

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

Zelalem Mengesha (✉ z.mengesha@unsw.edu.au)

UNSW

Alex Hawkey

Western Sydney University

Mazen Baroundi

Umeå University

Jane Ussher

Western Sydney University

Janette Perz

Western Sydney University

Systematic Review

Keywords: Men, Sexual health, Reproductive health, Refugee, Migrant

Posted Date: March 2nd, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1406572/v1>

License:   This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Abstract

Background

Australia's National Men's Health Strategy 2020–2030 identifies men from refugee and migrant backgrounds as priority groups for sexual and reproductive health (SRH) interventions due to their high risk of poor outcomes. Given the traditional focus of SRH research on women, the lack of SRH research focusing on refugee and migrant men is a significant gap to guide implementation of the strategy and future research into this topic. To provide a foundation for rectifying this omission, this review aimed to synthesise the available evidence on refugee and migrant men's SRH needs, understanding, and experiences of accessing services after resettlement in Australia.

Methods

We conducted a systematic search of peer reviewed literature in PubMed, Scopus, PsycInfo and Embase. A WHO 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.

Results

We identified and included 38 papers (24 sexual health, 5 reproductive health, 3 intimate relationships, 2 cancer and 4 'other'). The majority of sexual health studies (16) were about sexually transmitted infections (STIs), mainly HIV (12), Hepatitis B (3), and safe sexual practices (1). Reproductive health studies focused on contraceptive counselling and provision (3), antenatal, intrapartum and postnatal care (1) and safe abortion care (1). We also identified several factors influencing refugee and migrant men's SRH including a lack of access to SRH information at the individual level, language and communication barriers at the interpersonal level and stigma at the community level.

Conclusions

This review indicates that the SRH literature on refugee and migrant men lacks perspectives beyond STIs. The literature does not frame SRH as a human right rather follows a risk-based biomedical approach of health care keeping important aspects of SRH, such as gender-based violence and sexual pleasure, out of health services research. These identified gaps should be addressed to develop effective, equitable and gender sensitive SRH programs for refugee and migrant men in Australia.

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 (Dean et al., 2013; WHO, 2015). Traditionally, however, SRH research has disproportionately focused on women (Culley et al., 2013), and where men have been included representation of those from refugee and migrant backgrounds is minimal (Baroudi et al., 2021). The invisibility of men from SRH research can have several implications. First, designing gender sensitive SRH care would be difficult without understanding their specific needs and care access experiences (Ruane-McAteer et al., 2019). Second, health promotion efforts, SRH policies and clinical practice is unlikely to be tailored to the needs of men, resulting in limited SRH literacy and poor engagement with help seeking behaviours (Garrett et al., 2010). 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 and women (Baroudi et al., 2021). 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 (Shand & Marcell, 2021).

In Australia, people from refugee and migrant backgrounds experience inequitable health outcomes, with one major inequity being SRH (Multicultural Centre for Women's Health, 2021). Specifically, men have unique SRH needs upon arrival, including the management of STIs, HIV and sexual trauma (Araujo et al., 2019). 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 (McMichael & Gifford, 2009). Also, the high burden of mental health illness among refugee men may lead to a delay in seeking care for SRH issues (Timilsina, 2018). To overcome this and other men's health issues, Australia developed a National Men's Health Policy (Department of Health and Ageing, 2010), and recently prepared a Men's Health Strategy (Department of Health, 2019) to guide implementation of the policy.

Research has demonstrated that refugee and migrant men and women often have different SRH needs and preferred sources of care after resettlement which suggests the need to design gender sensitive SRH interventions (Kaczowski & Swartout, 2020). However, the degree of health and SRH evidence needed to design policy and health promotion interventions for people from refuge and migrants is limited (Byrne, 2006; Garrett et al., 2010). This review aimed to synthesise the available evidence on migrant and refugee men's SRH needs, understanding, and experiences of accessing services after resettlement in Australia. Findings from this review have the potential to meaningfully contribute to future policy reviews to inform the future direction of men's health in Australia. This is significant because the National Men's Health Strategy identifies men from refugee and migrant backgrounds as priority groups for interventions due to their high risk of poor SRH outcomes (Department of Health, 2019). In addition, understanding what exists and what are the gaps will help to identify areas of future research to meet the needs of refugee and migrant men which are currently marginalised in fertility and SRH research (Culley et al., 2013).

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) (Moher et al., 2009). The review was informed by two research questions: (1) what is the current status of the literature regarding refugee and migrant men's SRH? and (2) how refugee and migrant men experience SRH care in Australia?

Search strategy

We developed the search strategy based on the SRH definitions of the WHO (WHO, 2017) and a previous systematic review in refugee and migrant women's SRH (Mengesha et al., 2016). The search terms covered the following SRH topics: general sexual and reproductive health, 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) followed 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 the 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. Finally, reference lists of articles include in this review were screened to identify potential articles. These steps were conducted to make sure that the review is as comprehensive as possible in identifying all relevant articles that examined the SRH of migrant and refugee men in Australia.

Table 1
Search strategies

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 behavior" 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))

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 relaxed the criteria to include studies that involved both men and women and have results aggregated by gender, after we had found that the number of papers that exclusively focused on men were only eleven. Studies published in the English language and involved qualitative, quantitative, and mixed method designs were included. Articles were excluded if they: (i) were commentaries, reviews, letters, books, or grey literature, (ii) focused on women, (iii) focused on Australian-born men, (iv) were conducted outside of Australia, (v) did not involve empirical research methodology (vi) 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 AH) independently conducted primary screening and full-text review of the articles. Results were cross-checked and differences were discussed and resolved. The third author (JU) was continuously consulted over the review process when there was no agreement between ZM and AH. A diverse range of articles involving a diverse range of methodologies covering several areas of migrant and refugee men's SRH were identified. Data was then extracted from the studies selected for inclusion using a template developed for this purpose. Extracted data included: First author, year, population category, research question/objective, study design, data collection approaches, SRH services referred in the study and summary results. We then mapped the identified studies using the WHO framework for operationalising SRH (WHO, 2017).

The analysis was informed by the socio-ecological framework which provides a multi-level lens to understanding and addressing disparities in health care access and outcomes (McLeroy et al., 1988). The framework is useful to understand the complexity of accessing SRH care in the context of migration to a new country (Mengesha et al., 2017). 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 providers and close family members; (3) organisational which included formal and informal rules that guide health service provision; and the larger influence of the (4) community and (5) policies.

Results

The systematic search resulted in a total of 1548 articles, and after 306 duplicate removal, 1242 remained for title and abstract screening. On 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 3 studies mixed method approaches. Eleven studies exclusively focused on men and 27 studies involved both men and women.

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 findings
Agu et al. (2016)	2016	Migrants	Sexual health	Qualitative (key informant interviews FGDs). (n = 45)	To explore barriers and enablers to accessing sexual health services	Barriers and enablers to help seeking behaviors were sociocultural and religious influence, financial constraints, and knowledge dissemination to reduce stigma.
Blackshaw et al. (2019)	2019	Men who have sex with men diagnosed with HIV	HIV and other sexually transmissible infections	(Quantitative (medical record data n = 111)	Compare the behavioral 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. (2021)	2021	Migrants	HIV and other sexually transmissible infections	Qualitative and semi-structured interviews (n = 10)	Examine the (un)acceptability, barriers and facilitators to newer HIV testing approaches	Provider-initiated testing and counselling (PITC) and HIV rapid testing (HIV RT) by a doctor were considered to facilitate HIV testing.
Botfield et al. (2020)	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, Newman, et al. (2018)	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.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Botfield, Zwi, et al. (2018)	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. (2017a)	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 behavior change after resettlement and creates intergenerational discord and family conflict.
Dean et al. (2017b)	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. (2017)	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. (2018)	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.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Gray et al. (2019)	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 practitioners. Participants had low levels of knowledge on where to test for HIV and the different methods available.
Gunaratnam et al. (2019)	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. (2012)	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 (2005)	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 (2021)	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.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Ilami and Winter (2020)	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 (2012)	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 (2007)	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, Gray, et al. (2020)	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, Gunaratnam, et al. (2020)	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.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
McMichael and Gifford (2009)	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 (2010)	2010	Refugees	Education and information	Qualitative research (FGDs and in-depth interviews) (n = 142)	To explore how resettled youth access, interpret and implement sexual health information	Young people had some knowledge of HIV and AIDS, but knowledge of other STIs was limited. Narratives about risk and protection were informed by concerns for maintenance of social wellbeing.
Medland et al. (2018)	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 (MSM)	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 (2015)	2015	Refugees	Intimate relationships	Qualitative (KII, FGDs and (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. (2014)	2014	Minority groups	HIV and other sexually transmissible infections	Quantitative (national surveillance data) (n = 9,875)	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 40s, compared with early 30s for women.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Ramanathan and Sitharthan (2014)	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. (2013)	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. (2014)	2014	Migrants	Sexual function and psychosexual counselling	Quantitative (survey) (n = 268)	Investigate masturbatory behavioral 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. (2016)	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. (2020)	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.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Shahid and Rane (2017)	2017	Migrants	FGM	Quantitative (survey) (n = 67)	Examine attitudes about 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. (2018a)	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. Poor engagement with healthcare before arrival in Australia. Most of them first knew their HBV status upon entry to Australia.
Sievert et al. (2018b)	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 CHB knowledge between pre- and post-forum surveys.
Vu et al. (2012)	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. (2009)	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 PSA testing rates than Australian-born men. Cancer test use among migrants approached Australian-born rates as the number of years lived in Australia increased.

Author	Year	Focus population (refugee/migrant/youth)	WHO classification of the SRH care referred in the study	Design/data collection	Research question/objective	Major findings
Weber et al. (2014)	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. (2002)	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 MHC compared to Australian born fathers.
Woolley and Bialy (2012)	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 travelers. Travel may be a significant risk factor for non-adherence.

A framework developed by the WHO for operationalising sexual health and its relationship with reproductive health (WHO, 2017) was used to map the studies included in this review (Fig. 2). The framework was developed to explain the interwind nature between sexual health and reproductive health and make sure 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 SRH cancers were also added. The remaining studies with no specific topic of focus were categorised under 'other'.

Figure 3 presents the number of studies grouped by SRH topics from the WHO framework. We identified twenty-four studies that examined the sexual health of refugee and migrant men in Australia. The majority of sexual health studies (n = 16) were about STIs, mainly HIV (12), Hepatitis B (3), and safe sexual practices (1). These studies show that men bear the majority of HIV cases among the refugee and migrant population in Australia, with the main route of transmission being male-to-male exposure (Marukutira, Gray, et al., 2020). Rates of male-to-male HIV exposure and late HIV diagnosis showed an increasing trend between 2006 and 2015 (Gunaratnam et al., 2019; Marukutira, Gunaratnam, et al., 2020), with higher rates identified among migrant and refugee men compared to Australian-born men (Gunaratnam et al., 2019). In contrast, refugee 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 (Gunaratnam et al., 2019). In addition, refugee and migrant men far outnumbered women in recent trends in heterosexually acquired HIV infection (Persson et al., 2014).

Five studies explored the topic of education and information including refugee and migrant men's knowledge, attitude and behaviours, and 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 fertility and gender-based violence prevention, support, and care among refugee and migrant men in Australia. Finally, four studies that do not have a specific focus we grouped as 'others'.

Figure 4 provides a socio-ecological summary of factors that influence the SRH of refugee and migrant men. In the presentation of the analysis below, we described how these factors were understood to impact SRH needs, understanding, and experiences of accessing services by refugee and migrant men in Australia.

Individual level

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. Whilst some studies described refugee and migrant men as having ‘reasonable’ (Gray et al., 2018) and ‘widely varied’ (Sievert et al., 2018a) SRH knowledge, other studies identified them to ‘be inadequately informed’ (McMichael & Gifford, 2010), ‘held incorrect beliefs’ (Gray et al., 2018) and ‘be not aware of the relationship between HIV and AIDS’ (Körner, 2007). Similarly, refugee and migrant men were identified to be unaware of the range of SRH services available to them (Botfield, Zwi, et al., 2018; Ilami & Winter, 2020), including where to test for HIV (Gray et al., 2019), the process of sexual consultations (Ilami & Winter, 2020), and access to specialist SRH services (Ilami & Winter, 2020; McMichael & Gifford, 2009). This review has revealed contributory factors to the ‘limited’ (Botfield, Zwi, et al., 2018) or ‘insufficient’ (Ilami & Winter, 2020; Shahid & Rane, 2017) SRH knowledge among refugee and migrant men. For instance, access to SRH care and information was limited in their home country (Khawaja & Milner, 2012; Sievert et al., 2018a) and opportunities to acquire sexual health information remain limited after resettlement in Australia (Khawaja & Milner, 2012), with the exception of school based sexuality education for young men which was perceived to be ‘informative’ and ‘valuable’ (Botfield, Zwi, et al., 2018; McMichael & Gifford, 2009). Language and literacy proficiencies also made accessing online family planning information difficult for some refugee and migrant background men (Russo et al., 2020). SRH knowledge, however, significantly improved the longer refugee and migrant men had lived in Australia (Dean et al., 2017b). Finally, using a peer education approach, Sievert et al. (2018b) 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 (Dean et al., 2017b; Ellawela et al., 2017; Gray et al., 2018; Vu et al., 2012). With an exception of the finding of Gray et al. (2018) 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 SRH compared with women (Dean et al., 2017b). They also reported lower knowledge about the sexual transmission risk of hepatitis B (Vu et al. (2012) and more difficulty obtaining helpful contraceptive advice (Ellawela et al., 2017).

Attitude towards fertility management

Across the reviewed studies, three explored attitudes in relation to fertility management (Botfield et al., 2020; Russo et al., 2020; Weston et al., 2002). 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 (Russo et al., 2020). Men at large 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, men’s preference not to use condoms, 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’ (Russo et al., 2020).

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 (Weston et al., 2002). 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 Southeast Asian-born men (82.4%) and lowest in men born in the Indian subcontinent (50%), with Australian-born men in-between (65.3%) (Weston et al., 2002). 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 (Weston et al., 2002). Finally, two papers also reported on sociocultural beliefs in relation to abortion (Botfield et al., 2020; Russo et al., 2020). 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 (Botfield et al., 2020).

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 (2009) 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 PSA test than those living in urban areas (Weber et al., 2014). Two studies examined the impact of marital status on safe sexual practices and masturbatory behavior. Whilst married men were less likely to masturbate than unmarried men (Ramanathan et al., 2014), there were no significant differences in safe sexual practices based on their relationship status (Ramanathan & Sitharthan, 2014). Travelling to countries of origin was also identified to be a risk factor for adherence to HIV/AIDS care due to the inabilities of men to take treatments appropriately (Woolley & Bialy, 2012).

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 health care providers (Ilami & Winter, 2020; Sievert et al., 2018a), sometimes even with the presence of an interpreter (Ilami & Winter, 2020). 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 (Ilami & Winter, 2020; McMichael & Gifford, 2009) and limited interpreter options for some ethnic groups (Sievert et al., 2018a). Consequently, language barriers made 'it difficult to convey your pain and feeling helpless when you don't know what is the right word' (Ilami & Winter, 2020).

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 (Agu et al., 2016; Blondell et al., 2021). In a study by McMichael and Gifford (2009), 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 (Herrmann et al., 2012) and having HIV test at GP surgeries provided a sense of anonymity and made refugee and migrant men feel 'relieved' (Blondell et al., 2021).

Service provider ethnicity and gender

While the ethnicity and gender of the provider were 'not important' (Ramanathan et al., 2013) and 'not a necessity' (Russo et al., 2020) in some studies, 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 SRHS' (Ilami & Winter, 2020). 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. (2018a) 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 African migrant and refugee men's experiences of sexual intimacy following migration (Khawaja & Milner, 2012; Muchoki, 2015). In one study, men described Australia as a more a sexually promiscuous society compared to their home countries (Muchoki, 2015). The majority of participants positioned this negatively, associated with the erosion of sexual morals. African men also described difficulty in negotiating sociocultural norms, such as the collective community involvement in partner choice, with many men wanting to decide whom they wished to marry. A number of 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'(Khawaja & Milner, 2012).

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 (Khawaja & Milner, 2012). '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 (Hibbins, 2005; Muchoki, 2015), preferably heterosexual relationships (Hibbins, 2005). A further study investigated experiences of migrant African men, who entered into cross-cultural relationships with Australian women (Hoogenraad, 2021). Many men in this study reported difficulties associated with a lack of sociocultural and economic capital, compared to their partners, leading to men feeling 'useless', 'powerless' and 'emasculated.'

Organizational

Medicare, Australia's public health insurance system grants universal access to medical and pharmacy services and hospital treatment (Duckett & Willcox, 2015) for Australian and New Zealand citizens, permanent residents and citizens of countries with a reciprocal health agreement (Department of Human Services, 2014). Private health insurance schemes cover the costs of ambulance, hospital treatment as a private patient, and additional health services delivered outside a hospital (Australian Institute of Health and Welfare, 2014). Studies included in this review identified financial barriers based on the cost of tests and services at organizational level (Gray et al., 2019). Refugee and migrant men represented in one study explained that they 'had to pay \$120 for 2 hours consultation services and that was expensive' and would do an HIV test 'if it is free' (Blondell et al., 2021). In another study, difficulty of navigating the health system including the referral system was also highlighted by refugee and migrant men as a key barrier to accessing SRH services (Gray et al., 2019; Ilami & Winter, 2020). 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., 2018).

Community

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 (Agu et al., 2016; Botfield, Newman, et al., 2018; Botfield, Zwi, et al., 2018; Dean et al., 2017a; Ilami & Winter, 2020; Ramanathan & Sitharthan, 2014; Russo et al., 2020). Studies pointed out that Australian culture is perceived to be 'quite relaxed' (Botfield, Newman, et al., 2018) and 'more open to discussing sexual health issues' (Dean et al., 2017a; Russo et al., 2020) by refugee and migrant men, making 'discussion of sexual health and HIV related issues appeared to be more acceptable' (Agu et al., 2016). Back home, however, refugee and migrant men 'do not have courage to talk about sexual health – even with a doctor' (Russo et al., 2020). 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 (Russo et al., 2020) and sexual partners (Ramanathan & Sitharthan, 2014) after resettlement in Australia. Botfield et al. (2020) suggested that the culture of silence regarding SRH may also constrain access to quality SRH information and care. We also identified intergenerational differences in SRH taboo from the literature included in this review (Botfield, Newman, et al., 2018; Dean et al., 2017a). For young men from refugee and migrant backgrounds, 'attitude to talking about sex is more open' (Dean et al., 2017a). For older men, however, discussing SRH matters is 'no man's land' and 'no man speaks of it' (Botfield, Zwi, et al., 2018).

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 (Agu et al., 2016; Gray et al., 2019; Herrmann et al., 2012; McMichael & Gifford, 2009). 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' (Agu et al., 2016). 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' (Herrmann et al., 2012). In addition, stigma and shame were associated with non-marital sex and sexual health issues which presented a barrier to seeking knowledge and services (McMichael & Gifford, 2009). The perceived association between HIV and same-sex sexuality/sexual practices also created barriers to accessing information and care (Gray et al., 2019).

Policy

Visa status and health insurance emerged as policy level factors that shaped access and utilisation of SRH care by refugee and migrant men (Ellawela et al., 2017; Gray et al., 2018; Ilami & Winter, 2020; Marukutira, Gray, et al., 2020). For instance, some men on temporary work visas avoided HIV testing due to the fear that diagnosis would jeopardize future visa applications including to permanently stay in Australia (Herrmann et al., 2012). In addition, men from countries that are ineligible for the reciprocal health care agreement had lower rates of early HIV diagnosis and treatment (Marukutira, Gray, et al., 2020). 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 concern' (Ilami & Winter, 2020). This lack of adequate coverage through Medicare may have implications as reported in Ellawela et al. (2017) study where not having private health insurance was associated with difficulty obtaining helpful contraceptive advice.

Discussion

The purpose of this review was to lay the foundation for future research work into refugee and migrant men's SRH in Australia by identifying, mapping and describing the available literature. To summarise, the majority of the 38 reviewed studies addressed men's sexual health, mainly care related to STIs (HIV and hepatitis B). The literature lacked perspectives about sexual function, psychosexual counselling, gender-based violence prevention, support, and care. The focus on STIs reflects the risk-based biomedical conceptualisation of health care, keeping sexual satisfaction and gender-based violence topics out of health service research. The research about refugee and migrant men's reproductive health has been restricted to understanding religious beliefs regarding the use of condom and their perspectives on family size. The reproductive health literature also lacked viewpoints regarding fertility/infertility care, safe abortion care, gender roles and join 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 is not explored. Most significantly, none of the studies frame SRH care as a human right for refugee and migrant men.

This review also identified that refugee and migrant men face multilevel barriers to access SRH care. At the individual level, the Lack of access to SRH information including available services emphasises the need for SRH education as part of resettlement programs (Metusela et al., 2017). Gender differences in SRH literacy also suggest that programs need to be independently designed for men and women (Kaczkowski & Swartout, 2020). Language and communication were significant barriers at the interpersonal level. Addressing confidentiality concerns and the low uptake of interpreters is critical to overcome communication barriers in SRH consultations with men from refugee and migrant backgrounds (Mengesha et al., 2018). Although we identified some barriers at organisational and policy levels, the literature rarely discussed how organisation of SRH services in Australia and the National Men's Health Policy 2010 affect 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.

Achieving the aims of Australia's Men's Health Policy (Department of Health and Ageing, 2010) and Men's Health Strategy (Department of Health, 2019) requires greater engagement of refugee and migrant men in SRH care. This is important to enhance men's access and use of SRH services to meet their own needs and aspirations (Starrs et al., 2018). Engaging men is also critical to enable them equitably support their partners' reproductive health and share responsibilities for healthy sexuality and reproduction (Barker et al., 2007). 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 (Hawkey et al., 2021; Mengesha et al., 2017). 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 (Bustamante-Forest & Giarratano, 2004; Shand & Marcell, 2021). 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 (Shand & Marcell, 2021).

Strengths and limitations

To the best of our knowledge, this is the first systematic scoping review in Australia to synthesise the evidence on the SRH needs and experiences of refugee and migrant men to 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 aggregate 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).

Conclusions

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 are not 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 implantation of the National Men’s Health Strategy 2020–2030 and develop effective and gender sensitive SRH programs for refugee and migrant men in Australia.

Declarations

Conflict of interest:

None declared.

References

1. Agu, J., Lobo, R., Crawford, G., & Chigwada, B. (2016). Migrant Sexual Health Help-Seeking and Experiences of Stigmatization and Discrimination in Perth, Western Australia: Exploring Barriers and Enablers. *Int J Environ Res Public Health*, *13*(5). <https://doi.org/10.3390/ijerph13050485>
2. Araujo, J. d. O., Souza, F. M. d., Proença, R., Bastos, M. L., Trajman, A., & Faerstein, E. J. R. d. s. p. (2019). Prevalence of sexual violence among refugees: a systematic review. *53*.
3. Australian Institute of Health and Welfare. (2014). *Australia's health 2014. Canberra, Australia* (Australia’s health series no. 14, Issue. <https://www.aihw.gov.au/getmedia/d2946c3e-9b94-413c-898c-aa5219903b8c/16507.pdf.aspx?inline=true>
4. Barker, G., Ricardo, C., Nascimento, M., World Health, O., & Instituto, P. (2007). Engaging men and boys in changing gender-based inequity in health: evidence from programme interventions / Gary Barker, Christine Ricardo and Marcos Nascimento. In. Geneva: World Health Organization.
5. Baroudi, M., Stoor, J. P., Blåhed, H., Edin, K., & Hurtig, A.-K. (2021). Men and sexual and reproductive healthcare in the Nordic countries: a scoping review. *BMJ Open*, *11*(9), e052600. <https://doi.org/10.1136/bmjopen-2021-052600>
6. Blackshaw, L. C. D., Chow, E. P. F., Varma, R., Healey, L., Templeton, D. J., Basu, A., Turner, D., Medland, N. A., Rix, S., Fairley, C. K., & Chen, M. Y. (2019). Characteristics of recently arrived Asian men who have sex with men diagnosed with HIV through sexual health services in Melbourne and Sydney [<https://doi.org/10.1111/1753-6405.12926>]. *Australian and New Zealand Journal of Public Health*, *43*(5), 424–428. <https://doi.org/https://doi.org/10.1111/1753-6405.12926>
7. Blondell, S. J., Debattista, J., Griffin, M. P., & Durham, J. (2021). ‘I think they might just go to the doctor’: qualitatively examining the (un)acceptability of newer HIV testing approaches among Vietnamese-born migrants in greater-Brisbane, Queensland, Australia. *Sexual Health*, *18*(1), 50–57. <https://doi.org/10.1071/SH20064>
8. Botfield, J. R., Newman, C. E., Bateson, D., Haire, B., Estoesta, J., Forster, C., & Schulz Moore, J. (2020). Young migrant and refugee people’s views on unintended pregnancy and abortion in Sydney. *Health Sociol Rev*, *29*(2), 195–210. <https://doi.org/10.1080/14461242.2020.1764857>
9. Botfield, J. R., Newman, C. E., & Zwi, A. B. (2018). Engaging Migrant and Refugee Young People with Sexual Health Care: Does Generation Matter More Than Culture? *Sexuality Research and Social Policy*, *15*(4), 398–408. <https://doi.org/10.1007/s13178-018-0320-6>
10. Botfield, J. R., Zwi, A. B., Rutherford, A., & Newman, C. E. (2018). Learning about sex and relationships among migrant and refugee young people in Sydney, Australia: ‘I never got the talk about the birds and the bees’. *Sex Education*, *18*(6), 705–720. <https://doi.org/10.1080/14681811.2018.1464905>

11. Bustamante-Forest, R., & Giarratano, G. (2004). Changing men's involvement in reproductive health and family planning. *Nursing Clinics of North America*, *39*(2), 301–318. <https://doi.org/https://doi.org/10.1016/j.cnur.2004.02.001>
12. Byrne, M. (2006). *The other 50%: refugee men's health*. NSW Refugee Health Service, NSW Health.
13. Culley, L., Hudson, N., & Lohan, M. (2013). Where are all the men? The marginalization of men in social scientific research on infertility. *Reprod Biomed Online*, *27*(3), 225–235. <https://doi.org/10.1016/j.rbmo.2013.06.009>
14. Dean, J., Mitchell, M., Stewart, D., & Debattista, J. (2017a). Intergenerational variation in sexual health attitudes and beliefs among Sudanese refugee communities in Australia. *Culture, Health & Sexuality*, *19*(1), 17–31. <https://doi.org/10.1080/13691058.2016.1184316>
15. Dean, J., Mitchell, M., Stewart, D., & Debattista, J. (2017b). Sexual health knowledge and behaviour of young Sudanese Queenslanders: a cross-sectional study. *Sexual Health*, *14*(3), 254–260. <https://doi.org/10.1071/SH16171>
16. Dean, S. V., Imam, A. M., Lassi, Z. S., & Bhutta, Z. A. (2013). *Importance of Intervening in the Preconception Period to Impact Pregnancy Outcomes*. <https://doi.org/10.1159/000348402>
17. Department of Health. (2019). *National Men's Health Strategy 2020–2030*. Canberra Commonwealth of Australia
18. Department of Health and Ageing. (2010). *National Men's Health Policy 2010*. Canberra: Commonwealth of Australia
19. Department of Human Services. (2014). *Medicare for Providers*. Canberra, Australia. Retrieved Nov 2 from <http://www.medicareaustralia.gov.au/provider/medicare/>
20. Duckett, S., & Willcox, S. (2015). *The Australian health care system*. Oxford University Press.
21. Ellawela, Y., Nilaweera, I., Holton, S., Rowe, H., Kirkman, M., Jordan, L., McNamee, K., Bayly, C., McBain, J., Sinnott, V., & Fisher, J. (2017). Contraceptive use and contraceptive health care needs among Sri Lankan migrants living in Australia: Findings from the understanding fertility management in contemporary Australia survey. *Sex Reprod Healthc*, *12*, 70–75. <https://doi.org/10.1016/j.srhc.2017.03.003>
22. Garrett, P. W., Dickson, H. G., Whelan, A. K., & Whyte, L. (2010). Representations and coverage of non-English-speaking immigrants and multicultural issues in three major Australian health care publications. *Australia and New Zealand Health Policy*, *7*(1), 1. <https://doi.org/10.1186/1743-8462-7-1>
23. Gray, C., Crawford, G., Reid, A., & Lobo, R. (2018). HIV knowledge and use of health services among people from South-East Asia and sub-Saharan Africa living in Western Australia. *Health Promot J Austr*, *29*(3), 274–281. <https://doi.org/10.1002/hpja.168>
24. Gray, C., Lobo, R., Narciso, L., Oudih, E., Gunaratnam, P., Thorpe, R., & Crawford, G. (2019). Why I Can't, Won't or Don't Test for HIV: Insights from Australian Migrants Born in Sub-Saharan Africa, Southeast Asia and Northeast Asia. *Int J Environ Res Public Health*, *16*(6). <https://doi.org/10.3390/ijerph16061034>
25. Gunaratnam, P., Heywood, A. E., McGregor, S., Jamil, M. S., McManus, H., Mao, L., Lobo, R., Brown, G., Hellard, M., Marukutira, T., Bretaña, N. A., Lang, C., Medland, N., Bavinton, B., Grulich, A., & Guy, R. (2019). HIV diagnoses in migrant populations in Australia-A changing epidemiology. *PLoS One*, *14*(2), e0212268. <https://doi.org/10.1371/journal.pone.0212268>
26. Hawkey, A. J., Ussher, J. M., & Perz, J. (2021). What do women want? Migrant and refugee women's preferences for the delivery of sexual and reproductive healthcare and information. *Ethnicity & Health*, 1–19. <https://doi.org/10.1080/13557858.2021.1980772>
27. Herrmann, S., Wardrop, J., John, M., Gaudieri, S., Lucas, M., Mallal, S., & Nolan, D. (2012). The impact of visa status and Medicare eligibility on people diagnosed with HIV in Western Australia: a qualitative report. *Sex Health*, *9*(5), 407–413. <https://doi.org/10.1071/sh11181>
28. Hibbins, R. (2005). Migration and gender identity among Chinese skilled male migrants to Australia. *Geoforum*, *36*(2), 167–180. <https://doi.org/https://doi.org/10.1016/j.geoforum.2003.10.003>
29. Hoogenraad, H. (2021). Marriage migration as happiness projects?: Africa-origin male marriage migrants' experiences with marriage migration to Australia. *Journal of Ethnic and Migration Studies*, *47*(9), 2144–2160. <https://doi.org/10.1080/1369183X.2020.1729106>
30. Ilami, A., & Winter, S. (2020). Iranian Migrants' Lived Experiences of Access to Sexual and Reproductive Healthcare Services in Western Australia: A Conventional Content Analysis. *Sexuality Research and Social Policy*. <https://doi.org/10.1007/s13178-020-00478-2>
31. Kaczkowski, W., & Swartout, K. M. (2020). Exploring gender differences in sexual and reproductive health literacy among young people from refugee backgrounds. *Culture, Health & Sexuality*, *22*(4), 369–384. <https://doi.org/10.1080/13691058.2019.1601772>

32. Khawaja, N. G., & Milner, K. (2012). Acculturation stress in South Sudanese refugees: Impact on marital relationships. *International Journal of Intercultural Relations*, *36*(5), 624–636. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2012.03.007>
33. Körner, H. (2007). Late HIV diagnosis of people from culturally and linguistically diverse backgrounds in Sydney: The role of culture and community. *AIDS Care*, *19*(2), 168–178. <https://doi.org/10.1080/09540120600944692>
34. Marukutira, T., Gray, R. T., Douglass, C., El-Hayek, C., Moreira, C., Asselin, J., Donovan, B., Vickers, T., Spelman, T., Crowe, S., Guy, R., Stoove, M., & Hellard, M. (2020). Gaps in the HIV diagnosis and care cascade for migrants in Australia, 2013–2017: A cross-sectional study. *PLoS Med*, *17*(3), e1003044. <https://doi.org/10.1371/journal.pmed.1003044>
35. Marukutira, T., Gunaratnam, P., Douglass, C., Jamil, M. S., McGregor, S., Guy, R., Gray, R. T., Spelman, T., Horyniak, D., Higgins, N., Giele, C., Crowe, S. M., Stoove, M., & Hellard, M. (2020). Trends in late and advanced HIV diagnoses among migrants in Australia; implications for progress on Fast-Track targets: A retrospective observational study. *Medicine (Baltimore)*, *99*(8), e19289. <https://doi.org/10.1097/md.00000000000019289>
36. McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Educ Q*, *15*(4), 351–377. <https://doi.org/10.1177/109019818801500401>
37. McMichael, C., & Gifford, S. (2009). “It is Good to Know Now... Before it’s Too Late”: Promoting Sexual Health Literacy Amongst Resettled Young People With Refugee Backgrounds. *Sexuality & Culture*, *13*(4), 218. <https://doi.org/10.1007/s12119-009-9055-0>
38. McMichael, C., & Gifford, S. (2010). Narratives of sexual health risk and protection amongst young people from refugee backgrounds in Melbourne, Australia. *Culture, Health & Sexuality*, *12*(3), 263–277. <https://doi.org/10.1080/13691050903359265>
39. Medland, N. A., Chow, E. P. F., Read, T. H. R., Ong, J. J., Chen, M., Denham, I., Gunaratnum, P., & Fairley, C. K. (2018). Incident HIV infection has fallen rapidly in men who have sex with men in Melbourne, Australia (2013–2017) but not in the newly-arrived Asian-born. *BMC Infect Dis*, *18*(1), 410. <https://doi.org/10.1186/s12879-018-3325-0>
40. Mengesha, Z. B., Perz, J., & Dune, T. (2016). Culturally and linguistically diverse women’s views and experiences of accessing sexual and reproductive health care in Australia: a systematic review. *Sexual Health*, *13*(4), 299–310. <https://doi.org/https://doi.org/10.1071/SH15235>
41. Mengesha, Z. B., Perz, J., Dune, T., & Ussher, J. (2017). Refugee and migrant women’s engagement with sexual and reproductive health care in Australia: A socio-ecological analysis of health care professional perspectives. *PLoS One*, *12*(7), e0181421. <https://doi.org/10.1371/journal.pone.0181421>
42. Mengesha, Z. B., Perz, J., Dune, T., & Ussher, J. (2018). Talking about sexual and reproductive health through interpreters: The experiences of health care professionals consulting refugee and migrant women. *Sexual & Reproductive Healthcare*, *16*, 199–205. <https://doi.org/https://doi.org/10.1016/j.srhc.2018.03.007>
43. Metusela, C., Ussher, J., Perz, J., Hawkey, A., Morrow, M., Narchal, R., Estoesta, J., & Monteiro, M. (2017). “In My Culture, We Don’t Know Anything About That”: Sexual and Reproductive Health of Migrant and Refugee Women. *International Journal of Behavioral Medicine*, *24*(6), 836–845. <https://doi.org/10.1007/s12529-017-9662-3>
44. Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med*, *6*(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
45. Muchoki, S. (2015). Using ‘intimate citizenship’ to make sense of the experiences of men with refugee backgrounds in Australia. *Culture, Health & Sexuality*, *17*(sup1), 61–73. <https://doi.org/10.1080/13691058.2014.950606>
46. Multicultural Centre for Women’s Health. (2021). *Data Report: Sexual and Reproductive Health*.
47. Persson, A., Brown, G., McDonald, A., & Körner, H. (2014). Transmission and prevention of HIV among heterosexual populations in Australia. *AIDS Educ Prev*, *26*(3), 245–255. <https://doi.org/10.1521/aeap.2014.26.3.245>
48. Ramanathan, V., & Sitharthan, G. (2014). Safe sex practices of Indian immigrant men living in Australia: an exploratory research. *Indian J Public Health*, *58*(4), 274–277. <https://doi.org/10.4103/0019-557x.146295>
49. Ramanathan, V., Sitharthan, G., Pepper, K., & Wylie, K. (2013). Sexual health of Indian immigrant men in Australia: an exploratory research on help-seeking attitudes %J Sexual Health. *10*(4), 380–381. <https://doi.org/https://doi.org/10.1071/SH12199>
50. Ramanathan, V., Sitharthan, G., Pepper, K., & Wylie, K. (2014). Masturbatory Behavior and Feelings: An Exploratory Study of Indian Immigrant Men in Australia. *International Journal of Sexual Health*, *26*(1), 25–40. <https://doi.org/10.1080/19317611.2013.828147>
51. Riggs, E., Yelland, J., Szwarc, J., Wahidi, S., Casey, S., Chesters, D., Fouladi, F., Duell-Piening, P., Giallo, R., & Brown, S. (2016). Fatherhood in a New Country: A Qualitative Study Exploring the Experiences of Afghan Men and Implications for Health Services.

- Birth, 43(1), 86–92. <https://doi.org/10.1111/birt.12208>
52. Ruane-McAteer, E., Amin, A., Hanratty, J., Lynn, F., Corbijn van Willenswaard, K., Reid, E., Khosla, R., & Lohan, M. (2019). Interventions addressing men, masculinities and gender equality in sexual and reproductive health and rights: an evidence and gap map and systematic review of reviews. *BMJ global health*, 4(5), e001634-e001634. <https://doi.org/10.1136/bmjgh-2019-001634>
53. Russo, A., Lewis, B., Ali, R., Abed, A., Russell, G., & Luchters, S. (2020). Family planning and Afghan refugee women and men living in Melbourne, Australia: new opportunities and transcultural tensions. *Cult Health Sex*, 22(8), 937–953. <https://doi.org/10.1080/13691058.2019.1643498>
54. Shahid, U., & Rane, A. (2017). African, male attitudes on female genital mutilation: an Australian survey. *J Obstet Gynaecol*, 37(8), 1053–1058. <https://doi.org/10.1080/01443615.2017.1323196>
55. Shand, T., & Marcell, A. V. (2021). *Engaging Men in Sexual and Reproductive Health*. In: Oxford University Press.
56. Sievert, K., O'Neill, P., Koh, Y., Lee, J. H., Dev, A., & Le, S. (2018a). Barriers to Accessing Testing and Treatment for Chronic Hepatitis B in Afghan, Rohingya, and South Sudanese Populations in Australia. *J Immigr Minor Health*, 20(1), 140–146. <https://doi.org/10.1007/s10903-017-0546-z>
57. Sievert, K., O'Neill, P., Koh, Y., Lee, J. H., Dev, A., & Le, S. (2018b). Engaging new refugee in Australian communities at risk for chronic hepatitis B infection into care: A peer-educator intervention. *Health Soc Care Community*. <https://doi.org/10.1111/hsc.12602>
58. Starrs, A. M., Ezeh, A. C., Barker, G., Basu, A., Bertrand, J. T., Blum, R., Coll-Seck, A. M., Grover, A., Laski, L., Roa, M., Sathar, Z. A., Say, L., Serour, G. I., Singh, S., Stenberg, K., Temmerman, M., Biddlecom, A., Popinchalk, A., Summers, C., & Ashford, L. S. (2018). Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission. *The Lancet*, 391(10140), 2642–2692. [https://doi.org/10.1016/S0140-6736\(18\)30293-9](https://doi.org/10.1016/S0140-6736(18)30293-9)
59. Timilsina, A. J. H. P. J. o. P. H. (2018). Intersecting mental health and sexual and reproductive health. 17(1), 18–20.
60. Vu, L. H., Gu, Z., Walton, J., Peet, A., Dean, J., Dunne, M. P., & Debattista, J. (2012). Hepatitis B knowledge, testing, and vaccination among Chinese and Vietnamese adults in Australia. *Asia Pac J Public Health*, 24(2), 374–384. <https://doi.org/10.1177/1010539510390205>
61. Weber, M. F., Banks, E., Smith, D. P., O'Connell, D., & Sitas, F. (2009). Cancer screening among migrants in an Australian cohort; cross-sectional analyses from the 45 and Up Study. *BMC Public Health*, 9, 144. <https://doi.org/10.1186/1471-2458-9-144>
62. Weber, M. F., Chiew, M., Feletto, E., Kahn, C., Sitas, F., & Webster, L. (2014). Cancer Screening among immigrants living in urban and regional Australia: results from the 45 and up study. *Int J Environ Res Public Health*, 11(8), 8251–8266. <https://doi.org/10.3390/ijerph110808251>
63. Weston, G. C., Schlipalius, M. L., & Vollenhoven, B. J. (2002). Migrant fathers and their attitudes to potential male hormonal contraceptives. *Contraception*, 66(5), 351–355. [https://doi.org/10.1016/s0010-7824\(02\)00360-8](https://doi.org/10.1016/s0010-7824(02)00360-8)
64. WHO. (2015). *WHO recommendations on health promotion interventions for maternal and newborn health 2015*. World Health Organization. <https://apps.who.int/iris/handle/10665/172427>
65. WHO. (2017). *Sexual health and its linkages to reproductive health: an operational approach*.
66. Woolley, I., & Bialy, C. (2012). Visiting friends and relatives may be a risk for non-adherence for HIV-positive travellers. *Int J STD AIDS*, 23(11), 833–834. <https://doi.org/10.1258/ijrsa.2012.012063>

Figures

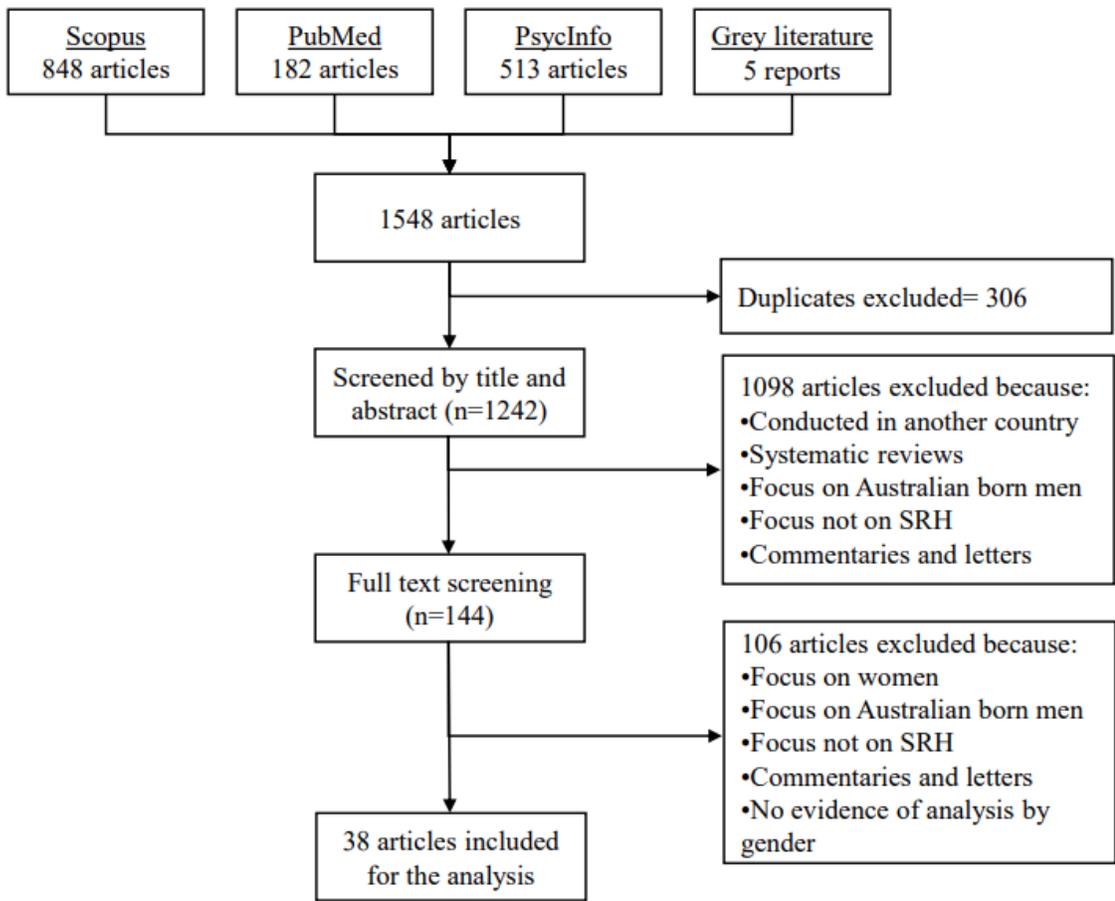


Figure 1

Prisma flow diagram



Figure 2

Framework for operationalising sexual health and its linkages to reproductive health (WHO, 2017) (blue and orange ribbons represent sexual health and reproductive health respectively)

Figure 3

Number of studies grouped by sexual and reproductive health topics.

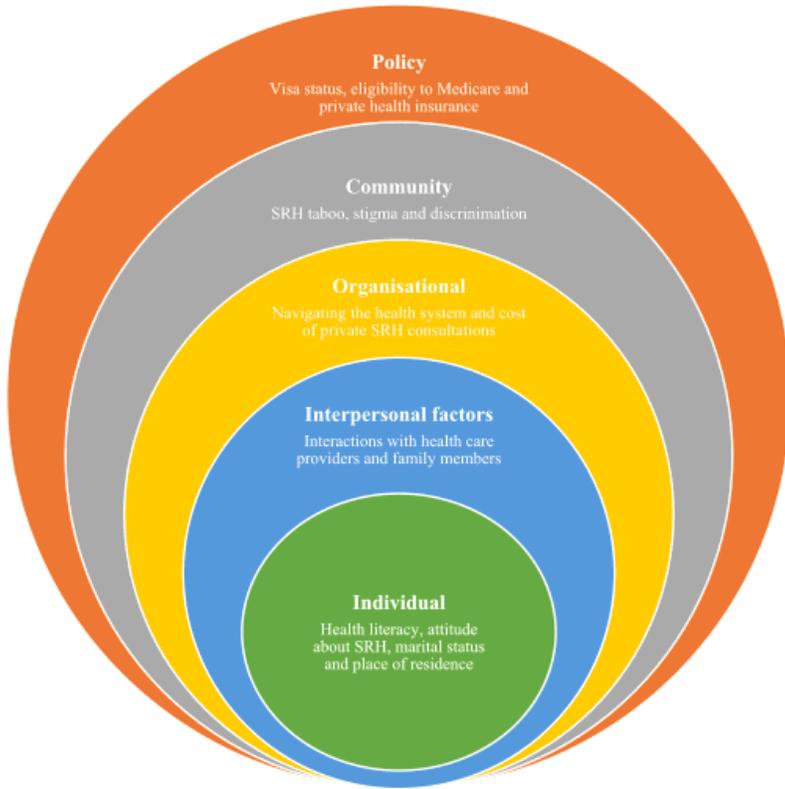


Figure 4

Factors influencing the SRH of refugee and migrant men