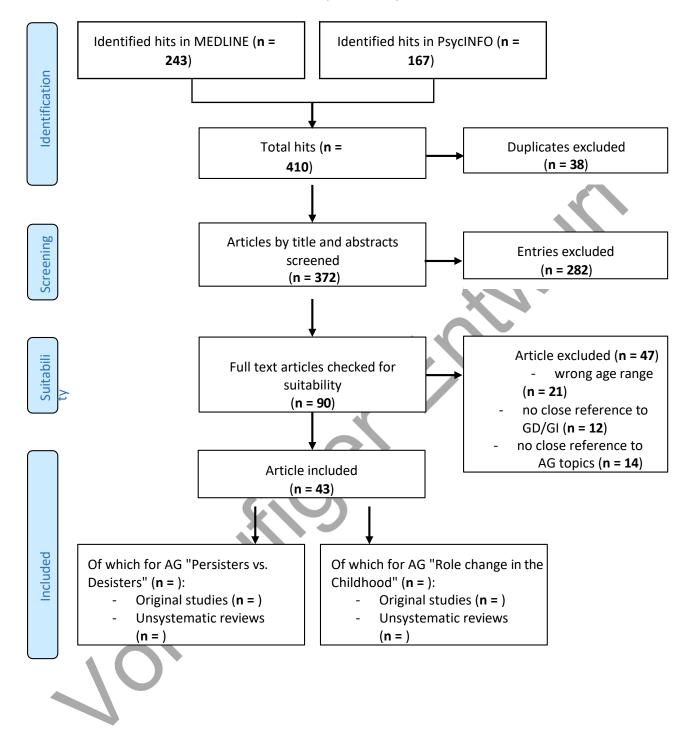
| Search terms for       | gender dysphoria & gender incongruence   |
|------------------------|--|
|                        | MeSH for MEDLINE (M1):   |
| Keywords               | Disorders of Sex Development, Gender Dysphoria, Gender Identity,<br>Health Services for Transgender Persons, Psychosexual Development, Sex<br>Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders<br>of Sex Development, Health Services for Transgendered Persons, Transgender<br>Persons<br><b>APA-Thesaurus for PsycINFO(P1)</b> :<br>Gender Identity, Transgender, Transsexualism, Gender Identity   |
| Text words             | Disorder, Psychosexual Development, Sex Change, Transgender<br>(T1):<br>gender incongruence*, Disorders of sex development*, female-to-male,<br>formation of gender identity, female-to-male, FTM, MTF, gender atypical*,<br>gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,<br>gender identity disorder* in adolescent*, gender identity disorder* of<br>childhood, gender nonconforming, gender non-conforming, gender non-<br>conformity, gender reassignment*, gender variance*, gender variant*,<br>gender queer*, gender conformity*, gender adaptation*, gender dysphoria*,<br>gender identity disorder* in adolescence, gender reassignment*, gender<br>variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-<br>female, "sexual and gender disorders", sexual identit*, TGNC, TGNC<br>adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,<br>transgender*, transident*, transidente* Jugendlich*, transidentity in<br>adolescent*, transsexual*, transsexualism, transsexuality |
| Search terms for       | hormone treatment  |
| Keywords               | MeSH for MEDLINE (M2):<br>Gonadotropin-Releasing Hormone, Hormone Replacement Therapy, Sex<br>Reassignment Procedures<br>APA-Thesaurus for PsycINFO(P2):<br>Sex Change   |
| Text words             | (T2):<br>hormone* replac* therap*, pubertal suspension, GnRHa, pubert*<br>suppression*, puberty-suppressing, GnRH analogue, cross-sex hormone*, sex<br>reassignment*,<br>cross-sex hormone* treatment*, hormone* therapy*, hormone treatment*  |
| Filter                 | ,,,,,  |
|                        | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12 years", "child, preschool: 2-5 years"  |
| Age group              | <b>For PsycINFO:</b> "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age (6-12 yrs)", "preschool age (2-5 yrs)"   |
| Age group<br>Languages |  |
|                        | (6-12 yrs)", "preschool age (2-5 yrs)"   |



**Figure C1:** PRISMA flow chart for the literature search for the "Hormone therapy" working group

**Table C2:** Search terms, filters and search period of the search runs for the working groups "social role change in childhood" and "persisters vs. desisters (developmental trajectories)"

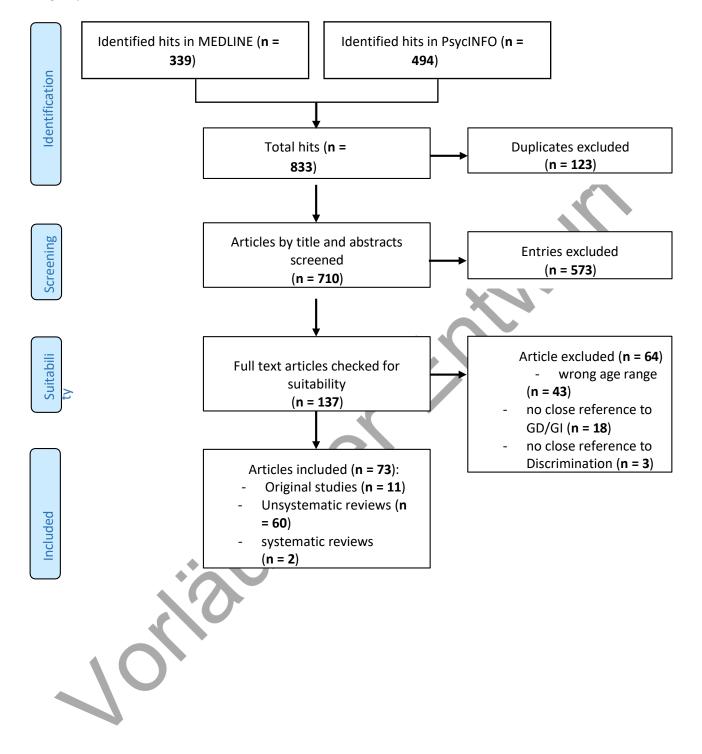
| Search terms for  | gender dysphoria & gender incongruence  |
|-------------------|---|
|                   | MeSH for MEDLINE ( <u>M1</u> ):   |
| Keywords          | Disorders of Sex Development, Gender Dysphoria, Gender Identity,<br>Health Services for Transgender Persons, Psychosexual Development, Sex<br>Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders<br>of Sex Development, Health Services for Transgendered Persons, Transgender<br>Persons<br><b>APA thesaurus for PsycINFO (P1):</b><br>Gender Identity, Transgender, Transsexualism, Gender Identity<br>Disorder, Psychosexual Development, Sex Change, Transgender   |
| Text words        | ( <u>T1</u> ):<br>gender incongruence*, Disorders of sex development*, female-to-male,<br>formation of gender identity, female-to-male, FTM, MTF, gender atypical*,<br>gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,<br>gender identity disorder* in adolescent*, gender identity disorder* of<br>childhood, gender nonconforming, gender non-conforming, gender non-<br>conformity, gender reassignment*, gender variance*, gender variant*,<br>genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,<br>gender dysphoria in adolescents*, gender identity*, gender identity disorder*,<br>gender identity disorder* in adolescence, gender reassignment*, gender<br>variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-<br>female, "sexual and gender disorders", sexual identit*, TGNC, TGNC<br>adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,<br>transgender*, transident*, transidente* Jugendlich*, transidentity in<br>adolescent*, transsexual*, transsexualism, transsexuality |
| Search terms for  | persisters vs. desisters and social role change in childhood  |
| Keywords          | MeSH for MEDLINE ( <u>M2</u> ):<br>Sexual Development<br>APA-Thesaurus for PsycINFO ( <u>P2</u> ):<br>Sex Roles   |
| Text words        | (T2):<br>cross sex behavio*, cross sex identifi*, cross gender behavio*, cross gender<br>identifi*, social* transition*, social* role transition*, social* transition*, social*<br>transition*, persist*, desist*, desisting, persisting, desisters, persisters,<br>persistence, desistence, deistance, psychosexual* outcome*, psychosexual<br>development*, psychosexual differentiation*, pubertal outcome*  |
| Filter            |   |
| Age group         | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12 years", "child, preschool: 2-5 years"<br>For PsycINFO: "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age (6-12 yrs)", "preschool age (2-5 yrs)"  |
| Languages         | German, English   |
| Period            | 2014 - September 2017   |
| Date of search: 2 | 1.09.2017   |



**Figure C2:** PRISMA flow chart for the literature search for the working groups "Social role change in childhood" and "Persisters vs. desisters (developmental trajectories)"

**Table C3:** Search terms, filters and search period of the search runs for the"Discrimination" working group

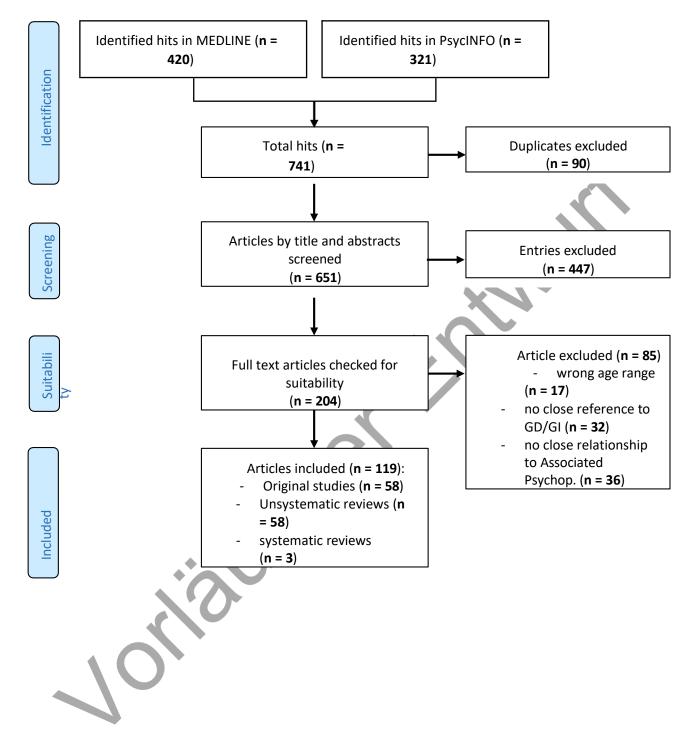
| Search terms for  | gender dysphoria & gender incongruence  |
|-------------------|---|
|                   | MeSH for MEDLINE (M1):  |
| Keywords          | Disorders of Sex Development, Gender Dysphoria, Gender Identity,<br>Health Services for Transgender Persons, Psychosexual Development, Sex<br>Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders<br>of Sex Development, Health Services for Transgendered Persons, Transgender<br>Persons<br><b>APA thesaurus for PsycINFO (P1):</b><br>Gender Identity, Transgender, Transsexualism, Gender Identity<br>Disorder, Psychosexual Development, Sex Change, Transgender   |
| Text words        | ( <u>T1</u> ):<br>gender incongruence*, Disorders of sex development*, female-to-male,<br>formation of gender identity, female-to-male, FTM, MTF, gender atypical*,<br>gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,<br>gender identity disorder* in adolescent*, gender identity disorder* of<br>childhood, gender nonconforming, gender non-conforming, gender non-<br>conformity, gender reassignment*, gender variance*, gender variant*,<br>genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,<br>gender dysphoria in adolescents*, gender identity*, gender identity disorder*,<br>gender identity disorder* in adolescence, gender reassignment*, gender<br>variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-<br>female, "sexual and gender disorders", sexual identit*, TGNC, TGNC<br>adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,<br>transgender*, transident*, transidente* Jugendlich*, transidentity in<br>adolescent*, transsexual*, transsexualism, transsexuality |
| Search terms for  | discrimination  |
| Keywords          | MeSH for MEDLINE (M2):<br>Social Stigma, Dehumanization, Bullying, Harassment (Non-Sexual), Social<br>Marginalization<br>APA-Thesaurus for PsycINFO (P2):<br>Victimization, Sex Discrimination, Bullying, Harassment, Social Isolation,<br>Transgender (Attitudes Toward)   |
| Text words        | (T2):<br>transphobi*, violen*, victimi?ation*, discriminat*, dehumani?ati*, defamati*,<br>insult*, ostraci*, in?quity, humiliation, harassment, bullying, hatred, injustice,<br>diskrimini*, mobbing, harassing*, humiliating*, defaming*, unjust*  |
| Filter            |   |
| Age group         | <ul> <li>For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12 years", "child, preschool: 2-5 years"</li> <li>For PsycINFO: "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age (6-12 yrs)", "preschool age (2-5 yrs)"</li> </ul>  |
| Languages         | German, English   |
| Period            | 2014 - May 2018   |
| Date of the searc | h: 25.05.2018   |



**Figure C3:** PRISMA flowchart for the literature search for the "Discrimination" working group

**Table C4:** Search terms, filters and search period of the search runs for the working group "Associatedpsychopathology" including "Autism spectrum disorders"

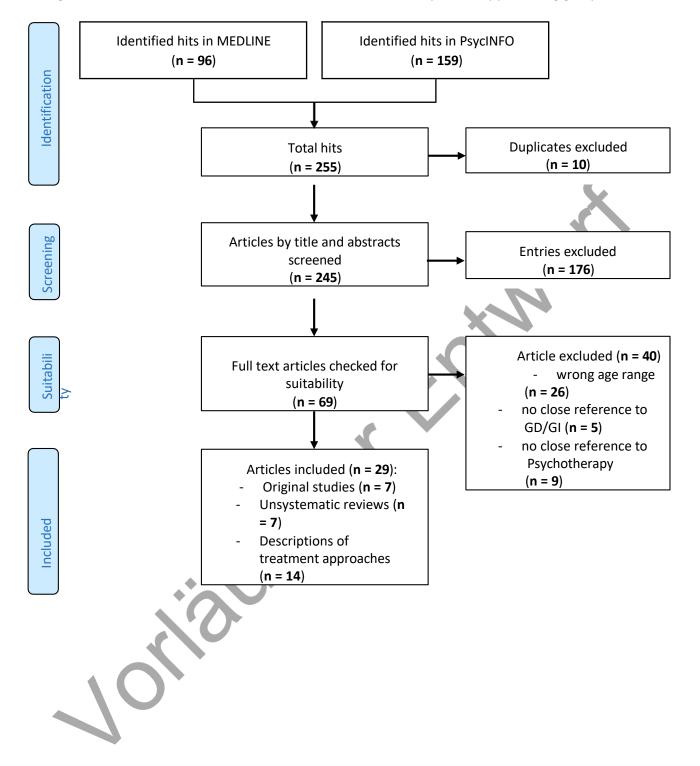
| Search terms for gender dysphoria & gender incongruence |  |  |
|---|--|--|
| MeSH for MEDLINE ( <u>M1</u> ):                         |  |  |
| Keywords  | Disorders of Sex Development, Gender Dysphoria, Gender Identity,<br>Health Services for Transgender Persons, Psychosexual Development, Sex<br>Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders<br>of Sex Development, Health Services for Transgendered Persons, Transgender<br>Persons<br><b>APA thesaurus for PsycINFO (P1):</b><br>Gender Identity, Transgender, Transsexualism, Gender Identity<br>Disorder, Psychosexual Development, Sex Change, Transgender  |  |
| Text words  | (T1):<br>gender incongruence*, Disorders of sex development*, female-to-male,<br>formation of gender identity, female-to-male, FTM, MTF, gender atypical*,<br>gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,<br>gender identity disorder* in adolescent*, gender identity disorder* of<br>childhood, gender nonconforming, gender non-conforming, gender non-<br>conformity, gender reassignment*, gender variance*, gender variant*,<br>genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,<br>gender dysphoria in adolescents*, gender identity*, gender identity disorder*,<br>gender identity disorder* in adolescence, gender reassignment*, gender<br>variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-<br>female, "sexual and gender disorders", sexual identit*, TGNC, TGNC<br>adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,<br>transgender*, transident*, transidente* Jugendlich*, transidentity in<br>adolescent*, transsexual*, transsexualism, transsexuality |  |
| Search terms for  | associated psychopathology incl. autism spectrum disorders   |  |
| Keywords  | MeSH for MEDLINE (M2):Comorbidity, Problem Behavior, Mental Disorders, Psychopathology, Mental<br>Health, Suicide, Autism Spectrum DisorderAPA-Thesaurus for PsycINFO (P2):Comorbidity, Mental Disorders, Behavior Problems, Psychopathology, Mental<br>Health, Suicide, Externalization, Internalization, Differential Diagnosis, Autism<br>Spectrum Disorders  |  |
| Text words  | (12):<br>comorbid*, psychological functioning, associated difficulties, psychopatholog*,<br>suicid*, mental health, differential diagnos*, autism*, autistic, comorbid*,<br>suicide*, psych* disorder*, differential diagnosis*, behavioral problem*   |  |
|   | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12  |  |
| Age group   | years", "child, preschool: 2-5 years"<br><b>For PsycINFO:</b> "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age<br>(6-12 yrs)", "preschool age (2-5 yrs)"   |  |
| Languages   | German, English  |  |
| Period  | 2014 - September 2018  |  |
| Date of the searc                                       | <b>h:</b> 12.09.2018   |  |



**Figure C4:** PRISMA flowchart for the literature search for the working group "Associated Psychopathology" including "Autism Spectrum Disorders"

**Table C5:** Search terms, filters and search period of the search runs for the"Psychotherapy" working group

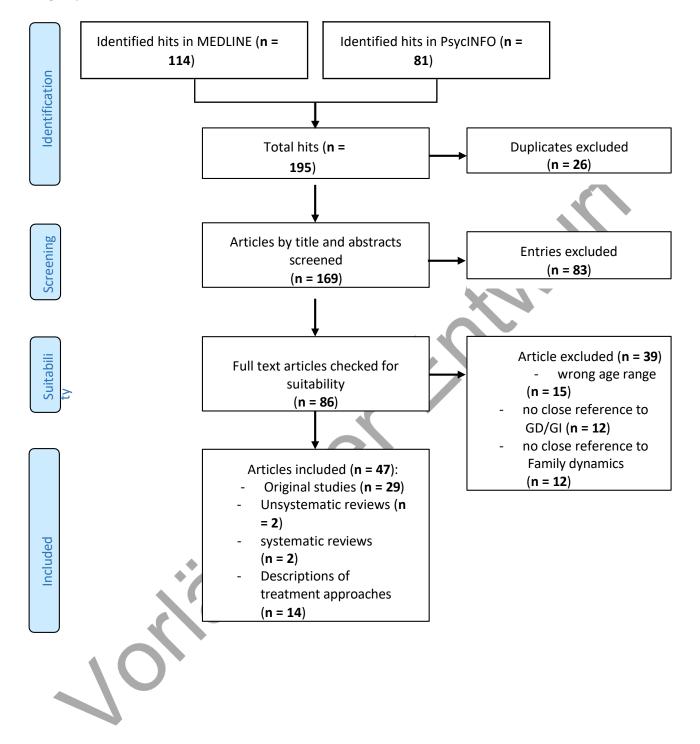
| Search terms for  | gender dysphoria & gender incongruence   |
|-------------------|--|
|                   | MeSH for MEDLINE (M1):   |
|                   | Disorders of Sex Development, Gender Dysphoria, Gender Identity,                 |
|                   | Health Services for Transgender Persons, Psychosexual Development, Sex           |
|                   | Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders        |
| Keywords          | of Sex Development, Health Services for Transgendered Persons, Transgender       |
|                   | Persons  |
|                   | APA thesaurus for PsycINFO (P1):   |
|                   |  |
|                   |  |
|                   | Disorder, Psychosexual Development, Sex Change, Transgender                      |
|                   | ( <u>T1</u> ):   |
|                   | gender incongruence*, Disorders of sex development*, female-to-male,             |
|                   | formation of gender identity, female-to-male, FTM, MTF, gender atypical*,        |
|                   | gender discordance*, gender dysphoria, gender dysphoria in adolescent*,          |
|                   | gender identit*, gender identity development*, gender identity disorder*,        |
|                   | gender identity disorder* in adolescent*, gender identity disorder* of           |
|                   | childhood, gender nonconforming, gender non-conforming, gender non-              |
|                   | conformity, gender reassignment*, gender variance*, gender variant*,             |
| Text words        | genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,         |
|                   | gender dysphoria in adolescents*, gender identity*, gender identity disorder*,   |
|                   | gender identity disorder* in adolescence, gender reassignment*, gender           |
|                   | variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-          |
|                   | female, "sexual and gender disorders", sexual identit*, TGNC, TGNC               |
|                   | adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,             |
|                   | transgender*, transident*, transidente* Jugendlich*, transidentity in            |
|                   | adolescent*, transsexual*, transsexualism, transsexuality                        |
|                   |  |
| Search terms for  | psychotherapy  |
|                   | MeSH for MEDLINE (M2):   |
|                   | Psychotherapy, Psychotherapy (Psychodynamic), Psychotherapy (Group),             |
|                   | Psychotherapy (Brief)  |
|                   | APA-Thesaurus for PsycINFO (P2):   |
| Keywords          | Psychotherapy, Child Psychotherapy, Adolescent Psychotherapy, Cognitive          |
|                   | Behavior Therapy, Behavior Therapy, Psychodynamic Psychotherapy, Brief           |
|                   | Psychotherapy, Individual Psychotherapy, Client Centered Therapy, Group          |
|                   | Psychotherapy, Psychotherapeutic Counseling, Supportive Psychotherapy,           |
|                   | Affirmative Therapy, Conversion Therapy  |
|                   | (T2):  |
|                   | Psychotherap*, "affirmative therapy*", "psychological intervention*",            |
| Text words        | "psychological treatment*", "mental treatment*", "psychiatric treatment*",       |
|                   | psychiatric treatment*, psych* counseling*                                       |
| Filter            |  |
|                   | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12    |
| .                 | years", "child, preschool: 2-5 years"  |
| Age group         | For PsycINFO: "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age |
|                   | (6-12 yrs)", "preschool age (2-5 yrs)"   |
| Languages         | German, English  |
| Period            | 2014 - December 2018   |
| Date of the searc |  |
| Date of the sedic | 11, 12,2010  |



#### Figure C5: PRISMA flowchart for the literature search for the "Psychotherapy" working group

**Table C6:** Search terms, filters and search period of the search runs for the "Familydynamics" working group

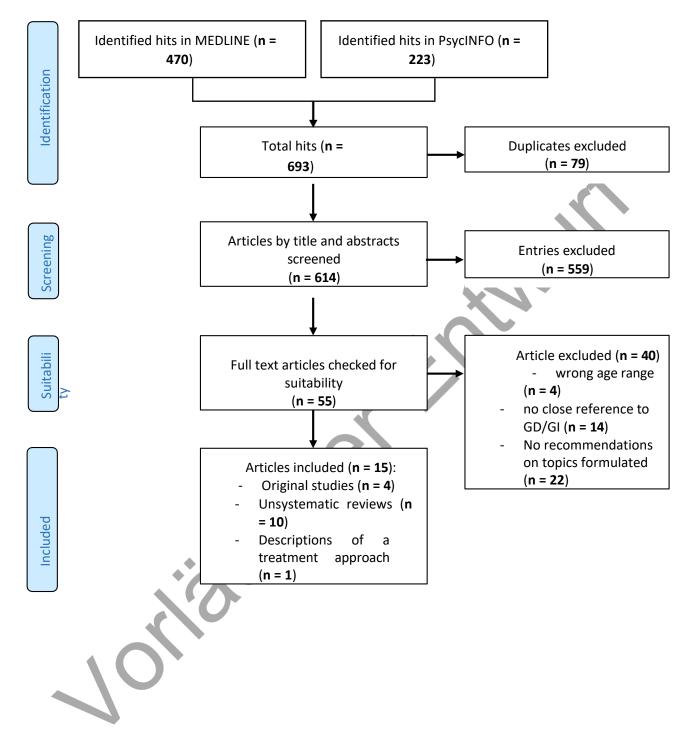
| Search terms for gender dysphoria & gender incongruence |  |  |
|---|--|--|
|   | MeSH for MEDLINE (M1):   |  |
| Keywords  | Disorders of Sex Development, Gender Dysphoria, Gender Identity,<br>Health Services for Transgender Persons, Psychosexual Development, Sex<br>Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders<br>of Sex Development, Health Services for Transgendered Persons, Transgender<br>Persons<br><b>APA thesaurus for PsycINFO (P1):</b><br>Gender Identity, Transgender, Transsexualism, Gender Identity<br>Disorder, Psychosexual Development, Sex Change, Transgender  |  |
| Text words  | (T1):<br>gender incongruence*, Disorders of sex development*, female-to-male,<br>formation of gender identity, female-to-male, FTM, MTF, gender atypical*,<br>gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,<br>gender identity disorder* in adolescent*, gender identity disorder* of<br>childhood, gender nonconforming, gender non-conforming, gender non-<br>conformity, gender reassignment*, gender variance*, gender variant*,<br>genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,<br>gender identity disorder* in adolescents, gender identity disorder*,<br>gender dysphoria in adolescents*, gender identity*, gender identity disorder*,<br>gender identity disorder* in adolescence, gender reassignment*, gender<br>variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-<br>female, "sexual and gender disorders", sexual identit*, TGNC, TGNC<br>adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,<br>transgender*, transident*, transidente* Jugendlich*, transidentity in<br>adolescent*, transsexual*, transsexualism, transsexuality |  |
| Search terms for  | psychotherapy  |  |
| Keywords  | MeSH for MEDLINE ( <u>M2</u> ):<br>Family, Family Relations, Parenting<br>APA-Thesaurus for PsycINFO ( <u>P2</u> ):<br>Family, Family Relations, Parenting   |  |
| Text words  | ( <u>T2</u> ):<br>Family*, Family, caregiver*, Parent*, Eltern*, mother*, father*, Väter*, Väter,<br>Mother*, Mothers  |  |
| Filter  |  |  |
| Age group   | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12 years", "child, preschool: 2-5 years"<br>For PsycINFO: "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age (6-12 yrs)", "preschool age (2-5 yrs)"   |  |
| Languages   | German, English  |  |
| Period  | 2014 - March 2019  |  |
| Date of the searc                                       | h: 07.03.2019  |  |



**Figure C6:** PRISMA flowchart for literature research for the "Family dynamics" working group

**Table C7:** Search terms, filters and search period of the search runs for the working group "Indications, age limits, individualization of treatment"

| Search terms for gender dysphoria & gender incongruence |   |  |
|---|---|--|
| MeSH for MEDLINE (M1):                                  |   |  |
|   | Disorders of Sex Development, Gender Dysphoria, Gender Identity,  |  |
|   | Health Services for Transgender Persons, Psychosexual Development, Sex  |  |
|   | Reassignment Procedures, Transgendered Persons, Transsexualism, Disorders   |  |
| Keywords  | of Sex Development, Health Services for Transgendered Persons, Transgender  |  |
|   | Persons   |  |
|   | APA thesaurus for PsycINFO ( <u>P1</u> ):   |  |
|   | Gender Identity, Transgender, Transsexualism, Gender Identity   |  |
|   | Disorder, Psychosexual Development, Sex Change, Transgender   |  |
|   | ( <u>T1</u> ):  |  |
|   | gender incongruence*, Disorders of sex development*, female-to-male,  |  |
|   | formation of gender identity, female-to-male, FTM, MTF, gender atypical*,   |  |
|   | gender discordance*, gender dysphoria, gender dysphoria in adolescent*,<br>gender identit*, gender identity development*, gender identity disorder*,  |  |
|   | gender identity disorder* in adolescent*, gender identity disorder* of  |  |
|   | childhood, gender nonconforming, gender non-conforming, gender non-   |  |
|   | conformity, gender reassignment*, gender variance*, gender variant*,  |  |
| Text words  | genderqueer*, gender conformity*, gender adaptation*, gender dysphoria*,  |  |
|   | gender dysphoria in adolescents*, gender identity*, gender identity disorder*,  |  |
|   | gender identity disorder* in adolescence, gender reassignment*, gender  |  |
|   | variant*, gender variance, GLBT, identity development*, LGBTQ, male-to-   |  |
|   | female, "sexual and gender disorders", sexual identit*, TGNC, TGNC  |  |
|   | adolescent*, TGNC Child*, "TGNC Child* and Adolescent*", TGNC youth,  |  |
|   | transgender*, transident*, transidente* Jugendlich*, transidentity in   |  |
|   | adolescent*, transsexual*, transsexualism, transsexuality   |  |
|   |   |  |
| Search terms for  | indication, age limits and individualization of treatment   |  |
|   | MeSH for MEDLINE ( <u>M2</u> ):   |  |
|   | Clinical Decision-Making, Contraindications, Time-to-Treatment, Age Factors,  |  |
| Keywords  | Precision Medicine, Individualized Medicine, Personalized Medicine  |  |
| incy words  | APA-Thesaurus for PsycINFO ( <u>P2</u> ):   |  |
|   | Treatment Planning, Treatment Withholding, Mental Age, Chronological Age,   |  |
|   | Personalization, Precision Medicine, Personalized Medicine  |  |
|   | ( <u>T2</u> ):  |  |
| Testevel  | indicat*, criteri*, contraindicat*, restrict*, withhold*, age limit*, personali*,   |  |
| Text words  | individuali?ation, individuali?ed, "precision medicine", "individualized medicine", "personalized medicine", indication*, indizi*, contraindication*, |  |
|   | kontraindizi <sup>*</sup> , Altersgrenz <sup>*</sup> , personali <sup>*</sup> , individuali <sup>*</sup>  |  |
| Filter  |   |  |
|   | For MEDLINE: "all child: 0-18 years", "adolescent: 13-18 years", "child: 6-12   |  |
|   | years", "child, preschool: 2-5 years"   |  |
| Age group   | <b>For PsycINFO:</b> "adolescence (13-17 yrs)", "childhood (birth-12 yrs)", "school age   |  |
|   | (6-12 yrs)", "preschool age (2-5 yrs)"  |  |
| Languages   | German, English   |  |
| Period  | 2014 - April 2020   |  |
| Date of the searc                                       | •   |  |
|   |   |  |



**Figure C7:** PRISMA flow chart for the literature search for the working group "Indications, age limits, individualization of treatment"

# 13 Appendix D: Tabular declarations of interests and handling of conflicts of interest

[would have to be inserted here according to the AWMF template, approx. 60 min.]