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The experiences of youth who identify as trans* in relation to health and social care needs: A scoping review

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Abstract

There is an increased interest in the experiences of youth who identify as trans* in order to

promote individual human rights and provide socially inclusive health and social care. This

scoping review aimed to explore the experiences of youth who identify as trans*. A full search

of relevant electronic databases was undertaken from the years 2006 to 2016. The search

resulted in 1656 hits and following the application of rigorous criteria, 20 papers were included

in the final review. Date extraction was executed by two of the authors and a quality assessment

tool was used to review the papers. The data were analysed and the key themes that emerged

included: stigma, discrimination and mental health; family relationships and supports;

educational concerns; healthcare experiences; and vulnerability and health risks. The findings

from the review are discussed and the implications for policy, research, education and practice

are highlighted.

Keywords: Transgender, trans*, youth, experiences, healthcare, sexuality

Background

Transgender or trans* is an 'umbrella' term that relates to people who do not 'fit' with the

prevailing gender binary categorisation of male or female and where a person's gender identity

or expression differs from their birth sex (Gridley et al. 2016). For the purpose of this paper,

the authors have used the term trans* throughout to encapsulate the spectrum of identities and

experiences of people whose assigned sex at birth does not match their own feelings of gender

identity nor conform to societal gender norms. (National Center for Transgender Equality 2014,

National LGBT Health Education Center 2016). There is still a lack of understanding and

acceptance of people who identify as trans* and many psychosocial challenges exist (Agius et

al. 2011, Baur & Schiem 2015, Grant et al. 2011, McCann 2014). In recent years, there has

been an increased interest in the experiences, needs and rights of children and young people

who identify as trans* as evidenced in the growing and evolving literature (Clark et al. 2014, Dunne & Turraoin, 2015 Kosciw et al. 2014, Veale et al. 2015). Whilst adolescence is a challenging time for all young people, it can present additional stressors for trans* young people. With the mean age of awareness being between 10 and 14 years of age (Higgins et al. 2015), coming to terms with gender non-conformity that may be compounded with sexual orientation issues, adds another layer of complexity to the lives of young trans* people. In relation to gender dysphoria, trans* youth are presenting in significantly higher numbers at gender clinics (de Vries et al. 2012). Gender dysphoria, described as a strong, persistent discomfort and distress with one's own gender, anatomy, birth-sex, may present additional stressors for children and young people. Negative societal attitudes towards an individual's gender variance can also add to experiences of distress in trans* youth (Stein 2012).

In addition to these challenges, trans* youth are often subjected to increased incidences of discrimination and transphobic abuse including having hurtful things written about them on social media and the use of biased language and insults (Higgins et al. 2015, Kosciw et al. 2014). Violence towards sexual minority youth also remains problematic. Studies indicate that between 30-80% of trans* youth have experienced some form of victimisation (DiFulvio 2014). High incidences of mental distress, including depression, anxiety, substance use and suicidality is evident among this group (McCann & Sharek 2015, McDermott et al. 2016, Schneider 2013). A recent report from New Zealand, Health and Wellbeing Survey 2012, highlighted that 40% of trans* students had significant depressive symptoms, almost half had self-harmed in the previous 12 months and one in five had attempted suicide in the last year (Clark et al. 2014). In the United States (US), the National Transgender Discrimination Survey (n=6450) showed that 41% of respondents reported attempted suicide, compared to 1.6% in the general population (Grant et al. 2011). In a recent Canadian report concerning trans* youth, Being Safe, Being Me, 66% of the study sample had self-harmed in the last year, with 33% having attempted taking their own lives (Veale et al. 2015). Furthermore, trans* youth are overrepresented among the homeless and there may also be drug and alcohol issues (Yu 2010).

In addition, young people may have difficulty accessing and using mental health services and other supports, which can lead to further isolation and marginalisation (Olson et al. 2015, Gridley et al. 2016).

At the same time, there is a distinct lack of supports available to families and significant others (Benson 2013; Dierckx et al. 2015). One study, investigating practitioners' clinical experiences of providing care to trans* youth, found that less than half of study participants reported feeling confident about providing trans-related care. Lack of training in trans-specific issues was identified as a key barrier to effective care (Vance et al 2015). Furthermore, globally, there has been a noticeable change in the attitudes towards children and young people with an increased recognition of their ability to contribute to society. There is more acceptance of the young person's fundamental right to be listened to and to openly express their opinions on issues that concern them (United Nations 1989; Coyne 2015). This is further expressed and reflected in recent reports (Centre for Mental Health 2016, Clark et al. 2014) but how well their views are heard remains unclear. Therefore, the current review will examine the views and experiences of trans* identified youth, to identify the key concerns for young trans* people, families and service providers. This information may be helpful for practitioners who support trans* youth and inform good practice and service provision for trans youth and their families.

Method

Aim

To establish the experiences of youth who identify as trans* and highlight issues in terms of policy, education, supports and service provision.

Procedure

A comprehensive search of electronic databases from August 2006 to August 2016 was conducted (Figure 1). The search string included the following terms: Transgender*, Transsexual*, gender dysphoria, gender queer, non-binary, youth, young adults, and adolescen*. The databases used were CINAHL, PsycINFO, PubMed and Sociological

Abstracts. Limiters were used and the Boolean operators AND OR were utilised. An example of the search strategy and results of one database is provided (see Table 1).

Insert Table 1 here

The search yielded 1656 hits in total. Following the removal of duplicates and a check for relevance 86 papers remained. Full papers were screened and finally 20 papers were considered suitable for the review. To be included in this review studies had to: (1) be empirical research (2) be peer reviewed (3) be in English (4) focus on the healthcare experiences of youth whom identified as trans*, (5) involve trans* people under 25 years of age. Studies not meeting this criteria were excluded.

Insert Figure 1 here *

Quality assessment

A recognized quality assessment tool was used to review the papers (Critical Appraisal Skills Programme, 2013). Specific questions were consistently applied to each of the selected studies (Table 2). Each question was scored zero, one or two out of a possible score of 20 points. A score of zero was assigned if the paper contained no information, one if there was a moderate amount, and a score of two indicated that the question was fully addressed (Rushbrooke, Murray & Townsend 2014). A score of 17 and above, indicating a high quality study, was achieved by 13 of the studies (Arcelus et al. 2016, Corliss et al. 2008, de Vries et al. 2014, Grossman et al. 2006, Grossman & D'Augelli 2007, Grossman et al. 2011, McGuire e al. 2010, Olson et al. 2015, Reisner et al. 2015, Wilson et al. 2009, Wilson et al. 2012, Wilson et al. 2015, Yadegarfard et al. 2013). A total of 5 studies scored between 14 and 16, indicating shortcomings in relation to clarity of aims, data collection methods, research relationships considered, and ethics considerations (Dowshen et al. 2016, Garofalo et al. 2006, Greytak et al. 2013, Grossman & D'Augelli 2006, Singh et al. 2014). The remaining 2 studies received scores of below 14, due to limited information that impacted on the quality and were related to the aims, ethics, and clarity and detail of findings (Simons et al. 2013, Singh et al. 2013). All the studies were deemed suitable for the review as they fulfilled the study inclusion criteria.

***Insert Table 2 here ***

Characteristics of the included studies

The 20 studies that addressed the review questions are presented in Table 3. The majority of studies were conducted in the US (n=17), and one each in the Netherlands, United Kingdom (UK) and Thailand. The studies had sample sizes ranging from 18 to 442 participants. The ages ranged from 12 to 25 years and participants self-identified as male or female. Eleven of the studies used quantitative methods and seven studies used qualitative methods. There were two mixed methods studies.

Data extraction and analysis

The data extraction was conducted by two of the authors (EM and IC). The scoping review was guided by methods allowed for the development of the mapping and 'narrative integration' of the relevant evidence (Arskey and O'Malley 2005). Data were analysed whereby core concepts were identified and coded from the results section of each paper. The extracted concepts were then compared and contrasted to enable grouping into themes. The themes and underpinning concepts were subsequently reviewed by the team to obtain agreement, verification and trustworthiness (Mays, Pope, & Popay, 2005).

***Insert Table 3 here ***

Results

Following a systematic analysis of the studies, five themes were identified: (i) stigma, discrimination and mental health; (ii) family relationships and supports; (iii) educational concerns; (iv) healthcare experiences and (v) vulnerability and health risks.

An ecological framework has influenced the organisation and presentation of the results of the scoping review moving from the societal or macro level to the meso or individual level (Bronfenbrenner 1979).

Stigma, discrimination and mental health

Some of the studies included in the analysis discussed important societal and cultural issues,

including the challenges faced by trans* youth who do not generally 'fit' within the dominant and accepted social paradigm. The resulting discriminatory experiences can often lead to individuals feeling rejected, ostracised and marginalised leading to feelings of shame and social isolation (Grossman & D'Augelli 2006; Reisner et al. 2015). Furthermore, persistent negative attitudes and behaviours from others can lead to an increased susceptibility to mental health problems (Baur & Schiem 2015). In one US study, trans* youth were compared to cisgender youth, and were two to three times more at risk for anxiety, depression and suicidal behaviours. Furthermore, strong associations have been demonstrated between substance misuse and bullying towards trans* youth (Reisner et al. 2015). Current evidence suggests that people who identify as trans* are a greater risk of suicidal behaviours. In a UK (United Kingdom) study, trans* youth were almost twice as likely to have self-harmed and one and a half times more likely to have planned or attempted suicide compared to cisgender study participants (Arcelus et al. 2016). Furthermore, the risk factors associated with non-suicidal self-injury (NSSI) were investigated. Research findings have demonstrated that those with a lifetime presence of NSSI had significantly greater general psychopathology, lower self-esteem, had suffered more transphobia, and experienced greater interpersonal problems than those not affected by NSSI (Arcelus et al. 2016). The authors concluded that more interventions should be made available that challenge transphobia, increase social support and help trans* young people develop and maintain relationships. Other significant factors associated with suicidality includes suicidal ideation related to trans* identity, parental physical or verbal abuse, and low body esteem (Grossman & D'Augelli (2007). Also, higher levels of sexual risk behaviours have been related to increased incidences of self-harm (Yadegarfard et al. 2013).

Despite increased mental health issues, existing studies demonstrate that trans* young people often develop positive resilient traits, including coping strategies, to deal with potential psychosocial challenges. Young people learn how to deal with discrimination and prejudice and manage to convert adverse experiences into feelings of pride and strength (Corliss et al. 2007). One study that investigated the experiences of youth who were socially transitioning,

reported that the levels of depression were no different to young people in the non-trans* population. The authors found that youth who are supported in their trans* identity become less distressed, stronger and more resilient (Olson 2015). The key features of resilience identified in the literature includes: the ability to self-define and theorize one's gender; proactive agency and access to supportive educational systems; connection to a trans-affirming community; reframing of mental health challenges, and the navigation of relationships with family and friends (Singh et al. 2014). In terms of psychological resilience following physical and verbal abuse, positive attributes were identified in one study. Participants reported improvements in a sense of personal mastery, self-esteem, perceived social support, and emotion-oriented coping (Grossman et al. 2011).

Family relationships and supports

Another major theme that emerged from the studies addressed the inter-relations between situations or contexts in which the individual has direct contact, including family relationships that can significantly affect the lives of youths. Family acceptance or not, can have a major impact upon the lives of trans* children and youth (Veale et al. 2015). One early study, involving female-to-male (FTM) (n=24) and male-to-female (MTF) (n=21) trans* youth, showed that both groups 'felt different' at a mean age of seven and a half years. A majority of each group were verbally abused, with more MTF youth reporting physical assaults (Grossman et al. 2006). Within the family context, a majority of trans* youth reported negative responses from parents. The more gender non-conforming, the more likely the young person was to be physically and verbally abused by the parent. The implications for school and family counsellors are highlighted (Grossman et al 2006). One study, that looked at associations between parental support and mental health outcomes, found that parental support was associated with higher quality of life and was beneficial towards addressing depression in trans* youth (Simons et al. 2013). Trans* youth can experience rejection, marginalisation, and victimisation. Families may experience a range of emotions including shock and uncertainty. There may be a lack of information and support. As a result, families may remain fearful,

frustrated, isolated and alone. Families may report feeling of guilt and seek assistance from professionals who may lack sufficient experience and training in the field. Appropriate family supports can safeguard against potential psychosocial challenges such as depression and anxiety, not just within the individual, but for family members too (Grossman et al. 2006, Grossman & D'Augelli 2006, Simons et al. 2013).

Educational concerns

An important place in the lives of trans* youth is the learning environment. Some of the studies in the current review supported the view that schools are influential in the experiences of youth and can have a major impact upon the inequalities and disparities that exist in the broader social context (McGuire et al. 2010, Singh et al. 2013). Trans* youth face many interpersonal challenges particularly related to their gender identity. They are also at high risk for negative educational experiences and poor outcomes. In a recent US study, the results showed that 63% of trans* youth felt unsafe at school, tended to have lower grades and a significant number (59%) absented themselves from school. There were elevated levels of harassment and assault with the negative effects of a hostile school climate being acknowledged educationally and psychologically. Students also reported being less keen on continuing their education as a result of hostile and unsafe environments (Greytak et al. 2013). For college-age trans* youth, one study that investigated affirming educational environments discovered four major themes on the topic: use of campus-wide trans-affirming language; campus training on trans* student concerns; trans-affirming campus health care access; and, developing a community of transallies on campus (Singh et al. 2013). In terms of specific school-based resources for trans* youth related to anti-victimisation procedures, positive outcomes were demonstrated in terms of support and alliance groups, supportive educators and inclusive curricula (Greytak 2013). Where anti bullying and harassment policies existed and were implemented, trans* students felt more connected with school staff and felt more safe. Focus group interviews with trans* youth highlighted important issues, such as tackling bullying and harassment, that would inform future educational interventions (McGuire et al. 2010).

Healthcare experiences

People who identify as trans* have unique and individual healthcare needs. How trans* youth access and use support services has been highlighted in existing studies included in this review (Corliss et al. 2007; Grossman et al. 2011; de Vries et al. 2014). The subjective views and experiences of male to female (MTF) trans* youth around health and social services provision have been considered in terms of physical and emotional well-being. For example, although 83% of trans* youth wanted access to services to receive hormones, a significant number (60%) of respondents were having issues accessing appropriate medically managed hormonal therapy (Corliss et al. 2007). A major barrier to accessing appropriate health care is the fear of rejection and negative attitudes of service providers (Grossman & D'Augelli 2006). Trans* youth have identified positive attributes that they expect to see in practitioners including: being supportive, caring, non-judgemental, knowledgeable and accessible (Corliss et al. 2007). Trans* youth spoke strongly about their psychosocial needs. Some of the issues were related to sexual health concerns, discrimination and victimisation experiences. There was a distinct lack of resources for mental health supports such as psychological counselling and access to talking therapies that are trans* affirmative. A significant number of trans* youth were resorting to avoidance tactics to deal with marginalisation experiences rather than being supported in developing more adaptive ways of coping (Grossman & D'Augelli 2006). Trans* youth articulated suggestions for improving services including the need to provide access to more trans* specific supports. Barriers to accessing hormone therapy need to be sufficiently addressed. Health and social care services should be designed that are tailored to individual needs and delivered by knowledgeable and skilled practitioners. (Corliss et al. 2007)

Vulnerability and health risks

At an individual level, the review findings suggest that trans* youth may be more susceptible to a number of health risks. Several studies indicate that youth who identify as trans* are at a significantly higher risk of contracting HIV (Garofalo 2006; Wilson et al. 2012; Wilson et al. 2015; Dowshen et al. 2016). In a study involving trans* female youth, the findings indicated a

potential link between HIV-related risk behaviour and parental support. Youth with adequate parental support reported regular condom use, while those without such support reported inconsistent condom use (Wilson et al. 2012). Another study, that examined behavioural and health outcomes for HIV positive young trans* women, found higher rates of unemployment, limited educational achievement, and poor antiretroviral treatment adherence compared with non-trans HIV infected youth. These issues were compounded by other psychosocial factors such as housing issues, depression and poor social support (Dowshen et al. 2016). In one study, examining sexual risk behaviours in female trans* youth (n=151), 67% of the study participants had engaged in sex work and 19% reported their HIV positive status. The findings revealed that lower education status, homelessness, use of street drugs, and perceived social support remained significantly associated with sex work (Wilson et al. 2009). In terms of ethnicity, trans* female youths were significantly more likely to engage in condomless anal intercourse than their white counterparts, thus presenting higher risks for HIV (Wilson et al. 2015). The authors recommended further research that addresses the potential challenges presented by multiple-minority stress among trans* youth. Other psychosocial issues may include homelessness, employment difficulties and problems accessing and using health care (Garofalo et al. 2006). Important vulnerability and safety issues among trans* youth were revealed including a lack of safe spaces, a lack of continuity of caregiving by their families and communities, and inadequate resources to address individual mental health concerns. However, the most prominent issue identified was the risk of violence on the disclosure of their trans* identity (Grossman & D'Augelli 2006).

Issues and concerns may manifest around gender dysphoria beginning when a child may express behaviour incongruent with and dissatisfaction related to their assigned gender. They may experience hostility and rejection because of their perceived differences and may be forced to hide and repress their feelings (Grossman & D'Augelli 2006). Body esteem of trans* youth was measured in one study and findings revealed that there was a marked increase in suicidal behaviours in trans* youth who were dissatisfied with their weight and overall body perception.

The issues may be compounded by practitioners refusing to treat youth or the fear of negative reaction from healthcare providers (Grossman & D'Augelli 2006). One study described the baseline characteristics of trans* youth over 12 years old (n=101) attending a trans* youth clinic for gender dysphoria. More than half of the youth had contemplated suicide and almost one third had attempted suicide (Olson et al. 2015). A research team in the Netherlands investigated psychological outcomes in young adults (n=55) after puberty suppression and gender reassignment. Psychological functioning (body image, depression, anxiety, emotional and behavioural issues), social functioning and quality of life were measured. Following gender reassignment, all areas showed improvements when correlated with similar aged young people in the general population (de Vries et al. 2014).

Discussion

This review has uncovered key issues that exist in relation to the experiences and needs of children and young people whom identify as trans*. For trans* youth tensions exist between integrating gender identity concerns with societal and cultural issues, family circumstances, educational concerns and individual resources. The findings indicate concerns and challenges in terms of policy, education, service and research developments. Bronfenbrenner's ecological model (Brofenbrenner 1979) provides a useful framework for understanding the issues and concerns resulting from this review, and offers a strengths-based approach to understanding and discussing the needs of trans* youth and how these may be addressed. The Ecological Model is multi-systemic and contains elements that has been used to help practitioners better understand the experiences and health needs of particular populations (Institute of Medicine 2011). Practitioners are able to identify windows of opportunity for the provision of various psychosocial interventions. The ecological model outlines different levels that 'nestle' within each other and interact to shape the environment that includes the macro, micro and meso systems. Each system refers to the different environments and interactions throughout a person's lifespan that may influence human behaviour (Brofenbrenner 1979). To make service improvements for trans* youth, health and social care providers need to be aware of and seek

ways of addressing social, cultural and political determinants as they relate to inequalities.

They are in a pivotal position to influence social, political and individual change.

Macro level

The macrosystem is overarching and contains a 'blueprint' of the societal norms or cultural attitudes that can influence a person's life. The process considers important aspects related to trans* youth including stigma and discrimination and the laws and social policies surrounding the topic. People who identify as trans* remain highly stigmatised with individuals being subjected to high levels of discrimination and victimisation (Arcelus 2016). In terms of social inclusion and health inequalities, policy makers are beginning to recognise that people from maginalised groups, including trans* children and young people, face an augmented risk of compromised mental health due to the particular psychosocial challenges that they encounter (House of Commons Women and Equalities Committee 2015). Socio-political changes need to occur in order to tackle discriminatory social structures (Brofenbrenner 1979). Worldwide, there have been significant changes and developments in identifying and responding to the human rights of people who identify as trans* (Agius et al. 2011, Coleman et al., 2011, Denell & Logan 2012, House of Commons Women and Equalities Committee 2015, Ó hUltacháin et al. 2016 Schneider 2013). However, discriminatory attitudes exist in many jurisdictions and the experiences and specific needs of trans* people are not being addressed. This is particularly true for children and young people who identify as trans*. Policies should be put in place that ensure that the explicit needs of this group are established and appropriate, seamless and responsive services are provided. The services need to have shared inter-professional protocols that are well coordinated. Robust policies should ensure that discrimination is dealt with to prevent further prejudice towards children and young people who identify as trans*. A majority of European countries now have policies that support gender recognition. In Ireland, the Gender Recognition was eventually passed into legislation in 2015, that allows trans* people over the age of 18 to have full legal recognition of their preferred gender. However, young

people aged 16-18 years must secure a court order to obtain these rights (Government of Ireland 2015).

Micro level

The microsystem contains the young person's direct contacts including family, peer, friends and romantic relationships (Bronfenbrenner, 1979). All services providers, including education, health and social care, must appreciate that trans* people face heteronormativity, prejudice and discriminatory attitudes in their daily lives (Gridley et al. 2016, McDermott et al. 2016). Teachers and health practitioners should be provided with opportunities to discuss trans* issues to allay some of their own fears, anxieties and misconceptions. They will then be in a better position to form alliances and challenge negative attitudes and stereotypes towards children and young people who identify as trans*. In terms of more responsive services and supports, collaborative working across all services needs to exist. This includes clear interdisciplinary protocols between mental health, medical, surgical, social work and education services. There needs to be a dedicated family support service that provides psychosocial interventions that are tailored to the unique needs of each family. In terms of sexual health for trans* youth, effective HIV and STI education and prevention strategies need to be provided. It is necessary to provide interventions that help trans* youth to address the negative effects of the challenges, such as discrimination and victimization, they face in their daily lives. The importance of early intervention strategies in terms of mental health provision has become clearer (Centre for Mental Health 2016). Current research has revealed a ten-year average delay in children and young people accessing and receiving the help that they require (Veale et al. 2015). There should be interventions to promote resilience and to tackle stress related experiences. This may include talking therapies such as DBT to develop coping skills and build self-esteem. Depression and anxiety related experiences can be successfully treated with CBT (Austin & Craig 2015).

Parental support is fundamental to the well-being and development of all young people including trans* youth, who often lack support from peer and classroom settings (Grant et al.

2011). Further, studies have shown negative correlations between family rejection and health outcomes including high rates of depression, suicidality, and drug and alcohol use (Grossman et al. 2006, Simons et al. 2013). Additionally, relationship quality and positive parental attitudes were associated with higher self-esteem and reduced depression and suicide attempts in trans* youths (Grossman et al. 2011). Health and social care practitioners and relevant support services should follow the Standards of Care of the World Professional Association for Transgender Health (Coleman et al. 2011). For young people, specific mental health guidelines have been issued in the UK (Royal College of Psychiatrists 2013). This includes information about accessing and using counselling and talking therapy services. Furthermore, family education programmes can help provide parents with necessary information, professional support, parenting strategies and peer support (Riley et al. 2011). Health care providers need to be adequately prepared in order to effectively provide this support (Corliss et al. 2007; Cohen-Kettensis 2008). Education and training to health professionals in trans* issues is often lacking or non-existent. Policies that promote and support the development of such initiatives need to be in place to ensure that more affirmative practices towards trans* youth and families exists (Baur et al. 2015, Edwards-Leeper et al. 2016). A good example of current developments is the Family Acceptance Project, who have developed a wealth of resources including information, publications and training resource materials. They have also provided a useful resource guide for practitioners to help them to engage more effectively with diverse families, to address specific challenges and to promote greater well-being (Substance Abuse and Mental Health Services Administration 2014).

Meso level

The mesosystem includes the relationships and interactions between individuals contained in the microsystem. For example, the trans* person's family experience may be related to school experiences and *vice versa*. The findings indicate that children and young people who identify as trans* clearly need education and support. Families and professionals often have limited knowledge about individual health and social care needs with reports of trans* people having

to educate their healthcare provider about trans* specific issues (Grant et al. 2011). There should be access to education about being trans*, sexuality and relationship issues and opportunities to discuss experiences, hopes and future desires and wishes. There should be education and training for counsellors and mental health professionals in trans-affirmative and resilience practices (Edwards-Leeper et al. 2016). For families, there needs to be an increase in interventions that recognise, support and promote parental support (Malpas 2011). Safe and supportive learning environments should exist for all students, including trans* people, that are free from the threat of violence and discrimination. Schools need to ensure the development of peer support networks, transphobia incentives and specific training for teachers and other staff. There needs to be clear anti-bullying and harassment strategies. It would be helpful for schools and colleges to instigate a community of 'trans-allies' on campus and produce protocols to support such an initiative. There should be a programme encouraging young people to develop their own campaigns (Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual Resource Centre 2017). Also, trans* young people should have greater involvement and a stronger voice in determining future service developments. There also needs to be the development of resources with partner organisations (NGOs) for trans-specific work. A good example of innovative community advocacy and support is the work of GLSEN in the United States (US). Ally Week is an annual event that encourages national dialogue about how everyone in society can become greater allies to marginalised groups including trans* youth (GLSEN 2017).

Another important ecological consideration is the workplace and neighbourhood community supports. These can be strongly associated with mental health outcomes. Also, greater visibility and more acceptance led to less hate crimes and lower rates of depression and suicidal ideation (Baur et al. 2015). Local trans* organisations and advocacy groups can fulfil the need for a greater sense of belonging. (GLSEN 2017, Parents, Families and Friends of Lesbians and Gays 2017).

Conclusion

There is an increased interest in the experiences and concerns of children and young people who identify as trans*. This review has summarized the current available evidence on the needs of this population and identified opportunities and gaps in terms of practice, policy and support needs. However, in terms of empirical evidence, the review is somewhat limited by the small number of studies from European countries, recruitment challenges and the broad age of participants. In view of the limited research, future studies should delimit age parameters and work with trans* youth to co-develop interventions to meet their needs (Bränström & Van Der Star (2016). This review clearly shows that significant challenges exist for trans* young people around human rights, social inclusion and equality initiatives. All services providers need to be aware that trans* people face heteronormativity, prejudice and discriminatory attitudes in their daily lives (Gridley et al. 2016, McDermott et al. 2016). In terms of more responsive services and supports, collaborative working across all services needs to exist. Trans* youth have unique needs, and services should actively identify and respond appropriately to those needs in health, social care and education sectors.

References

Agius, S., Köhler, R., Aujean, S. & Ehrt, J. (2011) Human Rights and Gender Identity. Brussels: ILGA Europe.

Arcelus, J., Claes, L., Witcomb, G.L., Marshall, E., Bouman, W.P. (2016) Risk Factors for Non-Suicidal Self-Injury Among Trans Youth. Journal of Sexual Medicine, 13 (3), 402-412.

Arksey, H., & O'Malley, L. (2005) Scoping studies: Towards a methodological framework. International Journal of Social Research Methodology: Theory & Practice 8(1), 19-32.

Austin, A. & Craig, S.L. (2015) Transgender affirmative cognitive behavioural therapy: Clinical considerations and applications. Professional Psychology, Research and Practice 46(1), 21-29.

Baur, G.R. & Schiem, A.I. (2015) Transgender People in Ontario, Canada: Statistics from the Trans PULSE Project to Inform Human Rights Policy. Ontario: Trans Pulse.

Benson, K.E. (2013) Seeking support: Transgender client experiences with mental health services. Journal of Feminist Family Therapy 25(1), 17-40.

Bränström, R. & Van Der Star, A. (2016) More knowledge and research concerning the health of lesbian, gay, bisexual and transgender individuals is needed. European Journal of Public Health 26(2), 208-209.

Bronfenbrenner, U. (1979) The Ecology of Human Development: Experiments by Nature and Design. Cambridge, M.A., Harvard University Press.

Centre for Mental Health (2016) Missed opportunities: Children and young people's mental health. London: Centre for Mental Health.

Clark, T.C., Lucassen. M.F.G., Bulen, P., Denny, S.j., Flemming, T.M., Robinson, E.M. & Rossen, F.V. (2014) The health and well-being of transgender high school students: Results from the New Zealand Adolescent Health Survey (Youth'12). Journal of Adolescent Health 55, 93-99.

Cohen-Kettenis, P.T., Delemarre-van De Waal, H.A., Gooren, L.J.G. (2008) The treatment of adolescent transsexuals: Changing insights. Journal of Sexual Medicine 5 (8), 1892-1897.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L. et al. (2011) Standards of care for the health of transsexual, trans-

gender, and gender-nonconforming people, version 7. International Journal of Transgenderism 13(4), 165–232.

Coyne I. (2015) Importance of listening to and seeking children's views. Barnbladet. 3, 28-9.

Corliss, H.L., Belzer, M., Forbes, C., Wilson, E.C. (2007) An evaluation of service utilization among male to female transgender youth: Qualitative study of a clinic-based sample. Journal of LGBT Health Research 3 (2), 49-61.

Critical Appraisal Skills Programme (2013). Ten questions to help you make sense of qualitative research. Critical Appraisal Skills Programme: Oxford.

Dennell & Logan (2012) Life in Scotland for LGBT Young People. Edinburgh: LGBT Youth Scotland.

de Vries, A. & Cohen-Kettensis, P. (2012) Clinical management of gender dysphoria in children and adolescents: The Dutch approach. Journal of Homosexuality 59, 301-320.

de Vries, A.L., McGuire, J.K., Steensma, T.D., Wagenaar, E.C., Doreleijers, T.A., Cohen-Kettenis, P.T. (2014) Young adult psychological outcome after puberty suppression and gender reassignment. Pediatrics 134 (4), 696-704.

Dierckx, M., Motmans, J., Mortelmans, D. & T'sjoen, G. (2015) Families in transition: A literature review. International Review of Psychiatry 28(1), 36-43.

DiFulvio, G.T. (2015) Experiencing Violence and Enacting Resilience: The Case Story of a Transgender Youth. Violence Against Women 21 (11), 1385-1405.

Dowshen, N., Matone, M., Luan, X., Lee, S., Belzer, M., Fernandez, M.I., Rubin, D. (2016) Behavioral and Health Outcomes for HIV+ Young Transgender Women (YTW) Linked to and Engaged in Medical Care. LGBT Health 3 (2), 162-167.

Dunne, P & Turraoin, C. (2015) It's time to hear our voices: National Trans Youth Forum Report. Dublin: National Trans Youth Forum.

Edwards-Leeper, L., S. Leibowitz and V. F. Sangganjanavanich (2016) Affirmative practice with transgender and gender nonconforming youth: Expanding the model. Psychology of Sexual Orientation and Gender Diversity 3 (2): 165-175.

Garofalo, R., Deleon, J., Osmer, E., Doll, M., Harper, G.W. (2006) Overlooked, misunderstood and at-risk: Exploring the lives and HIV risk of ethnic minority male-to-female transgender youth. Journal of Adolescent Health 38 (3), 230-236.

GLSEN (2017) National Ally Week 25-29 September 2017. https://www.glsen.org/allyweek: Accessed 27 February 2017.

Government of Ireland (2015) Gender Recognition Act 2015. Dublin: Office of the Attorney General.

Greytak, E.A., Kosciw, J.G., Boesen, M.J. (2013) Putting the 'T' in 'Resource': The Benefits of LGBT-Related School Resources for Transgender Youth. Journal of LGBT Youth 10 (1-2), 45-63.

Grant, J. M., Mottet, L. A., & Tanis, J. (2011). Injustice at every turn: A report of the National Transgender Discrimination Survey. Washington D.C: National Center for Transgender Equality.

Gridley, S.J., Crouch, J.M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., Schimmel-Bristow, A. et al. (2016) Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. Journal of Adolescent Health 59, 254-261.

Grossman, A.H. & D'Augelli, A.R. (2006) Transgender youth: Invisible and vulnerable. Journal of Homosexuality 51 (1), 111-128.

Grossman, A.H., D'Augelli, A.R. & Salter, N.P. (2006) Male-to-female transgender youth: Gender expression milestones, gender atypicality, victimization and parents' responses. Journal of GLBT Studies 2(1), 71-92.

Grossman, A.H., D'Augelli, A.R. (2007) Transgender youth and life-threatening behaviors. Suicide and Life-Threatening Behavior 37 (5), 527-537.

Grossman, A.H., D'Augelli, A.R., Frank, J.A. (2011) Aspects of psychological resilience among transgender youth. Journal of LGBT Youth 8 (2), 103-115.

Higgins, A., Begley, T., de Vries, J., Doyle, L., McCann, E., Sheerin, F., Smyth, S. & Sharek, D. (2015) LGBTIreland: A study of the mental health and suicidality of lesbian, gay, bisexual and transgender people in Ireland and public attitudes to LGBT people. Dublin: GLEN.

House of Commons Women and Equalities Committee (2015) Transgender Equality: First

Report of Session 2015-16. London: The Stationery Office Limited.

Institute of Medicine. (2011) The Health of Lesbian, Gay, Bisexual, and Transgender People. Washington, D.C: The National Academies Press.

Kosciw, J. G., Greytak, E. A., Palmer, N. A., & Boesen, M. J. (2014). The 2013 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools. New York: GLSEN.

Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual Resource Centre (2017)

LGBTQIA Ally Training, http://lgbtqia.ucdavis.edu/educated/ally-training.html: Accessed 6

March 2017.

Malpas, J. (2011) Between pink and blue: A multi-dimensional family approach to gender non-conforming children and their families. Family Process 50 (4), 453-470.

Mays, N., Pope, C. & Popay, J. (2005) Details of approaches to synthesis a methodological appendix to the paper: systematically reviewing qualitative and quantitative evidence to inform management and policy making in the health field. Technical Report. Canadian Health Services Research Foundation/NHS Service Delivery and Organisation R&D Programme, Ottawa, Canada / London, UK.

McCann, E. (2014) Transgender people and mental health services in Ireland: Narrative accounts. International Journal of Mental Health Nursing 23, 525-533.

McCann, E. & Sharek, D. (2015) Mental health needs of people who identify as transgender: A review of the literature. Archives of Psychiatric Nursing 30, 280-285.

McDermott, E., Hughes, E. & Rawlings, V. (2016) Queer Futures: Understanding lesbian, gay, bisexual and trans (LGBT) adolescents' suicide, self-harm and help-seeking behaviour. London, Department of Health.

McGuire, J.K., Anderson, C.R., Toomey, R.B., Russell, S.T. (2010) School Climate for Transgender Youth: A Mixed Method Investigation of Student Experiences and School Responses. Journal of Youth and Adolescence 39 (10), 1175-1188.

National Center for Transgender Equality (2014) Transgender Terminology accessed 30 January 2017 http://www.transequality.org/issues/resources/transgender-terminology

National LGBT Health Education Center (2016) Affirmative Care for Transgender and Gender Non-Conforming People: Best Practices for Front-line Health Care Staff. Boston MA: The Fenway Institute.

Ó hUltacháin, C., Mathews-McKay, R. & Urain, B. (2016) Burning Issues 2: What's next for LGBT Ireland. Dublin: National LGBT Federation.

Olson, J., Schrager, S.M., Belzer, M., Simons, L.K., Clark, L.F. (2015) Baseline physiologic and psychosocial characteristics of transgender youth seeking care for gender dysphoria. Journal of Adolescent Health 57 (4), 374-380.

Parents, Families and Friends of Lesbians and Gays (2017) Support Meetings, http://www.pflag.com/support-meetings/: Accessed 5 February 2017.

Reisner, S.L., Vetters, R., Leclerc, M., Zaslow, S., Wolfrum, S., Shumer, D., Mimiaga, M.J. (2015) Mental health of transgender youth in care at an adolescent Urban community health center: A matched retrospective cohort study. Journal of Adolescent Health, 56 (3), 274-279.

Riley, E. A., Sitharthan, G., Clemson, L. & Diamond, M. (2011) The needs of gender-variant children and their parents: a parent survey. International Journal of Adolescent Health 23 (3), 181-195.

Royal College of Psychiatrists (2013) Good practice guidelines for the assessment and treatment of adults with gender dysphoria. London: Royal College of Psychiatrists.

Schneider, E. (2013) An insight into respect for the rights of trans and intersex children in Europe. Strasbourg: Council of Europe.

Simons, L., Schrager, S.M., Clark, L.F., Belzer, M., Olson, J. (2013) Parental support and mental health among transgender adolescents. Journal of Adolescent Health 53 (6), 791-793.

Singh, A.A., Meng, S. & Hansen, A. (2013) "It's Already Hard Enough Being a Student": Developing Affirming College Environments for Trans Youth. Journal of LGBT Youth 10 (3), 208-223.

Singh, A.A., Meng, S.E., Hansen, A.W. (2014) I am my own gender: Resilience strategies of trans youth. Journal of Counseling and Development, 92 (2), 208-218.

Stein, E. (2012) Commentary on the treatment of gender variant and gender dysphoric children and adolescents: Common themes and ethical reflections. Journal of Homosexuality 59(3), 480-500.

Substance Abuse and Mental Health Services Administration (2014) A Practitioner's Resource Guide: Helping Families to Support Their LGBT Children. HHS Publication No. PEP14-LGBTKIDS. Rockville, MD: Substance Abuse and Mental Health Services Administration.

United Nations (1989) The United Nations Convention on the Rights of the Child. London: UNICEF.

Vance, S.R., Halpern-Felsher, B.L., Rosenthal, S.M. (2015) Health care providers' comfort with and barriers to care of transgender youth. Journal of Adolescent Health 56 (2), 251-253.

Veale J, Saewyc E, Frohard-Dourlent H, Dobson S, Clark B & the Canadian Trans Youth Health Survey Research Group (2015). Being Safe, Being Me: Results of the Canadian Trans Youth Health Survey. Vancouver, BC: Stigma and Resilience Among Vulnerable Youth Centre, School of Nursing, and University of British Columbia.

Wilson, E.C., Garofalo, R., Harris, R.D., Herrick, A., Martinez, M., Martinez, J., Belzer, M. (2009) Transgender female youth and sex work: HIV risk and a comparison of life factors related to engagement in sex work. AIDS and Behavior 13 (5), 902-913.

Wilson, E.C., Iverson, E., Garofalo, R., Belzer, M. (2012) Parental Support and Condom Use Among Transgender Female Youth. Journal of the Association of Nurses in AIDS Care 23 (4), 306-317.

Wilson, E.C., Chen, Y., Arayasirikul, S., Fisher, M., Pomart, W.A., Le, V., Raymond, H.F., McFarland, W. (2015) Differential HIV risk for racial/ethnic minority trans female youths and

socioeconomic disparities in housing, residential stability, and education. American Journal of Public Health 105, 41-47.

Yadegarfard, M., Ho, R., Bahramabadian, F. (2013) Influences on loneliness, depression, sexual-risk behaviour and suicidal ideation among Thai transgender youth (2013) Culture, Health and Sexuality, 15 (6), 726-737.

Yu, V. (2010). Shelter and transitional housing for transgender youth. Journal of Gay & Lesbian Mental Health, 14(4), 340-345.

Figure 1: Identification, retrieval and inclusion of relevant studies

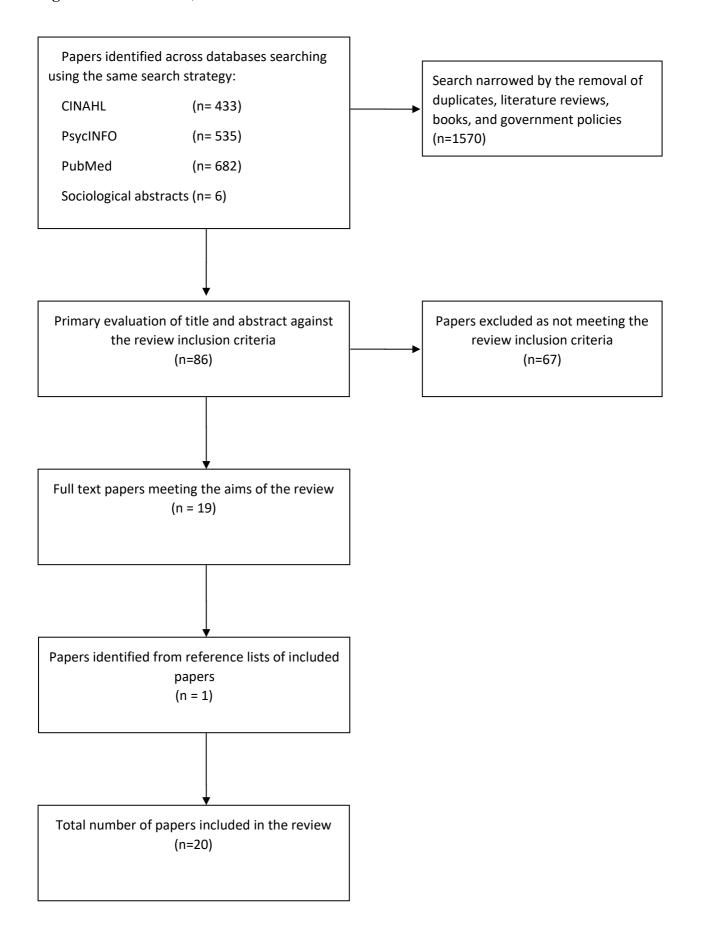


 Table 1: CINAHL search strategy and results

Search code	Query	Results
S1	transgender*	2,366
S2	transsexual*	1,036
S 3	gender dysphoria	176
S4	genderqueer	7
S5	non-binary	12
S6	youth	25,333
S7	young adults	14,212
S8	adolescen*	397,761
S9	S1 OR S2 OR S3 OR S4 OR S5	3,036
S10	S6 OR S7 OR S8	410,850
S11	S9 AND S10	433

 Table 2: CASP quality scores

CASP criteria	Arcelus et al. (2016)	Corliss et al. (2008)	de Vries et al. (2014)	Dowshen et al. (2016)	Garofalo et al. (2006)	Greytak et al. (2013)	Grossman & D'Augelli (2006)	Grossman et al. (2006)	Grossman & D'Augelli (2007)	Grossman et al. (2011)	McGuire et al. (2010)	Olson et al. (2005)	Reisner et al. (2015)	Simons et al. (2013)	Singh et al. (2013)	Singh et al. (2014)	Wilson et al. (2009)	Wilson et al. (2012)	Wilson et al. (2015)	Yadegarfard et al. (2013)
1. Clear statement of aims	2	2	2	2	1	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2
2. Appropriate methodology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3. Appropriate research design	2	2	2	2	1	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
4. Appropriate recruitment strategy	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
5. Appropriate data collection methods	2	2	2	2	1	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
6. Research relationships considered	1	1	1	0	1	0	2	2	2	2	0	2	2	1	0	1	1	1	2	1
7. Consider ethical issues	2	2	2	0	2	0	0	2	2	2	2	2	2	2	1	2	1	2	0	0
8. Rigorous analysis	2	1	2	2	2	2	1	0	0	2	2	2	2	2	1	2	2	2	2	2
9. Clear findings	2	2	2	2	2	2	1	2	2	2	2	2	2	2	1	1	2	2	2	2
10. Value of the research	2	2	2	2	2	2	1	2	2	2	2	2	2	2	1	2	2	2	2	2
Total scores out of 20	19	18	19	16	16	16	15	18	18	19	18	20	20	11	13	16	18	19	18	19

Table 3: Papers included in the review Data collection **Key Findings** Recommendations **Author and country** Aims Sample method Arcelus et al. (2016) Identify risk factors Questionnaires: self-46% had NSSI in lifetime showed To decrease psychopathology, need interventions that Trans youth for non-suicidal selfdecrease transphobia, increase social support and help (n=268)greater psychopathology, lower selfinjury; trans youth with interpersonal relationships. UK injury (NSSI) in trans psychopathology; selfesteem, experienced more esteem: victimization: trransphobia, and had greater vouth < 25 years interpersonal problems (mean 19.9 years) transphobia; and social support Corliss et al. (2007) Participants identified health and Improve the availability of and access to appropriate Evaluation of service Trans youth (n=18) In-depth interviews use by trans youth social risks and complex needs services for young people and their families. Develop around healthcare, education, culturally competent medical, social and mental USA 16-24 years employment, housing, safety, and health services. personal relationships. Range of positive and negative experiences discussed. de Vries et al. (2014) Determine Trans youth (n=55) Post reassignment, GD alleviated, Clear clinical multidisciplinary protocol (mental Ouestionnaires: psychological state improved, wellhealth, medical surgical) to guide interventions, care psychological Gender dysphoria and support to trans children and youth. Netherlands outcome after puberty 11-23 years (GD), psychological being was the same or better than youth in the general population. suppression and factors, well-being gender reassignment Better psychological functioning was positively correlated with postsurgical subjective well-being.

Dowshen et al. (2016) USA	Describe health and psychosocial outcomes of HIV+ young transgender women	Trans (MTF) youth (n=66) 12-24 years	Questionnaires	Young trans women reported: Higher unemployment, poor educational achievement, less antiretroviral treatment adherence. Psychosocial factors predicted viral detection.	HIV prevention strategies for trans youth e.g. life skills training. Appropriate psychosocial and medical care by multidisciplinary teams.
Garofalo et al. (2006) USA	Explore ethnic minority male-to- female (MTF) trans youth lives and HIV- risk factors	MTF trans youth (n = 51) 16-25 years	Questionnaire	High risk of HIV. Main life stressors were: sex for resources, Job issues, forced sex, and poor access to health care. 98% had sex with men. 49% unprotected anal sex and 53% with drugs or alcohol.	Unmet needs of this group. Need more research to understand the specific needs. Develop targeted broadbased interventions that reduce risky behaviors.
Greytak et al. (2013) USA	Investigate the benefits of good school resources for trans youth	Trans youth (n=409) 13-21 years	Survey	Topics: gay-straight alliances (GSAs), supportive educators, LGBT-inclusive curricula, and comprehensive antibullying/anti-harassment policies. All but anti-bullying/anti-harassment policies related to lower levels of victimization.	Researchers, advocates, and educators can all benefit from a better understanding of the importance of supportive school resources for transgender youth. More research comparing nontrans groups
Grossman et al. (2006) USA	Explore trans youth gender expression, victimization and parental responses	Trans youth (MTF) (n=31) 15-21 years	Interviews	Youth felt they were different between eight and nine years of age. Many were called sissies and made change their behavior by parents; more gender-atypical youth reported childhood parental abuse.	Education programmes for families, health and social care practitioners, administrators and teachers. Community campaigns and safe spaces.

Grossman & D'Augelli (2006) USA	Explore factors affecting the experiences of trans youth	Trans youth (n=24) 15-20 years	Focus group interviews	Average age of gender identity awareness 10.4 years. Most had negative reactions and confusion between their gender identity and sexual orientation. Also lack of safe environments, poor access to health services, no mental health input and poor caregiving by families.	More research to establish key issues. Service user involvement in service planning and staff education programmes. Tackle stigma and discrimination. Better access to care, supports and treatments.		
Grossman & D'Augelli (2007) USA	Explore trans youth and suicidal behaviours	Trans youth (n=55) 15-21 years	Interviews	Almost 50% thought seriously of taking their life .25% reported suicide attempts that were related to trans identity, parental verbal and physical abuse, lower body esteem.	Increased psychoscocial interventions. Access to counseling and interpersonal supports. Parental and family supports.		
Grossman et al. (2011) USA	Explore resilience among trans youth	Trans youth (n=55) 15-21 years	Interviews and questionnaires	Greater personal mastery, self esteem and social support equated with better mental health outcomes.	Interventions to enhance resilience. Psychoeducation programmes for parents. More research on resilience rather than risk factors alone.		
McGuire e al. (2010) USA	Explore trans youth experiences of school climate	Trans youth: Survey (n=68) Focus groups (n=35) 12-23 years	Survey and focus group interviews	School harassment due to trans identity was common and strongly related to feelings of safety. Strategies to tackle harassment resulted in better connectedness with teachers thus increased feeling of safety.	Increase opportunities to create positive change in schools. Policies that support the establishment and maintenance of Trans support groups and specific training for staff.		
Olson et al. (2015) USA	Describe baseline characteristics of trans youth seeking care for gender dysphoria	Trans youth (n = 101) 12-24 years	Surveys	Youth recognized gender incongruence at mean age 8.3 years, disclosed to family at mean age 17.1 years. Depression (35%), suicidal thoughts (over 50%), suicide attempts (almost 33%).	Early psychosocial interventions. Research evaluations of the interventions.		
Reisner et al. (2015) USA	Investigate stress, bullying and substance use disparities	Trans youth (n=442) 13-18 years	Online survey	Increased substance use in past 12 months linked to victimization experiences.	Early detection and intervention strategies and increased supports for bullying and harassment.		
Simons et al. (2013) USA	Investigate parental support and mental	Trans youth (n=66) 12-24 years	Survey	Trans youth face rejection, marginalization, and victimization. Parental support was significantly	Increase in interventions that promote parental support. Systematic evaluation of specific interventions.		

	health among trans youth			associated with higher life satisfaction, lower perceived burden of being trans, and fewer depressive symptoms.	
Singh et al. (2013) USA	Explore affirming college environments for trans youth	Trans youth (n=18) 15-25 years	Interviews	Main issues: campus-wide trans- affirming language; campus training on trans student concerns; trans- affirming campus health care access, developing a community of trans allies on campus; nurture resilience in trans students.	All staff to be trained in trans specific issues. Advocate for trans-affirming health care with competent staff. Develop a community of trans allies on campus Produce protocols.
Singh et al. (2014) USA	Identify trans youth stress and resilience strategies	Trans youth (n=19) 15-25 years	Interviews	Resilience supports: define own gender, supportive education system, trans affirming community, mental health supports, good relationships. Resilience threats: access to healthcare, isolation, work discrimination, poor finances.	Counsellors to create trans-affirmative environments. Professionals must listen and respond to trans youth needs. Develop counsellor competencies. More research needed around stigma, discrimination and resilience.
Wilson et al. (2009) USA	Explore trans female youth, HIV risk and sex work	Trans female youth (n=151) 15-24 years	Surveys	Lower education status, homelessness, use of street drugs and perceived social support were highly related to sex work.	More sex work research needed. HIV prevention interventions at individual, social and community levels for trans youth.
Wilson et al. (2012) USA	Explore HIV risk, condom use and parental support among trans female youth	Trans female youth (n=21) 16-24 years	In-depth interviews	24% had HIV. Just under half felt unsupported by parents and got support from the trans community. Consistent condom use in those with supportive parents.	Involve parents in HIV prevention interventions. Increased social support to parents. More research into HIV interventions and evaluation studies.
Wilson et al. (2015) USA	Examine HIV risk for racial/ethnic minority trans female youth	Trans female youth (n=282) 16-24 years	Survey	Racial/ethnic minority youth had did less well educationally, did not live with their parents as a child and more likely to have condomless sex than Whites.	Research to assess the impact of multiple-minority stress. Interventions to address disparities and prevent incident HIV cases.

Yadegarfard et al. (2013) Thailand	Determine the influences on loneliness, depression, sexual risks and suicide	Trans youth (n=190) 15-25 years	Questionnaire	Level of education impacted on depression and loneliness. The number of sex partners had a significant influence on sexual risk behavior. Suicidal ideation and age	Very limited studies on the topic exist. Further 'more in-depth' research is required in the future.
				had a significant impact on sexual risk behavior and suicidal behavior.	