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Mental Health and Health Care for Transgender and Gender Nonconforming Adolescents: A Systematic Review

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ABSTRACT

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Keywords Gender dysphoria Transgender Adolescents Review Mental health With increased frequency there are more transgender youths who request and require health care for issues regarding gender identity. The aim of this paper is to conduct a systematic review on the mental health of transgender adolescents and health care to which they have access regarding their discovery of transgender issues. This systematic review was undertaken by analysing international literature following PRISMA guidelines for systematic scientific reviews. The searches were conducted in the following databases: MEDLINE, SciELO, Psicodoc, PsycINFO and PubMed. A total of 24 articles complied with the inclusion criteria. The results indicate that transgender and non-conforming gender adolescents are an especially vulnerable group because they display high rates of mental health problems when compared to their cisgender peers. Hormone therapy for gender affirmation points to possible psychological benefits for this population group. In conclusion, transgender and non-conforming gender adolescents may exhibit mental health problems associated with the discrimination, rejection/repudiation, or bullying/harassment experienced in their corresponding social, health, and educational environments. This demands the need for a social change that promotes the acceptance and normalization of non-normative identities and genders.

Salud Mental y Atención Sanitaria de Adolescentes Transgénero y no Conformes con el Género: Una Revisión Sistemática

RESUMEN

Cada vez son más los jóvenes transgénero que solicitan atención sanitaria para la afirmación del género. El objetivo de este trabajo es realizar una revisión sistemática sobre la salud mental de los adolescentes transgénero y la atención asistencial sanitaria, para la afirmación del género a la que tienen acceso. Esta revisión sistemática llevó a cabo una revisión de la literatura internacional siguiendo las directrices PRISMA, para revisiones sistemáticas científicas. Las búsquedas se realizaron en las bases de datos MEDLINE, SciELO, Psicodoc, PsycINFO y PubMed. Un total de 24 artículos cumplieron con los criterios de inclusión. Los resultados indican que los adolescentes transgénero y de género no conforme, es una población especialmente vulnerable al manifestar altas tasas de problemas de salud mental en comparación con sus pares cisgénero. La terapia hormonal para la afirmación del género, apunta a posibles beneficios psicológicos en dicha población. En conclusión, los adolescentes transgénero y de género no conforme, pueden presentar problemas de salud mental asociados a la discriminación, rechazo o acoso experimentado en el ámbito social, sanitario y educativo, por lo que urge la necesidad de un cambio social, que promueva la aceptación y normalización de las identidades y expresiones de género no normativas.

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Palabras clave

Disforia de género Transgénero Adolescentes Revisión Salud mental

Introduction

During the last decade an increase on the demand of health care services to families with *Transgender* and *Gender Nonconforming* (TGNC) adolescents has been very noticeable. These adolescents gender identity or expression does not coincide with the sex assigned when born and request health assistance regarding matters related to gender identity. This increase can be due to the social cultural changes registered in the last decades which promote both gender diversity visibility with boys, girls and teenagers and health resources for gender assignment (Bloom et al., 2021; Kyriakou et al., 2020; Miranda, 2022, Riaño et al., 2018).

According to the World Health Organization (WHO), adolescence ranges from 10 to 19, period in which important cognitive, physical and social changes happen. Also, one out of seven adolescents (14%) is estimated to suffer some mental disorder and not all of them have these disorders identified or receive the appropriate treatment (WHO, 2022). At the same time, gender dysphoria gains importance during this evolutionary stage, as secondary sexual characteristics (such as hair and breast growth, change in pitch of voice, etc.) start being noticeable. These changes affect personal identity development, social skills and mental health of these transgender adolescents.

Therefore, this study focuses in transgender adolescents, as this part of the population is considered to be vulnerable due to the double transition they have to go through. They need to grow up into adults and also move towards their manifested gender identity.

In relation to TGNC adolescents, throughout history, reliable estimates about incidence and prevalence of those who manifest gender dysphoria haven't been given, due to lack of formal epidemiological studies and transsexuality social stigma. By gender incongruence or nonconformity, we understand a condition in which a person's gender identity does not coincide with the one assigned when born (Grinten et al., 2021). Therefore, people with gender incongruence can be identified as transgender, transsexual, nonbinary gender, genderfluid, queer or other, and can manifest itself from the age of 2 or 3 (Castilla, 2018; Sevilla et al., 2019).

Nowadays, the results of national and international studies show higher rates in gender incongruence among TGNC adolescents than in adults. Furthermore, recent studies among adolescent population estimate that between 1.2% and 4.1% express gender incongruence (Bloom et al., 2021; Bonifacio et al., 2019; Clark et al., 2014; Eisenberg et al., 2017; Shields et al., 2013; Sumia et al., 2017).

Also, it should be underlined, due to the importance and transcendence of this phenomenon, that current investigations reflect *"Rapid Onset Gender Dysphoria"* (ROGD) among adolescent population. This is characterized by sudden appearance of gender dysphoria during or after puberty, not having showed any previous signs during childhood. Studies point out as possible factors in this demographic group, social relationships (belonging to a peer group), as well as social media influence (Bauer et al., 2022; Kyriakou et al., 2020; Littman, 2018; Mahfouda et al., 2017).

In relation to the theme object of study and its depathologization in the health field, in the last years there have been changes in conceptualization and terminology in diagnose taxonomies in an international outreach, such as Diagnostic and Statistical Manual of Mental Disorders (DSM) and International Classification of Diseases for Mortality and Morbidity Statistics (ICD). Particularly, in relation to *gender dysphoria*, which diagnosis definition included in DSM-5, refers to the discomfort and distress some children, adolescents or adults can experiment when their gender identity does not correspond to their sex assigned when born (APA, 2014).

On the other hand, from the World Health Organization (WHO) with its publication of ICD-11 in 2018, gender dysphoria is excluded from mental illnesses and included in "Conditions related to sexual health" under the term Gender Discordance (WHO, 2018). Nevertheless, it should be underlined that not everyone with gender incongruence experiments gender dysphoria, as it is not a mental disease but part of human diversity.

The aims of this systematic review are: a) to explore transgender teenage population's mental health, b) to describe to which health care for gender affirmation they can access, and c) to establish general guidelines to help professionals improve quality assistance of the study population.

Method

To obtain the outline aims, a systematic review has been carried out following the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses declaration (PRISMA; Moher et al., 2010) so as to preserve a methodical development and planning.

Search Strategies

The initial search took place between March and April 2022. MEDLINE, SciELO, Psicodoc, PsycINFO and PubMed database were used. A second search was also carried out before the final production of the article, between September and November 2022, to include new investigations published during this time.

It started combining the terms *transgender adolescents* and *mental health*, as well as, *transgender adolescents*, *health care* in all the database mentioned. Afterwards, the search was extended adding the terms *transgender youths*, *gender dysphoria*, *transsexuality*, *adolescence*, *medical treatment*, *psychological care*, *clinical approach* and *gender affirmation*, and boolean operators *AND* and *OR* were used, as appropriate, of the previous terms for the search of title, summary and key words. It was decided to use truncation (*) in the following terms *gender dysphoria**, *medical treatment**, *gender affirmation**, so as to obtain a higher amount of records about the topic. The combination of terms used in database which obtained the best results, were:

- "Adolescentes transgénero" OR "jóvenes transgénero" AND "salud mental" OR "disforia de género*" OR "atención sanitaria" OR "tratamiento médico*" OR "afirmación del género* OR "atención psicológica" OR "abordaje clínico".
- "Adolescencia" AND "transexualidad" OR "transgénero" OR "afirmación del género*".

Additionally, those terms have been established in the search of database in English:

- 3) "Transgender adolescents" OR "Transgender youths" AND "mental health" OR "gender dysphoria*" OR "health care" OR "medical treatment*" OR "gender affirmation* OR "psychological care" OR "clinical approach".
- "Adolescence" AND "transsexuality" OR "transgender" OR "gender affirmation*".

Inclusion and Exclusion Criteria

The inclusion criteria of the studies were the following: empirical studies, mental health analysis in transgender adolescents, health care approach to which transgender adolescents can access for gender affirmation, publications produced between January 2012 and December 2022 (to obtain a more updated vision of the topic, there has only been an approach in the last decade in relation to changes in terminology, evolution of diagnostic criteria and health care for gender affirmation), full text articles and Spanish and English studies.

The exclusion criteria were the following: theoretical reviews, single case studies, meta-analysis, recessions, critical reflections, investigations which not include transgender adolescent population or those not related to stated aims, and those articles which didn't allow access to full text.

Selection of the Studies

Initial searches threw 595 articles into database, using the key words mentioned before. Firstly, duplicated articles included in more than one database were excluded (n=164). Secondly, inclusion and exclusion criteria were applied to the 431 remaining summaries, of which 331 articles were excluded. Thirdly, the full text of the 100 empirical studies was read. When read, 76 articles were excluded for the following reasons: not including transgender population (for example: only including transgender or transsexual adult population) (n=15), not finding the topic related to the stated aims (for example: analyzing mental health in other LGBI sexual diversities (lesbian, gay, bisexual, intersexual) (n=34), single case studies (n=6), and other type of non-empirical investigations (n=21). Finally, a total of 24 articles fulfilled all the inclusion and exclusion criteria. Figure 1 shows the research process, screening and selection of articles).

So as to register and systematize the most relevant information of the selected articles, a chart was made which included the author, the sample, the country, the study design and the objectives (See Table 1).

Results

Of the total 24 empirical studies included in this systematic review, 3 (12.5%) were classified as retrospective, 3 (12.5%) as retrospective cohort, 9 (37.5%) as empirical, 1 (12.5%) as retrospective observational and 1 (4%) as qualitative. All of them were published between 2012 and 2022. Most of the studies were written in English (80%). Most studies came mainly from USA (54%), Spain (27%), Canada (8.3%), UK (4.1%), China (4.1%), Finland (4.1%) and the Netherlands (4.1%).

In all the studies, adolescents who identified themselves as transgender participated, finding more transmasculine than transfeminine adolescents. Moreover, in these studies, people who identified themselves as nonbinary or cisgender also participated.

Mental Health Among Transgender and Nonconforming Adolescents

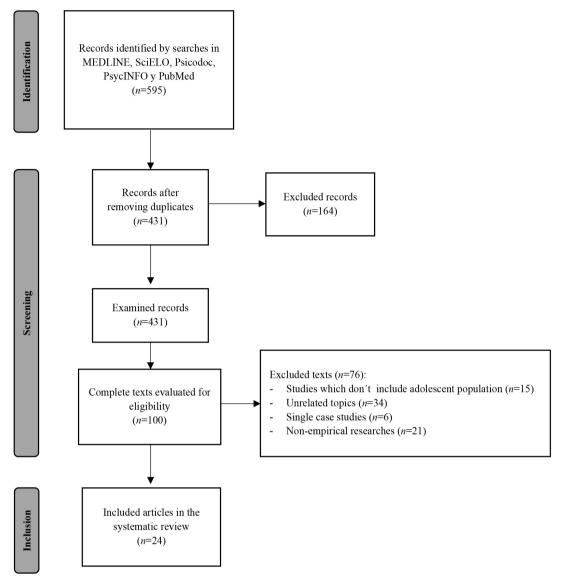
A total of 11 studies evaluated transgender adolescents mental health comparing it to their cisgender peers. The authors Kingsbury et al. (2022) stated that transgender adolescents and sexual minorities have 5 times higher risk of suffering suicidal ideation compared to their heterosexual cisgender (58% vs. 10%) and 7 times higher risk of suicide attempt (40% vs. 5%). In the same way, Reisner et al. (2015) claimed that young TGNC have between 2 or 3 times higher risk of suffering depression, anxiety disorder, suicidal ideation, suicide attempt, self-harm without suicide attempt and mental health treatment both inpatient and outpatient, compared to cisgender youngsters.

Also, according to the authors Modrego et al. (2021), young TGNC under 20 years old, presented a significant higher persistency towards suicidal tendency in comparison to young adults (43% vs. 25%).

A total of 3 studies, evaluated the mental health in a group of young TGNC, specifying particularly its results in those who define themselves as transmaculine (TM), transfeminine (TF) and nonbinary gender (NBG). Its results informed that transmasculine adolescents from Canada are more prone than transfeminine adolescents to inform about depressive symptoms (21.2% vs10.8%), and anxiety symptoms (66.6% vs. 33.3%) (Bauer et al., 2021). Furthermore, the study by Becerra et al. (2018) included the participation of 1.333 transgender children and adolescents (745 TM and 558 TF) in EEUU, informing that the most common diagnosis with transgender children and adolescents were attention deficit disorder (TM 16% and TF 15%) and depressive disorders (62% TM vs 49% TF). However, the study by Toomey et al. (2018) which included a cohort of 120.617 adolescents between 11 and 19 years old, indicated that TF adolescents presented higher amount of suicidal attempts (51%), followed by NBG adolescents (41,8%) and TM adolescents (29,9%).

In the same way, a total of 385 TGNC adolescents: 109 TM, 167 TF and 109 NBG between 12 and 18 years old, participated in the first national comprehensive study in China (Peng et al., 2019). This study manifests high rates of poor mental health, showing that a 44.9% of these numbers are in risk of suffering a higher depressive disorder and a 38.4% anxiety. Also, 76.6% declared having suffered abuse or intimidation at school because of their gender identity from teachers and classmates, being these rates associated in a significant

Figure 1 Flowchart for Systematic Reviews (PRISMA)



way to suicidal ideation. In this same line, studies of different authors manifest difficulties associated to TGNC adolescents population, which affect their psychosocial development, such as school bullying, low state of mind, depression, self-harm, suicidal ideation, suicidal attempts, ADHD, psychosis and eating disorders (Chodzen et al., 2018; Holt et al., 2016; Olson et al., 2015; Rider et al., 2018; Thoma et al., 2019).

Finally, in the study of coloured young trans (TRUTH) in the EEUU (Rusow et al., 2022), which sample was formed only by coloured transgender adolescents (TG), reflected higher rates of poor mental health where 85% of these adolescents declared having wanted or needed advice about their mental health in the last 12 months. Also, its participants informed about their limited access to health care due to lack of coverage in their medical insurance.

Health Care for Gender Affirmation in Transgender and Gender Nonconforming Adolescents

Nowadays, health care standards for clinical care for gender dysphoria in adolescents TGNC are based in the Dutch model and the application of clinical guides elaborated by the World Professional Association for Transgender Health (WPATH, 2012) and the Endocrine Society (Hembree et al., 2018). Likewise, the psychological evaluation of the TGNC adolescents is conducted during the initial phase of the medical treatment for gender affirmation, for those who want to receive treatment and for those who don't. The clinical approach of these adolescents is based on the hormonal and surgical therapeutic triad which consists in the administration of hormonal blockers for puberty suppression (once reached phase II in Tanner scale) and the administration of crossed

Table 1

Characteristics of the Studies Included in the Systematic Review

Author	Sample	Country	Study design	Objectives
Asenjo et al. (2015)	n=45 Age 15-17 years old	Spain	Retrospective empirical study	Analyse the casuistry of underage transgender looked after in the GIU Ramón y Cajal Hospital in Madrid from 2009 to 2013. And the persistence in time of gender dysphoria diagnosis.
Bauer et al. (2021)	n=174 137 TM 37 TF Age 14-16 years old	Canada	Empirical study of prospective cohort	Describe the psychosocial characteristics of pubertal and post pubertal young trans in Canada who assist a clinic for gender affirmation.
Becerra et al. (2018)	<i>n</i> =1.333 (588 TF and 745 TM) Age 3-17 years old	EEUU	Empirical study	Identify mental health problems, in particular those which threaten life, experienced by (TGNC) youngsters, for a better management of these conditions.
Chen et al. (2021)	<i>n</i> =95 GnrHA 316 GAH transgender and nonbinary Age 8-20 years old	EEUU	Observational empirical study	Evaluate mental health, well-being and metabolic/ physiological parameters of two cohorts of transgender and nonbinary youngsters who start a medical treatment for gender affirmation.
Chodzen et al. (2018)	<i>n</i> =109 Age 12-18 years old	EEUU	Empirical study	Identify mental health problems in adolescents and young adults (TGNC).
Fernández et al. (2018)	n=20 Age under 18 years old	Spain	Empirical study of retrospective cohort	Describe the characteristics of psychological and medical care process in adolescents with GD in GIU Principado de Asturias (Spain).
Gordo et al. (2018)	n=12 (5 TF and 7 TM) Age under 14 years old	Spain	Descriptive retrospective empirical study	Define the reality of the medical care demand and families' point of view about attention to gender dysphoria adolescents.
Gridley et al. (2016)	n=65 (15 transgender youths and 50 assistants) Age 14-22 years old	EEUU	Empirical study	Analyse the barriers young transgender and their families have to face to have access to health care for gender affirmation.
Holt et al. (2016)	n=218 37,2% TF 62,8% TM Age 5-17 years old	United Kingdom	Transversal empirical study	Provide a general vision of demographic characteristics and difficulties related to children and adolescents with gender dysphoria characteristics referred to Gender Identity Development Service in London.
Kaltiala et al. (2020)	<i>n</i> =52 (11 TF and 41 TM) Age 15-20 years old	Finland	Retrospective empirical study	Evaluate the adolescent's development progress and how psychiatric symptoms are developed in transsexual adolescents after starting the crossed hormonal treatment.
Kingsbury et al. (2022)	n=6.800 (99,4 % cisgender 0,6 % (50) transgender) Age 15 - 17 years old	Canada	Empirical study	Evaluate the suicidal risk among transgender adolescents and sexual minorities in Canada.
Kuper et al. (2020)	<i>n</i> =148 (transgender) Age 9 - 18 years old	EEUU	Empirical study	Evaluate mental health (corporal dissatisfaction, depression and anxiety) in transgender adolescents who are receiving hormonal therapy for gender affirmation.
López et al. (2020)	n=53 (23 transgender (16 TM y 7 TF) (30 cisgender) Age 14-18 years old	Spain	Prospective analytical empirical study	Evaluate the psychosocial condition of transgender adolescents patients who attend a pediatric gender identity unit and establish the impact of the crossed hormonal therapy.
Modrego et al. (2021)	n=200 110 TM 90 TF Age 10-35 years old	Spain	Retrospective transversal empirical study	Investigate the prevalence of the non-suicidal self-harm and suicidal behavior in transsexual people.
Nos et al. (2022)	n=434 (with gender dysphoria) Age 10 - 17 years old	EEUU	Empirical study of retrospective cohort	Investigate if there is any type of relation between the use of hormonal blockers and a further use of hormones for gender affirmation.
Olson et al. (2015)	n=101 (transgender 50,5% TF) Age 12-24 years old	EEUU	Prospective observational empirical study	Describe the initial psychosocial and physiological characteristics of young transgender who look for health care for gender dysphoria.
Peng et al. (2019)	n=385 (109 TM, 167 transgender TF and 109 nonbinary NB) Age 12-18 years old	China	Retrospective empirical study	Evaluate the abuse rates, negligence and intimidation and its relation with a deficient mental health among nonbinary gender and transgender Chinese adolescents.
Reisner et al. (2015)	<i>n</i> =360 (180 trans gender and 180 cisgender) 106 TM 74 TF Age 12-29 years old	EEUU	Empirical study of retrospective cohort	Compare the mental health of transgender adolescents and young adults with cisgender youngsters who access community clinical services.
Rider et al. (2018)	<i>n</i> =80.929 students (2.168 TGNC) Age 16-18 years old	EEUU	Empirical study	Examine mental and physical health characteristics and the use of health services among TGNC and cisgender youngsters.

Autor	Muestra	País	Diseño de Estudio	Objetivos
Rusow et al. (2022)	<i>n</i> =108 (TG) Age 16-24 years old	EEUU	Empirical study	Evaluate the prevalence of sexual health behaviors, mental health problems, use of substances and health care of TG coloured youngsters.
Thoma et al. (2019)	<i>n</i> =2.020 (1.148 TGA) Age 14-18 years old	EEUU	Empirical study	Evaluate suicidal tendencies throughout life (passive desire of death, suicidal ideation, suicide plan, suicide attempt and attempt which requires health care) and non-suicidal self-harm.
Toomey et al. (2018)	<i>n</i> =120.617 Age 11-19 years old	EEUU	Empirical study	Examine the prevalence of suicidal behavior through 6 gender identity groups (women, man, FT, MT, nonbinary gender and gender questioning).
Tordoff et al. (2022)	<i>n</i> =104 (63 TM, 27 TF, 10 NB, 4 DK/NR) Age 13-20 years old	EEUU	Empirical study of prospective observational cohort	Investigate changes in mental health of transgender youth during the first year of treatment with puberty blockers or hormonal treatment for gender affirmation.
Vrouenraets et al. (2016)	<i>n</i> =13 Age 13-18 years old	The Netherlands	Qualitative empirical study	Express the opinions and considerations of adolescents with gender dysphoria in the Netherlands about gender and sex concept and the use of medical treatment for puberty suppression.

Note. TA: transgender adolescent, NB: non-binary, TF: transfeminine, TM: transmasculine, TG: transgender, TGNC: transgender and gender non-conforming, GIU: Gender Identity Unit

hormone treatment to masculinize or feminize the body once reached 16 years old and once they become adults to be able to carry out surgical treatment for gender affirmation (Fernández et al., 2018; Gordo et al., 2018; López et al., 2020; Vrouenraets et al., 2016).

A total of 2 studies investigated the existence of some type of relation between the use of hormonal blockers and a later use of hormones for gender affirmation. The investigation of (Fernández et al., 2018) informed that the majority of young people who require health care for gender affirmation, once they start hormonal treatment after psychological support and endocrinological evaluation, do not abandon the process. Nevertheless, Nos et al. (2022) didn't find a significant relation between receiving treatment to block puberty and a subsequent initiation of gender affirmation hormone treatment.

A total of 6 studies investigated a possible relation between hormonal therapy for gender affirmation and mental health in TGNC adolescents. Investigations by Chen et al. (2021) and Tordoff et al. (2022) indicated that the beginning of gender affirmation treatment with hormonal blockers or firming hormonal treatment, mentions possible benefits in mental health with TNB youngsters in a short period of 12 months. In the same line, the discoveries found by López et al. (2020) revealed that there were significant differences in anxiety, emotional and behavioral distress and depressive symptomatology rates, as well as gender dysphoria feeling with the group of transgender adolescents before starting gender affirmation treatment and the monitoring group of cisgender adolescents. After a year of cross hormone therapy (CHT) from transgender adolescents, the results in those rates were similar to those in the non-transsexual monitoring group. Also, the study by Kingsbury et al. (2022) which aim was to evaluate the suicidal risk with transgender adolescents and sexual minorities in Canada, indicated that both suicidal prevention programmers aimed specifically to TGNC adolescents, and gender affirmation care for transgender adolescents could help reduce the burden of suicidal tendencies in this group.

On the other hand, according to Kuper et al. (2020) the hormonal treatment for gender affirmation in TGNC adolescents, shows light

improvements in mental health during the first year of treatment, but the improvement in corporal dissatisfaction was not related to the type of treatment. At the same time, Kaltiala et al. (2020) indicated that the hormonal treatment for gender affirmation is not enough to relieve the psychiatric comorbidities with gender dysphoria adolescents.

Also, TGNC adolescents who manifest gender dysphoria, reflect clinical approach difficulties due to its own evolutionary period marked by change and constant development. For that reason, the emission of a gender dysphoria persistent diagnosis for the start of a gender affirmation medical treatment is sometimes questioned. The results found indicate that gender dysphoria in adolescent population remains after legal age in most cases (Asenjo et al., 2015). Also, adolescents with gender dysphoria in the Netherlands expressed the need to determine the appropriate age limit to start suppression of puberty due to lack of data about long term effects. Despite this, most claimed that this doesn't and won't stop them desiring puberty suppression (Vrouenraets et al., 2016).

In addition, obstacles were noticed which complicate access to health care for gender affirmation in TGNC adolescents. This has a negative effect on health. Some of these obstacles are: lack of professional training in gender affirmation, absence of protocols applied consistently, inconsistent use of name/pronoun chosen by the adolescents from health professionals during attention care, uncoordinated care and supervision, limited and delayed access to hormonal treatment for gender affirmation and exclusions of medical insurance treatments (Gridley et al., 2016).

Finally, the assessment of health care received for gender affirmation from transgender adolescents relatives was very satisfactory, although they suggested coordination problems between services and institutions (Gordo et al., 2018).

Discussion

Investigations inform that TGNC adolescents have a high risk of suffering other psychopathological comorbidities in relation to their cisgender peers, which include anxiety symptoms, depressive symptoms, suicidal ideation, suicidal attempts, eating disorders, personality disorders, Autism Spectrum Disorder (ASD), Post Traumatic Stress Disorder (PTSD), Attention Disorder with Hyperactivity (ADHD) and substance abuse (Bauer et al., 2021; Becerra et al., 2018; Bonifacio et al., 2019; Chen et al., 2021; Guss et al., 2015; Holt et al., 2016; Kaltiala et al., (2020); Kyriakou et al., 2020; Mahfouda et al., 2017; Modrego et al., 2021; Rider et al., 2018; Sevilla et al., 2019; Toomey et al., 2018).

Gender incongruence becomes a risk factor in TGNC adolescents. The results indicated that gender dysphoria, as well as other mental health problems related to manifestation of gender identity, in most cases is due to discrimination, victimization, stigma, bullying and rejection experimented both in family environment and at school. (Bauer et al., 2022; Becerra et al., 2018; Chodzen et al., 2018; Holt et al., 2016; Modrego et al., 2021; Peng et al., 2019, Rider et al., 2018). This reveals the urge of social changes that promote acceptance, visibility, inclusion and safety of people with non-regulatory identities and gender expressions in all vital contexts.

The administration of hormonal treatments for gender affirmation, as well as family and professional support towards manifested gender identity become mental health protective factors in TGNC adolescents (Bonifacio et al., 2019; Gordo et al., 2018; Guss et al., 2015; López et al., 2020; Vrouenraets et al., 2016). Nevertheless, neither gender dysphoria nor psychosocial difficulties inherent to the evolutionary development of the adolescence, or other psychological comorbidities related to gender identity, disappear with hormonal treatment for gender affirmation (Kaltiala et al., 2020; Shumer et al., 2016; DeVries et al., 2011).

The resources health system offer for gender affirmation, premises that gender variability is not pathology; gender is unsteady and sometimes is not binary. Gender affirmation is conducted with the objective of promoting self-esteem and allowing family and similar group support, creating safe environments in different vital contexts like family and school (Bonifacio et al., 2019; Edwards et al., 2016; López et al., 2020; Shumer et al., 2016).

The clinical approach of TGNC adolescents has to be carried out in a personalized way, looking after each subject's needs, respecting the time it takes to make decisions, under supervision of a multidisciplinary team formed by doctors, endocrinologist, psychologists, psychiatrists and social workers among others (Asenjo et al., 2015; Castilla, 2018; Edwards et al., 2016; Grinten et al., 2021; Holt et al., 2016).

Nowadays, health care of gender incongruence at an early age raises ethical dilemmas among health professionals, both for establishing a definite psychological diagnosis for gender dysphoria and for long term risk and effects of medical treatments for gender affirmation. The informed consent becomes an essential tool for resolving these type of matters. Family (parental figures) plays an essential role for support, understanding, acceptance and consent of health resources for gender affirmation of their children (Asenjo et al., 2015, Edwards et al., 2016; López y González, 2018; Mahfouda et al., 2017; Miranda, 2022; Riaño et al., 2018; Vrouenraets et al., 2016).

For the psychological approach of TGNC adolescents, studies establishing a standardized psychological intervention procedure haven't been found, as psychological demand might be related to different aspects like gender dysphoria, poor academic performance, psychological problems, maturity development problems or psychological adaptation.

Studies understand psychotherapy in transgender adolescent population as a support intervention, counseling and accompaniment to both youngsters and their relatives. For this reason, a safe and free environment is created for, in which feelings and gender experiences can be expressed and information is given about risks and benefits of the different legal and medical options for gender transition (Asenjo et al., 2015; Fernández et al., 2018; Grinten et al., 2021).

Limitations

The findings encountered in this systematic review must be understood in view of the following limitations:

Firstly, due to the variability in the samples characteristics of the chosen empirical studies for this systematic review, the sample may not be representative and may not be appropriate to generalize the obtained results.

Secondly, most of the samples included in the studies are related to young TGNC extracted in clinical environments, so subjects with difficulties to access to health care for gender affirmation or those who by own choice don't need it, wouldn't be included. For that reason the sample might not be representative.

Thirdly, as gender identity is a culturally established construct which differs across countries, samples may have been obtained with variability defining the transgender or non-conforming person.

Conclusions

The findings in this study reveal that TGNC adolescents present bigger mental health problems (depressive symptoms, anxiety, suicidal ideation and attempt) in comparison to their cisgender peers.

Also, in relation to the healthcare which TGNC adolescents receive for gender affirmation, data show that there are obstacles like: lack of specific protocols for mental health attention, inconsistent use of name/pronoun chosen by the TGNC person from the health professionals who look after them and the delay on the hormonal treatment for gender affirmation.

In respect to the psychological approach of TGNC adolescents for gender affirmation, standardized psychological intervention procedures haven't been found but psychotherapy is conceived as a support intervention, counseling and accompaniment to both TGNC adolescents and their relatives.

Finally, in relation to health care for gender affirmation in TGNC adolescents, it becomes necessary to implement specific training in sexual and gender diversity for health professionals, so as to offer appropriate quality care assistance for the real needs this population presents.

Financing

This study has no finance.

Conflict of Interest

The authors declare not having any conflict of interest.

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Articles marked with * correspond to those included in this systematic review.

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