

A systematic review of literature on the use of health and social care by older trans adults:

what can United Kingdom services learn?

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**A narrative review of literature on the use of health and social care by older trans adults:
what can United Kingdom services learn?**

Abstract

We carried out a narrative review and thematic analysis of literature on the physical healthcare, mental healthcare and social care of trans older adults to ascertain what is known about older trans adults' contacts with and use of health and social care.

Thirty papers were found: a majority originated in the United States. Five themes were identified: experience of discrimination/ prejudice and disrespect; health inequalities; socio-economic inequalities; positive practice; and staff training and education. The first three themes present challenges for providers and service users. Experiences of discrimination/ prejudice and disrespect over the course of their lives powerfully influence how older trans adults engage with care services and practitioners. Health and socio-economic inequalities suggest that older trans adults are likely to have greater need of services and care. The remaining two themes offer opportunities for service improvement.

We conclude that more research is needed, that there is a strong argument for taking a life course perspective in a spirit of cultural humility, and that contextual societal factors influence service users and providers. We identify positive trans-inclusive practices which we commend to services. More needs to be done now to make older adult services appropriate and welcoming for trans service users.

Key words

Care-giving; dementia; education; end of life care; mental health; older adults; stigma;
transgender health

Prepublication version

Background

The literature on the challenges faced by trans people when requiring health and social care has increased over the last 10 years. For example, a review and synthesis of peer reviewed recent literature 2008-2014 about transgender health identified 116 studies in 30 countries (Reisner *et al.*, 2016). The topics considered in the review include: access to health care and marginalisation (Ming, Hadi and Khan, 2016; Winter *et al.* 2016a) clinical care considerations (Wylie *et al.* 2016), issues of global health burden and equity (Lo and Horton, 2016; Reisner *et al.*, 2016), the connection between trans health and trans human rights (Winter *et al.*, 2016b), how the community voice can help to understand trans health challenges (Reisner *et al.*, 2016), and insights from over 30 countries. The literature has not specifically focused on particular age groups, rather it has taken a generic population-based position, which perhaps overlooks the subtle variance that age may bring to the trans experience: generic papers do not offer specific insights that may be unique to certain sections of the population. Age is a particularly important factor since increasing age is accompanied by physical, psychological and social changes, and services are often tailored to age. This paper focuses on what is known about older trans adults and their experiences of health and social care.

There are numerous definitions of the term transgender and its shortened form, trans. In this paper we use the term trans and this definition:

A trans person is someone who feels that the sex they were assigned at birth (male or female) does not match or sit easily with their sense of their own gender... It includes those

who have transitioned from male to female (transgender women) or from female to male (transgender men) as well as those who do not have a typically 'male' or 'female' gender identity (non-binary). (Government Equalities Office and Gendered Intelligence, 2015; p. 3)

It has proved difficult to find current, comparable data of prevalence estimates within global populations, although a limited number of studies have been conducted in, for example, the United States of America (USA), United Kingdom (UK), Belgium, Netherlands and Singapore. Reviews of these studies (Arcelus *et al.*, 2015; Collin, Goodman and Tangpricha, 2016; Collin *et al.*, 2016; Goodman *et al.*, 2019) have highlighted the complexity of this issue and explored how the variability within the data is influenced by factors such as study design, terminology and classification of cases, country of origin with associated cultural and legal contexts, and the date of the study. Studies focusing on surgical or hormonal gender therapy and trans-related diagnoses have estimated prevalence rates of between 1 and 30 per 100,000 people. However, studies relying on self-report suggest significantly higher rates of between 100 and 700 per 100,000 people (Collin, Goodman and Tangpricha, 2016). In the UK the Gender Identity Research & Education Society (GIREs) has updated their estimate of prevalence from 20 per 100,000 in 2007 for people (who had sought medical care for gender variance) to around 1% in 2011 (although the prevalence of those seeking transition is much smaller, perhaps 0.2% of the population) (Gender Identity Research and Education Society, 2011). Goodman *et al.* (2019) reviewed studies reporting trend data from Sweden, Serbia, Netherlands, Spain and the USA, and in all cases found a dramatic increase in numbers of recorded trans people regardless of geographic region. Meerwijk and Sevelius (2017) concluded that the proportion of trans individuals in the USA was increasing at 0.026% annually. Alongside this evidence that increasing numbers of people are identifying

as trans, the general population is ageing and, as a result, the number of trans people using older adult services is expected to increase over time. It is therefore important that service providers, commissioners, funders and planners understand and address the needs of this group. Since gender reassignment is one of nine “protected characteristics” in the Equality Act 2010, providers of health and social care services have an obligation to ensure that their services are trans-inclusive and actively tackle any impediments to access.

In this paper we draw on three concepts that are influential in older adult health and social care practice. One is a life course perspective, which is widely accepted as a useful approach to understanding ageing and health inequalities in later life in the context of dynamic and cumulative processes across the whole of life from birth or even from conception (Fuller-Iglesias, Smith and Antonucci, 2009; Foresight Mental Capital and Wellbeing Project, 2008). A second is person-centred care which involves “*attending to the relational aspects of life inasmuch as the biological aspects*” (Edvardsson, 2015). The third is cultural humility, defined as:

commitment to self-evaluation and critique, to redressing power imbalances ... and to developing mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations (Tervalon and Murray-Garcia, 1998),

We carried out a review drawing on international literature to ascertain what is known about older trans adults’ contacts with and use of health and social care services in order to inform UK research and practice.

Method

We carried out an initial search for literature in November 2018 using the stem keywords trans and old* or age using PubMed and Medline. We selected the stem trans as being clearly defined and in common usage in the literature: this is an evolving area and there are numerous descriptors in use as people seek to describe their experience (Gender identity Research and Education Society, 2019). We reviewed the abstracts of the papers identified (n=781) for relevance to three inclusion criteria:

1. focus on trans individuals
2. Focus on older adults
3. physical and/ or mental healthcare and/ or social care

We excluded papers written before 2010, and non-English language papers and identified 21 papers which met our inclusion criteria. We excluded papers pre 2010 as Finkenauer et al carried out a related review, which was published in 2012, and we aimed to build on that. The search was repeated in February 2020 using Medline, PubMed, PsychINFO and Google scholar and the same stem keywords. Figure 1 sets out the results of both searches which gave a combined total of 30 papers included in this review. There were three papers by Latham and Barrett from the same project: since they complement one another and are best understood together, we have counted them as one paper for the purposes of the review.

All 30 papers were loaded into a computerized software package, NVivo, which was used to assist in thematic analysis. NVivo is a qualitative data analysis computer software package (Bazeley and Jackson, 2013; QSR International, 2016), which facilitates the organization,

storage, and retrieval of data. The package also incorporates advanced data management, interrogation and visualization tools. It may be used to complement various theoretical approaches.

The collected papers were read and re-read, allowing familiarization with the literature, and then subjected to thematic analysis in order to explore commonalities and differences by identifying recurring themes and patterns (Braun and Clarke, 2006). Thematic analysis followed the following process after familiarisation; search for themes; review and clarification of themes; naming and definition of themes; and overall synthesis. Emerging themes were discussed, refined, clarified and named by research team members in partnership.

Results and discussion

Seventeen papers originated from the USA, four from Australia, four from Canada, and four from Europe. One paper had authors from each of the USA and UK. Most did not define older or ageing ($n=16$). Of the 14 papers that did, ten used age 50 plus as the cut off for older age, three used age 60 plus, and one used age 65 plus. Six papers described quantitative research and seven qualitative research, four were case based and five were literature reviews. The remaining papers consisted of three summary papers, two theoretical papers, two opinion pieces and one quality improvement project.

Table 1 lists the papers included in this review. Overall the literature on older trans adults is limited. Published studies that focus on LGBT (an acronym for lesbian, gay, bi and trans)

participants often include only a small number of trans participants if any. There appears to be a tendency to use the descriptor LGBT as a catch all, and to extrapolate findings derived from LG and B research to include trans people: Baril and Silverman (2019) refer to "a merging of trans realities with sexual minority experiences". The majority of recent publications originate from the USA, and UK or European research literature relevant to older trans adults is more limited. An additional complication is that studies use different cut-offs for older age or do not define the term.

Five overarching themes were identified. Three themes present challenges for health and social care services and practitioners and the people using their services. These are: experience of discrimination/ prejudice and disrespect; health inequalities; and socio-economic inequalities. Two themes suggest ways of improving services, namely positive practice in health and social care, and training and education for staff at all levels.

1. *Experience of discrimination/ prejudice and disrespect*

Concerns/ fears about discrimination are a recurrent theme (Ferron *et al.*, 2010; Latham and Barrett, 2015a; Witten, 2017) and are linked to inadequate health care and possibly with behaviours that might be regarded as risky (Bachmann and Mussman, 2015; Walker, Powers, and Witten, 2017). The context for older adults is that of lifetime experience of violence, abuse and hate crimes (Fredriksen-Goldsen *et al.*, 2014; Porter *et al.*, 2016).

Experiences of discrimination and disrespect within care settings range across a spectrum of experiences from insensitivity (Page *et al.*, 2016) through "subtle Othering" (Pang, Gutman and de Vries, 2019) to frank refusals of care (Redman, 2011) (maybe linked with denial of insurance cover (Finkenauer *et al.*, 2012)), and across a range of care settings, including

gender identity services (Latham and Barrett, 2015a). Trans individuals' concerns link with previous negative experiences in health and/or social care and lead to anticipation of bias which acts as a barrier (Baril and Silverman, 2019; Fabbre, 2015), influencing trans persons both in terms of reluctance to access services (Walker, Powers and Witten, 2017) and in whether they are able to be open and 'come out' to health and social care practitioners (Fredriksen-Goldsen *et al.*, 2014). Service barriers include denial of agency and gate-keeping (Baril and Silverman, 2019; Fabbre, 2015; Johnson *et al.*, 2018). Latham and Barrett describe rejection, stigmatisation and discrimination as being an inevitable part of being trans (Latham and Barrett, 2015b), and Siverskog notes that:

Earlier experiences of being closeted, shamed, and disciplined are something that one carries through life in the form of mental and physical scars, and that also have social and material consequences in later life. (Siverskog, 2014; p. 394)

These points are important, in that trans people's previous experiences of discrimination, including discrimination from service providers, will influence their worries about accessing and using services and how they relate to health and care practitioners and services. Internalised stigma (Johnson *et al.*, 2018; Porter *et al.*, 2016; Siverskog, 2014) is also relevant (for more on this issue see Puckett and Levitt, 2015). [Invisibility](#) is a word sometimes applied to trans people within health and social care (and more widely) (Fredriksen-Goldsen *et al.*, 2014; Michael *et al.*, 2018; Page *et al.*, 2016; Pang, Gutman and de Vries, 2019; Porter *et al.*, 2016; Siverskog, 2014; Waling *et al.*, 2019; Walker, Cohen and Jenkins, 2016; Witten, 2014, 2017).

Bouman and colleagues use the term double discrimination, referring to the discrimination attached to being trans plus the discrimination linked with being older (Bouman *et al.*,

2016), although Warren and Steffen (2018) suggest that older trans adults may be more likely to attribute discrimination to gender identity than to age. Ettner and Wylie (2013) comment that the physical and sensory changes that accompany ageing may be more challenging ("poignant") for older trans adults who have transitioned late, and Fabbre (2014) makes observations on time, writing about awareness of time left to live and sense of time wasted/ lost in connection with late gender transition. The awareness that time left is short may exert pressure on trans individuals to transition, whereas practitioners may take an ageist view, questioning why an individual might want to do this at an older age. Set against this, for some people later life may bring new beginnings (Pang *et al.*, 2019). Other writers flag up the need to acknowledge intersectionality: in addition to transphobia and ageism some older trans adults will be subject to other forms of oppression, including those related to ethnicity and/or sexuality (Porter *et al.*, 2016; Siverskog, 2014; Walker, Powers and Witten, 2017; Witten, 2014).

Privacy is a concern in health and social care settings (Ansara, 2015; Finkenauer *et al.*, 2012; Michael *et al.*, 2018; Pang, Gutman and de Vries, 2019; Redman, 2011; Walker, Cohen and Jenkins, 2016; Witten, 2017) and encompasses privacy of information, space and direct aspects of care. It links to discrimination and disrespect and also to the challenges (or anticipated challenges) of growing older, possibly becoming physically more dependent on others and being less able to maintain one's own privacy without support. This is particularly in relation to personal care-related activities of daily life, but also more broadly in relation to administrative procedures (Ansara, 2015) and maintenance of hormone use if someone becomes unable to manage their own medication (Latham and Barrett, 2015a).

2. Health inequalities

Older trans adults have been reported to have higher rates of physical ill-health, disability, obesity and lack of physical activity than older non-trans LGB adults (Fredriksen-Goldsen *et al.*, 2014). Higher rates of psychological morbidity are also reported. Fredriksen-Goldsen and colleagues (2014) found older trans adults to be at higher risk of depressive symptomatology and perceived stress than older non-trans LGB adults, and Hoy-Ellis and colleagues (2017) found that nearly 50% of trans adults aged 50+ had clinically significant depressive symptomatology in a secondary analysis of data from a large community survey in the USA. It is argued that having, historically, to hide one's gender identity, together with experiences of discrimination and social isolation may be relevant to these higher rates of psychological morbidity (Porter *et al.*, 2016). Witten (2017) notes that there is a lack of data on suicidality in older trans adults.

Alongside this there are concerns about long term implications of trans-specific treatments. Trans individuals may have undergone surgery related to their gender variance and this may have implications for their care as they grow older, e.g. Ansara (2015) notes that older adults with arthritis that limits their manual dexterity and who have undergone vaginoplasty may need assistance with vaginal dilatation. Gooren and T'Sjoen's (2018) review gives a useful account of the endocrine treatment of older trans individuals. Long term treatment with hormones may result in physical health problems, e.g. trans women who have cardiovascular risk factors and who start on oestrogen therapy have a higher risk of cardiovascular problems and may need careful monitoring (Gooren and T'Sjoen, 2018; Mahan *et al.*, 2016), and Mahan and co-workers (2016) note that testosterone can increase the risk of destabilizing some psychiatric conditions, for example bipolar and schizoaffective

disorders. Hormonal dosage may need to be adjusted as a trans person ages, whilst maintaining a dose that sustains their affirmed gender (Gooren and T'Sjoen, 2018; Mahan *et al.*, 2016). Conditions associated with ageing may add to the complexity of treatment (Bachmann and Mussman, 2015; Ferron *et al.*, 2010) and may introduce the possibility of drug interactions with hormonal treatments (Porter *et al.*, 2016). Bone health is a further area of concern in older trans individuals as a consequence of long-term hormone treatment (Mahan *et al.*, 2016).

It is interesting to note two positive findings. One study has reported that the use of cross-sex hormones amongst older trans women appeared to be associated with psychological benefits (Bouman *et al.*, 2016), although many had obtained their hormones via the internet or privately. Also, prior military service has been found to be associated with lower levels of depressive symptomatology and higher health related quality of life amongst older trans adults (Hoy-Ellis *et al.*, 2017).

Screening is a further complication: appropriate health screening may be associated with the person's gender assigned at birth and may therefore be missed for administrative reasons or because of being associated with a previous gender identity (Gooren and T'Sjoen, 2018; Mahan *et al.*, 2016; Waling *et al.*, 2019).

Historically there has been a complex relationship between mental health and gender diversity/ identifying as trans. In the past being trans was itself regarded as an indicator of mental ill-health and a (psychiatric) diagnosis was needed in order to access gender affirming treatments. However, over recent years societal attitudes have undergone a

considerable shift towards understanding gender more as a spectrum, and towards separating mental ill-health from gender variance (World Professional Association for Transgender Health, 2012). Nevertheless, a history of “gender dysphoria” may mean that older trans people are sensitive to suggestions of psychological ill-health and concerned that psychological symptoms will be attributed to their trans identity. Seeking counseling might be associated with getting a psychological diagnosis in order to access medical care, rather than as a way to access psychological help (Witten, 2014).

Sub-theme - Dementia: Dementia is a condition that is identified by some authors as being of particular concern for older trans individuals (Ansara, 2015; Michael *et al.*, 2018; Witten, 2014) and this relates to the complexity of managing dementia and providing trans-affirming services to people with dementia. Page and colleagues (2016) list a number of potential concerns for trans people who are developing dementia: fear of being “outed” as trans as a consequence of needing care; losing touch with one's individual gender identity; having to rely on others to express one's own gender identity; being forced into the “wrong” gender identity (maybe reverting to birth gender); and not being treated with respect and dignity.

Four of the papers included in this review make a major contribution to this area. Latham and Barrett (2015b) include two narrative accounts from trans people living with dementia: one trans woman had transitioned a long time before moving into a care setting and prior to moving into care was dressing and living as a woman. In the Home, she dressed and lived as a man. A staff member is quoted as saying that this was not the individual's choice, implying that this was the only way their family would keep links with them, and the authors raise

the question of whether this is elder abuse. This narrative raises the possibility of undue influence (Peisah et al., 2009). Power imbalances can affect vulnerable adults as well as children, and age, gender and access to resources are potential factors in a power imbalance. The concept of undue influence is applicable to the abusive situation described and, in the UK, a safeguarding response would have been appropriate and consequently a police perspective introduced.

Another case in the literature involves a trans woman who developed dementia with “subsequent gender confusion”, and became unable to express a clear gender preference (Marshall, Cooper and Rudnick, 2015). The next of kin was a daughter who had difficulty accepting her father’s transition. The authors suggest that the best management might have been a “gender neutral” approach but question whether this would have been ethical. Baril and Silverman’s paper (2019) contributes a theoretical analysis of possible management approaches, namely gender neutralisation; trans-affirmative stable (supporting the person’s pre-dementia self-identified gender identity); trans-affirmative fluid (supporting the person’s gender identity as experienced at the time); and what they refer to as a fourth paradigm. Their fourth paradigm rests on three principles: it is fluidly trans-affirmative supporting the changing nature of gender identity and expression, values the personhood of the individual and is age-positive, respecting the agency of the individual with dementia. It will be interesting to learn how this translates into practice. Page and colleagues (2016) describe an ongoing systems approach to service change in older people’s mental health using appreciative inquiry and involving older trans experts engaging with mental health practitioners to describe a vision, quality standards and guidelines for the future service. Their paper suggests that they support the trans affirmative stable approach.

3. *Socio-economic inequalities*

There is little focus in the identified papers on the social care aspects of growing older as a trans individual, although some papers are directed at a social work audience (Fabbre, 2014; Siverskog, 2014). Fabbre (2014) notes how trans individuals who transition later in life will renegotiate their social and familial relationships and the social expectations that have dominated their earlier lives: a fifth of her group described ongoing socio-economic challenges. She argues that social workers are in a position to support the growth and wellbeing of the people they work with and should do more to help, and warns against perpetuating heteronormative assumptions about identity and behaviour (Fabbre, 2015).

A key theme identified in relation to social care is possible increased reliance on formal social care services because of a lack of family/social support. Trans individuals may have been rejected by their family of origin, and they may not engage with or feel they belong with LGB communities (Porter *et al.*, 2016). As a result, they may have limited access to informal social supports, possibly in conjunction with less financial resource, leading to potentially greater reliance on formal (or in some countries public) services. This has been identified as a concern for trans individuals as they grow older: people may fear increasing dependency and a need for assistance with personal care and other activities of daily living either in their own home or in a long-term care setting. These concerns might also encompass communal housing options for older adults (Walker, Powers and Witten, 2017), some of which due to their faith-based foundations may introduce even greater complexity into an already challenging situation. Witten (2014) comments on the fear of potential

abuse by care-givers and some of her interviewees considered de-transitioning for reasons of safety.

In terms of economic challenges, in some economies a lack of insurance to fund care is a concern (Ferron *et al.*, 2010; Finkenauer *et al.*, 2012; Waling *et al.*, 2019), and this is in a context of possible historical economic instability for older trans adults who may have experienced discrimination and barriers in education and employment and who are at increased risk of poverty and homelessness (Finkenauer *et al.*, 2012).

Sub-theme - Care-giving: We found that older trans individuals as care-givers were conspicuous by their absence from the identified literature, despite reports in the broader LGBT literature that LGB and T individuals may be more likely to take on a caring role than non-LGBT individuals (Shiu, Muraco & Fredriksen-Goldsen, 2016). Where people rely on friends as care-givers (Hines, 2007), those friends are likely to be of a similar age – and may be limited in their ability to provide long-term care and support because of their own health issues.

4. *Positive practice in health and social care*

Taking a life course perspective involves aiming to understand individuals in terms of their family and personal history, prior life experiences, psychosocial context, broad socio-historical context and relational context, all of which affect physical and mental health, and well-being in later life (Latham and Barrett, 2015b; Porter *et al.*, 2016; Siverskog, 2014; Walker, Cohen and Jenkins., 2016; Walker, Powers and Witten., 2017; Witten, 2014). Health and social care systems are often perceived as inflexible by those who use them, and a life

course perspective to some extent mitigates inflexibility. However, questioning by practitioners needs to be respectful, sensitive, non-intrusive, sympathetic to the possibility/likelihood of adverse prior experiences, and proportionate to the context (Porter *et al.*, 2016). Porter *et al.* (2016) recommend *an attitude of cultural humility and an accepting non-judgemental stance* (p.377) on the part of providers/ practitioners, and define cultural humility in terms of a relational stance that is *other-oriented* in relation to aspects of cultural identity most important to the individual concerned.

Other suggestions for positive practice include the following (Ansara, 2015; Bachmann and Mussman, 2015; Latham and Barrett, 2015*b*; Porter *et al.*, 2016; Siverskog, 2014; Walker, Powers and Witten, 2017): avoiding unnecessary and/or intrusive questioning; attention to how staff use language (e.g. avoiding the use of incorrect pronouns and names); gender neutral restroom facilities; agencies displaying material to show that they aspire to be trans friendly; policies appropriately recognising non-biological kin; and both cultivating and advertising links with local community groups. Table 2 summarises some of the positive/affirming practice suggestions in the literature.

Future planning is an aspect of positive practice in relation to physical and mental health and social care. Fredriksen-Goldsen and colleagues (2014) found that older trans people in the USA were less likely to have put in place arrangements for power of attorney and less likely to have written Wills. Latham and Barrett (2015*c*) stress the need to document future health care and personal care wishes in an advance care plan as early as possible in order to ensure that one's rights are upheld. This is particularly important in relation to end of life care: there is a major anxiety for some people about being mis-gendered at end of life and/

or after death, and narrative accounts of families/ others imposing their own wishes and not respecting what an individual wanted (Latham and Barrett, 2015a, 2015c; Llorente, 2018). Witten (2014) asserts that some trans individuals consider self-euthanasia or suicide as an alternative to the possible indignities they fear at the end of life. Planning ahead may be a way of ensuring that one's wishes (including those related to gender identity) are respected at the end of life. Legal issues include advance directives, powers of attorney and Wills (Porter *et al.*, 2016; Witten, 2014).

5. *Training and education of staff at all levels*

Training and education contribute to positive practice and were a prominent theme in the literature reviewed.

In the past trans people have, not uncommonly, been put in the tricky position of educating health and social care professionals they work with (Latham and Barrett, 2015a, 2015b; Porter *et al.*, 2016; Siverskog, 2014). They may have had to come out as trans to health and social care providers despite not seeing their trans status as relevant to their health and/or social care needs (Latham and Barrett, 2015b). Porter *et al.* (2016) point out that a third of US and Canadian medical school curricula require zero clinical hours on LGBT healthcare.

It is not surprising then that training and educating staff is widely regarded as both helpful and important in the literature reviewed and this applies across health and social care (Fredriksen-Goldsen *et al.*, 2014; Mahan *et al.*, 2016; Siverskog, 2014; Waling *et al.*, 2019; Walker, Powers and Witten, 2017). Training is understood to indicate, as a minimum, that agencies recognise the importance of gender diversity and acknowledge the need to train

their staff in order to provide non-discriminatory care for trans service users. At best it indicates that older trans service users will receive respectful affirming care. Whether training changes attitudes and behaviours and how it changes practice remains to be established.

The literature identifies a need for training and education in a number of areas, including: current definitions, concepts, terminology, and trans issues relevant to practice (Bachmann and Mussman, 2015; Warren and Steffen, 2018); knowledge and skills regarding trans-inclusive care across all health and social care staff and professions (Finkenauer *et al.*, 2012; Waling *et al.*, 2019); a life course/ biographical approach to care (Porter *et al.*, 2016); organisational leadership (Latham and Barrett, 2015a); co-design approaches to involving trans service users at all levels (Michael *et al.*, 2018).

Conclusions

Limitations of this review include the following: non-English papers were excluded; most of the literature is North American; some papers have few participants; and many of the papers underrepresented certain groups, including trans people of colour. These limitations have implications with regard to the application and generalisability of our findings and support the need for further research. Despite these limitations we draw conclusions in three broad areas: research and teaching/ training; practice; and societal.

With regard to research, we located relatively few papers specifically focused on older trans adults and fewer papers still originated from the UK. There is a need for more research in

this area to inform training and clinical practice. We suggest that priority research topics might include investigating what services for older adults can do differently and evaluating what difference changes make to people using those services. Although training is commonly regarded as helpful and important, there is less clarity about how and when training should be carried out and what difference it makes. How are doctors, nurses, social care professionals and others who are training currently informed and educated about issues affecting older trans adults and their care and support? Involving older trans people in training is likely to be more powerful than professionals running training on their own. In reviewing these papers, we found powerful accounts of people's experiences in social and health care related to gender variance. It remains to be established whether training changes people's prejudices, attitudes and practice, or whether people learn that their attitudes are unacceptable and hide them more effectively.

Specific areas for further research are care-giving, dementia and end of life care. The literature suggests that there are differences in care-giving amongst older trans adults and for them to have equal access to supportive services (which may be more necessary when they are estranged from family) these differences need to be better understood. There is also evidence that older trans people have specific concerns about dementia and end of life care: to provide good and equitable care, organisations providing services need to ensure that their staff are aware of these and that the concerns are addressed appropriately.

With regard to practice, the practical suggestions in the literature for combatting prejudice and making people feel more welcome are a useful starting point. Older adult health and social care services are familiar with the concept of person-centred care (Brooker, 2007;

Bridges et al, 2009; Edvardsson, 2015; Nolan et al, 2006) and the benefits of taking a life course perspective (Jones et al., 2019). The evidence for, and argument in favour of, an approach of cultural humility is strong, and fits with these established philosophies. The trans-inclusive practices identified in Table 2 fit with these approaches. Staff who connect with the concerns and experiences of older trans people are likely to provide more appropriate and tailored care.

The reviewed literature highlights the complex relationship between mental health and gender variance, reflecting the uncomfortable relationship between psychiatric diagnosis and societal attitudes and beliefs and the possible assumptions made in relation to cause and effect. Furthermore, it highlights particular physical healthcare issues and the need to acknowledge the power of historical experiences that may still influence people many years later. It raises questions about how best to provide person-centred health and social care for older trans people. Our view is that all services should be equipped to provide appropriate care but there may also be a need for some specialist health and social care. There is little to guide us on this in the existing literature.

Of course, it is impossible to separate what is happening at the level of service provision from the broader societal changes taking place. How these broader changes in understanding of and acceptance of gender variance are influencing service users and service providers, both organizationally and as individuals, is unclear. The evidence shows there is still much work to be done to ensure that older trans people have access to culturally appropriate and welcoming services, and we commend the trans-inclusive positive practices identified in Table 2 as useful starting points for services.

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Declaration of contribution of authors

Statement of conflicting interests

The authors have no conflicting interests to declare.

Note

The authors have chosen to use the style 'trans' in this paper in response to comments from service users.

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Prepublication version

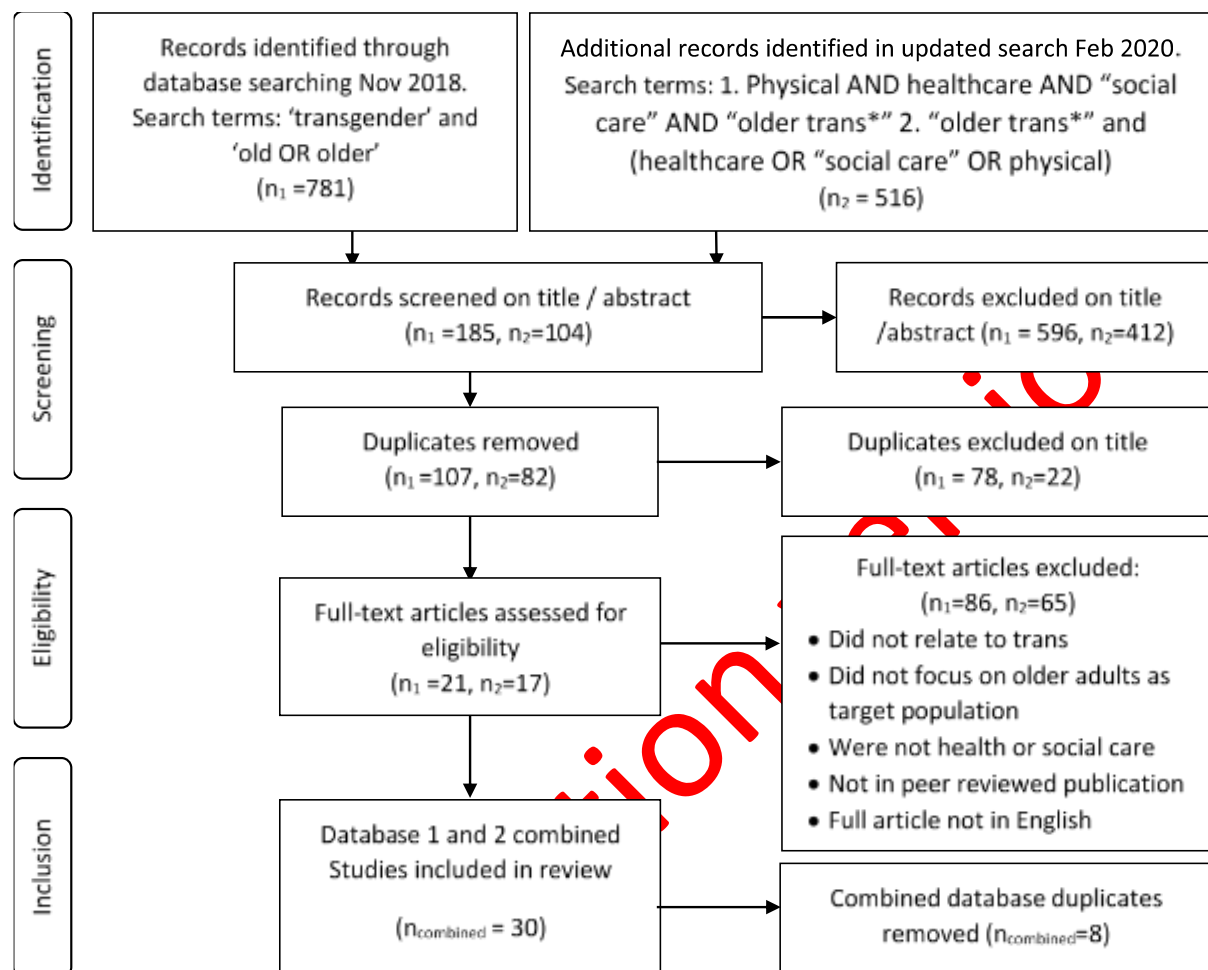


Figure 1: Literature search results

No	Authors	Year	Country of origin	Title	Type of paper	Number of participants (n/a = not applicable)	Age of participants (in years)	Culture/ ethnicity of participants	Comments
1	Ansara	2015	Australia	Challenging cisgenderism in the ageing and aged care sector: Meeting the needs of older people of trans and/or non-binary experience	Theoretical	n/a	n/a	n/a	Aimed at aged care sector service providers
2	Bachmann & Mussman	2015	USA	The aging population: imperative to uncouple sex and gender to establish "gender equal" health care	Literature review	n/a	n/a	n/a	Literature review focused on transgender medicine
3	Baril & Silverman	2019	Canada	Forgotten lives: Trans older adults living with dementia at the intersection of cisgenderism, ableism/ cogniticism and ageism	Theoretical	n/a	n/a	n/a	Theoretical approaches to managing dementia
4	Bouman et al	2016	Europe	Sociodemographic Variables, Clinical Features, and the Role of Preassessment Cross-Sex Hormones in Older Trans People	Research - quantitative	71	50+	98.6% white 1.4% other	Questionnaire based survey of Gender Identity Clinic attendees
5	Ettner & Wylie	2013	USA/ UK	Psychological and social adjustment in older transsexual people	Case based	n/a	n/a	n/a	Interventions based on

									fictitious case vignettes
6	Fabbre	2014	USA	Gender Transitions in Later Life: The Significance of Time in Queer Aging	Research - qualitative	22	50+ Range 50+ to 82	18 European American; 3 African American; 1 Asian American	Qualitative analysis of interviews - applied to gerontological social work
7	Fabbre	2015	USA	Gender Transitions in Later Life: A Queer Perspective on Successful Aging	Research - qualitative	22	50+ Range 50+ to 82	As above	Qualitative analysis of interviews - applied to gerontology
8	Ferron et al	2010	USA	Integrated care of an aging HIV-infected male-to-female transgender patient	Case based	1	68	Hispanic	Case study
9	Finkenauer et al	2012	Canada	When injustice gets old: A systematic review of trans aging	Literature review (34 articles)	n/a	n/a	n/a	Systematic review of trans ageing – themes policies & practice in healthcare; & HIV
10	Fredriksen-Goldsen et al	2014	USA	Physical and Mental Health of Transgender Older Adults: An At-Risk and Underserved Population	Research - quantitative	174	50+	79.1% non-Hispanic white; 7% Native American;	Survey of over 50s using standardised measures

								4.7% African American; 3.5% Hispanic; 2.3 % multi-racial; 1.7% Pacific Islander; 1.7% other.	
11	Gooren & T'Sjoen	2018	Europe	Endocrine treatment of aging transgender people	Literature review	n/a	n/a	n/a	Summarises literature on topic
12	Hoy-Ellis & Fredriksen-Goldsen	2017	USA	Depression Among Transgender Older Adults: General and Minority Stress	Research - quantitative	174	50+ (range 50-86)	82% non-Hispanic white; 7.3% American Indian; 4.9% Black; 1.8% Asian/ Pacific Islander.	Subset of larger LGBT survey using standardised measures
13	Hoy-Ellis et al	2017	USA	Prior Military Service, Identity Stigma, and Mental Health Among Transgender Older Adults	Research - quantitative	183	50+	68.0% non-Hispanic white; 32.0% People of colour	Subset of larger LGBT survey using standardised measures
14	Johnson et al	2018	USA	Gay and Gray Session: An Interdisciplinary Approach to Transgender Aging	Literature review	n/a	n/a	n/a	Review focused on mental health care
15	Latham & Barrett	2015a	Australia	We're people first... Trans Health and Ageing An	Research - qualitative	15	Range 49-79	Not stated	Based on interview

				evidence-based guide to inclusive services					with 15 trans individuals – focus on health & care needs
	Latham & Barrett	2015b	Australia	Gender is just part of who I am. Stories from Trans Australians: Exploring the experiences and needs of trans people for health and aged care services	Research qualitative				Accounts of people's stories taken from the interviews above
	Latham & Barrett	2015c	Australia	We're people first ... Trans Health and Ageing: Summary An evidence-based guide to inclusive services	Research qualitative				Summary of the above 2 documents
16	Llorente	2018	USA	Transitioning the Healthcare System to Effectively Work with Older Transgender Persons	Opinion	n/a	n/a	n/a	Summary and opinion
17	Mahan et al	2016	USA	Drug Therapy for Gender Transitions and Health Screenings in Transgender Older Adults	Summary	n/a	n/a	n/a	Summarises what is known on topic
18	Marshall et al	2015	Canada	Gender Dysphoria and Dementia: A Case Report	Case based	1	94	British origin	Single case history
19	Michael et al	2018	Australia	Supporting Aged Care Workers to Understand and Respond to the	Quality improvement project	n/a	n/a	n/a	Quality improvement project to

				Needs of Transgender People: A co-designed quality improvement initiative					develop resources with trans partners
20	Page et al	2016	UK	Transgender, Mental Health, and Older People: An Appreciative Approach Towards Working Together	Research - qualitative	n/a	n/a	n/a	Used appreciative enquiry to identify organisational vision
21	Pang et al	2019	Canada	Later Life Care Planning and Concerns of Transgender Older Adults in Canada	Research - qualitative	24	Range 55-89	100% white Canadians of European descent	Subset of larger LGBT project. Focus group & interviews focused on later and end-of-life.
22	Porter et al	2016	USA	Providing Competent and Affirming Services for Transgender and Gender Nonconforming Older Adults	Summary	n/a	n/a	n/a	Focus on APA guidelines for psychological practice
23	Redman	2011	USA	Fear, discrimination and abuse: Transgender elders and the perils of long-term care.	Opinion	n/a	n/a	n/a	Opinion – based on interview with trans activist

24	Siverskog	2014	Europe	"They Just Don't Have a Clue": Transgender Aging and Implications for Social Work	Research - qualitative	6	Range 62-78	Not stated	Qualitative analysis of interviews
25	Waling et al	2019	Australia	Trans Women's Perceptions of Residential Aged Care in Australia	Research - qualitative	10	Range 60-75	Not stated	Qualitative analysis of interviews (n=10)
26	Walker et al	2016	USA	An older transgender woman's quest for identity	Case based	1	70	Caucasian	Single case study
27	Walker et al	2017	USA	Impact of Anticipated Bias from Healthcare Professionals on Perceived Successful Aging Among Transgender and Gender Nonconforming Older Adults	Research - quantitative	384	50+	91.2% White; 2.6% multi-racial; 1.0% Hispanic; 0.5% Black; 0.5% Native American; 4.2% other.	Subset of larger online survey
28	Warren & Steffen	2018	USA	Development of a Transgender and Gender Nonconforming Language Self-Efficacy Scale for Social Service Providers Working With Older Adults	Research - quantitative	n/a	n/a	n/a	Survey of Area Agencies on Aging focused on developing new scale
29	Witten	2014	USA	It's Not All Darkness: Robustness, Resilience, and Successful Transgender Aging	Literature review	n/a	n/a	n/a	Literature review focused on

									transgender ageing
30	Witten	2017	USA	Health and well-being of transgender elders	Summary	n/a	n/a	n/a	Summary of what is known on topic

Table 1: Papers included in the review

Prepublication version

Table 2: Examples of positive practice

Area	Suggested actions
Administrative	Ensure use of an individual's preferred name and pronoun EPR designates preferred name and pronoun Gender inclusive terms used eg partners
Environmental	Gender-inclusive rest rooms Gender-inclusive materials eg posters, magazines in shared/ waiting areas Gender-inclusive material on website Privacy of interview/ treatment rooms
Treatment/ management	Non-intrusive and respectful questioning by practitioners Maintaining a list of trans accepting/affirming resources/clinicians/ practitioners in an area and referring people to them when necessary Information about available community resources Person-centred/ life course/ biographical treatment approach Access to care coordination when appropriate
Staff training	Including gender diversity in equality training for staff Advertising that staff are trained eg on website Encouraging staff to reflect on their own biases/ prejudices
Policies	Recognising non-biological kin and/ or carers Protection from biological kin who disrespect an individual's gender identity Recruiting staff from diverse communities Co-design of policies with a wide range of service users including gender-diverse persons
Service design/ development	Co-design approach to service design and training at all levels involving a wide range of service users, including gender-diverse individuals
Other	Awareness programs for of residential care services Future planning actions eg Powers of Attorney, Wills.