CSIRO PUBLISHING

REVIEW
https://doi.org/10.1071/SH22073

SEXUAL HEALTH

Men of refugee and migrant backgrounds in Australia: a scoping review of sexual and reproductive health research

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Handling Editor:
Lisa McDaid

Received: 3 May 2022
Accepted: 25 September 2022
Published: 20 October 2022

Cite this:
Mengesha Z *et al.* (2023)
Sexual Health, **20**(1), 20–34.
doi:10.1071/SH22073

ABSTRACT

Australia's National Men's Health Strategy 2020–2030 identifies refugee and migrant men from culturally and lingustically diverse backgrounds as priority groups for sexual and reproductive health (SRH) interventions. The paucity of SRH research focusing on refugee and migrant men is a significant gap to advance men's health and policy. Hence, this review aimed to synthesise the available evidence on refugee and migrant men's SRH needs, understandings and experiences of accessing services after resettlement in Australia. A systematic search of peer reviewed literature in PubMed, Scopus, and PsyInfo was made. A World Health Organization framework for operationalising sexual health and its relationship with reproductive health was used to map the identified studies. The socio-ecological framework was applied to thematically synthesise data extracted from individual studies and identify factors that influence the SRH of refugee and migrant men. We included 38 papers in the review. The majority of sexual health studies (16) were about sexually transmitted infections (STIs), mainly HIV (12), followed by sexual health education and information (5) and sexual functioning (3). Reproductive health studies focused on contraceptive counselling and provision (3), antenatal, intrapartum and postnatal care (1) and safe abortion care (1). Several factors influenced refugee and migrant men's SRH, including a lack of access to SRH information, language barriers and stigma. We found that SRH literature on refugee and migrant men focuses on STIs, meaning other areas of SRH are poorly understood. We identified key gaps in research on experiences of, and access to, comprehensive SRH care.

Keywords: Australasia, health promotion, health services, men, migrant and mobile populations, refugee, reproductive health, sexual health.

Background

Involving men in sexual and reproductive health (SRH) programs and discussions is widely recommended by global health policies to improve pregnancy, maternal and child health outcomes.[1,2] Traditionally, SRH research has disproportionally focused on women,[3] and where men have been included, representation of those from refugee and migrant backgrounds is minimal.[4] The invisibility of men from SRH research has several implications. First, designing gender sensitive SRH care would be difficult without understanding their specific needs and experiences with access to health care.[5] Second, health promotion efforts, SRH policies and clinical practice are unlikely to be tailored to the needs of men, resulting in limited SRH literacy and poor engagement with help seeking behaviours.[6] This results in lower uptake of preventative health behaviours including screening for sexually transmitted infections (STIs) and contraception use for pregnancy prevention, with implications for the lives of both men, women and their families.[4] Third, there will be poor acknowledgement of the role that men may have in women's health, which is important to engage men as supportive partners in improving contraceptive use, family planning and other SRH outcomes of women.[7]

The focus of this review is culturally and linguistically diverse men from refugee and migrant backgrounds. In Australia, people from refugee and migrant backgrounds experience inequitable health outcomes, with one major inequity being SRH.[8]

Specifically, men have unique SRH needs upon arrival, including higher rates of STIs and HIV infections.[9] Sexual violence and trauma are also prevalent problems affecting men.[10] While, they may be offered a range of SRH services during and after resettlement to meet these needs, resettlement demands are generally prioritised over SRH issues, with focus given to competing practical and social needs such as housing, employment, and childcare responsibilities.[11] The high burden of mental health illness among refugee men may lead to a delay in seeking care for SRH issues.[12] Given these inequities migrant and refugee men have been identified as priority groups in Australia's National Men's Health Policy[13] and Men's Health Strategy 2020–2030.[14]

Refugee and migrant men and women have different SRH care needs and preferred sources of care after resettlement. For example, in one study, men reported to prefer peer and online sources for SRH information,[15] while women may talk with their close family members[16] or would like to access groups sessions.[17] In addition, men have stressed concerns about confidentiality when accessing SRH care, whereas women identified shame and embarrassment when discussing sexual health with service providers.[16] These differences suggest the need to design gender sensitive SRH interventions. However, the degree of health and SRH evidence needed to design policy and health promotion interventions for men from refugee and migrant backgrounds is limited.[6,18] This review aimed to synthesise the available evidence on refugee and migrant men's SRH needs, understandings, and experiences of accessing services after resettlement in Australia. Exploring existing SRH literature and identifying gaps in current knowledge will help to identify areas of future research and service provision to meet the needs of refugee and migrant men whose perspectives and experiences are often neglected in mainstream SRH programs and research.[3]

Materials and methods

This scoping review adhered to the systematic review processes and standards described in the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA).[19] The review addressed two research questions: (1) what is the published evidence of needs, understanding and experiences of refugee and migrant men in Australia in relation to their access to SRH care and factors influencing this? and (2) what are the gaps in this evidence?

Search strategy

We developed the search strategy based on the SRH definitions of the World Health Organization (WHO)[20] and a previous systematic review investigating refugee and migrant women's SRH.[21] The search terms covered the following SRH topics: SRH, sexual health and relationships, pregnancy, fertility, abortion, contraception, family planning, sexually transmitted infections, sexual and intimate partner violence and marriage.

The search strategy (Table 1) used the following format: Australia and (focus population terms) and (men related terms) and (SRH related key words). We included peer reviewed literature published between 2000 and 2021 and searched three major databases: Scopus, PubMed, PsycInfo. We also searched for literature in Google, Google Scholar and websites of organisations involved in SRH care research and service delivery for refugees and migrants in Australia. Reference lists of articles included in this review were screened to identify further potential articles. These steps were conducted to make sure that the review was as comprehensive as possible in identifying all relevant articles that examined the SRH of migrant and refugee men in Australia.

Inclusion and exclusion criteria

Australian studies that examined the SRH needs, care access experiences and outcomes of men from refugee and migrant backgrounds were included. We use the term men to include all men, including cis-gendered men (gender identity and sex assigned at birth are the same) and trans men. We were also interested in men across differing sexualities, including gay, bisexual and heterosexual identifying men. We included studies that involved both men and women but provided results disaggregated by gender, as originally only 11 papers exclusively focused on men. Studies published in English and involved qualitative, quantitative, and mixed method designs were included. Articles were excluded if they: (1) were commentaries, reviews, letters, or books; (2) focused on women; (3) focused on Australian-born men; (4) were conducted outside of Australia; (5) did not involve empirical research methodology; and (6) SRH was not the primary focus. The PRISMA flow diagram (Fig. 1) provides reasons for exclusion.

Data extraction and synthesis

All papers identified from the systematic search were downloaded and saved into an Endnote library for title and abstract screening using the inclusion and exclusion criteria. Two authors (ZM and AJH) independently conducted primary screening and full-text review of the articles. Results were cross-checked and differences were discussed and resolved. The fourth author (JMU) was continuously consulted over the review process when there was no agreement between ZM and AJH. A diverse range of articles involving a range of methodologies covering several areas of migrant and refugee men's SRH were identified. Data were then extracted from the studies selected for inclusion using a template developed for this purpose. Extracted data

Table 1. Search strategy.

Place	(TITLE-ABS-KEY (Australia)
Population	AND (TITLE-ABS-KEY ('refugee*' OR 'asylum seeker*' OR 'migrant*' OR 'ethnic minorities' OR 'culturally and linguistically diverse' OR 'undocumented migrants' OR 'immigrant*')
Men	AND (TITLE-ABS-KEY (men OR male OR boys OR youth OR father OR young))
Topic	AND (relationship OR 'healthy relationships' OR 'forced marriage' OR 'arranged marriage' OR 'health promotion' OR 'education program' sexual OR 'sexual health' OR 'sexual behaviour' OR 'sexual activity' OR sex OR sexuality OR 'sexual intercourse' OR 'sexual wellbeing' OR 'sexual relationship' OR 'sexual health beliefs' OR 'sexual practices' OR 'sexual dysfunction' OR reproductive OR 'reproductive health' OR reproduction OR 'reproductive health beliefs' OR 'sexual and reproductive health' OR 'sexually transmitted infection' OR sti OR 'sexually transmitted disease' OR std OR 'venereal diseases' OR 'human immunodeficiency virus' OR hiv OR 'acquired immune deficiency syndrome' OR aids OR chlamydia OR gonorrhoea OR syphilis OR contraception OR 'family planning' OR 'emergency contraceptive' OR 'oral contraceptive' OR condom OR 'contraceptive education' OR 'contraceptive counselling' OR 'unintended pregnancy' OR abortion OR 'induced abortion' OR 'sexual violence' OR 'intimate partner violence' OR infertility OR fertility OR 'reproductive medicine' OR parenthood OR birth OR pregnancy OR miscarriage))

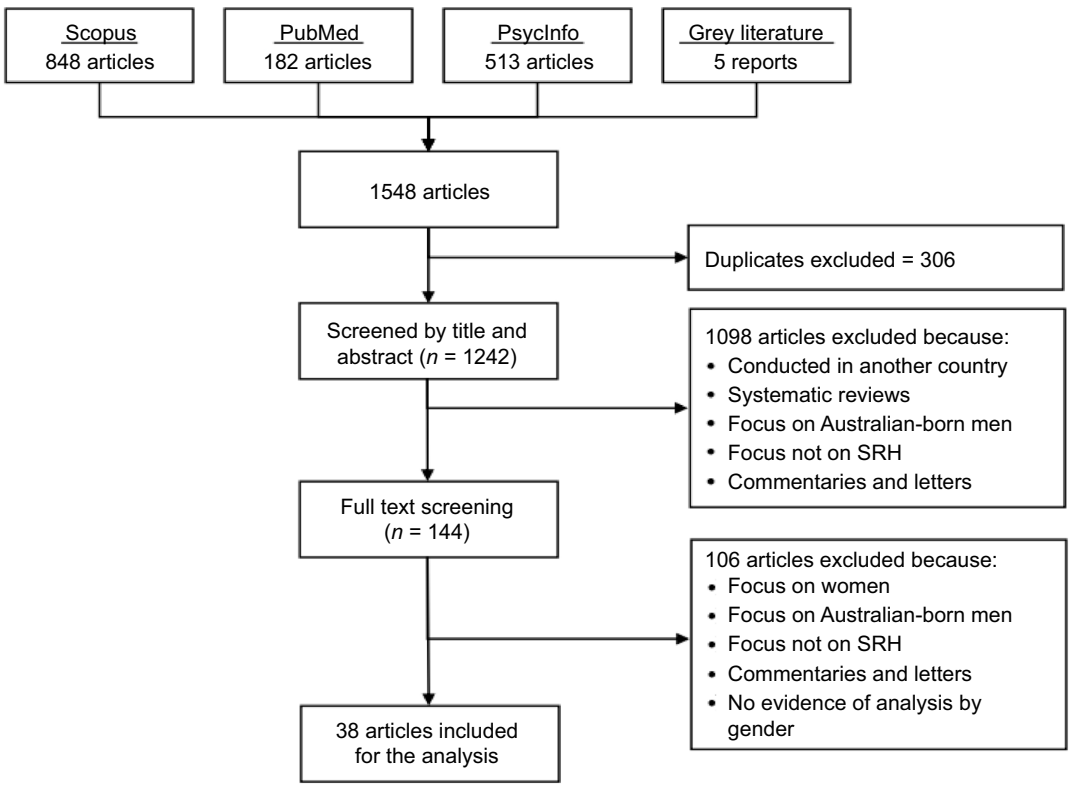

Fig. 1. PRISMA flow diagram.

included: first author, year, population category, research question/objective, study design, data collection approaches, SRH services referred in the study and summary results.

A framework developed by the WHO for operationalising sexual health and its relationship with reproductive health[20] was used to map the studies included in this review (Fig. 2). The framework was developed to explain the intertwined nature between sexual health and reproductive health and ensure both sexual health and reproductive health receive full attention in research and programming for all population groups. In addition to the eight topics from this framework, intimate marital relationship and reproductive cancers were added, as these two are integral parts of SRH. The remaining studies that broadly explored SRH were categorised under 'other'. The analysis was informed by the socio-ecological framework that provides a multi-level lens to understanding and addressing disparities in health care access and outcomes.[22] The framework is useful to understand the complexity of accessing SRH care in the context of migration to a new country.[23] Accordingly, the results from each article were coded and synthesised using the five levels of the socio-ecological framework: (1) individual such as health literacy and socio-economic factors; (2) interpersonal, which examines encounters of men with health care

Fig. 2. Framework for operationalising sexual health and its linkages to reproductive health[20] (blue and orange ribbons represent sexual health and reproductive health, respectively).

providers and close family members; (3) organisational, which included formal and informal rules that guide health service provision; and the larger influence of (4) the community; and (5) policies.

Results

The systematic search resulted in a total of 1548 articles, and after 306 duplicate removals, 1242 remained for title and abstract screening. Of these, 144 were included for full-text screening. Finally, we included 38 articles that met the inclusion criteria (Fig. 1). The characteristics of the 38 included articles are summarised in Table 2. Eighteen studies adopted qualitative methods, 17 studies quantitative designs and three studies mixed method approaches. Eleven studies exclusively focused on men and 27 studies involved both men and women.

Fig. 3 presents the number of studies grouped by SRH topics from the WHO framework. We identified 24 studies that examined the sexual health of refugee and migrant men in Australia. The majority of sexual health studies (n = 16) explored STIs, namely HIV (12), hepatitis B (3), and safe sexual practices (1). Five studies explored the topic of education and information including refugee and migrant men's knowledge, attitude and behaviours, and

Table 2. Characteristics of included studies.

Author	Year	Focus population (refugee/ migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/ objective	Major finings
Agu *et al.*[24]	2016	Migrants	Sexual health	Qualitative (key informant interviews and focus group discussions (FGDs) ($n = 45$)	To explore barriers and enablers to accessing sexual health services	Barriers and enablers to help seeking behaviours were socio-cultural and religious influence, financial constraints, and knowledge dissemination to reduce stigma
Blackshaw *et al.*[25]	2019	Men who have sex with men (MSM) diagnosed with HIV	HIV and other sexually transmissible infections	Quantitative (medical record data $n = 111$)	Compare the behavioural characteristics of Asian and Australian-born men living with HIV	Asian men reported fewer male sexual partners within 12 months, were less likely to have tested for HIV previously and had a lower median CD4 count
Blondell *et al.*[26]	2021	Migrants	HIV and other sexually transmissible infections	Qualitative (semi-structured interviews) ($n = 10$)	Examine the (un)acceptability, barriers and facilitators to newer HIV testing approaches	Provider-initiated testing and counselling and HIV rapid testing by a doctor were considered to facilitate HIV testing
Botfield *et al.*[27]	2020	Migrants and refugees	Abortion	Qualitative (semi-structured interviews) ($n = 27$)	Explore views and experiences regarding unintended pregnancy and abortion	Pregnancy outside marriage was described as a shameful prospect as it revealed pre-marital sexual activity. Many participants would find an abortion preferable to continuing an unintended pregnancy outside marriage even if abortion was described as culturally and/ or religiously unacceptable
Botfield *et al.*[28]	2018	Migrant and refugee	SRH	Qualitative (semi-structured interviews) ($n = 27$)	To explore the complexities and opportunities for SRH information and care engagement	Understanding generational difference is significant to engaging young people from refugee and migrant backgrounds in SRH care
Botfield *et al.*[29]	2018	Migrants and refugees	Education and information	Qualitative (semi-structured interviews) ($n = 27$)	To explore the complexities and opportunities for SRH information and care engagement	Young people reported that they were unable to discuss sexuality or sexual health with their parents. Participants appeared to have limited awareness of the different services available to them
Dean *et al.*[30]	2017	Refugees	Education and information	Qualitative (interviews and FGDs) ($n = 30$)	Understand factors perceived to influence sexual health and wellbeing	Sexual health knowledge, attitudes, beliefs and sexual behaviour change after resettlement and creates intergenerational discord and family conflict
Dean *et al.*[31]	2017	Refugees	Education and information	Quantitative survey ($n = 229$)	Explore sexual health knowledge, attitudes, and behaviours	STI and HIV knowledge scores were generally low but improve the longer participants had lived in Australia. Participants also had low levels of risk-taking behaviour
Ellawela *et al.*[32]	2017	Migrants	Contraception counselling and provision	Quantitative (survey, $n = 2377$)	Investigate contraceptive use among Sri Lankan migrant women and men	Sri Lankan men are more likely to report difficulty in obtaining helpful contraception information compared to Sri Lanka women and Australian, men and women
Gray *et al.*[33]	2018	Migrants	HIV and other sexually transmissible infections	Quantitative (cross-sectional survey) ($n = 209$)	Examine HIV knowledge and use of health services	Men were more likely to report not being able to find a doctor that understood their culture as a barrier compared to women
Gray *et al.*[34]	2019	Migrants	HIV and other sexually transmissible infections	Qualitative (FGDs) ($n = 77$)	Identify barriers to HIV testing and the acceptability of new testing methods	Barriers to HIV testing include cost and eligibility of health services, low visibility of HIV in Australia, HIV-related stigma, and missed opportunities by general

(*Continued on next page*)

Table 2. (*Continued*).

Author	Year	Focus population (refugee/ migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/ objective	Major finings
						practitioners. Participants had low levels of knowledge on where to test for HIV and the different methods available
Gunaratnam *et al.*[35]	2019	Migrants vs Australian-born people	HIV and other sexually transmissible infections	Quantitative (national HIV registry data) (n = 8834)	Examine trends in new HIV diagnoses by country of birth	Average annual HIV diagnosis rate per attributed to male-to-male sex was significantly higher in men born in south-east Asia and Americas
Herrmann *et al.*[36]	2012	Temporary and permanent residents	HIV and other sexually transmissible infections	Mixed methods (qualitative interviews + clinical data from patient records) (n = 22)	Understand the impact of HIV and issues of access and adherence to antiretroviral therapy (ART)	Adherence to HIV treatment was excellent and self-reported side-effects were relatively infrequent. Participants applying for visa continuations and permanent residency were fearful, believing their HIV serostatus would prejudice their applications
Hibbins[37]	2005	Skilled migrants	Sexual function and psychosexual counselling	Qualitative (semi-structured in-depth interviews (n = 40)	Understand effects of migration on constructions of masculinities	Migrants displayed qualities of hegemonic masculinity and they placed little emphasis on sexual prowess and performance
Hoogenraad[38]	2021	Migrants	Intimate relationships	Qualitative (interviews) (n = 36)	Examine experiences of cross-cultural marriage to Australian women	Marriage migration undermined their sense of self and understanding of what it means to be a man and a husband
Ilami and Winter[39]	2020	Migrants	SRH	Qualitative (semi-structured interviews) (n = 10)	Investigate perceptions and experiences in accessing SRH care	Barriers to SRH care access include feeling of being insufficient, lack of trust, credibility, safety, and confidentiality, and pre-established beliefs and feelings
Khawaja and Milner[40]	2012	Refugees	Intimate relationships	Qualitative – focus groups (n = 13)	Explore the impact of acculturation stress on marital relationship	The management of finances and lack of family and social support were the major issues causing conflict between couples
Körner[41]	2007	Migrants	HIV and other sexually transmissible infections	Qualitative (in-depth interviews) (n = 29)	Examine circumstances of late HIV diagnosis	Regular HIV tests were the exception in this group. Testing was usually motivated by a serious health crisis. Late HIV diagnosis is explained by complex sets of social and cultural relations
Marukutira *et al.*[9]	2020	Migrants	HIV and other sexually transmissible infections	Quantitative (national HIV registry data)	Compare HIV diagnosis and care access between migrant and non-migrant populations	Majority of migrant men infected through male-to-male exposure. Migrant men reporting male-to-male HIV exposure had lower HIV diagnosis and retention than non-immigrants
Marukutira *et al.*[42]	2020	Migrants	HIV and other sexually transmissible infections	Quantitative (national HIV registry data) (n = 8340)	Examine trends in late and advanced HIV diagnoses	Findings showed an upwards trend in the proportion of late diagnoses among migrants reporting male-to-male sex exposures
McMichael and Gifford[11]	2009	Refugees	Education and information	Qualitative research (FGDs and in-depth interviews) (n = 142)	To explore and describe how resettled youth access, interpret and implement sexual health information	Young people had little knowledge of sexual health or STIs apart from HIV/ AIDS. Concerns about confidentiality, shame and embarrassment when discussing sexual health, and the competing demands of resettlement are barriers to learning about sexual health
McMichael and Gifford[43]	2010	Refugees	Education and information	Qualitative research (FGDs and in-depth interviews) (n = 142)	To explore how resettled youth access, interpret and	Young people had some knowledge of HIV and AIDS, but knowledge of other STIs was limited. Narratives about risk

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Table 2. (*Continued*).

Author	Year	Focus population (refugee/ migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/ objective	Major finings
					implement sexual health information	and protection were informed by concerns for maintenance of social wellbeing
Medland *et al.*[44]	2018	Migrants	HIV and other sexually transmissible infections	Quantitative (data extracted from HIV test records) (n = 12 180)	Examine differences in incident HIV infection between newly-arrived Asian-born and other men who have sex with men	Being newly-arrived Asian-born was associated with an increased odds of diagnosis of incident HIV infection. The incidence of HIV in newly arrived Asian-born MSM remains high
Muchoki[45]	2015	Refugees	Intimate relationships	Qualitative (key informant interviews and FGDs) (n = 50)	Explore the experiences men with intimate relations	Men had to adjust to new ways of pursuing intimate relationships in Australia
Persson *et al.*[46]	2014	Minority groups	HIV and other sexually transmissible infections	Quantitative (national surveillance data) (n = 9875)	Outline recent trends in heterosexually-acquired HIV infection in NSW	Men far outnumbered women in heterosexual exposure category and tended to be diagnosed in their mid-to-late 1940s, compared with early 1930s for women
Ramanathan and Sitharthan[47]	2014	Migrants	HIV and other sexually transmissible infections	Quantitative (survey) (n = 184)	Measure the frequency of use of different safe sex practices	One in two men surveyed, agreed that it is difficult for them to discuss safe sex issues with their sexual partners. One in men participated reported that they never insist on condom use when having sexual intercourse
Ramanathan *et al.*[48]	2013	Migrants	Sexual function and psychosexual counselling	Quantitative (survey) (n = 225)	Explore help-seeking attitudes	Men preferred to seek help from medical doctors. Young (18–25 years) Indian men were three times more likely to prefer a specialist medical doctor than older men
Ramanathan *et al.*[49]	2014	Migrants	Sexual function and psychosexual counselling	Quantitative (survey) (n = 268)	Investigate masturbatory behavioural patterns and feelings	A large proportion (79%) of the participants reported that they currently masturbate. A high proportion these men said that they experienced positive feelings when masturbating
Riggs *et al.*[15]	2016	Refugees	Antenatal, intrapartum and postnatal care	Qualitative (semi-structured interviews and focus groups) (n = 50)	Investigate perceptions regarding fatherhood	Afghan men reported playing a major role in supporting their wives during pregnancy and postnatal care by accompanying their wives to appointments and providing language and transport support
Russo *et al.*[50]	2020	Refugees	Contraception counselling and provision	Qualitative (interviews and FGDs) (n = 77)	Explore how family planning is valued and negotiated in Western contexts	Participants indicated a preference for two or three children and were open to using modern contraception
Shahid and Rane[51]	2017	Migrants	FGM	Quantitative (survey) (n = 67)	Examine attitudes about female genital mutilation (FGM)	About a quarter of participants believed that FGM should be allowed under Australian law. Participant perceptions on FGM were amenable to change through educational interventional strategies
Sievert *et al.*[52]	2018	Refugees	HIV and other sexually transmissible infections	Mixed methods (survey + semi-structured interviews) (n = 26)	Understand barriers to accessing testing and treatment for chronic hepatitis B	Language and cultural barriers were commonly reported as obstacles and impeded participants abilities to fully understand the information explained to them

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Table 2. (*Continued*).

Author	Year	Focus population (refugee/ migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/ objective	Major finings
						Poor engagement with healthcare before arrival in Australia. Most of them first knew their hepatitis B virus status upon entry to Australia
Sievert *et al.*[53]	2018	Refugees	HIV and other sexually transmissible infections	Mixed methods (survey + semi-structured interviews) ($n = 35$)	Evaluate the impact of a peer education intervention (radio education and community form)	Participants demonstrated a significant improvement in chronic hepatitis B knowledge between pre- and post-forum surveys
Vu *et al.*[54]	2012	Migrants	HIV and other sexually transmissible infections	Quantitative (survey) ($n = 875$)	Examine hepatitis B knowledge and actions	Males had lower knowledge about the sexual transmission risk than females and those younger than 40 years were less likely to be aware of this risk than the older people
Weber *et al.*[55]	2009	Migrants	Cancer	Quantitative (self-administered questionnaire) ($n = 31\,401$)	Examine the distribution of bowel, breast and prostate cancer test use by place of birth and years since migration	Only men from East Asia had significantly lower prostrate-specific antigent testing rates than Australian-born men. Cancer test use among migrants approached Australian-born rates as the number of years lived in Australia increased
Weber *et al.*[56]	2014	Migrants	Cancer	Quantitative (self-administered questionnaire) ($n = 48\,642$)	Examine differences in migrants' cancer screening participation by place of birth and residence	Men born in East Asia were 32% less likely to have been tested for prostate cancer
Weston *et al.*[57]	2002	Migrants	Contraception counselling and provision	Quantitative ($n = 194$)	Assess potential uptake of male hormonal contraception by migrant fathers	Migrant groups are less enthusiastic about novel potential male hormonal contraception compared to Australian born fathers
Woolley and Bialy[58]	2012	Migrants	HIV and other sexually transmissible infections	Case study ($n = 3$)	Identify risk factors for non-adherence	Visiting friends and relatives in countries of origin and migration is a risk factor for non-adherence for HIV-positive travellers Travel may be a significant risk factor for non-adherence

their experiences of accessing, interpreting and applying sexual health information. In addition, we found three studies dealing with sexual functioning (construction of sexuality, masturbatory behaviours and help seeking preferences); three studies that examined intimate marital relationships in the context of migration to a new country, and two studies on screening behaviours for SRH cancers.

We also found five studies dealing with refugee and migrant men's reproductive health: contraception counselling and provision (3), antenatal, intrapartum and postnatal care (1), and safe abortion care (1). We found no studies focusing on SRH in the context of gender-based violence prevention, support and care among refugee and migrant men in Australia. Finally, four studies that do not have a specific focus were grouped as 'others' (female genital mutilation (1), general SRH (2) and sexual health (1)). In the presentation of the analysis below, we describe how the identified socio-ecological factors were understood to impact SRH needs, understanding and experiences of accessing services by refugee and migrant men in Australia (Fig. 4).

Individual level

The burden of HIV

Studies included in the review show that men bear the majority of HIV cases among the refugee and migrant population in Australia, with the main route of transmission being among men who have sex with men (MSM).[9] Rates of male-to-male HIV exposure and late HIV diagnosis showed an increasing trend between 2006 and 2015,[35,42] with higher rates identified among migrant and refugee men compared to Australian-born men.[35] In contrast, refugee

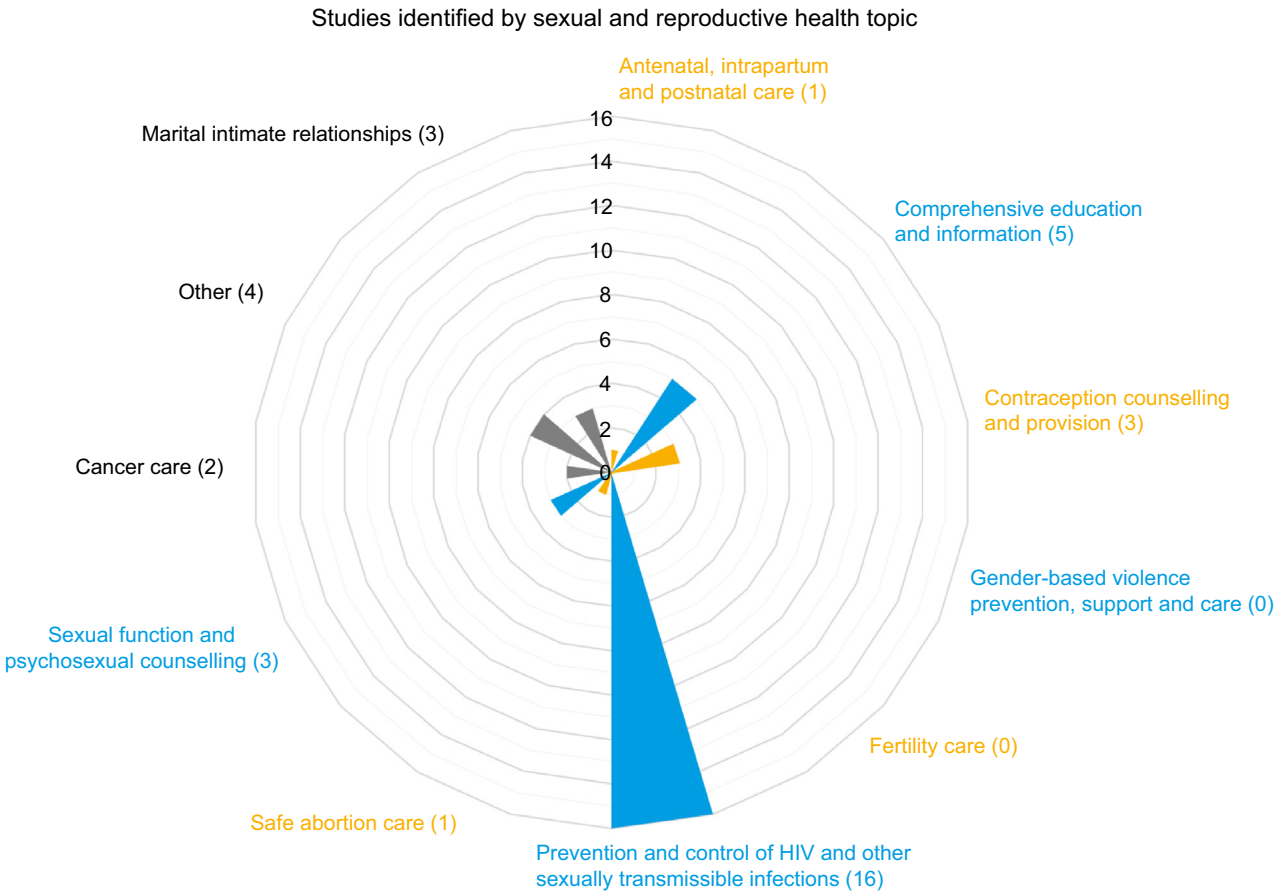

Fig. 3. Number of studies mapped by sexual and reproductive health topics.

and migrant men's new HIV diagnosis rates attributed to heterosexual exposure decreased over the past decade although the rate remained higher than Australian-born men.[35] In addition, refugee and migrant men far outnumbered women in recent trends in heterosexually acquired HIV infection.[46]

Knowledge about SRH and services: 'inadequately informed'

Studies included in this review identified that refugee and migrant men in Australia had varied levels of knowledge about SRH and available services. Although some studies described refugee and migrant men as having 'reasonable'[33] and 'widely varied'[52] SRH knowledge, other studies identified them to 'be inadequately informed',[43] 'held incorrect beliefs'[33] and 'not aware of the relationship between HIV and AIDS'.[41] Similarly, refugee and migrant men were identified to be unaware of the range of SRH services available to them,[29,39] including where to test for HIV,[34] the process of sexual health consultations,[39] and access to specialist SRH services.[11,39] This review has revealed contributory factors to the 'limited'[29] or 'insufficient'[39,51] SRH knowledge among refugee and migrant men. For instance, access to SRH care and information was limited in their home country for South Sudanese men and opportunities to acquire sexual health information remain limited after resettlement in Australia,[40] with the exception of school-based sexuality education for young men, which was perceived to be 'informative' and 'valuable'.[11,29] Language and literacy proficiencies also made accessing online family planning information difficult for men of Afghan background.[50] SRH knowledge, however, significantly improved the longer refugee and migrant men had lived in Australia.[31] Finally, using a peer education approach, Sievert *et al.*[53] delivered and evaluated the effectiveness of a health promotion intervention to build chronic hepatitis B (CHB) knowledge and dispel misconceptions. Their analysis revealed that refugee and migrant men demonstrated a significant change in their CHB knowledge.

Gender differences in SRH literacy

We identified four quantitative studies that reported on gender differences in SRH literacy.[31-33,54] With an exception of the finding of Gray *et al.*[33] where men were more likely to know that condoms could prevent HIV transmission than women, the other three studies showed that men had less SRH literacy. Men reported significantly lower levels of both STI and HIV knowledge, and confidence to talk about

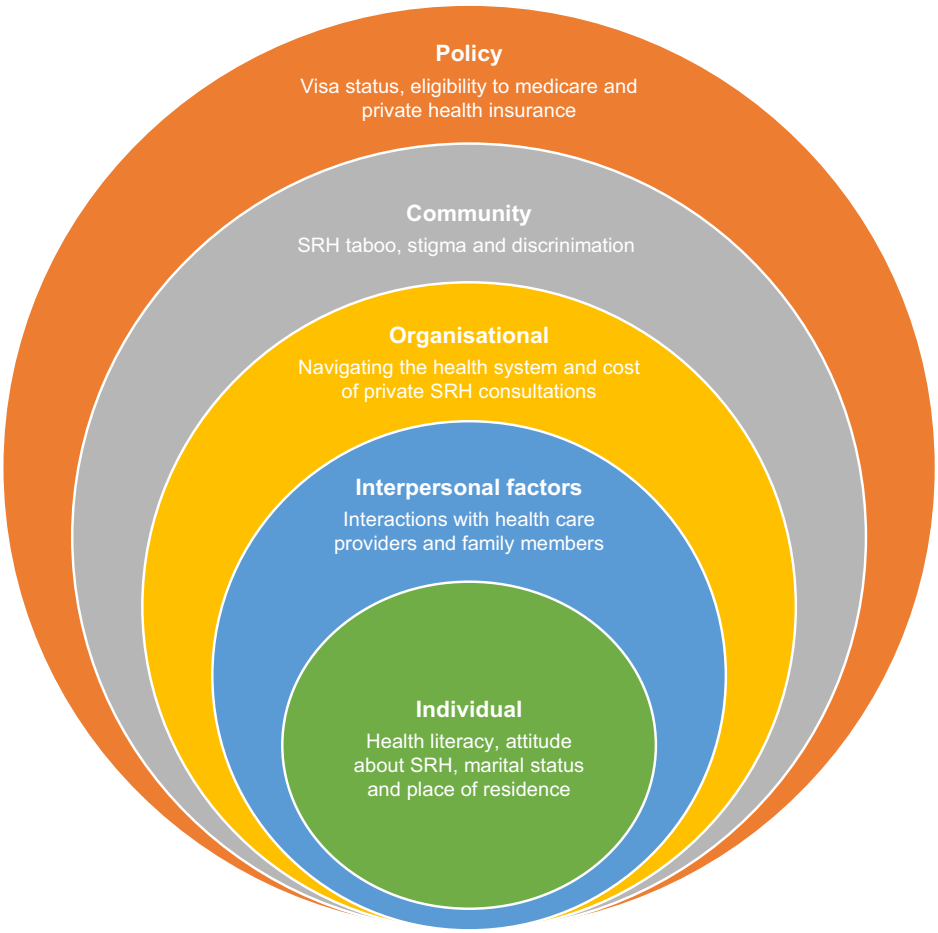

Fig. 4. Socio-ecological factors influencing the SRH of refugee and migrant men.

SRH compared with women.[31] Studies also reported lower knowledge about the sexual transmission risk of hepatitis B among Chinese- and Vietnamese-born men.[54] For Sri Lankan men living in Australia, they had more difficulty obtaining helpful contraceptive advice.[32]

Attitude towards fertility management

Across the reviewed studies, three explored attitudes in relation to fertility management.[27,50,57] Overall, refugee and migrant men were open to having fewer children following migration, associated with the belief that they experienced a reduction in authority within the family.[50] The majority of men were also open to using contraception, associating it with being 'open-minded' and 'modern' and resisting the idea that it was religiously forbidden, or something men could 'force' upon women. However, some men prefered not to use condoms and often relied on withdrawal to avoid pregnancies: 'At the start, I was going with condoms, and after that, I thought 'nah', I went just with the withdrawal method, and that's it ... I didn't like condoms, so I'm going with the withdrawal method and it's working'.[50]

In another study, migrant men were less enthusiastic about potential use of male hormonal contraception (MHC), with only 13.6% (95% CI: 5.8–21.4) of migrant fathers indicating they would definitely or probably consider using MHC compared with 47.5% (95% CI: 38.5–56.5) of Australian-born fathers.[57] The same study examined attitudes to two existing male contraceptive methods, condoms and vasectomy, which were significantly different between migrant and Australian-born fathers. Acceptability of condoms was highest in the south-east Asian-born men (82.4%) and lowest in men born in the Indian subcontinent (50%), with Australian-born men in-between (65.3%).[57] Migrant fathers were less likely than Australian-born men to find the idea of vasectomy acceptable, and more likely to favour a tubal ligation for their female partner over a vasectomy for themselves.[57] Finally, two papers also reported on socio-cultural beliefs in relation to abortion.[27,50] In one study with Afghan men, it was indicated that while abortion was increasingly being positioned as an acceptable option in Australia, most men remained firmly against termination of pregnancies due to religious objections. In a younger cohort

of men across varying migrant and refugee backgrounds, abortion was viewed as a 'possible' alternative to carrying through with a pregnancy, due to cultural prohibitions around premarital sex and having children outside of wedlock.[27]

Other socio demographic factors

We have also identified additional individual level factors that impact refugee and migrant men's SRH care needs and care access experiences in Australia. A study by McMichael and Gifford[11] identified that the demands of resettlement takes precedence over accessing SRH care, with focus given to fulfilling practical social needs such as employment, housing and attending English language classes. In another study, refugee and migrant men living in regional areas were more likely to have had a prostate-specific antigen test than those living in urban areas.[56] Two studies examined the impact of marital status on safe sexual practices and masturbatory behaviour among men from India. While married men were less likely to masturbate than unmarried men,[49] there were no significant differences in safe sexual practices based on their relationship status.[47] Travelling to countries of origin was also identified to be a risk factor for non-adherence to HIV/AIDS care due to the inabilities of men to take treatments appropriately.[58]

Interpersonal: interaction with care providers and family

Communication barriers

Studies included in this review identified language and communication barriers as main obstacles that limit refugee and migrant men's abilities to fully understand the information provided to them by healthcare providers,[15,39,52] sometimes even with the presence of an interpreter.[39] Although Australia has a publicly funded translation and interpretation program, these services were not readily used by refugee and migrant men in SRH services due to concerns related privacy and confidentiality[11,39] and limited interpreter options for some ethnic groups.[52] Consequently, language barriers made 'it difficult to convey your pain and feeling helpless when you don't know what is the right word'.[39]

Privacy and confidentiality concerns

Shaped by previous experiences in their countries of origin, refugee and migrant men represented in some studies expressed privacy and confidentiality concerns as potential barriers to accessing SRH care in Australia.[24,26] In a study by McMichael and Gifford,[11] many young refugee and migrant men were reluctant to access sex related information from health care providers due to the fear of confidentiality breaches and family and community repercussions. However, 'nonjudgmental support' from health care providers[36] and having HIV test at GP surgeries provided a sense of anonymity and made refugee and migrant men feel 'relieved'.[26]

Service provider ethnicity and gender

While the ethnicity and gender of the provider were 'not important'[48] and 'not a necessity'[50] for Indian and Afghan men, Iranian refugee and migrant men reported that 'Iranian same-gender sexologists and gynecologists' and 'Iranian health professionals can act as enablers for Iranian migrants in providing SRH'.[39] Gender of the provider was also identified to be an important factor in accessing SRH care. Refugee and migrant men in a study by Sievert *et al.*[52] explained that gender difference may affect their capacity to fully disclose information as 'to be seen by a female doctor is a bit [un] comfortable for the male'.

Sexual intimacy and conflict in marriage

Two qualitative studies spoke to East African migrant and refugee men's experiences of sexual intimacy following migration.[40,45] In one study, men described Australia as a more sexually promiscuous society compared to their home countries.[45] The majority of participants positioned this negatively, associated with the erosion of sexual morals. East African men also described difficulty in negotiating socio-cultural norms, such as the collective community involvement in partner choice, with many men wanting to decide whom they wished to marry. A number of South Sudanese men spoke to a loss of power associated with migrating to Australia and women's resistance to traditional ways of resolving relationship difficulties: '[She] will tell you 'this is not Africa... here [in Australia] we have the freedom, we have our rights, everyone is equal here'. She doesn't agree with you. So she can decide to do whatever she likes also. So here, we don't have power very much'.[40]

For some men, such loss of power led to relational conflict, the desire to return to their home countries or to select a wife from overseas, for those who were not partnered. Changes in adherence to cultural roles, in addition to financial issues and a lack of family support, was also reported among Sudanese refugee men.[40] 'Freedom' provided to women in Australia and changes in gender roles were also reported by men as being a major cause of conflict, marriage break up and acculturative stress: 'The woman in Africa they don't have freedom, here they have it. Also the wife she felt that she have rights in this country. Some of the people feel the wife now she has freedom she can do anything. She has rights now she has freedom.' Furthermore, two studies reported the preference for participants to retain mono-ethnic relationships,[37,45] preferably heterosexual relationships.[37] A further study investigated experiences of migrant African men, who entered into cross-cultural relationships with Australian women.[38] Many men in this study reported difficulties associated with a lack of socio-cultural and economic capital, compared to their partners, leading to men feeling 'useless', 'powerless' and 'emasculated.'

Organisational level

Studies included in this review identified financial barriers based on the cost of STI tests and services at organisational level.[34] Refugee and migrant men represented in one study explained that they 'had to pay A$120 for 2 h consultation services and that was expensive' and would do an HIV test 'if it is free'.[26] In another study, difficulty navigating the health system including the referral system was also highlighted by refugee and migrant men as a key barrier to accessing SRH services.[34,39] Men were more likely to report not being able to find a doctor that understood their culture as a barrier compared to women.[33]

Community level

Taboo: SRH is 'no man's land'

SRH taboo, shaped by cultural and generational differences, emerged as an important factor shaping the way refugee and migrant men perceive and access SRH.[24,28–30,39,47,50] Studies pointed out that Australian culture is perceived to be 'quite relaxed'[28] and 'more open to discussing sexual health issues'[30,50] by refugee and migrant men, making 'discussion of sexual health and HIV related issues appeared to be more acceptable'.[24] In their country of origin, however, refugee and migrant men 'do not have courage to talk about sexual health – even with a doctor'.[50] This culture of shame and stigma regarding the discussion of SRH issues is identified to be a major barrier in discussing the topic freely with health care providers[50] and sexual partners[47] after resettlement in Australia. Botfield *et al.*[27] suggested that the culture of silence regarding SRH may constrain access to quality SRH information and care. We also identified intergenerational differences in SRH taboo from the literature included in this review.[28,30] For young men from refugee and migrant backgrounds, 'attitude to talking about sex is more open'.[30] For older men, however, discussing SRH matters is 'no man's land' and 'no man speaks of it'.[29]

Stigma and discrimination

Four studies identified stigma and discrimination, both at family and societal levels and mainly related to HIV/AIDS, as major barriers to testing and status disclosure at workplaces.[11,24,34,36] Men in one study explained that having HIV/AIDS means 'you are odd from the family and they don't care because you can still infect them'.[24] Due to the fear of stigma and discrimination, men in another study 'haven't talked to anyone in the company about these things [HIV status] and don't want to talk to them'.[36] In addition, stigma and shame were associated with non-marital sex and sexual health issues, which presented a barrier to seeking knowledge and services.[11] The perceived association between HIV and same-sex sexuality/sexual practices also created barriers to accessing information and care.[34]

Policy level

Visa status and health insurance emerged as policy level factors that shaped access and utilisation of SRH care by refugee and migrant men.[9,32,33,39] For instance, some men on temporary work visas avoided HIV testing due to the fear that diagnosis would jeopardise future visa applications including to permanently stay in Australia.[36] In addition, men from countries that are ineligible for the reciprocal health care agreement had lower rates of early HIV diagnosis and treatment.[9] Even if they are eligible for Medicare, some Iranian men in one study mentioned that 'Just 10 consultation sessions [supported by Medicare] were not enough for those who have a serious [psychosexual] concern'.[39] This lack of adequate coverage through Medicare may have implications as reported by Ellawela *et al.*[32], where not having private health insurance was associated with difficulty obtaining helpful contraceptive advice among Sri Lankan men living in Australia.

Discussion

The purpose of this review was to synthesise the available evidence on refugee and migrant men's SRH needs, understandings, and experiences of accessing services after resettlement in Australia. Mapping of the identified studies against the WHO SRH framework revealed that the majority of the 38 studies addressed men's sexual health, mainly care related to STIs (HIV and hepatitis B). There were gaps in the literature on sexual function, psychosexual counselling, gender-based violence prevention, support, and care. The focus on STIs reflects the risk-based biomedical conceptualisation of health care. It may also reflect the focus of state hospital services on STIs and the paucity of services on male sexuality and gender based violence services.[59]

The research about refugee and migrant men's reproductive health has been restricted to understanding their perspectives on family size and attitude towards condoms and male hormonal contraceptives. The reproductive health literature also lacked viewpoints regarding other important components of fertility control including fertility/infertility care, safe abortion care, gender roles and joint reproduction and family planning decisions. In addition, the impact of forced migration, trauma and sexual violence on refugee men's SRH during and after resettlement in Australia has not been explored. The identified research gaps should be addressed to develop effective, equitable and gender sensitive SRH programs for refugee and migrant men in Australia.

By applying the socio-ecological lens on the extracted data, we found that refugee and migrant men face multilevel barriers to access SRH care. At the individual level, the lack of access to and understanding of SRH information

including on the availability of services emphasises the need for SRH education as part of resettlement programs.[60] Education and support should also be provided well after resettlement to address SRH issues that often arise later after the immediate issues of resettlement have been addressed. Gender differences in SRH literacy also suggest that programs need to be independently designed for men and women.[16] This requires greater participation of refugee and migrant men in the co-design, delivery and evaluation of SRH programs. Addressing confidentiality concerns and the low uptake of interpreters is critical to overcome the interpersonal level communication barriers in SRH consultations with men from refugee and migrant backgrounds.[61]

Although we identified some barriers at organisational and policy levels, there was infrequent mention in the published literature how the organisation of SRH services in Australia and the National Men's Health Policy 2010 affected refugee and migrant men's utilisation of SRH services. This makes evaluating the impact of the policy on equitable SRH interventions, service utilisation and outcomes a necessity. Knowledge about the impact of the policy is required to facilitate and guide implementation of Australia's Men's Health Strategy 2020–2030, which prioritises both refugee and migrant men and SRH for possible interventions.

Overall, the findings of this review show that refugee and migrant men in Australia are underrepresented and generally marginalised in SRH program development, research conceptualisation, implementation and service delivery. Achieving the aims of Australia's Men's Health Policy[13] and Men's Health Strategy[14] requires greater engagement of refugee and migrant men in SRH. This is important to enhance men's access and use of SRH services to meet their own needs and aspirations.[62] Engaging men is also critical to enable them equitably support their partners' reproductive health and share responsibilities for healthy sexuality and reproduction.[63] This is significant as refugee and migrant women and health care providers in recent research have called for greater engagement of men in SRH care.[17,23] Furthermore, improved engagement of men in SRH is critical to promote and achieve gender equality and challenge harmful gender roles and attitudes that undermine women's SRH autonomy and rights and discourage men from seeking care.[7,64] Evidence suggests that gender transformative approaches across the life span that operate at multiple levels of the socio-ecological environment and consider a broad approach to sexuality, gender and masculinities are effective in engaging men.[7]

Strengths and limitations

This is the first systematic scoping review in Australia to synthesise the evidence on the SRH needs, understandings and experiences of refugee and migrant men, which can guide future research and programs. The use of the socio-ecological framework facilitated a systematic understanding of factors that shape refugee and migrant men's SRH. It is valuable to mention that when presenting the results and discussing major findings, we chose to implicitly treat 'refugee' and 'migrant' men as essentially similar. Studies that involved both refugee and migrant men did not disaggregate results by refugee status, making it difficult to aggregate and synthesise results for these two groups. This may obscure important differences between and within the two groups (e.g. refugee men may have experienced trauma and sexual abuses in their asylum and resettlement journeys).

Conclusion

The review demonstrated that SRH research involving refugee and migrant men in Australia concentrated on the domains of STIs and HIV/AIDS and other aspects of both sexual health and reproductive health have not been sufficiently explored. This suggests the need to have a more comprehensive understanding of refugee and migrant men's SRH needs and experiences. Specifically, further research should examine the influence of the National Men's Health Policy 2010, state level men's health policies and frameworks, and organisation of SRH care on refugee and migrant men's access and experience in SRH care. Such knowledge is critical to guide the implementation of the National Men's Health Strategy 2020–2030 and develop effective and gender sensitive SRH programs for refugee and migrant men at both national and state levels in Australia.

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Data availability. All relevant data are included in this manuscript.

Conflicts of interest. The authors declare that they have no conflicts of interest.

Declaration of funding. No funding received for this project.

Author contributions. ZM and AJH conceived the review. ZM and AJH conducted the search and screened the titles with support from MB, JMU and JP. ZM, AJH and MB extracted and synthesised the data and drafted the manuscript. All authors reviewed, edited, and approved the final manuscript.

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