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Health assets among refugees in Australia: a systematic review

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Abstract

Background A health assets-based approach seeks to identify health-promoting or protective factors across multiple levels. Evidence of the health assets of refugees at the individual, family, and community levels in Australia is scarce. We aimed to synthesise current evidence from Australia to identify refugee health assets and explore how they influence health and well-being. We explored existing strengths that can be harnessed to ensure sustainable, equitable, and culturally responsive health interventions.

Methods We systematically reviewed qualitative and quantitative observational and experimental Australian studies. We searched MEDLINE/PubMed, EMBASE, CINAHL, psych INFO, Web of Science Core Collection and SCOPUS, and used Covidence software for screening and collating articles. We adapted a health assets model for this study using four intersectoral domains and applied it to data extraction and qualitative content analysis.

Findings Twenty-nine observational studies were included in this review. Studies reported a relationship between health assets and improved physical, mental, and social well-being of refugees resettled in Australia. A sense of belonging and identity, resilience, acculturation, and well-being most frequently intersect with social capital. This was built through engagement with family and friend networks, participation within cohesive and friendly cultural and host communities, and involvement with religious and educational organisations. Access to education, employment, and community-based activities positively impacted the well-being of refugees.

Conclusion A health assets model is a valuable approach to examining protective factors. Refugee social capital and connectedness are strongly linked to resilience, acculturation, health, and well-being. Further research is needed using participatory assets mapping to examine the effects of co-produced interventions that harness the assets of diverse refugee groups to improve health and well-being.

Keywords Refugee, Health assets, Well-being, Social capital, Resilience, Acculturation, Sense of belonging

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Background

The United Nations Refugee Agency (UNHCR) estimates that in mid-2022, forced displacement reached 103 million people worldwide [1]. An estimated 53.2 million are internally displaced people, 32.5 million are refugees, 4.9 million are asylum-seekers, and 5.3 million are other people needing international protection [1]. Refugees have been forced to flee their country because of persecution, war or violence [2]. They are unable or unwilling to return to their country of origin due to a well-founded fear of being persecuted for their race, religion, nationality, membership in a particular social group, or political opinion [2]. Since 1991, approximately 420,000 humanitarian entrants have been resettled in Australia: 37% in New South Wales and 32% in Victoria [3].

Refugees often present with physical and mental health issues on arrival in Australia. Upon resettlement, poor health is often exacerbated by acculturation stress, social isolation, financial and housing insecurities, and challenges in navigating and accessing health services [4]. There is a need for increased data on positive health and well-being among populations [5] (in contrast to data focused on illness, death and deficits) to inform effective and equitable health promotion activities and to support refugee-centred health decision-making.

Historically, a deficit model is often used to address population health needs based on information concerning health service barriers, vulnerabilities, illness, disease, and risk behaviours [6]. While deficit models are an important approach to understanding the needs of priority populations, they can undermine and undervalue individuals, families, and communities' positive and active role in health and well-being [6–8]. In contrast, an assets-based approach to health seeks to identify health-promoting or protective factors across multiple levels [9].

An asset-based approach is underpinned by the concept of salutogenesis that focuses on the generation of health rather than pathogenesis or the origin of disease. This approach involves the identification of health assets and how they support health and well-being. Asset mapping is a means of assessing individual community, organisational and societal capacity to engage with health and health-promoting activities, and finally, asset indicators that can be used to determine the effectiveness of interventions at multiple levels to eliminate health inequities [9, 10].

Health assets are multifaceted. Morgan et al. define a health asset as "any factor (or resource), which enhances the ability of individuals, groups, communities, populations, social systems and institutions to maintain and sustain health and well-being and to help to reduce health inequities." [9] Researchers and health professionals can work with communities to identify health-promoting or health-protecting assets from across all the domains of health determinants and at multiple levels [9].

Several authors refer to health assets as internal and external strength qualities that everyone possesses [7, 11]. Internal assets are innate and acquired and can facilitate positive health behaviours and optimise health and well-being outcomes. Core attributes of health assets encompass internal - relational, motivational, protective and volitional strengths; external support, the expectation of others; and physical and environmental elements [7].

There is a dearth of evidence on the health assets of refugees at the individual, family, and community levels in Australia. Australia hosts fewer refugees than, for example, the estimated 3.68 million in Türkiye (2018) but few have been resettled. The UN estimates that 375,000 refugees in Türkiye require settlement, but only 65,000 have submitted applications so far [12]. Resettlement is a durable solution that provides lasting protection for refugees and is often coordinated by the United Nations High Commissioner for Refugees (UNHCR). Australia ranked third overall for resettlement of UNHCR-resettled refugees (behind Canada and the USA). However, only 0.4% of the total refugee population (30 million) were resettled in 2018, including less than 13,000 in Australia [13]. The Australian Government recently announced increasing the annual Refugee and Humanitarian Program places [14]. Therefore, an investment in evidence-based approaches to best address the health of refugee populations is required. We sought to synthesise research to identify refugee health assets and explore how they influence health and well-being. The findings of this research can identify existing strengths that could be harnessed to ensure sustainable, equitable, and culturally responsive health interventions.

Methods

We visualised an asset model incorporating elements from various researchers to support the extraction, analysis and synthesis of data from primary research studies included in this systematic review [7, 9, 15]. The outcomes of interest were indicators of health and well-being. We identified health assets across four intersectoral domains or levels: Internal assets at the individual level and external assets at familial, community and population levels. See Fig. 1. At the centre of the diagram are individual assets that are internal to each person that interact with the physical and social environment that include assets in an individual's family, community and society.

Individual assets

assets are internal strength-based positive characteristics inherent in a person and expressed through their

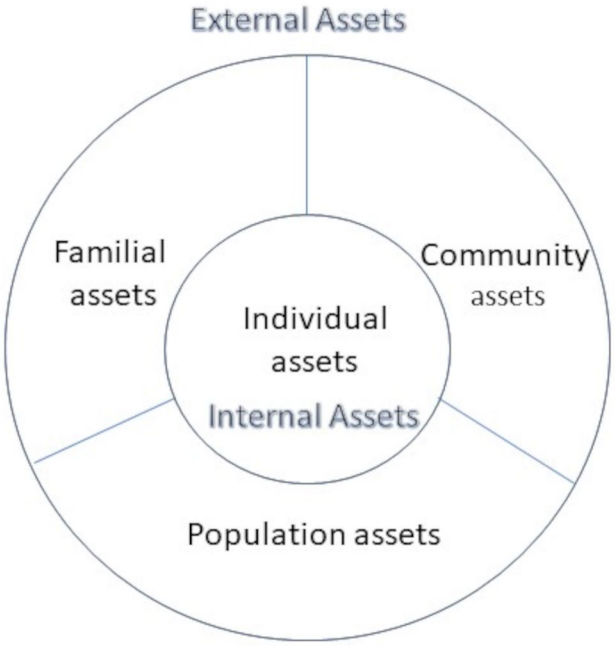

Fig. 1 Health asset model

attitudes and personality. These incorporate concepts such as an individual's internal capacity for social competence, self-regulation, positive values, a sense of identity, self-esteem, a sense of purpose, self-regulation, resilience, commitment to learning, a sense of belonging, acculturation, skills that enable resistance to high-risk behaviours, adjustment, and a sense of coherence [7, 9, 16–19].

Individual assets relate to an individual's control over their ability to interact with their personal environment and the attributes and skills they present and experience within it, such as cultural connectedness, quality of life, spirituality and religion, language and literacy skills, and school attendance and achievement [9]. Assets at the individual level also relate to personal resources an individual has access to, such as visa type, health literacy, access to transport and housing, access to schooling, training and employment, physical health and activity and nutritional status [15]. Factors impacting an individual's interconnectedness with people within their family and social circles and their perceived place within this environment relate to familial assets and can include assets enabling connections to the community, affinity groups, religious tolerance and harmony, social capital (friend/relatives), family structure and parenting style, family and friendship networks, family support, peer and friend support, intergenerational solidarity, parental monitoring, and access to day-care and childminding support [9, 15].

Familial assets

Familial health assets are concerned with supportive family networks and intergenerational solidarity. Assets may be connected with the type of family structure and parenting style or parental monitoring present in families that offer support to children, their friends and relatives.

Community assets

Community comprises a social group of refugees with shared characteristics such as culture, language, ethnicity, political views, gender, sexual orientation, history of persecution and forced migration. Community assets contribute to resilience and well-being. These assets not only encompass tangible resources, such as accessibility to schooling and supportive community structures, but also extend to the invaluable social capital manifesting in relationships, mutual trust, and collective efficacy amongst people in their local communities [9]. By nurturing and capitalising on these assets, resettled populations can harness their inherent strengths, fostering an environment that facilitates individual and communal flourishing despite the challenges of displacement and resettlement.

Population assets

Population assets largely outside an individual's control encompass factors associated with the cultural and physical accessibility of healthcare services, integration of refugees into the labour and housing markets, and ensuring inclusive diversity and social justice.

Search strategy and study selection

The following online databases were searched: MEDLINE/PubMed, EMBASE, CINAHL, psych INFO, Web of Science Core Collection and SCOPUS. The search strategy included vital terms relating to identified keywords, Index terms and MeSH terms used to describe the studies. The protocol for this review is registered in Prospero (CRD42022330393).

The search terms included: 'Health asset' OR 'Community adj3 (asset mapping OR strength OR cohesion OR development)' OR 'Social capital' OR 'resilience' AND 'refugee'. In addition to the definitions of refugee and health assets and asset mapping above, we clarified our understanding of these terms for the purpose of the search. Community comprises a social group of refugees with shared characteristics such as culture, language, ethnicity, political views, gender, sexual orientation, history of persecution and forced migration. Strength is affiliated with the positive nature of the assets concept, where such strengths can be harnessed for self-development or determination. Cohesion is a health asset that enhances the capacity of communities to preserve and maintain connections through actions that promote reciprocity

and trust [20]. Social cohesion is regarded as a critical aspect of social capital, defined as the resources accessible through one's social and interpersonal networks, which can be within family or friend groups, across the community or in organisations such as a workplace. Social capital is acknowledged as a critical social determinant influencing health [21]. Resilience is the process of adaption to adversity and requires an understanding of one's exposure to cumulative risks, knowledge of existing assets, and access to resources over time [22].

We included studies on refugees in Australia and excluded those on migrants and asylum seekers where data had not been disaggregated to allow the examination of refugee health assets and health outcomes. We included studies published in the English language from 2004 to 2022. This time frame was selected to ensure a contemporary perspective over a period where there has been a rapid increase in the number of refugees globally from 10 to just over 30 million people. However, the number of humanitarian visas granted over this period in Australia remains relatively stable, between 13 and 14 thousand people each year [1, 23]. We sought to have studies in other languages if translations were available.

Qualitative and quantitative observational and experimental primary research studies were included in this review. We aimed to identify the health assets and their influence on health and well-being. We used the PRISMA framework for reporting [24]. See Fig. 2 for an overview of studies that we included from databases.

Data extraction and analysis

We summarised the studies by the author, context/location, participant characteristics and sample size, design and methodology, exposures (health assets), results/findings, information for assessing risk of bias (see appraisal Supplementary Table 1), and any factor(s) that promote health status. A total of 52 papers were screened. We excluded twenty-three studies that did not include information concerning assets if the data included migrants and asylum seekers and could not be disaggregated (12 studies), or if the study setting was not Australia (one study). Nine studies were excluded as they did not include data about health assets, and one was a discursive review (wrong study design).

Quality appraisal of included studies was undertaken independently by two authors (CR, AD), with a third author (EAM) randomly selecting seven studies to appraise to ensure consistency. Tools used to assess the quality of evidence in the included studies were the CASP Qualitative Studies Checklist [25] for qualitative studies, the Mixed Methods tool [26] for mixed methods studies, the AXIS Tool for cross-sectional studies [27] and the Non-Randomised – Ottawa [27] for the longitudinal study. Supplementary Table 1 provides detail of all included papers, appraisal tools applied, score and appraisers. No studies were excluded and were overall of high quality.

We undertook a directed content analysis to systematically and objectively describe and quantify health assets and health and well-being outcomes [28]. Using the health assets model as a framework, a standardised data extraction form was created using the four asset levels as initial predetermined codes (as defined above and outlined in Fig. 1) and data from the findings section of all papers coded to relevant areas by CR, EA-M and AD. We sought to identify the health effects associated with extracted asset data articulated in the findings sections of papers that included descriptive qualitative or quantitative measures of health outcomes and well-being or quality of life, satisfaction/ dissatisfaction, feelings of un/happiness with daily life or overall. We analysed the findings within each asset level and by key concepts or resources, and consensus was reached for each code. We used Excel spreadsheets to collate the extracted data for each asset and included notes to describe the health and well-being outcomes. Where there were connections across assets and levels, we discussed the category with which the data was most strongly aligned and inserted links across the spreadsheet to indicate connections across assets to enable cross-referencing. We discussed the coding of various assets at length through constant comparison, and where there was ambiguity, we invited the other authors to assist with determining where data should be coded.

We aimed to use this data to examine how assets were described and assessed across and within papers and highlight relationships and gaps. Additionally, we sought to examine the veracity of the assets framework we articulated in Fig. 1 by mapping findings to each individual, familial, community and population level assets and identifying if and where it could be extended by the addition of other types of categories of assets.

Findings

We included 29 papers in this systematic narrative review encompassing a diversity of refugee populations from countries and regions who have resettled in Australia (see Supplementary Table 2 for a summary of all included studies and Supplementary Table 3 for a summary of all assets identified in the included studies). Across all papers, study participants included 5748 people from refugee backgrounds and 62 stakeholder or refugee service providers [29–31] for a total of 5810 participants aged 4–70 years. See Supplementary Table 4 for an overview of the countries and regions of origin of the study participants, places of resettlement and characteristics of participants.

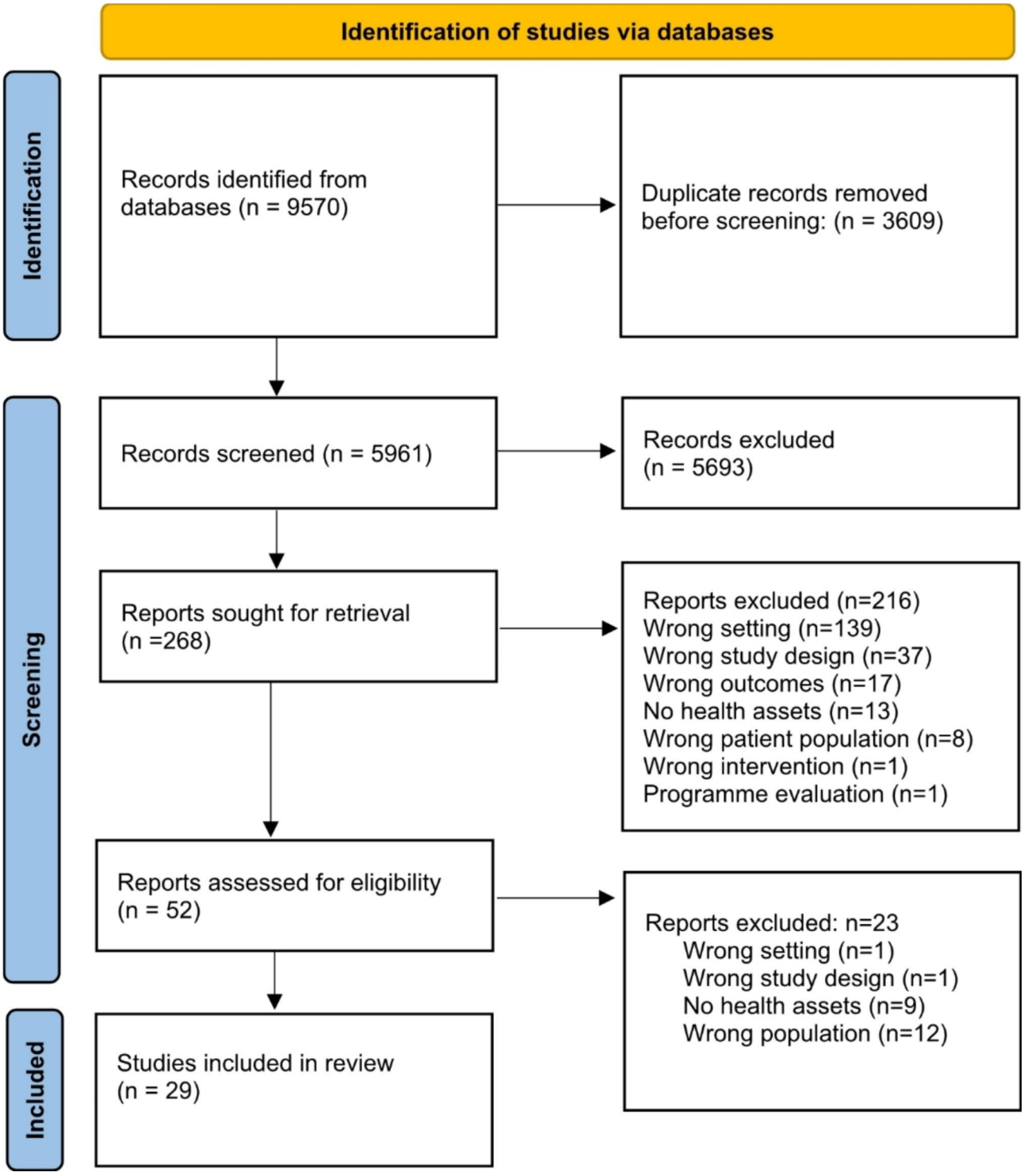

Fig. 2 The PRISMA flow diagram

All included studies were observational, and the study design was qualitative $n=14$ [29–42], cross-sectional $n=9$ [43–51], mixed methods $n=5$ [52–56], and longitudinal study $n=1$ [57]. No experimental studies were identified examining the association of interventions to strengthen or build health assets on health and well-being. Below we provide the findings of the analysis across the four intersectoral health asset domains in Fig. 1. We identified many links between assets at the individual, familial, community, and population levels and across the

different levels. This was most evident in the exploration of social networks where personal agency and ability to access social networks (individual) was linked to a sense of belonging [35] (individual assets), prosocial peer group and family networks [29] (family assets), a connection to people, place and opportunities building social cohesion [53] (community assets), that related to literacy (individual) and access to health services (population asset) [29]. However, we could not establish if these are causal links and the qualifiable cumulative effect of various assets in different contexts over time on health and well-being. Such insights require more complex theoretical and methodological approaches involving social epidemiology, such as studies undertaken by Schoon et al. examining resilience [58]. Below we describe the assets in each area with reference to reported outcomes and links to other assets.

Individual assets

Resilience

Resilience, as defined above, was regarded as a key component in supporting the physical, mental, and social health and well-being of refugees across the papers included in this review [30, 39, 43, 47, 51]. Parents of school age children and adolescents in the study by Baker et al. (2019) reported that self-sufficiency and hope were linked with their personal resilience. *"The family must encourage themselves, ask, find out, depend on themselves … the solutions are inside us!"* (Parent) [29]. Several papers discussed resilience through the lens of overcoming day-to-day challenges and undertaking everyday tasks, referring to this concept of resilience as 'every day resilience' [39], as well as the idea of 'moving forward' [30, 39]. Resilience was also reported to be linked with social capital and community engagement [30, 33, 35, 51], ethnic identity [51], spirituality [29, 33, 39], and personal well-being [43, 47, 51] within refugee populations.

Acculturation

Acculturation is an iterative process resulting from intercultural contact and is highly dependent on a person's context. Acculturation involves stress that can have negative effects involving the initiation of coping strategies and resilience [59]. It also involves a change in cultural behaviours, values and identities. Acculturation was described as an important influence on personal well-being in several studies [42, 43, 45, 47]. In their exploration of predictors and mediators of personal well-being, Copolov et al. (2018) found that acculturation mediated the relationship between spirituality and personal well-being and between resilience and personal well-being of Hazaras refugees [43]. Spirituality [53], school attendance [38, 47] and social capital and connectedness [33, 50, 54] were also positively linked with acculturation. While Wood et al. (2019) found that engaging in paid employment or volunteering activities demonstrated a positive impact on the acculturation of their study participants from Africa. Khawaja et al. (2019) conversely found acculturation was associated with the likelihood of being unemployed, while an increase in acculturative stress (modification of the culture of a group or individual because of contact with a different culture) was associated with the likelihood of employment.

Sense of purpose and agency

A sense of purpose in life, defined as an individual's belief that their life is meaningful and purposeful, has been described as a key component of psychological well-being alongside agency or the ability to effectively manage one's life and the surrounding world [60]. This sense of purpose can be protective against depression and anxiety [61]. Several studies found that contribution to community activities, events, and organisations engendered a sense of purpose and belonging, which improved well-being and one's ability to cope with stress during and after resettlement [30, 32, 37, 40, 42]. Some refugees in Australia described community volunteering facilitated a feeling of 'giving back' and supporting community members which had a positive impact on self-esteem, self-image and identity [42]. Riordan and Claudio (2021) found that an increased sense of agency acquired through participation in community activities had a positive impact on the well-being of young African refugees. Being able to effectively connect and converse with community members and service providers was reported to have a positive impact on agency [56].

Sense of belonging

A sense of belonging is an internal, psychological process that involves a desire to connect with others including peers, family and community members [62]. Studies have examined how a lack of belongness can affect school attendance and well-being [63]. The well-being of refugees in our review was identified across numerous studies and predominantly linked with a sense of belonging [32, 37, 38, 50, 51]. Several papers within this review found that social capital, and friendship and family networks provide a sense of belonging and identity, stability and solidarity [31, 35, 38, 42, 50–53]. Engagement in community-based activities [30, 32, 37, 42, 53], settling in a multicultural community, gaining employment [30], feelings of resilience [39, 51] and personal well-being [50] were associated with a sense of belonging. One participant noted that they felt: "*Very welcomed, loved and wanted. For somebody who wasn't really fortunate before you know it's something that you never really expect to happen*" [38].

Sense of self or identity

We embraced a broad understanding of a sense of self or individual identity. While some authors have defined this as a notion of self-ownership, identity may also be defined collectively. Ethnic or cultural identity for example has been found to be associated with mental and physical health [64] and mitigate the effect of discrimination and other disparities by building resilience [65]. In our review we found that a sense of self or a sense of identity was closely associated with refugees' own culture in several studies. These highlight the important role community programs played in assisting refugees to reconnect with traditional food and agricultural practices to maintain a sense of self and belonging through connection with land and place, across time and countries [32, 37]. Strong friendship and family networks, particularly for young people, also contributed to a sense of identity and belonging [38, 51], while findings from Wood et al. (2019) demonstrate undertaking paid work engenders a "sense of self" and "self-worth", helping refugees to integrate into their new communities.

Culture

Culture is the way of life, traditions, customs, and beliefs of a group of people at a particular time. Strong cultural connections are regarded by many populations as integral to health and well-being [66] and that engaging in cultural events can enhance health [67]. Being empowered to develop connections with one's ethnic community and ethnic identity was described in studies in our review as being linked with resilience [51], providing a sense of community and belonging [30, 51, 54], supporting cultural bereavement [34], and facilitating health and well-being [55]. Engagement with the wider community was noted to provide opportunities for cultural exchange and was shown to facilitate a sense of belonging and integration into the community [38, 42, 50]. Learning about Australian customs and practices was reported as having a positive impact on well-being and acculturation [42, 50]. However, parents interviewed in some studies described challenges establishing a balance for their children between their own cultural heritage and that of their new home, and in some cases this led to family tension [52]. "*Australia is our second home, but again I told my children, we have to make sure we have a home back home. Time will come when we'll need to go back and visit back home* " (mother) [68]. Refugee participants conveyed the importance of celebrating their cultural heritage within their new home environment, and the way food connects people, culture, identity and belonging [32, 37].

Language

Refugees reported being able to communicate with child services, schools, health services and the wider community as an essential part of acculturation [29, 36, 47, 52, 56]. For refugees with limited language skills, one study found having access to interpreters increased their access to services and promoted a sense of agency [56]. Host community friendships and community networks helped to strengthen language skills [36, 38, 39, 52]. Study findings reported that refugees who are proficient in English are more likely to gain employment [34, 39, 46, 48, 55]. Gaining employment also contributed to financial security and enabled refugees to find support, social connections and feel integrated in Australian society [30, 36, 46]. "*So as an African it's really good to be friends with Australians, because they are the people who are going to teach you English*" [38].

For young refugees, language proficiency is an important facilitator in gaining employment and access to higher education, that are critical to acculturation [38]. Young people were found to use their language skills to act as translators and cultural brokers for family members who do not speak English [52]. Refugee participants in some studies highlighted difficulties finding employment [31, 39, 55] and feelings of isolation [31] if they did not speak English proficiently.

Education, literacy, school attendance, and achievement

Patterns were found across ten studies in relation to four individual assets. Several studies highlighted the positive impact of school attendance on acculturation [31, 38, 39, 47, 49] and school connectedness on children's physical health and well-being [29, 40, 45, 47, 49, 51]. For adult refugees, it was found that having a higher level of education was related to well-being [45, 48] and competent literacy skills were reported as vital to job seeking [46].

Social networks

Social networks enable individuals to gain benefits through membership in connected groups of individuals or structures [69]. The well-being of refugees across numerous studies was predominantly linked with their personal agency and ability to access social networks (both friends and family) [38, 40, 50, 51, 54, 55] and engage with community networks [30, 32, 37, 40, 42]. Using the Comprehensive Quality of Life Scale, Williams et al. (2021) found that the strongest predictors of subjective well-being were social links (daily living competencies), social bridges (social networks), and a sense of belonging.

Correa-Velez et al. (2020), in their study of recently arrived refugee women-at-risk, found that individuals who could access and interact with others built social capital and social networks that positively predicted

quality of life in resettlement [45]. Social networks within the same or similar cultural background and the support they provide refugees were noted in other studies [33, 38, 47, 50, 54, 56]. Several papers highlighted the importance of engagement with the broader Australian community and the establishment of social networks outside of ethnic groups as a factor that promotes cultural and social integration, resulting in positive physical and mental health and social well-being [30, 38, 40, 50, 52]. The ethnic background of such communities was only reported by Joyce et al., who described young Congolese refugees who actively sought to connect with Australians to make friends and improve their English [38].

Studies noted that young people from refugee backgrounds seek support and connection with peers in social networks [29, 35, 38, 40, 47, 51]. Social competence and the ability to understand and adapt to Australian ways and cultural norms were reported to give refugees a sense of belonging and feelings of acceptance and inclusivity within social networks outside of their ethnic communities [50, 53].

Employment

Findings from the studies indicated employment had a positive impact on a resettled refugee's sense of belonging [30, 42], health and well-being [42, 55], English proficiency [46, 48, 55] and integration into their new community [30, 37, 48, 56]. However, Delaporte et al. found that those who undertake English training in Australia were less likely to gain employment one year after arrival [48]. Several studies noted the critical role ethnic community networks and social capital had in linking newly arrived refugees with the job market [31, 34, 48, 56] and increasing their likelihood of having a permanent job one year and two years after arrival, respectively [48]. While the length of time a refugee had been in Australia and their English proficiency increased the likelihood of being employed, but not resilience, this was also associated with acculturation stress [46]. Conversely, refugees who perceived themselves to be acculturated in this study reported being unemployed [46]. Several papers stated that living in a regional town was a barrier to employment opportunities [31, 38, 42], particularly where discrimination had been encountered [31, 38].

Housing

Couch's study on refugee young people and homelessness highlights how housing is an important individual health asset, particularly for young people who experience displacement from their social and family networks [35]. Johnston et al. (2009) detailed difficulties accessing housing but noted the importance of community networks who support newly arrived refugees to locate housing [31].

Spirituality and religion

Religion and spirituality were found to contribute to health and well-being [33, 55], and in particular, happiness [53], resilience [29], acculturation [30, 33, 43, 53] and social capital [30, 33, 37, 53]. Findings throughout the review detailed the importance of religious practice during resettlement and how it can provide refugees with comfort, strength, and a sense of community [30, 33]. "*it's good if you can go to church every week with a set of people and if you participate so I think that it is good for your mental health and social*" [55]. Religious identity was fused with ethnic identity for some Bosnian refugees [34].

Familial health assets

Social capital: friend and peer support networks

The analysis highlighted the positive impact friend and peer support networks have on refugees from diverse backgrounds. Findings demonstrate that refugee young people found connections with people their own age both within and outside of their cultural background, supported their health and well-being [33, 38, 40, 41, 47, 55], and acculturation [33, 38, 40, 54]. Building English language skills [38] and a sense of belonging [35, 40, 51], along with school attendance and extracurricular activities, facilitated engagement with friends and peers [29, 38, 40, 47, 51].

Adult refugee study participants noted that friendship networks supported their physical, mental, and social well-being. In their 2020 study, Correa-Velez et al. (2020) found a positive association between the size of one's social network and self-reported physical and mental health. Friendship support networks were reported to impact on the well-being of refugee adults in other studies [30, 32–34, 45, 48, 53–56].

Family support networks

Strong family support networks were positively associated with health and well-being [38, 41, 43, 52, 55, 57], a sense of belonging [51, 52], resilience [51], increased community engagement [35, 40, 48, 52, 55, 56] and assistance with employment opportunities [48]. Findings also demonstrated that gender norms affect refugee women and girls who can experience both support and stress within their family and friendship networks, particularly women who are single parents [39, 40, 45]. Zora noted "there's gossips, fighting, ignorance, and it makes it difficult with coping with day-to-day activities and challenges" [39]. Lolie illustrated how her gender also impacted on family expectations: "*You know for me, as a woman, I can't really just go and live with friends. It wouldn't look good for my family*" [38].

Family structure, parenting style and parental monitoring

While family support was noted as a key health asset, several papers highlighted the stress that parental expectations can place on young refugee people within the context of the family environment. It was reported that young people can sometimes feel pressure to act as language and cultural brokers for their parents [35, 38, 52] and, due to disruptions within family dynamics, take on more adult roles within their family unit [52]. Young people in the study by Couch et al. (2017) discussed how conflict around '*having Australian friends*', becoming '*too Australian*' and a '*lack of freedom*' all led to family conflict [35]. Parents of refugee children and young people also spoke about the challenges of parenting in their new cross-cultural environment and the desire for their children not to lose their cultural links [29, 39].

Family structure was regarded by participants as an important health asset, particularly in relation to children and young people [29, 52, 57]. Findings reported that engagement of refugee parents with their child's schooling and health was a strength [29, 49], and the advantage of adopting a family focused approach to ensure young people from refugee backgrounds have access to stable housing [35]. However, gender norms were identified as affecting different expectations refugee parents had for daughters and sons [38, 40].

Community health assets

Community cohesion and affinity groups

Community cohesion is a health asset that enhances the capacity of communities to preserve and maintain connections through actions that promote reciprocity and trust [20]. Community cohesion was linked with successful refugee resettlement in communities where cultural diversity was celebrated. Cultural exchange through community engagement and participation in groups with which refugees have an affinity was also noted as contributing to community cohesion [32, 37, 38]. For refugees, engagement with affinity groups was reported to aid health and well-being [32, 37, 40] and ensuing feelings of connectedness and belonging [32, 37, 55].

> *It's good to have the community there but I also really like the Australian community, like the X community also. Like this is good because we blend in so good with the rest of the community, the wider community… So, it's great to have them but it's also great to have the wider community always supporting us. So, without them this group wouldn't be strong. Without the wider community, like the X City Council, this group wouldn't be strong. [38]*

Intergenerational solidarity in two studies was facilitated by engagement with affinity groups such as community gardens strengthening family bonds through shared culture [32, 37].

Organisational engagement and social capital

The findings of included studies highlighted the positive effect of ethnic, religious and social community engagement and support [29–32, 34, 35, 38, 40, 41, 45, 48, 50, 54–56], host community engagement [39, 42, 54], and holistic engagement with all communities on health and well-being [30, 32, 35, 37, 39, 40, 42, 44, 45, 50, 53].

Organisational social capital enables individuals to work collectively for the common good in a positive, supportive context that facilitates networking and trust [70]. Community and religious organisations, service providers, and businesses were reported to facilitate community engagement, not only within refugee's ethnic communities, but also across the broader Australian population. Schools [29, 36–38, 40, 44, 47, 51], technical and further education facilities (TAFEs) [37], workplaces [40, 42], community-based refugee organisations [30, 31, 35, 37], and places of worship [33, 35, 40, 55, 56] provided an enabling environment for refugees to engage with the community, participate in activities, and strengthen their social capital, health and well-being. Organisations were also described as building social capital by facilitating engagement in the natural environment, such as gardening [32, 37, 55] or outdoor physical activities and sports:

> *When I'm playing soccer it makes me glow, feel good, you know? Yeah, it's because if you're playing soccer and you have your friends there you have a lot of fun, you know? Yeah, you don't…feel…to be sad, yeah, because you have your friend, you talk to your friend and you play. [40]*

These activities not only allowed refugees to connect with community members and their networks but also with culture and place to ensure a sense of belonging [32, 37].

For young people, extracurricular activities facilitated through their school provided access to peer and friendship networks and physical activity [29, 38, 47, 49]. Engaging with religious communities was also shown to have a positive impact on the refugee resettlement experience [33, 40, 56], their ability to establish or expand social networks [33, 55, 56] and find stable housing [35]. Employment, training and volunteering opportunities were found to increase social connectivity with the broader Australian population and facilitate cultural exchange [37, 40, 42]. Engagement with the community through cultural activities such as gardening groups [32, 37], festivals [30, 37] and other community-based activities [38, 40, 55, 56] facilitated cultural exchange opportunities that strengthened social capital and well-being.

This engagement also provided a sense of belonging [30, 38, 42] and agency [40] and helped refugees overcome language barriers [36, 55].

Studies detailed the positive effect of support from ethnic, religious, educational and host communities on refugees' health and well-being [29–32, 37–40, 44, 45, 50, 51, 53, 55–57].

> *If it wasn't for people from my community that I met at the mosque, I could still be looking for a house. The best thing was I didn't have to go through my whole story. They know, they don't doubt that I can do it. They don't treat you like a child. (young refugee) [35].*

Support from ethnic religious communities assisted refugees to access information, resources and services which facilitated their resettlement [29, 31, 35, 50] and provided information to address their immediate housing [31, 35], employment, schooling, and government support needs [31, 56]. Support from ethnic and religious communities also provided an environment where refugees felt culturally connected and felt that they belonged and were valued in their new home [32, 37, 55].

However, these support networks were reported to sometimes lead to the sharing of incorrect information or "the blind leading the blind" [29], which could cause stress related to cultural pressure or gender-based norms [30, 39, 40]. A sole parent participant who described her experiences of a support network established to help refugee women stated, "Instead *of appreciating as a single woman manage to do all that, now they've come up with strange stories, they don't believe that I can do that. They say, maybe there is a man behind* [laughs] (Thara)" [39]. Despite this, some refugees recognised the importance of engaging in community activities to break down barriers and change gender roles: "*Here Aussie…men cook… that's the good thing about everything here…feminism here is really strong*" (Naomi) [40]. When refugees could not receive the support they needed through their ethnic community, some participants reported expanding their social networks and engaging more with their host community [30, 31, 40]. One participant who was asked how he coped with stressors replied, "*I just go and play basketball with a few friends*" [33].

Ethnic community networks were found to play an important role in the initial stages of resettlement and the ongoing resettlement experiences of refugees, including facilitating links to social networks, services, and groups [30–33, 35, 40]. One participant described being at ease with asking for help: "You know if you have a problem, you can go to them, *and they'll help you*" (Regina) [38]. Findings show these resettlement experiences can shape assets, for example, increase social capital [35] and foster a sense of belonging [50] and connection to their new home [32, 37] that, in turn, can support well-being [30].

Food production

Food production is a community health asset involving a collective effort to grow both cultural and local vegetables and fruit trees that are harvested to share and co-create nutritious meals using family recipes for the neighbourhood to enjoy. The importance of the activities associated with this food production and being in the natural environment was shown to be an effective mechanism for supporting resettlement, community engagement and support, and increasing social capital. "*It brings a lot of, not only satisfaction but relief, sense of belonging, and you feel people understand you, you feel people… you're part of that community that you're in.*" (Gardener A) [32]. In addition, these community development initiatives also played an often overlooked but important role in providing food security and financial income for refugees as well as exercise [32, 37]. One participant explained, "*It means you do not have to buy things from outside, and that shop will provide enough food for your family and minimise costs. It means to make your own garden at the back of your house.*" [37].

Friendly, safe neighbourhoods and places

One paper focused on neighbourhood friendliness [36]. Over half of the interview participants (26/47) reported having good or non-problematic relationships with their neighbours. Some participants were unsure and apprehensive about engaging: "*I dare not to—to make a friend with them. If they nice, we are nice too. I dare not to go to talk to them first but if they come to my house I welcome them.*" [36]. However, a few experienced isolation, unfriendly contact and conflict with neighbours.

While no papers in this review focused specifically on neighbourhood safety, or features of the built environment that fostered safety, feelings of personal safety within the community were reported as high for refugees resettled in Australia [49, 50]. In one study, personal safety was said to be higher than their non-refugee counterparts [50].

Community cohesion

The positive impact community cohesion had on refugees' health, well-being and sense of belonging was described in several studies [38, 42, 50, 55], often resulting from cross-cultural engagement, including participation in shared hobbies, activities or events [32, 37, 38]. Resettlement in a welcoming, established multicultural town reportedly helped participants feel accepted and supported within their new Australian community and gave them a sense of belonging [38]. Conversely, Johnston et al. (2017) reported a negative impact on refugees'

well-being, social capital and integration within the wider community when settling within a community that viewed them with suspicion of taking scarce public resources, such as public housing [31].

Leaders and champions

Across the papers in this review, community leaders/champions active within refugee communities were shown to facilitate social bonding [37, 56] and advocacy [34]. However, Colic-Peisker et al. (2005) found that tension can emerge within refugee communities when there are differences in members' commitment to faith and that changes can occur because of forced migration. One Bosnian refugee described that since coming to Australia, he had become more aware of his religion and felt more strongly connected with religious leaders as part of his ethnic identity.

> *I am a Bosnian Muslim but never went to a mosque. I did not know what it meant really. I worked in a state firm, I was a member of the [Communist] Party so I wasn't religious. But [here in Australia] perhaps I would expect that our imam visits people. that he knocks on my door in the same way the Catholic priest knocks on my neighbour Franjo's door. [34]*

Population assets

Health service access

Health service access was reported to be challenging for refugees as they navigate a new health system in a different cultural environment [54, 55]. Access was affected by a lack of awareness [29], the availability of interpreter services [56], family and friend health-seeking behaviours [41], and information and support provided by community members [29, 55, 56]. The cultural competence of health care providers was important [29, 41], with practitioners' cultural sensitivity contributing to refugees feeling understood or misunderstood:

> *maybe I will act different, so I make them understand who I am exactly, what I've been through. I feel interesting to them so I tell them my story. they become like closer to me. [41]*

Labour market

Equitable access to the labour market was highlighted by participants in the study by Wood et al. (2019),

> *So, have to build more companies, to create more jobs, even it can small job but have to open their heart to employ anyone that have experience the job is looking for because most people the job they get is not their own effort it is a connection, like a family connection. So, if you don't have anyone who can connect you to the job you are looking, how can you get a job? (ID01) [55].*

A permanent visa status that enables employment was linked with the well-being of refugees [31, 44, 47].

Inclusive diversity

Inclusive diversity was shown to be an important facilitator of a sense of belonging and acceptance. For refugees who settle in an established multicultural town, findings from one study highlighted how the inclusive nature of a community that celebrates diversity supported refugees' well-being and settlement into their new home [38]. However, racism in Australian society was identified that facilitated the acceptance of Bosnian refugees was seen to be because they were "*the right colour*" [34].

Discussion

All papers in this qualitative synthesis review explored health assets across the internal, individual, familial and community levels. However, only three papers examined population health assets, and only four papers included health assets across all four domains [29, 31, 38, 42]. Resilience, acculturation, and a sense of belonging were the most noted internal health assets. Health assets most frequently cited focused on social capital (organisations, family, friends, and community), ethnic and host community engagement activities and support, well-being, culture, language, education and school attendance, and employment. While the health asset model [15] provides a valuable approach to examining these different levels confirmed as per our framework in Fig. 1, there are considerable linkages between and across assets. We also noted the influence of a refugee's resettlement experience and environment on their skills and capacity to access social capital. These existing assets and the context of refugee resettlement appear to interact. They can contribute to empowerment and acculturation, suggesting an assets ecosystem where assets affect health and well-being in different and adaptive ways.

The social capital identified in this review can be understood as the resources inherent within an individual's social and interpersonal networks [71]. These resources are a social infrastructure that provides social cohesion [72], bonding refugee groups with similar characteristics (e.g., ethnicity, language, age), facilitating support between members and also a level of social influence and control. A strong culture of sharing and interconnectedness has been documented in the cultural assets of refugee populations in America that can serve as a foundation for health interventions [72]. Social cohesion may also be attained by mechanisms that form a bridge between groups such as refugees and their host community that can enable acculturation. However, it

is important to note that acculturation is not merely attained by refugees absorbing the culture of the broader society through bridging efforts but also by bonding mechanisms that acknowledge a bidirectional approach to acculturation. Acculturation involves refugees adapting to, but also shaping, the new culture in which they live [73].

Our findings showing the link between refugee social capital and connectedness to resilience, acculturation, health, and well-being concur with those from research in other high-income country contexts, particularly in relation to the mental health and well-being of refugee children and young people. Psychosocial well-being may be related to existing resilience that enables young people to acculturate and adapt to the prevailing culture of the Australian society. Keles et al. (2016) study examining resilience and acculturation among unaccompanied refugee minors in Norway found that at least 60% of the sample could be defined as healthy and resilient over a three-year period after arrival despite the adversity they had endured [18]. This is aligned with another study from Denmark where 52% of unaccompanied refugee minors were described as having no significant mental health problems at both assessments with 22% as described as having adapted" [74].

Consistent with other studies, our review found that resilience, also reported in other research, can be enabled by social capital and connectedness. A study from the United Kingdom outlined internal assets that predisposed young people's resilience, including their faith, mechanisms to cope with stress, being positive and having self-esteem and self-efficacy [75]. This was bolstered by having strong familial ties and enabling school environments where young people could access supportive friendships to help them navigate difficulties [75]. A deep sense of their own ethnic identity or "cultural heritage" was linked to young refugees' resilience and acculturation [18, 75], as also detailed in one study included in our review [51].

A study from the United States and one from New Zealand explored resilience and protective assets in young people and their families among Burundian and Liberian refugees (US) [76] and Sudanese refugees (NZ) [77]. Like our study, various forms of social capital were identified as key, including friend and family relationships and peer networks, community cohesion, and cultural and religious connections. In addition, engaged parenting was important, along with English proficiency and educational support, to facilitate cultural competence and acculturation. Elliot et al. found gender differences in social capital, with women more likely to make friends with other parents through their children's schools, while men made more friends through work [77].

While gender equity is a population health asset, the health asset model [15] would benefit from including gender-focused health assets at the individual, familial and community levels. In addition, including access to government services (such as government welfare and social services organisations and interpreter services) would complement health service access and the availability of social housing as population-level health assets already included in the model.

The findings of our review also highlight potential adverse effects of social capital mediated by prevailing values, norms and traditions within refugees' cultural communities, particularly for young people and women. In some cases, this exerted social influence and control that affected acculturation and led to stress and conflict. For example, some studies reported contradictory findings about employment and acculturation, where employment was not associated with resilience and unemployment positively related to acculturation [78]. English language training did not appear to increase the likelihood of employment [48]. However, these studies included samples of refugees from socio-demographic backgrounds and locations that may not be representative of all refugees in Australia. Further research is needed to explore health assets for different groups within refugee communities and the factors mediating the influence of social capital and acculturation. None of the papers within this review specifically addressed health assets for refugees who are LGBTQIA+or older refugees, such as retirees and those who may be frail and infirm.

The papers in our review included refugee participants across a range of ages. Only one paper focused on children 4–15 years [57] and eight on adolescents and young people 10–25 [29, 35, 38, 40, 47, 49, 51, 52] and one 16–30 [43] while the remainder (16 papers) focused on adults of mixed age largely over 30 years. In line with studies from other countries protective factors for social-emotional well-being for children and young people feature friends or peer support networks, the importance of school attendance and extracurricular activities [19]. No clear distinction can be drawn for the mixed age groups. However, interestingly, a review by Hornby-Turner et al. also identifies the importance of family and friend networks, social activities and the influence of a high level of education on health status [79]. This highlights the need for more research that examines the influence of age on health assets that could be integral to the development of health programs that target different populations across the lifespan.

Our review comprised studies that described assets rather than experimental studies that analysed the effect of interventions on assets. However, one study used asset mapping to develop a community gardening initiative and explored how this supported African refugee

connectedness and acculturation [32]. This study aligns with the findings of a similar community development initiative in the United States [80]. However, Bloom et al. (2018) undertook an extensive participatory mapping exercise prior to developing the community garden, to understand existing assets related to food production and preparation and to develop an action plan. This process identified how building bridging social capital between migrant and refugee groups enabled assets to be leveraged to promote and share healthy food traditions that were further strengthened by bonding social capital with women and families working together in solidarity. This study highlights the usefulness of assets mapping as a key part of the development of co-designed community initiatives that harness existing assets and mitigate the potential adverse effects of unhelpful community social influence and control. Further research is needed to incorporate asset mapping into developing health services and programs, including in refugee communities.

Health assets are not included in the review

Some health assets in the model were not noted in any papers during the extraction and analysis. These include the internal health assets of social competence, positive values, commitment to learning, sense of coherence, and resistance skills. Data was not found for individual health assets: social competence, training, skills, life objectives, access to transport, and health literacy. Familial health assets not identified were religious tolerance and harmony, access to day-care, and population health assets: availability of social housing, gender equity, Society Resource Adjusted Life Year (RALY), and social justice. While these were not the focus of the studies in our review, such assets may be critical and deserve examination in future research. Overall, all specified community health assets were addressed within the papers.

Strengths and limitations

Our study has several limitations. We did not identify any intervention studies that assessed the effect of strategies to optimise, evaluate and improve health and well-being. We acknowledge that there may be different definitions of the various concepts of assets at each level that may result in variations in coding and interpretation. However, constant comparison of coding and accompanying discussion led to consensus and afforded the most rigorous approach possible. The papers in our review did not provide detailed demographic information on refugee populations, such as their ethnicity. There was also a lack of information on some groups of refugees – for example, older people, those with a disability and LGBTQI people. Our study was also restricted to one high-income country, Australia, and our findings may not apply to other high-income countries or low and middle-income countries.

While we note these limitations, our study also had several strengths. We systematically reviewed the literature and identified the health assets that improve refugee populations' health across Australia's internal, individual, familial and community assets, a country ranked third globally for refugee resettlement. We also assessed the quality of the studies that we included. Our findings regarding assets that may improve the health of refugees are likely to be generalisable to similar high-income settings. They should provide policymakers with strategies that can be applied and further tested to improve the health of refugee populations. We also identified assets, including community assets (ethnic/religious/community/ social support and social capital organisations) and family assets (social capital), that were seen across the literature as essential to harness for the health of the refugee population.

Conclusion

Assets at the internal, individual, family, community and population levels are important aspects to consider in promoting health and well-being. This review demonstrates that social capital, family networks, friendship, peer networks, and community engagement are essential in the physical, mental, and social health of refugees resettled in Australia. Organisations facilitated building social capital, bringing refugees together with people in their ethnic and broader Australian communities. Further and more inclusive research is needed using assets mapping involving diverse refugee groups to examine the effects of interventions and the environment to harness assets to improve refugee health and well-being.

Supplementary Information

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Supplementary Material 1

Supplementary Material 2

Supplementary Material 3

Supplementary Material 4

Supplementary Material 5

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Author contributions

Angela Dawson conceived and designed the study. Evelyn Adjei-Mensah undertook the literature search and led the screening with Angela Dawson and Claire Rogers. Claire Rogers undertook the analysis with input from Angela Dawson, Andrew Hayen and Evelyn Adjei-Mensah. Angela Dawson and Claire Rogers drafted the manuscript with input from all authors. All authors approved the final version.

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Data availability
All data is available in the public domain.

Declarations

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Not required.

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