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Improving primary health care quality for refugees and asylum seekers: A systematic review of interventional approaches

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Abstract

Background: It has been widely acknowledged that refugees are at risk of poorer health outcomes, spanning mental health and general well-being. A common point of access to health care for the migrant population is via the primary health care network in the country of resettlement. This review aims to synthesize the evidence of primary health care interventions to improve the quality of health care provided to refugees and asylum seekers.

Methods: A systematic review was undertaken, and 55 articles were included in the final review. The Preferred Reporting Items for Systematic Reviews was used to guide the reporting of the review, and articles were managed using a reference-management software (Covidence). The findings were analysed using a narrative empirical synthesis. A quality assessment was conducted for all the studies included.

Results: The interventions within the broad primary care setting could be organized into four categories, that is, those that focused on developing the skills of individual refugees/asylum seekers and their families; skills of primary health care workers; system and/or service integration models and structures; and lastly, interventions enhancing communication services. Promoting effective health care delivery for refugees, asylum seekers and their families is a complex challenge faced by primary care professionals, the patients themselves and the communication between them.

Conclusion: This review highlights the innovative interventions in primary care promoting refugee health. Primary care interventions mostly focused on upskilling doctors, with a paucity of research exploring the involvement of other health care...
1 BACKGROUND

Globally, the number of humanitarian migrants, who include refugees and displaced people, has been consistently increasing, with an unprecedented 70.8 million people around the world being forced to leave their home country in 2019 due to conflict and persecution. There are currently more displaced people who have left their current home or residence than at any point since reliable data have been recorded. The United Nations High Commissioner for Refugees (UNHCR) defines a refugee as a person ‘who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion’ and an asylum-seeker is ‘someone whose request for sanctuary has yet to be processed’. Therefore, an asylum seeker is seeking international protection, but whose claim for refugee status is yet to be determined. The UNHCR was originally established in 1950 to help the refugees of but whose claim for refugee status is yet to be determined. Therefore, an asylum seeker is seeking international protection, but whose claim for refugee status is yet to be determined. The UNHCR was originally established in 1950 to help the refugees of the Second World War and developed the 1951 Refugee Convention to safeguard the rights of refugees. Although the health and well-being of refugees were not specifically mentioned in the 1951 convention, the World Health Organization (WHO) Constitution ‘envisages... the highest attainable standard of health as a fundamental right of every human being’. As such, nation states that accept humanitarian migrants have a responsibility to ensure that the health and well-being of this group are maintained throughout their resettlement process.

It has been widely acknowledged that specifically refugees and asylum seekers may experience poorer health outcomes, spanning mental health and general well-being. This is due to a combination of factors including high burden of disease, poor health care, poverty and the hazards associated with migration. The literature also highlights that many displaced people are reluctant to seek health care assistance when needed due to multiple reasons including, but not limited to, cultural beliefs and psychological trauma. The humanitarian migrants are at risk of poor health outcomes, which is further compounded by reluctance to seek health care assistance when needed due to a range of complex factors. Timely access to high-quality care during resettlement is commonly reported as a challenge amongst refugee populations.

The most commonly reported point of access to health care for migrants including refugees and asylum seekers is via the primary health care/community network in the country of resettlement. A recent systematic review has identified a number of constraints that limit the provision of quality health care to refugee populations including access to health care services, provision of focused care and further resettlement. Access to health care delivery is frequently identified as a barrier for effective health care for refugees and asylum seekers. Often, this is linked to the fragmented and difficult-to-navigate health care systems in countries of resettlement or the reluctance of refugees/asylum seekers to access health care for simple reasons like communication barriers. The review also outlined a number of aspects of care quality that should be targets for improvement to enhance health care and outcomes amongst refugees and displaced people. Some of these aspects include building a trusting relationship between patients and practitioners; improving communication; ensuring cultural and social awareness by the practitioners; and ensuring that there is sufficient time to address the needs of refugees. Promoting continuity of health care and ensuring adequate resources to promote this are also a key part of resettlement processes. The resettlement process is one component contributing to complex care needs amongst refugees and asylum seekers. Complex care needs describe a diverse population who experiences a combination of medical conditions and requirements for long-term care along with behavioural and/or social need. In the context of refugees and asylum seekers, complex care needs may comprise resettlement, social acclimatization and health concerns.

Primary health care systems globally have explored and adopted numerous approaches to improve the quality of health care provided to refugees and asylum seekers, and yet, knowledge of the nature of the interventions used and their impacts is fragmented. The primary health care system is the entry level into the health system via which the people can enter the health system, and it includes a broad range of activities and services from health promotion and prevention to the treatment and management of acute and chronic conditions. The present review therefore aims to synthesize the evidence on primary health care interventions to improve the quality of health care provided to refugees and asylum seekers. This review focuses on the interventions exclusively developed in primary care system.
delivery for refugees and asylum seekers in OECD (Organization for Economic Co-Operation and Development) countries of resettlement and to establish evidence of their impacts on care quality. These findings are valuable for health care providers and policy makers towards the systematic enhancement of the quality of health care provision to sustain the complex care needs of refugee and asylum seeker populations.

2 | METHODS

A systematic review\textsuperscript{18–20} was undertaken and the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) was used to guide the reporting of the review.\textsuperscript{21}

2.1 | Data sources and study strategy

The search strategy was developed in liaison with a medical information specialist (S. M.). A medical information specialist is a librarian (information specialist) who specializes in health and medical literature. This strategy was applied to the following five databases from inception till 2 September 2020 for relevant studies: CINAHL, EMBASE, MEDLINE, PsycINFO and Web of Science. Search terms were combined for primary health care, refugees and asylum seekers. All searches were limited to studies published in the English language only, but no date limits were applied. The detailed search strategy for the databases is attached as File S1.

2.1.1 | Eligibility criteria

Inclusion criteria
The eligibility criteria were developed using the Population, Intervention, Comparison and Outcome (PICO) framework.\textsuperscript{19} Articles that fulfilled the following criteria were included: (1) articles published in the English language; (2) empirical and original studies; (3) research conducted in the primary health care setting in countries of resettlement (OECD countries); and (4) articles reporting an intervention to enhance any of the six outcomes that meet the definition of health care quality: health care safety, effectiveness of care, timeliness of care, efficiency of care, equitable and person-centred care. Quality of care was defined as that aligned with the six pillars of quality identified in the WHO’s definition of quality of care: ‘the extent to which health care services provided to individuals and patient populations improve desired health outcomes’. To achieve this, health care must be ‘safe, effective, timely, efficient, equitable and people-centred’.\textsuperscript{22}

Exclusion criteria
Articles that reported interventions that did not occur in a primary care setting or include a component that occurred within a primary care setting were excluded, along with those that were not focused on the target population of refugees and/or asylum seekers. Articles that were commentary, opinion pieces, editorials and non-peer-reviewed were also excluded.

2.2 | Study selection and data extraction

Articles were managed using a reference-management software (Covidence), and duplicates were removed. The process of title and abstract screening was undertaken independently by two reviewers (M. P. I.; J. L.) to identify potentially relevant studies. The retained studies were subjected to a full-text review in which the inclusion criteria were independently applied to the full-text articles by two reviewers (M. P. I. and J. L.). Two other team members reviewed all the full-text articles identified as fulfilling the inclusion criteria (R. H. and B. H.-R.). The team then met to discuss any discrepancies with regard to eligibility in relation to the inclusion criteria and agreed on the final studies for inclusion.

The data extraction proforma was developed by the research team to address the review questions. The following study characteristics were extracted using the finalized proforma: investigators, year, country, setting, sample and background, design and health care professional involved in the delivery of the intervention and the intervention.

2.3 | Assessment of quality

All the included articles were assessed and evaluated using the comprehensive Quality Appraisal for Diverse Studies (QuADS) tool, which is specifically designed to appraise qualitative, mixed and multimethod studies in health services research\textsuperscript{23} (see File S2). The nature of health services research involves diverse study designs that can be in-depth qualitative studies, mixed methods and multimethod approaches of exploration and evaluation.\textsuperscript{23} Each criterion was scored on a 4-point scale ranging from 0 to 3. The QuADS tool was independently applied to the studies by two reviewers (M. P. I.; J. L.). Discrepancies were discussed and resolved by a third reviewer (R. H.).

2.4 | Data synthesis

The findings were analysed using a narrative empirical synthesis based on the aims of the systematic review.\textsuperscript{24} Narrative synthesis in systematic reviews is particularly useful in understanding the effects of the interventions as well as the factors that impact the implementation of interventions.\textsuperscript{24} The narrative approach was used to synthesize the qualitative and quantitative findings, which allowed in-depth exploration and collective understanding from multiple studies that developed a broader perception of the phenomenon under study. The initial descriptions of eligible studies and results are tabulated in Table 1.
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|-------------|
| Balachandra et al. | 2009 | USA | Family-centred maternity care | One Vietnamese couple | Illustrative case study with refugee | A complex team including interpreters, the perinatal case manager, the resident doctor and a faculty member | This intervention implemented an interprofessional, family-centred antenatal care delivery model for deaf refugees. This was provided in the format of patient-centred medical home visits with improved access to effective care |
| Ballard et al. | 2018 | USA | Primary health care | 11 Karen Refugees and their children from Burma | Mixed methods | Marriage and family therapists, language interpreters and local health care workers provided the intervention | Implementing a family-focused intervention (i.e., an educational module) that is a parenting intervention to manage children’s misbehaviours in the context of trauma and relocation stress |
| Benjumea-Bedoya et al. | 2019 | Canada | Primary care clinics | 274 refugees from 23 countries were tested | Mixed methods | Physicians, nurse practitioners and primary care nurses ran the programme | This intervention is a free of cost, integrated intervention to access screening and treatment of refugees at BridgeCare Clinic for Latent Tuberculosis Infection (LTBI) screening and treatment. Free QuantiFERON-TB Gold Interferon Gamma Release Assay (IGRA) testing and treatment were provided to clients |
| Berkson et al. | 2014 | USA | Primary health care | 126 Cambodian refugees | Quantitative methods | A mental health practitioner and a Cambodian community health worker | A holistic, culturally focused intervention to promote patient access to care and increased ability to adhere to healthy lifestyle modifications. The intervention was in the format of |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|--------------|
| Biegler et al. | 2016 | USA & Canada | Primary healthcare | 18 health providers participated (10 in the intervention group and 8 in the control group) 390 Cambodian refugees participated (272 patients in the intervention group and 118 patients in the control group) | Randomized control trial Quantitative methods Pre-Hopkins Symptom checklist (HSC) and Harvard Trauma Questionnaire (HTQ) survey and a 12-week follow-up survey | Primary care doctors | An innovative, online Health Information Technology (HIT) intervention was developed that has four components: (1) web-based provider training, (2) multimedia electronic screening of depression and PTSD in the patients’ primary language, (3) computer-generated risk assessment scores delivered directly to the provider and (4) clinical decision support health promotion groups (i.e., 5 sessions) for Cambodian survivors of torture over the period 2007–2011. An American mental health practitioner and a Cambodian community health worker cofacilitated the health promotion groups (HPGs). The cofacilitators integrate Khmer health concepts with evidence-based biomedicine and encourage participants to adopt an informed and integrated approach to their health |
| Birman et al. | 2008 | USA | Community-based mental health service Primary healthcare | 97 children and adolescents who were refugees participated | Quantitative Used the Child and Adolescent Functional Assessment Scale (CAFAS) to rate the participants’ functioning The Trauma Event Checklist of Harvard Trauma Questionnaire (HTQ) was used to record the types and number of traumatic events | Doctors provided services and some mental health workers were also involved | This intervention is a collaborative, family-centred, effective intervention designed to promote mental health among refugees. A multitude of services were offered including individual treatment, group treatment, family treatment, psychiatric services, case management, consultation, treatment and support services |
| Bonvicini et al. | 2019 | Italy | | 368 irregular immigrants, (i.e., immigrants who | Primary care doctors | This was a person-centred, efficient intervention designed to improve the | (Continues) |
| Investigators          | Year | Country | Setting                        | Sample and background                                                                 | Design                                                                                                               | Health care professional involved in delivery of intervention | Intervention                                                                 |
|------------------------|------|---------|--------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Borgschulte et al.     | 2018 | Germany | Primary care outpatient clinic | 984 patient contacts were registered, mainly by young persons from Western Balkan countries and Syria | Retrospective cohort study-epidemiological method to collect data                                                   | Doctors, nurses and social workers                                                                                   | This intervention was designed within the refugee accommodation and was in the format of an outpatient clinic to provide timely, person-centred and equitable access to health care |
| Bosson et al.          | 2017 | USA     | Patient-centred medical home approach to Primary health care | 525 out of 540 refugees completed the RHS-15, and in 65 refugees (12.4%), there was a need for mental health services. 40 of these refugees entered the programme | Mixed methods                                                                                                         | Clinical psychologists and psychiatrists provided individual mental health care and counselling. Clinical psychology graduate students were also included to assess and treat refugees | Interprofessional training model of care focused on mental trauma and to provide mental health assessment and consultation for refugees. The care was individualized for the refugee and included a variety of family and social/community contacts |
| Bourne                 | 2004 | UK      | African well Women’s Clinic   | 1111 African women attended this service                                                | A case study                                                                                                         | Nurses provided the services                                                                                         | A patient-centred intervention for patients with a specific health condition to improve improved access to care in terms of healthy lifestyle, screening and treatment Established African Well Women’s Clinic for women who underwent Female Genital Mutilation (FGM) to provide culturally sensitive services. Health care services are provided to women to discuss their health concerns in specific languages, and the service also facilitates communication with the GP and direct referral to specialists |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|---------------------------------------------------------------|--------------|
| Browne et al. | 2018 | Canada  | Primary care | Equipping Primary Health Care staff | Mixed methods | Primary care doctors, nurses and nurse practitioners, social workers, nutritionists, counsellors and, depending on the clinic, pharmacists, physiotherapists, dentists and Indigenous Elders | This intervention is designed to be person centred |
|               |      |         |         | Equipping Primary Health Care staff No sample size specified | Quantitative and Qualitative In-depth, open-ended interviews Observations in each setting Staff ratings of confidence in selected aspects of equity-oriented health care at preintervention, posteducation and postintervention |                                    |
|               |      |         |         |                                                     |                                    | This intervention focused on promoting the delivery of safe, effective and equitable health care, in addition to effective health care delivery via an organizational-level health equity intervention |
| Bull et al.   | 2018 | USA     | Primary health care | 68 patients were included in the project. 12 Bhutanese patients participated in group visits and 56 were included in standard care with 15 min appointments | Quantitative data were collected during the monthly group visits and growth parameters were reviewed by physicians. A one-time postanonymous e-survey was conducted after the intervention | The team involved family physicians, a paediatrician, a registered nurse (RN) and a Bhutanese Nepali interpreter | The intervention was designed to improve primary health care for refugee children, with a specific focus on failure to Thrive (FTT). The intervention was conducted via a series of culturally adapted group visits (GV) for patients with the same first language |
|               |      |         |         |                                                     |                                    |                                    |
| Carter et al. | 2017 | USA     | Primary care clinic for refugees | 121 out of 436 refugees were latent tuberculous infection LTBI positive and 103 of them were referred to the pharmacist-run LTBI clinic for treatment. The completion rate was 94% A clinical pharmacist-run latent tuberculous infection LTBI clinic was established | Quantitative study A retrospective chart review was conducted among refugees screened for LTBI and general information was collected | Pharmacists | A structured model delivered via a clinical pharmacist that focused efficiently on tracking patients and ensuring completion of screening and treatment of tuberculosis. The appointments were coordinated with the resettlement agency and transportation service was provided. This service was free of cost | (Continues) |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|--------------|
| Cheng et al.  | 2019 | Australia | Integrated health care pathway | 1087 were referred to the pathway, and 951 transitioned through the pathway. Refugees and asylum seekers were mainly from Afghanistan, Sri Lanka and Iran | Mixed methods: Quantitative and qualitative data | Allied health clinician, doctors and nurses involved in the triage | An interprofessional, efficient, effective health service was especially designed to provide easy access to refugees and asylum seekers. More specifically, a triage system was set up to link patients based on the care that they needed |
| Cibots and Dolphin | 1992 | USA | Community health care | A total of 378 tapes were made and sent to health services agencies; 8 agencies responded to the survey and sent results back | Quantitative | Online/videotapes | A person-centred, health promotion intervention that is in the format of 9 multilingual educational videotapes in 7 languages to help immigrants and refugees improve their health literacy knowledge and understand how to gain access to the health care system |
| Culhane-Pera et al. | 2005 | USA | Community health centres | 39 participants who were Hmong refugees with type 1 diabetes mellitus with poor glycaemic control | Quantitative study | Family physician, diabetes nurse educator and nurse assistant, social worker and exercise specialists | A collaborative, holistic, person-centred intervention promoting improved access to patients, with a focus on diabetes management of the patients. Group visit structure involving check-in, group discussions, one-to-one discussion and exercise |
| Duke and Brunger | 2015 | Canada | Family medicine | From 2006 to 2012, the patient numbers ranged | Quantitative | Medical students conduct assessments of | A collaborative, educational intervention promoting improved health care access to newly arrived refugees to
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|--------------|
| Dutcher et al. | 2008 | USA     | Health care delivery | No sample size reported | Quantitative—data on visiting the webpage | Online resource | An online, easy to access, person-centred intervention providing a resource of health care information to refugees and asylum seekers - the Refugee Health Information Network (RHIN). RHIN currently focuses on providing quality materials to health providers who work with refugee clients. |
| Ekblad et al. | 2013 | Sweden  | Primary health care | 11 primary health clinicians used and evaluated the tool. | Mixed methods: Quantitative and qualitative data Pre- and postquestionnaire 15–30 min telephone interviews | Primary care doctors | This intervention was an online tool in the format of a virtual patient with a history of trauma to train primary health care professionals to provide safe and effective care to refugees with a history of trauma and refugee mental health. |
| Esala et al.  | 2018 | USA     | Integrated care | 40 Karen Refugees were involved in the study | Qualitative exploration In-depth, semistructured interviews were conducted | Highly qualified psychotherapy and social work professionals who are supervised by senior providers with extensive experience working with traumatized | Timely, integrated, effective behavioural health care intervention. This intervention is provided in the primary care health centre and provides psychotherapy and targeted case management services. |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|---------------------------------------------------------------|-------------|
| Farokhi et al. | 2014 | USA     | Primary health care | Majority of patients attending the clinic have been Nepali, Burmese, Iraqi, Iranian, Congolese, Burundi and Thai refugees | Qualitative data | Dental, medical and nursing students | An interprofessional, safe, educational intervention that involved students from dental, medical and nursing schools, under the mentorship of their faculty to serve the refugee community. The student-run San Antonio Refugee Health Clinic (SARHC) was free of cost and provided an opportunity to train and educate students to serve the diverse refugee population |
| Ferrari et al. | 2016 | Canada  | Primary health care | 74 participated. 58 completed ICCAS in English, and 16 in Spanish | Mixed methods: Quantitative and qualitative | Family physicians and nurse practitioners | This intervention was an online, computer-assisted client assessment tool completed by clients while waiting to see their family physician (FP) or nurse practitioner (NP) |
| Gondek et al. | 2015 | USA     | Primary health care | A total of 14 sessions conducted with 348 participants. Varied ethnicity of patients: Middle Eastern (29.5%), Nepali (20.1%), Burmese and Thai (17.1%) and African (16.8%) | Quantitative study | An educational session had a breast cancer survivor as a speaker and a female physician to answer questions | A multilingual, person-centred intervention that was designed to engage immigrant and Refugee Women in Breast Health Education. The intervention included breast cancer screening in a mobile mammography unit |
| Goodkind      | 2005 | USA     | Integrated care | 28 Hmong adults (majority women) and 27 undergraduate students participated in the intervention | A comprehensive, multimethod strategy, which included a within-group longitudinal design with four data collection points and in-depth qualitative recruitment and postintervention interviews | Undergraduate students | This intervention was a community-based advocacy and learning programme for Hmong refugees. The intervention had two major components: (1) Learning Circles, which involved cultural exchange and one-on-one learning opportunities for Hmong adults, and (2) an advocacy component that involved |
| Investigators     | Year | Country | Setting                  | Sample and background                                                                 | Design                                                                                                      | Health care professional involved in delivery of intervention                                                                 | Intervention                                                                                                                                                                                                 |
|-------------------|------|---------|--------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gould et al.      | 2010 | Australia | Primary health care      | 76 patients received health assessment; 69 of them received the assessment within the first year of arrival | Mixed methods: Qualitative and quantitative methods and included a description of the service delivery model and a retrospective analysis of data from the records of the first 76 patients referred to the clinic for a comprehensive health assessment | The clinical team consists of a clinical nurse, consultant (CNC), administrative support, access to pathology and diagnostic imaging services and pharmaceuticals for the clinic. However, medical services at the clinic are provided by five general practitioners | This intervention was designed to provide effective, culturally appropriate and timely health services via an interprofessional team |
| Grigg-Saito et al.| 2010 | USA     | Community health centres | More than 1000 health professionals completed cultural competence and Cambodian health beliefs training. A sample of 297 professionals completed pretest and posttest evaluations | Quantitative data reported                                                                                   | Doctors, nurses, community health workers, religious personnel and translators                                                                 | A comprehensive service model was implemented to address refugees' physical, psychosocial and spiritual needs. Many interprofessional groups were involved in each subprogramme like Buddhist monks' consultations, community health workers, peer leaders and teaching assistants and involvement of parents and community partners. This model was specifically designed to address health disparities in the Cambodian refugee and immigrant community of Lowell, MA |
| Jahn et al.       | 2018 | Germany | Integrated care          | No sample size suggested                                                                  | A multisited qualitative study in 6 refugee centres in 5 cities                                             | Doctors and nurses                                                                                                                                         | This intervention was designed to improve communication between different health care sectors for |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|--------------|
| Jirovsky et al. | 2018 | European countries | Primary health care (PHC) | A total of 390 participants registered as health care professionals for the online course in 6 countries with | Quantitative | Online | An online, web-based course containing 8 modules of information to support primary health care professionals in the provision of high-quality care for refugees and migrants |
| | | | | | | | | The English template was translated into 7 languages in 6 countries |
| | | | | | | | |
| Johnson et al. | 2006 | UK | Local Somali community centre or in participants' home | Twenty Somalis were presented with three communication tools and were asked a set of general questions in Somali that they had to answer using each tool: (1) a paper-based communication book containing symbols and bilingual text labels; (2) a laptop PC with a mouse pad containing the same symbols, text labels and augmented with digitized Somali speech; and (3) a tablet PC with touch screen containing the same | Qualitative study | Primary care doctors | This intervention utilized alternative communication strategies to communicate with both literate and illiterate Somalis, thus promoting safe and effective health care delivery |
| | | | | | | | | Video-recorded interviews |
|Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|--------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|--------------|
|Kennedy et al. | 1999 | USA | Family medicine centre and Refugee Services Programme | More than 1600 refugees received assessments during the first 30 months of the programme | Case study Quantitative data | Family medicine faculty and residents perform all health assessment exams | A comprehensive refugee health screening programme was implemented to provide a single point of access for all family members of refugees/asylum seekers. A range of appropriate, interpreting services, comprehensive health assessments that include a thorough mental health screening, data collection and evaluation and education of health care providers to deliver culturally responsive care was made available |

Kirmayer et al. | 2003 | Canada | Health care delivery | Collected data of the first 100 cases referred to cultural consultation service (CCS); 102 referrals, People from 42 countries, speaking 28 languages, with more than 50 ethnocultural groups and 6 major religious traditions participated; 29 clinicians completed service evaluation questionnaires; 86% were satisfied with the format | Mixed methods | Core CCS personnel included 2 part-time psychiatrists, as well as psychologists, social workers, psychiatric nurses, medical anthropologists and trainees from these disciplines and from family medicine. A full-time clinical psychologist acted as a clinical coordinator and triaged all referred cases | This intervention was designed to improve practitioner–patient communication in relation to a model of mental health service for multicultural societies. Three formats were available: the first one is a consultant + cultural expertise + patient; the second one is a consultant + cultural expertise; and the third one is a consultant + community organization |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|------------------------------------------------------------|--------------|
| Martin et al. | 2018 | Australia | Primary health care | More than 300 sessions were delivered to 3000 participants from 2012 to 2016. Over 400 health care volunteers were involved | Case study | Volunteer health care professionals include doctors, nurses, midwives, dentists, physiotherapists, dieticians and medical students in their final year of study | This is a health promotion intervention focused on providing effective and person-focused health care information to refugees and asylum seekers. Interactive, health education sessions are provided by volunteer health care professionals at the request of established community groups. Interactive education sessions, 60–90 min each |
| McHenry et al. | 2016 | USA | Family medicine | Approximately 173 residents completed the pre- and postsurveys | Quantitative: Pre- and postintervention, self-administered surveys were used to measure clinician’s knowledge, attitudes and comfort. Some open-ended questions were also included | Primary care doctors | This intervention was a brief educational module focused on cross-cultural considerations when caring for Burmese refugees i.e., cultural considerations and specific health care needs |
| Michael et al. | 2019 | USA | Primary health care/integrated care | 285 refugees were included in the study A total of 20 unique countries were represented among the | Quantitative data: Single variable logistic nonlinear mixed models were used | Primary care doctors | This intervention was a collaborative-developed novel algorithm that guided the process by which refugees establish care in patient-centred medical homes (PCMHs) |
|Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|--------------|------|---------|---------|-----------------------|--------|-------------------------------------------------------------|-------------|
| Muller et al. | 2020 | Germany | General practice | A pilot study (text run) was conducted with 36 patients of Syrian origin | Quantitative data: A digital and audio-supported questionnaire was completed when the DCAT was finished | Online/web-based tool | This communication tool was in the form of a Digital Communication Assistance Tool (DCAT) to obtain medical history from refugees and asylum seekers. The tool was designed with 19 different languages and dialects |
| Njeru et al. | 2015 | USA | Health care delivery | 8 digital stories were created on topics like medication management, glucose self-monitoring, physical activity and nutrition for diabetes. Each of the 8 storytellers was from the Somali and Latino communities with diabetes (4 from each group) | Community-based participatory research (CBPR). Qualitative study 6 focus groups with 4–9 people in each group (37 total) involved in 60–90 min workshops that were held for 6 weeks. Results from the workshops were collected and summarized into 8 stories | Community health workers and translators | An effective and a person-focused intervention that used digital storytelling to provide diabetes-related information to refugees and immigrants. This intervention was designed to aid participants in managing diabetes |
| Northwood et al. | 2020 | USA | Primary care | 193 out of 214 participants completed a baseline and follow-up assessment. Karen refugees Involved in the project | Pragmatic randomized control trial with a baseline and follow-up assessment | Psychotherapist, clinical social worker and primary care doctor | This intervention was specifically designed for Karen refugees and related to providing intensive psychotherapy and case management for patients with major depression presenting to primary care |
| Ong et al. | 2010 | UK | General practice | A total of 280 refugee doctors participated; 42 | Quantitative survey | The refugee doctors involved were from 16 different | This intervention focused on promoting learning and training of refugee doctors by offering them clinical |
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|--------------------------------------------------------------|-------------|
| Parmentier et al. | 2004 | UK | Health care delivery | Give refugees with minor illness a voucher that can be used in the pharmacy to exchange OTC medicines. A total of 200 vouchers were given to 184 refugees in the 5-month project. 264 items were collected by refugees | Quantitative study | Pharmacists | This intervention helped allied health care staff, that is, pharmacists to manage minor illnesses of refugees by offering over the counter (OTC) medicines, thus promoting effective and timely provision of health care. |
| Percac-Lima et al. | 2013 | USA | Community health centre | There were 188 refugees (36 Somali, 48 Arabic, 104 Serbo-Croatian speaking), 2072 English-speaking and 2014 Spanish-speaking women eligible for breast cancer screening | Quantitative study | Patient navigators | This intervention was a tailored Patient Navigator (PN) programme that provided knowledge about breast cancer screening for refugee women and encouraged them to complete the screening. |
| Pottie and Hestland | 2007 | Canada | Family medicine/refugee centre | This intervention was pilot-tested on 5 refugee families (15 individuals) at a shelter | Qualitative study: Follow-up semistructured face-to-face interviews with students, GPs and refugees | Medical students and primary care doctors | This was an educational intervention designed to enhance refugee health care delivery and cultural competence of effective health care for refugees and asylum seekers. The intervention had a wide variety of formats including internet-based training modules, a self-assessment quiz and workshops to increase competence in cultural matters. Both refugees and medical practitioners including students participated in the intervention. After attending the educational component, students had the experience of working with at least 1 refugee family at a shelter. |
| Investigators       | Year | Country | Setting                              | Sample and background                                                                 | Design                                                                 | Health care professional involved in delivery of intervention                                                                 | Intervention                                                                                       |
|---------------------|------|---------|--------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Prescott et al.     | 2018 | USA     | Community-based educational workshops | 12 workshops were conducted for 282 refugees from 33 countries                           | Mixed methods: Quantitative and qualitative study                      | The workshops were held approximately once per month with Doctor of Pharmacy Students, alumni and a faculty member | This interactive intervention was person-focused and promoted safe health care delivery by providing a medication health literacy programme for refugees and asylum seekers. Refugees were provided basic information about medications with the help of laminated slides and demonstration kits |
| Reavy et al.        | 2012 | USA     | Community health centre              | 13 Clinic Health Advisors and 227 prenatal and paediatric refugee patients received assistance from a health advisor who spoke the refugees' preferred spoken language and English | Mixed methods: Qualitative and quantitative                          | Family practice physicians, certified nurse midwives, a paediatric nurse practitioner, registered nurses, a licensed case social worker, a dietitian, medical assistants and office staff | This intervention was a new clinic model for prenatal and paediatric refugee patients, which is the C.A.R.E. (Culturally Appropriate Resources and Education) model that aimed to promote effective and efficient health care delivery |
| Rodriguez-Torres et al. | 2019 | USA     | Primary health care                  | N = 126 Refugee women received the intervention                                        | Quantitative methods                                                  | Patient navigator                                                                                                             | A culturally Tailored, patient-focused Patient Navigation (PN) Programme to increase Breast Cancer Screening in Refugee Women |

(Continues)
|Investigators | Year | Country        | Setting          | Sample and background | Design                  | Health care professional involved in delivery of intervention | Intervention                                                                 |
|--------------|------|----------------|------------------|-----------------------|--------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------|
|Schulz et al. | 2014 | Australia      | General practice | 20 consultations      | Quantitative study       | General practitioner and nurse                                | This intervention was a new telehealth clinic that promoted timely access to specialist care at the general practice along with the general practitioner and/or the practice nurse |
|Spruijt et al.| 2020 | The Netherlands| Primary health care | A total of 904 Eritrean migrants participated, and 401 of them attended the Latent Tuberculosis infection (LBTI) education programme and 257 received LTB screening | Mixed methods             | Primary care physician, nurse and technical assistant        | This was a person-centred, effective intervention designed to motivate migrant communities that are at high risk for TB to participate in a latent tuberculosis infection screening programme |
|Sundquist et al.| 2010 | Sweden         | Primary health care | 243 refugee women participated from two locations, 131 in the intervention group and 112 in the control group | Quantitative study       | The female leaders/instructors were either physiotherapists or physical education teachers | An effective intervention was developed in the format of a Primary health care-based cardiorespiratory fitness programme for refugee women |

First-generation refugees in Sweden from either the Middle East or Latin America.

(Refugee women recruited from two locations; one group was set as the intervention group and the other one was set as the control group).
| Investigators | Year | Country | Setting | Sample and background | Design | Health care professional involved in delivery of intervention | Intervention |
|---------------|------|---------|---------|-----------------------|--------|---------------------------------------------------------------|--------------|
| Teunissen et al. | 2017 | Five European countries: Austria, England, Greece, Ireland and the Netherlands | Primary health care | 66 stakeholders participated in 62 Participatory Learning and Action (PLA) style groups. To develop supportive evidence-based guidelines and training initiatives (G/TIs) Stakeholders including migrant representatives, general practitioners (GPs), practice nurses, receptionists, practice assistants, practice managers, academics, interpreters, health service planners and policy makers | Qualitative study and observational data collection | General practitioners (GPs), practice nurses, receptionists, practice assistants, practice managers, academics and interpreters | This was a comprehensive, widely integrated intervention that promoted the implementation of person care guidelines and training initiatives to improve cross-cultural communication in primary care consultations, especially with refugees and asylum seekers |
| Timlin et al. | 2020 | Australia | Primary health care | 57 staff from 25 GP clinics participated. 95%, n = 54) were GPs and the remaining 5% were practice nurses | Quantitative data Rigorous record keeping, pre- and post-practice assessments guided by a self-reported 12-point checklist, participant feedback | General practitioners and nurses | This collaborative, educational intervention, delivered by the practice facilitator, focused on developing the skills of general practice health care workers in the provision of safe and effective health care for refugees and asylum seekers |
| Wagner et al. | 2015 | USA | Primary health care | 114 out of 140 participants, who were Cambodian refugees, completed the 1-year assessments | Quantitative study | Community health care workers | A person-centred, effective, community health worker (CHW)- delivered lifestyle intervention for the prevention of cardiometabolic disease, called Eat, Walk, Sleep (EWS) for Cambodian American refugees |
| Weissman et al. | 2012 | USA | Primary health care/health | None specified | Case study | Students and primary care doctors | This intervention discussed the free of cost, student-run health initiatives provided by Refugee Health Partner (RHP) programme. The programmes offered vaccine clinics and health |
|Investigators    | Year | Country | Setting                  | Sample and background | Design                                                                 | Health care professional involved in delivery of intervention | Intervention                                                                                                                                                                                                 |
|-----------------|------|---------|--------------------------|-----------------------|-------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|Wieland et al.   | 2017 | USA     | Primary health care      | 25 refugees (15 Latino, 10 Somali) with type 2 diabetes mellitus were involved | Mixed methods: Qualitative data and Quantitative assessment and comparison of HBA1C | Online/digital tool | A person-centred, effective intervention was developed that was in the format of a digital storytelling module targeting immigrants and refugees with type 2 diabetes mellitus (T2DM) Fairs; English as a second language classes in every Saturday afternoon; refugee education partners; mental health assistance; and promotion of women's health |
|Wittick et al.   | 2018 | Australia | Primary health care   | An Australian Refugee Health Practice Guide website | Qualitative study—semistructured interviews | General practitioners | This intervention was in the format of an online resource for general practitioners (GPs) to promote their role in supporting refugee health care in Australian general practice | A 12-min culturally and linguistically tailored video included an introduction, four stories and an educational summary |
|Yacoob et al.    | 2020 | USA     | Primary health care      | Refugee patients (n = 171) were study sample | Quantitative study | Nurses and medical assistants | A lecture-based educational intervention for nurses and medical assistants to enhance the vaccination uptake among high-risk populations | |
|Zehetmair et al. | 2018 | Germany | Reception centre        | During the study period, a total of 86 imaginative stabilization group therapy sessions took place and N = 46 participants (Sub-Saharan Africa, Middle East, South Asia and North-Africa) visited the sessions at least once | Mixed methods: Quantitative study and qualitative exploration Pre- and post self-report questionnaires Follow-up interviews with 25 participants 2 weeks after the last session | Psychotherapists and a doctoral student of behavioural therapy | This was a person-focused intervention design in the format of a psychotherapeutic group for traumatized male refugees. The programme used imaginative stabilization techniques to promote the mental health of participants |
3 | RESULTS

3.1 | Search results

The systematic database search identified 1201 articles. After removal of duplicates, 1173 articles remained. A total of 1017 articles were excluded based on the title and abstract. The full text was reviewed of the remaining 156 articles, and these were assessed against the inclusion criteria. After this review, a total of 55 final articles were included in the narrative synthesis (Figure 1: PRISMA Flowchart).

3.2 | Excluded studies

Studies \( n = 101 \) were excluded at the full-text review stage because they did not fulfill the inclusion criteria and for the following reasons:

- \( n = 44 \) reported an intervention that is not focused on improving the quality of care for refugees and asylum seekers, and \( n = 24 \) did not report eligible outcomes relevant to the inclusion criteria. In addition to these, \( n = 19 \) were studies from non-OECD countries; \( n = 14 \) focused on the nonrefugee/asylum seeker population or the intervention was beyond the primary care context.

3.3 | Study quality

The studies rated highly on a clear statement of research aims and appropriate study design descriptions to address the stated aims, and yet, generally received an average or low score for description of the data collection methods. The majority of the studies received low scores \( 0–1/3 \) on criteria related to sampling and evidence of research stakeholders’ involvement in the research.

![PRISMA Flowchart](image-url)
design and conduct (0–1/3). We did not exclude studies based on the quality assessment; rather, the quality assessment data were used simply to indicate the strength of the available evidence.

3.4 Characteristics of the included studies

Of the total of 55 studies included in the review, the majority \( n = 35 \) were from North America (United States and Canada)\(^{25–30,34,35,37,39–42,44–47,49,51,52,54–57,59,62,65,66,69–75} \); 14 were from countries in Europe including the United Kingdom, the Netherlands, Germany, Sweden and Italy\(^{31–33,38,48,53,60,61,63,64,68,76–78} \); and 6 were from Australia.\(^{36,43,50,58,67,79} \) All articles were published between 1992 and 2020. The interventions, identified in this review, focused on four broad areas: (1) developing skills amongst individual refugees/asylum seekers and their families; (2) skill development of primary health care workers; (3) system and/or service integration models and structures; and (4) interventions enhancing communication services (Figure 2). Two interventions (2/55 studies) were organized to be included in more than one category outlined above.\(^{29,78} \) The majority of the studies (29/55 studies) identified in this review discussed the involvement of doctors engaging with the interventions.\(^{25–29,31,32,34–37,41,43,44,45,47,53–55,57,62,63,66,68,70,73,77,78} \) Health care professionals involved in the interventions also included nurses or nurse practitioners (11/55 studies),\(^{26,28,29,31,35,36,48,50,58,77,78} \) undergraduate students (6/55 studies),\(^{29,30,36,40,57,78} \) patient navigator roles/community health workers (4/55 studies),\(^{29,42,44,46} \) clinical psychologists (4/55 studies),\(^{25,47,54,74} \) pharmacists (3/55 studies),\(^{38,62,71} \) physiotherapists and/or exercise specialists (3/55 studies),\(^{28,36,64} \) a health care advisor or a refugee health facilitator role (2/55 studies),\(^{41,79} \) midwives (1/55 studies),\(^{36} \) dentists (1/55 studies)\(^{36} \) and family therapists (1/55 studies).\(^{45} \) Some interventions were self-directed and were online and/or computer based (10/55 studies).\(^{33,52,53,55,57,60,66,67,69,72} \) A variety of study designs and methods were used including qualitative interviews (in-depth, semistructured and unstructured; 24/55 studies)\(^{26,30,31,33,40,41,45,47,53–55,57,62,63,66,68,70,73,77,78} \); 20/55 studies reported quantitative information on administrative data sets from self-reported surveys (collecting data on hospital/emergency visits and uptake of screening/treatment/vaccination)\(^{26,29,30,34,36,38,39,41,43,48,49,56,58,63,66,68,69,72,75,76} \) and quantitative surveys (16/55 studies).\(^{27,29,35,42,44,47,50,51,55,57,59–62,70,77} \) Some studies (9/55 studies) gathered baseline and postintervention data.\(^{32,37,45,46,53,56,67,71,74,79} \) One study (1/55 study) reported researcher field reports collecting observational data.\(^{78} \) Few longitudinal studies (4/55 studies) were conducted, ranging over a period of 6 months,\(^{57,75 \ 19 \ months, \ 76} \) and 3 years.\(^{27} \) A case method approach was adopted for four studies (4/55 studies).\(^{25,34,36,48} \)

(1) Skills of individual refugees/asylum seekers and their families: Twenty studies (20/55 studies) in the review focused on developing the skills of refugees, asylum seekers and their families.

![Figure 2](image-url) Interventions present within the primary care network that aim to improve the health care quality of refugees and asylum seekers in countries of resettlement
A substantial group of studies (n = 14) described health promotion interventions for refugees/asylum seekers and their families and these were predominantly aimed at promoting access to the services available (five studies), improving engagement with and adherence to health regimes for better health care outcomes (seven studies). Two studies in this category were also designed to promote information about physical health and well-being especially related to cardiovascular health like healthy diet, sleep and exercise.

Six studies sought to advance the skills and ability of refugees and asylum seekers to talk about their health and health care with health professionals and broader health and social care workers. The studies tackled a range of issues addressing mental health concerns (2/6 studies) and trauma care related to past experiences and/or migration to a new country (3/6 studies). One intervention was more broadly seeking to improve individual patients’ ability to speak with health care workers in the host country’s health care system. Interventions often focused on a specific cultural and ethnic group.

A variety of different formats of refugee training were discussed including face-to-face, small-group, one-to-one patient counselling and workshop formats; a single intervention often had multiple delivery formats. Educational toolkits with pictures, stories, video recordings and/or reading and web-based resources were used in several interventions. Small-group, face-to-face sessions were generally identified as preferable as opposed to receiving resource packs because they promoted active engagement with participants that supported knowledge and skill development. Several studies reported the involvement of trained language translators to ensure clarity in communication with patients and others offered bilingual/multilingual formats (n = 3 studies). The content of the interventions was also tailored to meet their cultural traditions and habits, by offering advice about dietary recommendations and especially in communicating about the general concept of well-being (n = 2 studies).

The interventions in this section reported improvement in several quality-of-care outcomes. Educational interventions (four studies) not only improved the ability of patients to communicate with health care professionals within the health system but also enhanced their access to it. Participants’ access to health care was further promoted by offering timely, targeted and comprehensive health assessment models. For example, medical students were involved in providing comprehensive patient assessments and triaged them to appropriate care services under the mentorship of senior general practitioners (GPs). Participants’ engagement with the interventions was further promoted via offering patient target interventions to a specific patient group and/or health conditions (eight studies) by offering information in multiple languages (five studies) and in a multiple format (one study).

(2) Skill development of primary health care workers: Fifteen studies outlined interventions to enhance the capacity and capability of primary health care providers to respond effectively to the complex care needs of the refugees. Interventions in this category were focused (eight studies) on promoting safe care delivery and on effective health care delivery (12 studies). While some (four studies) focused on provision of person-centred care and promoted equity-oriented care (four studies). Five interventions in this group primarily focused on a specific ethnic group and/or a health condition.

Eight interventions upskilling health care professional staff in care delivery for refugees and asylum seekers focused on safe health care practices, out of which four studies also promoted equitable care delivery. Interventions focused on either upskilling health care professional staff in care delivery for refugees and asylum seekers in an Australian context or on effective health care delivery for refugees and asylum seekers focused on safe and patient-focused health care for refugees and asylum seekers. Moreover, multiple subsequent visits were arranged to include GPs and practice nurses, in providing effective health care for refugees and asylum seekers.

One study discussed the role of a refugee health fellow in building the capacity of primary health care professionals, including GPs and practice nurses, in providing effective health care for refugees and asylum seekers in an Australian context. The role of the facilitator was to identify and contact general practices involved in providing care to refugees and asylum seekers. Visits to the general practices aided in providing health care delivery resources, tools and frameworks to promote provision of safe and patient-focused health care for refugees and asylum seekers. Moreover, multiple subsequent visits were arranged to discuss practice-specific issues in relation to providing ongoing assistance. Tailored educational strategies were collaboratively developed by the fellow along with the GPs and practice nurses to deal with health care issues pertinent to refugees and asylum seekers. This targeted approach of developing skills of the...
general practice staff members was identified to bring about a positive change in the practitioner–patient clinical encounter with early identification of refugees and asylee patient groups within the general practice. It was identified on self-perception surveys, completed by participants before and after the implementation of the role, that there was an increased referral to mental health services and improvement in the provision of tailored care in terms of relevant screening and investigations.79 Another intervention was developed and adapted across several countries in Europe (Austria, England, Ireland, Greece and the Netherlands), tailored to their primary health care systems and targeted to their specific refugee populations.78 This intervention was in the form of supportive, evidence-based guidelines and training initiatives to improve cross-cultural communication between practice staff (i.e., including GPs, practice nurses, receptionists, practice assistants, practice managers, interpreters and the migrant patients.78 The positive outcomes, generally reported via in-depth interviews such as self-perceptions on improved communications with the refugees/asylee seekers coming into the practice, improved diagnoses and increased the confidence of general practitioners in developing management plans. The challenges that were reported varied according to the countries and their general practice structure. For example, in Ireland and Greece, the lack of structural resources to provide interpreters and logistic challenges with difficulties accessing trained interpreters created barriers in effective care provision.78

Three interventions promoting person-centred care targeted impact in distinct groups of refugees and asylee seekers. Two interventions were designed for a specific refugee/asylee cultural group49,69 and/or a specific health condition.49,69 The effectiveness of these interventions was reported through patient self-reported outcomes such as patient satisfaction in the overall quality of their mental health care, satisfaction with the primary care provider and the degree of patient-centredness.49,69 A statistical increase in the number of clinic visits for age-appropriate child checks was reported, and increased health care professional satisfaction and confidence was measured in relation to providing care for a specific health condition like failure to thrive in refugee children.49 Another unique initiative promoting person-centred care and improved access to health care involved upskilling refugees who were doctors themselves to become effective members of the National Health Service team, in the primary care delivery context, of the host country, that is, United Kingdom, and involve them in care delivery of the refugee population.61 Participating refugee doctors became familiar with the health care delivery standards of the host country and over 50% continued to work as doctors, providing care in the community.

Seven interventions focused on specifically enhancing access to health care services amongst refugees by upskilling health care professionals in terms of the legal aspects for refugee health and approaches that orient refugees to a new health system to promote cultural safety and access to care in the host country.32,67 For example, specific modules were designed with information on the different aspects of health care delivery and legal aspects such as the involvement of interpreters, translators and cultural mediators in care provision.32 A further study reported conducting face-to-face workshops on specific topics (such as trauma- and violence-informed care) with general group discussions about issues raised by primary care professionals and online education modules to support harm reduction.70 Participants in these interventions reported gaining a better insight into the sensitive issues pertaining to migrant patients and gained improved knowledge about how to carefully navigate health care delivery for refugees and asylum seekers.72,67,70 Four studies reported interventions to develop the skills of health care students in the primary care delivery context by providing them opportunities to both learn from and experience cross-cultural patient practice in training under the mentorship of senior health care professionals.29,30,40,65 These interventions were designed to upskill prospective, primary health care staff in health care delivery of refugees. A framework was also developed to provide an initial access to health care for refugee patients and to refer them to appropriate health care services.79,66 One study reported the design of an online module with workshops for students to attend before their engagement with refugee health clinics.40 This model was well received by students, primary care doctors and refugees because it facilitated easier access to health care and provided an opportunity to gain insight into the health care delivery of the host country.40 Similar to this model, Farokhi et al.30 presented a more interprofessional model involving nursing and dental students in addition to medical students. This approach of involving students in refugee care provision was reported to be an effective approach of developing the students’ skills and knowledge of sensitive issues in providing care to refugees. The involvement and mentoring of students were rewarding experiences for the entire team including the senior health care professionals.30 Interprofessional models of care discussed have initiated holistic and accessible health care for the refugees.

(3) System and/or service integration models and structures: Seventeen interventions (17/55 studies) were designed to promote health system integration and continuity of care arrangements. Interventions in this subcategory were designed to improve different facets of health care delivery. However, all 17 studies focused on the delivery of safe health care.25–27,34,35,38,41,50,58,59,68,71,72,74,76–78 Some studies were designed to improve more than one health care outcome: Fourteen studies (14/17 studies) sought to enhance or enable delivery of person-centred care.26,27,33–35,41,43,47,58–60,74,76–78 nine studies (9/17 studies) focused on promoting efficient care delivery38,41,50,58,59,68,71,76,77 and two studies (2/17 studies) enhanced equitable health care delivery.25,72
Six studies were designed to be in close proximity to the residences of refugees and asylum seekers, which promoted better engagement with them and aided in providing them timely access to care. Collaborative models of care were also described that linked refugees and asylum seekers to appropriate health care facilities \((n = 3\) studies), such as patient-centred medical homes for provision of health care by collaborative, interprofessional health care staff.\(^{25,72}\) These collaborative models reported their effectiveness of health care provision in terms of measured health care outcomes\(^{25}\) such as enhanced timeliness of effective care provision reported in terms of reduced visits to emergency care.\(^{72}\)

Enhanced models of care were introduced and evaluated in seven studies from Europe,\(^{77,78}\) the United States,\(^{41,59,72}\) and Australia.\(^{33,50}\) These interventions focused on enhanced patient access, provision of culturally oriented, family/person-focused collaborative care in primary care more generally,\(^{33,50,59,72,77,78}\) and, more specifically, antenatal/maternity care.\(^{25,43}\) These care models, implemented across different countries, aided in enhancing communication between health care professionals and patients, with enhanced delivery of timely and appropriate continuity of care. For example, the Integrated Healthcare Pathway triaged and linked patients within three weeks of arrival into the host country. Similar to this approach, Michael et al.\(^{72}\) discussed the development of an algorithm to link refugees to appropriate care models. The feasible location of the health care service near the refugee population and provision of care in multiple languages and formats improved both access to care and person/family-focused health care delivery (three studies).\(^{43,77,78}\)

In addition to these, Grigg-Saito et al.\(^{59}\) presented a comprehensive ‘whole community model’ with collaborative community networks across multiple centres. These were involved in providing a range of holistic, support mechanisms, which include mental well-being, physical health, youth development, communication and delivery of emotional empowerment interventions that are culturally appropriate for the Cambodian refugee patient community. A longitudinal assessment at baseline and post-implementation (measured after 1 year) of this comprehensive intervention outlined improvement in the mental health of participants, specifically resulting in reduced depression and anxiety. Moreover, there was an improvement in physical measures like blood sugar and blood pressure control, increased compliance with medications and improved awareness of health and well-being.\(^{59}\)

This category included comprehensive care delivery models for mental health care \((n = 6\) studies) offered in accessible locations including homes, community centres and schools.\(^{27,35,47,55,59,68,74}\) Two studies discussed a family care approach promoting the mental and psychological well-being of the entire family.\(^{27,59}\) Four studies offered patients access to evidence-based, trauma-informed mental health care in the primary care clinical context itself, and these care services offered integration with wider sustainable social support networks.\(^{47,68,74}\)

Patient access to care and person-centred care within existing health services was promoted via interventions offering client information in multiple languages, translation services and also various formats \((11\) studies)\(^{24,27,33-35,43,58-60,74,77}\) or the involvement of cultural mediators in its delivery \((5\) studies).\(^{35,41,47,76,78}\) Some of the interventions highlighted the free-of-cost services, which again related to improved accessibility to care and equitable health care for refugees and asylum seekers \((n = 4\) studies).\(^{38,71,76,77}\) Distinct, patient-focused and integrated clinics were also evaluated relative to specific diseases to enhance the provision of screening services, education and treatment for infectious diseases such as latent tuberculosis infections \((2\) studies).\(^{26,76}\) Some studies reported the involvement of allied health staff members \((2\) studies) such as pharmacists in effectively leading these clinics for tuberculosis in particular and for other minor ailments.\(^{38}\) The studies reported on factors such as the importance of cultural mediators, language translators and cost-free services in improving safety, quality, equity and accessibility to care and provision of person-centred care.

(4) Interventions enhancing communication systems: Five studies \((5/55\) studies) assessed the use of interventions in health systems to enhance the communication aspect of health care delivery.\(^{31,33,43,55,60}\) The studies varied from interventions that enhanced communication between patients and practitioners \((n = 3\) studies)\(^{33,55,60}\) to those that promoted continuity and access to care via models that aided in communication between different health sectors even beyond primary care \((n = 2\) studies).\(^{31,43}\) Interventions enhancing communication between the patient and the health care provider included online/digital, multimodal, multilingual tools that aided in capturing patient history and mental health screening.\(^{33,55,60}\) In addition to this, patient held, personal health records were implemented in primary care to improve communication between different sectors of health care delivery in the host country.\(^{31}\) Another model linked primary care to specialist care via the telehealth clinic option, in which refugees, along with their general practitioner or practice nurse in the primary care centre, could access and communicate with a specialist at the tertiary health care centre.\(^{43}\) This intervention was reported to facilitate enhanced communication and immediate transfer of information to the primary care doctor.

Interventions outlined in this category were a system-levels approach in improving communication aspects of care delivery for refugees and asylum seekers.

4 | DISCUSSION

A systematic and structured approach was used to explore the primary health care interventions that were developed to optimize health care quality for refugees and asylum seekers in countries of resettlement. The WHO acknowledges the importance of promoting quality health care delivery for refugees and migrants because they are known to positively contribute to the country of resettlement,
provided that they are in good health. Moreover, addressing the health needs of refugees and migrants early via preventive and primary care actually reduces long-term costs for the health care system. Fifty-five studies were identified and included. The included studies presented interventions closely associated with the WHO priority list for promoting refugee health. Interventions predominantly sought to enhance the skills of individual refugees/asylum seekers and their families to contribute to their own care and improve its quality. While some interventions sought to enhance the skills of primary health care workers to provide high-quality care for humanitarian migrants, new models of care or approaches to promote system and/or service integration, communication and care arrangements were also identified. These interventions were not only limited to direct provision of health care delivery but also had wider implications such as migrant resettlement in the host country.

To date, a predominant focus of research with refugee and asylum seekers has been on inequalities in their health outcomes. Systematic reviews identify major challenges influencing health care delivery for migrants and refugees and consistently report on the inequalities of health outcomes. Challenges in health care delivery that were identified included, but are not limited to, communication, confidence/trust in the provision of care and the continuity of care including resettlement in the host country. Refugees and migrants experience complex challenges in relation to health care, and poorer health outcomes are evidenced by difficulties faced in accessing health care, receiving unequal medical care and appropriate continuity of care. Health outcomes are highly influenced by the quality of health care, and yet, this has received limited attention to date. Quality of health care describes the degree to which it is safe, effective, timely, efficient, equitable and person-centred. The first point of patient access to health care is often the primary care of the host country. Therefore, high-quality primary care is critical towards redressing inequities. Promoting effective health care delivery for refugees, asylum seekers and their families is a complex challenge. This challenge is faced by both primary care professionals and also patients and families, who face a number of complex hurdles in seeking and accessing care in each phase of the migration and the displacement cycle (i.e., including before and during departure, travel, arrival at destination and possible return). Moreover, on arrival in a new country of residence, refugees and asylum seekers face several challenges. These include a lack of access or barriers to accessing health care services, patients facing language and cultural differences, high costs, discrimination, administrative hurdles, adverse living conditions and a lack of information about health entitlements, to identify a few. The majority of the interventions in this review focused on improving the quality of health care within a specific clinical context, although some identified interventions had wider goals to acclimatize and resettle displaced people in the host country.

The vast majority of studies relied on self-reported data about whether interventions were effective in improving the quality of health care, that is n = 51 studies. Meanwhile, there were fewer large-scale and longitudinal studies, n = 4. The complexities and challenges of conducting longitudinal studies with humanitarian migrants are identified in the literature. Long-term and longitudinal research on refugee resettlement is valuable because it can provide an insight into the transformation of challenges and opportunities over time. All education programmes discussed the importance of being culturally/linguistically relevant in promoting both the physical and psychological well-being of both receiving and providing care. Studies that explored refugees’ experiences were useful in providing an in-depth understanding of client experiences with the intervention and these were explored in some studies on upskilling refugees/asylum seekers. The in-depth understanding of participants’ perspectives aided in identifying the subtle, yet critical aspects of care provision that impacted health and well-being. Participants also explained why the positive impact of the intervention waned after the completion of the intervention. An important aspect was communicating about the implementation of the intervention with the participants. Research involving resettled refugees and asylum seekers raises methodological and ethical complexities. This complex nature of conducting research with humanitarian migrants is reflected in the wider literature and some draw particular attention to methodological issues of sampling, translation and use of local assistants and using an open-minded approach to draw inferences. Others have identified ethical considerations in relation to research, its application and policy, and issues around informed consent, and the notion of doing no harm in research.

The broader literature suggests that refugee health requires intersectoral and multidisciplinary work to promote effective health care delivery. The WHO mandates this by advocating for enhanced coordination and collaboration to achieve the goal of universal health coverage for refugees and migrants. However, this review identified that doctors were predominantly the group provided with the skill development opportunities. This has implications for involving the wider health care team and interprofessional members in primary care delivery for refugees and asylum seekers. Very few interventions are targeted towards upskilling or encouraging the involvement of interprofessional teams in health care delivery. The potential for enhancing health care quality through interprofessional team involvement requires further exploration. The majority of studies focused on specific issues pertaining to refugee health, with a paucity of interventions that focused on holistic engagement in health care delivery.

The potential for enhancing health care quality through interprofessional team involvement requires further exploration. The majority of studies focused on specific issues pertaining to refugee health, with a paucity of interventions that focused on holistic engagement in health care delivery.
4.1 | Implications

The review findings suggest that there is value in involving multi-disciplinary health care professionals when exploring models of health care delivery for refugees and asylum seekers, and yet, there is a paucity of interventions involving other members of health care teams beyond doctors. Coordination and integration of health care across different health and nonhealth services have been associated with improved communication and coordination between service providers to meet the needs of migrant patients. Moreover, the role of the health sector in working across organizations on issues not limited to health but to wider aspects related to migration, social, welfare, education, interior and development sectors is a priority in promoting the health of refugees and migrants. Refugees are identified to have complex care needs; therefore, a multidisciplinary team is an important mechanism for organizing and coordinating health and care services to meet the needs of individuals with complex care needs.

Papers discussing upskilling of health care professionals highlighted the importance of cultural competence as underpinning quality care for humanitarian migrants. Time constraints faced by primary health care providers in participating in such activities were identified as a key challenge. Addressing health care professionals’ cultural competence is a common approach to improving the quality of health services for culturally and ethnically diverse groups, such as refugees and asylum seekers. A range of individual and organizational approaches to cultural competence in refugee service settings have been identified that comprise different strategies to meet the needs of refugees. The strategies include individual approaches like developing self-awareness and cultural competence, along with more organizational strategies like addressing barriers to access and provision of culturally focused care. Comparisons of the relevance and usefulness of the educational approaches are hampered by the different areas of focus, format and duration of the study. Online approaches are emerging and can be feasible for health care professionals to access and use, while more targeted approaches need further evaluation in terms of feasibility and efficiency.

4.1.1 | Strengths and limitations of the review

A systematic approach to search five different databases with the support of an information scientist led to a comprehensive search strategy and search process. A comprehensive screening approach with a team-based approach increased the rigour of the selection and extraction processes. The inclusion of only English-language articles and primary care interventions from the OECD countries means that some relevant material may have been omitted. There was heterogeneity in how the impacts and outcomes were evaluated in different studies. Mostly, studies discussed self-reported impacts, with a lack of long-term and longitudinal studies exploring the impacts. Asylum seekers face further uncertainties in relation to seeking refugee status, the possibility of return and unpredictable current legal status. The identified interventions in the primary care setting were designed for both refugees and asylum seekers, and no differentiated intervention specifically for asylum seekers was recognized. A lack of distinction was identified in studies between different types of humanitarian migrants and this identifies a need for more rigorous evaluations, especially those focused on the impact of innovative models on different groups of humanitarian migrants.

5 | CONCLUSION

This review has identified 55 studies that report on interventions in primary care that were developed to promote effective health care delivery for refugees, asylum seekers and their families. Interventions were designed with a focus on delivering effective, efficient, timely, equitable and person-centred health care for important issues pertinent to the health of refugees and their resettlement in the host country. Interventions were focused on upskilling humanitarian migrants, their families and health professionals and on models and systems of care to improve health care quality communication and care arrangements. It is identified that there is a paucity of studies that have explored the involvement of a multidisciplinary team and community-focused and intersectorial approaches that may be important in contributing to quality care provision for this population.

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CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

AUTHOR CONTRIBUTIONS

Maha P. Iqbal, Reema Harrison and Ramesh Walpola wrote the background and developed the methodology. Stephen Mears ran the search and retrieved the final articles. Maha P. Iqbal and Jiadai Li were involved in the screening, data abstraction and analysis. Jiadai Li was involved in data abstraction and quality assessment of the final articles included. Maha P. Iqbal, Reema Harrison, Ben Harris-Roxas and John Hall wrote the first draft of the article. All authors provided input and have approved the final draft of this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.
REFERENCES

1. United Nations. Global issues: refugees. 2020. Accessed July 7, 2020. https://www.un.org/en/issues/refugees/

2. World Health Organisation. Refugee and migrant health. 2020. Accessed November 13, 2020. https://www.who.int/health-topics/refugee-and-migrant-health#tab_1

3. UN Refugee Agency, UNHCR—who we help. 2020. Accessed July 8, 2020. https://www.unhcr.org/en-au/who-we-help.html

4. Refugee U-Wia. What is a refugee? 2020. Accessed July 8, 2020. https://www.unhcr.org/what-is-a-refugee.html

5. World Health Organisation. Human rights and health. 2017. Accessed September 15, 2020. https://www.who.int/social-determinants-migrant-health

6. International Organization for Migration. Social determinants of migrant health. 2020. Accessed September 15, 2020. https://www.iom.int/social-determinants-migrant-health

7. Hynie M. The social determinants of refugee mental health in the post-migration context: a critical review. Can J Psychiatry. 2018;63(5):297-303.

8. Slew-Younan S, Yaser A, Guajardo MGU, Mannan H, Smith CA, Mond JM. The mental health and help-seeking behaviour of resettled Afghan refugees in Australia. Int J Mental Health Syst. 2017;11(1):49.

9. Zeidan AJ, Khatri UG, Munyikwa M, Barden A, Samuels-Kalow M. Barriers to accessing acute care for newly arrived refugees. West J Emerg Med. 2019;20(6):842-850.

10. Yelland J, Riggs E, Szwarc J, Vanpraag D, Dawson W, Brown S. Improving the ascertainment of refugee-background people in health datasets and health services. Aust Health Rev. 2018;42(2):130-133.

11. Robertshaw L, Dhesi S, Jones LL. Challenges and facilitators for health professionals providing primary healthcare for refugees and asylum seekers in high-income countries: a systematic review and thematic synthesis of qualitative research. BMJ Open. 2017;7(8):e015981.

12. Hadgkiss EJ, Renzaho AM. The physical health status, service utilisation and barriers to accessing care for asylum seekers residing in the community: a systematic review of the literature. Aust Health Rev. 2014;38(2):142-159.

13. Brandenberger J, Tylleskär T, Sontag K, Peterhans B, Ritz N. A systematic literature review of reported challenges in health care delivery to migrants and refugees in high-income countries—the 3C model. BMC Public Health. 2019;19(1):755.

14. Better Care. Better care playbook. 2021. https://www.bettercareplaybook.org/questions/who-are-people-complex-needs

15. Morris MD, Popper ST, Rodwell TC, Brodine SK, Brouwer KC. Healthcare barriers of refugees post-resettlement. J Community Health. 2009;34(6):529-538.

16. Australian Institute of Health and Welfare. Primary health care. 2021. Accessed April 21, 2021. https://www.aihw.gov.au/reports-data/health-welfare-services/primary-health-care/overview

17. World Health Organisation. Primary health care. 2021. Accessed June 2, 2021. https://www.who.int/health-topics/primary-health-care#tab_1

18. Bettany-Saltikov J. Learning how to undertake a systematic review: part 2. Nurs Stand. 2010;24(51):47-56.

19. Bettany-Saltikov J, Fernandes T. Learning how to undertake a systematic review: part 1. Nurs Stand. 2010;24(50):47-55.

20. Rethlefsen M.L., Kirtley S, Waffenschmidt S. et al. PRISMA-S: an extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews. Syst Rev. 2021;10:39. https://doi.org/10.1186/s13643-020-01542-z

21. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. J Clin Epidemiol. 2010;63(5):297-310.

22. World Health Organisation. What is quality of care and why is it important? 2020. Accessed August 5, 2020. https://www.who.int/maternal_child_adolescent/topics/quality-of-care/definition/en/

23. Harrison R, Jones B, Anderson P. et al. Quality Assessment with Diverse Studies (QuADS): an appraisal tool for methodological and reporting quality in systematic reviews of mixed- or multi-method studies. BMC Med Res Methodol. 2021;21:144. https://doi.org/10.1186/s12913-021-06122-y

24. Popay J, Roberts H, Sowden A, Petticrew M, Arai L, Rodgers M, Britten N, Roen K, Duffy S. Guidance on the conduct of narrative synthesis in systematic reviews. A product from the ESRC methods programme Version. 2006;1:b92.

25. Balachandran SK, Carroll JK, Fogarty CT, Finigan EG. Family-centered maternity care for deaf refugees: The patient-centered medical home in action. Fam Syst Health. 2009;27(4):362-367.

26. Benjumea-Bedoya D, Becker M, Haworth-Brockman M, et al. Integrated care for latent tuberculosis infection (LTBI) at a primary health care facility for refugees in Winnipeg, Canada: a mixed-methods evaluation. Front Public Health. 2019;7:57.

27. Birman D, Beehler S, Harris EM, et al. International family, adult, and child enhancement services (FACES): a community-based comprehensive services model for refugee children in resettlement. Am J Orthopsychiatry. 2008;78(1):121-132.

28. Culhane-Pera K, Peterson KA, Crain AL, et al. Group visits for Hmong adults with type 2 diabetes mellitus: a pre-post analysis. J Health Care Poor Underserved. 2005;16(2):315-327.

29. Duke P, Brunger F. The MUN Med Gateway Project: marrying medical education and social accountability. Can Fam Physician. 2015;61(2):e81-e87.

30. Farokhi MR, Glass BJ, Gureckis KM. A student operated, faculty mentored dental clinic service experience at the University of Texas Health Science Center at San Antonio for the underserved refugee community: an interprofessional approach. Tex Dent J. 2014;131(1):27-33.

31. Jahn R, Ziegler S, Nöst S, Gewalt SC, Straßer C, Bozorgmehr K. Early evaluation of experiences of health care providers in reception centers with a patient-held personal health record for asylum seekers: a multi-sited qualitative study in a German federal state. Glob Health. 2018;14(1):71.

32. Jirovsky E, Hoffmann K, Mayrhuber EA, et al. Development and evaluation of a web-based capacity building course in the EUR-HUMAN project to support primary health care professionals in the provision of high-quality care for refugees and migrants. Glob Health Action. 2018;11(1):1547080.

33. Johnson MJ, Evans DG, Mohamed Z, Caress AL. The development and consultation: a model of mental health service for multicultural societies. Can J Psychiatry. 2003;48(3):145-159.

34. Kennedy J, Seymour DJ, Hummel BJ. A comprehensive refugee health screening program. Public Health Rep. 1999;114(5):469-477.

35. Kirmayer LJ, Grof G, Guzder J, Blake C, Jarvis E. Cultural consultation: a model of mental health service for multicultural societies. Can J Psychiatry. 2003;48(3):145-153.

36. Martin TJ, Butters C, Phuong L. A two-way street: reciprocal teaching and learning in refugee health. Aust Heal Rev. 2018;42(1):1-4.
37. McHenry MS, Nutakki K, Swigonski NL. Effectiveness of cross-cultural education for medical residents caring for Burmese refugees. Educ Health. 2016;29(3):250-254.
38. Parmenter H, Golding S, Ashworth M, Rowlands G. Community pharmacy treatment of minor ailments in refugees. J Clin Pharm Ther. 2004;29(5):465-469.
39. Percac-Lima S, Ashburner JM, Bond B, Oo SA, Atlas SJ. Decreasing disparities in breast cancer screening in refugee women using culturally tailored patient navigation. J Gen Intern Med. 2013;28(11):1463-1468.
40. Pottie K, Hostland S. Program description: health advocacy for refugees. Medical student primer for competence in cultural matters and global health. Can Fam Physician. 2007;53(11):1923-1926.
41. Reavy K, Hobbs J, Hereford M, Crosby K. A new clinic model for refugee health care: adaptation of cultural safety. Rural Remote Health. 2012;12(1):1-12.
42. Rodríguez-Torres SA, McCarthy AM, He W, Ashburner JM, Percac-Lima S. Long-term impact of a culturally tailored patient navigation program on disparities in breast cancer screening in refugee women after the program’s end. Health Equity. 2019;3(1):205-210.
43. Schulz TR, Richards M, Gasko H, Lohrey J, Hibbert ME, Biggs BA. Telehealth: experience of the first 120 consultations delivered from a new refugee telehealth clinic. Intern Med J. 2014;44(10):981-985.
44. Wagner J, Sengly K, Tuoch T, Scully MF, Heang Kim T, Bermudez Torres SA, McCarthy AM, He W, Ashburner JM, Percac-Lima S. Patient reported outcomes of eat, walk, sleep: a cardiometabolic lifestyle program for Cambodian Americans delivered by community health workers. J Health Care Poor Underserved. 2015;26(2):441-452.
45. Ballard J, Wieling E, Forgatch M. Feasibility of implementation of a parenting intervention with Karen refugees resettleld from Burma. J Marital Fam Ther. 2018;44(2):220-234.
46. Berkson SY, Tor S, Mollica R, Lavelle J, Cosenza C. An innovative model of culturally tailored health promotion groups for Cambodian survivors of torture. Torture. 2014;24(1):1-16.
47. Bosson R, Williams M, Frazier V, et al. Addressing refugee mental health needs: from concept to implementation. Behav Ther. 2017;40(3):110-112.
48. Bourne J. Healing the wounds. Community Pract. 2004;77(1):10-11.
49. Bull J, Cabral K, Kvach E. Failure to thrive among immigrant and refugee children: a quality improvement project to innovate a primary care approach. J Health Care Poor Underserved. 2018;29(4):1319-1332.
50. Cheng IH, McBride J, Decker M, Watson T, Jakubenko H, Russo A. The Asylum Seeker Integrated Healthcare Pathway: a collaborative approach to improving access to primary health care in South Eastern Melbourne, Victoria, Australia. Aust J Prim Health. 2019;25(1):6-12.
51. Clabots RB, Dolphin D. The multilingual videotape project: community involvement in a unique health education program. Public Health Rep. 1992;107(1):75-80.
52. Dutcher GA, Scott JC, Arnesen SJ. The Refugee Health Information Network: a source of multilingual and multicultural health information. J Consum Health Internet. 2008;12(1):1-12.
53. Ekkblad S, Mollica RF, Fors U, Pantziaras I, Lavelle J. Educational potential of a virtual patient system for caring for traumatized patients in primary care. BMC Med Educ. 2013;13:110.
54. Esala J, Hudak L, Eaton A, Vukovich M. Integrated behavioral health care for Karen refugees: a qualitative exploration of active ingredients. Int J Migr Health Soc Care. 2018;14(2):133-145.
55. Ferrari M, Ahmad F, Shakya Y, Ledwos C, McKenzie K. Computer-assisted client assessment survey for mental health: patient and health provider perspectives. BMC Health Serv Res. 2016;16:15.
56. Gondek M, Shogan M, Saad-Harrouche FG, et al. Engaging immigrant and refugee women in breast health education. J Cancer Educ. 2015;30(3):593-598.
57. Goodkind JR. Effectiveness of a community-based advocacy and learning program for Hmong refugees. Am J Community Psychol. 2005;36(3-4):387-408.
58. Gould G, Viney K, Greenwood M, Kramer J, Corben P. A multidisciplinary primary healthcare clinic for newly arrived humanitarian entrants in regional NSW: model of service delivery and summary of preliminary findings. Aust N Z J Public Health. 2010;34(3):326-329.
59. Grigg-Saito D, Toof R, Silka L, et al. Long-term development of a “whole community” best practice model to address health disparities in the Cambodian refugee and immigrant community of Lowell, Massachusetts. Am J Public Health. 2010;100(11):2026-2029.
60. Müller F, Chandra S, Furaijat G, et al. A Digital Communication Assistance Tool (DCAT) to obtain medical history from foreign-language patients: development and pilot testing in a primary health care center for refugees. Int J Environ Res Public Health. 2020;17(4):1368.
61. Ong YL, Trafford P, Paice E, Jackson N. Investing in learning and training refugee doctors. Clin Teach. 2010;7(2):131-135.
62. Prescott GM, Dascanio SA, Klosko R, Shogan M. Development of a medication health literacy program for refugees. J Am Pharm Assoc. 2018;58(6):673-678.
63. Spruijt I, Haile DT, Erkens C, et al. Strategies to reach and motivate migrant communities at high risk for TB to participate in a latent tuberculosis infection screening program: a community-engaged, mixed methods study among Eritreans. BMC Public Health. 2020;20(1):1-10.
64. Sundquist J, Hagstromer M, Johansson SE, Sundquist K. Effect of a primary health-care-based controlled trial for cardiorespiratory fitness in refugee women. BMC Fam Pract. 2010;11:55.
65. Weissman GE, Morris RJ, Ng C, Pozzessere AS, Scott KC, Altschuler MJ. Global health at home: a student-run community health initiative for refugees. J Health Care Poor Underserved. 2012;23(3):942-948.
66. Wieland ML, Njeru JW, Hanza MM, et al. Pilot feasibility study of a digital storytelling intervention for immigrant and refugee adults with diabetes. Diabetes Educ. 2017;43(4):349-359.
67. Wittick T, Walker K, Furler J, Lau P. An online resource supporting refugee healthcare in Australian general practice: an exploratory study. Aust J Gen Pract. 2018;47(11):802-806.
68. Zehetmair C, Kaufmann C, Tegeler I, et al. Psychotherapeutic group intervention for traumatized male refugees using imaginative stabilization techniques—a pilot study in a German Reception Center. Front Psychiatry. 2018;9:10.
69. Biegler K, Mollica R, Sim SE, et al. Rationale and study protocol for a multi-component Health Information Technology (HIT) screening tool for depression and post-traumatic stress disorder in the primary care setting. Contemp Clin Trials. 2016;50:66-76.
70. Browne AJ, Varcoe C, Ford-Gilboe M, et al. Disruption as opportunity: impacts of an organizational health equity intervention in primary care clinics. Int J Equity Health. 2018;17(1):154.
71. Carter KL, Gabrellas AD, Shah S, Garland JM. Improved latent tuberculosis therapy completion rates in refugee patients through use of a clinical pharmacist. Int J Tuberc Lung Dis. 2017;21(4):432-437.
72. Michael L, Brady AK, Russell G, et al. Connecting refugees to medical homes through multi-sector collaboration. J Immigr Minor Health. 2019;21(1):198-203.
73. Njeru JW, Patten CA, Hanza M, et al. Stories for change: development of a diabetes digital storytelling intervention for refugees and immigrants to Minnesota using qualitative methods. BMC Public Health. 2015;15(1):1-11.
74. Northwood AK, Vukovich MM, Beckman A, et al. Intensive psychotherapy and case management for Karen refugees with major depression in primary care: a pragmatic randomized control trial. BMC Fam Pract. 2020;21(1):17.
75. Yacoob Z, Cook C, Kotovicz F, et al. Enhancing immunization rates in two urban academic primary care clinics: a before and after assessment. J Patient Cent Research and Reviews. 2020;7(1):47-56.

76. Bonvicini F, Cillonis S, Formaciari R, et al. Compliance with tuberculosis screening in irregular immigrants. Int J Environ Res Public Health. 2019;16(1):11.

77. Borgschulte HS, Wiesmuller GA, Bunte A, Neuhann F. Health care provision for refugees in Germany—one-year evaluation of an outpatient clinic in an urban emergency accommodation. BMC Health Serv Res. 2018;18(1):488.

78. Teunissen E, Gravenhorst K, Dowrick C, et al. Implementing guidelines and training initiatives to improve cross-cultural communication in primary care consultations: a qualitative participatory European study. Int J Equity Health. 2017;16(1):32.

79. Timlin M, Russo A, McBride J. Building capacity in primary health care to respond to the needs of asylum seekers and refugees in Melbourne, Australia: the ‘GP Engagement’ initiative. Aust J Prim Health. 2020;26(1):10-16.

80. World Health Organization (WHO). Promoting the health of refugees and migrants framework of priorities and guiding principles to promote the health of refugees and migrants. WHO Secretariat; 2017:1-4.

81. Hahn K, Steinhäuser J, Wölfling D, Goetz K. Quality of health care for refugees—a systematic review. BMC Int Health Hum Rights. 2019;19(1):20.

82. World Health Organization AfhawigepWA-ep. Promoting the health of refugees and migrants: draft global action plan, 2019–2023, Geneva, Switzerland; 2019.

83. Maio JD, Silbert M, Jenkinson R, Smart D. Building a New Life in Australia: Introducing the Longitudinal Study of Humanitarian Migrants. Australian Institute of Family Studies; 2014.

84. McMichael C, Nunn C, Gifford SM, Correa-Velez I. Studying refugee settlement through longitudinal research: methodological and ethical insights from the Good Starts Study. J Refug Stud. 2014;28(2):238-257.

85. Jacobsen K, Landau LB. The dual imperative in refugee research: some methodological and ethical considerations in social science research on forced migration. Disasters. 2003;27(3):185-206.

86. Hugman R, Bartolomei L, Pittaway E. Human agency and the meaning of informed consent: reflections on research with refugees. J Refug Stud. 2011;24(4):655-671.

87. De Maio J, Silbert M, Jenkinson R, Smart D. Building a new life in Australia: introducing the longitudinal study of humanitarian migrants. Family Matters. 2014(94):5-14.

88. Woodland L, Burgrner D, Paxton G, Zwi K. Health service delivery for newly arrived refugee children: a framework for good practice. J Paediatr Child Health. 2010;46(10):560-567.

89. Wickramage K, Vearey J, Zwi AB, Robinson C, Knipper M. Migration and health: a global public health research priority. BMC Public Health. 2018;18(1):1-9.

90. Madon S, Schoemaker E. Digital identity as a platform for improving refugee management. Information Systems J. 2021.

91. Drolia M, Sifaki E, Papadakis S, Kologianakis M. An overview of mobile learning for refugee students: juxtaposing refugee needs with mobile applications’ characteristics. Challenges. 2020;11(2):31.

92. Joshi C, Russell G, Cheng IH, et al. A narrative synthesis of the impact of primary health care delivery models for refugees in resettlement countries on access, quality and coordination. Int J Equity Health. 2013;12(1):88.

93. World Health Organization. Beyond the Barriers: Framing Evidence on Health System Strengthening to Improve the Health of Migrants Experiencing Poverty and Social Exclusion. 2017.

94. Social Care Institute for Excellence. Integrated care research and practice-multidisciplinary teams. 2018. Accessed July 05, 2021. https://www.scie.org.uk/integrated-care/research-practice/activities/multidisciplinary-teams

95. Kay M, Jackson C, Nicholson C. Refugee health: a new model for delivering primary health care. Austr J Prim Health. 2010;16(1):98-103.

96. Jongen C, McCalman J, Bainbridge R. Health workforce cultural competency interventions: a systematic scoping review. BMC Health Serv Res. 2018;18(1):232.

97. Lau LS, Rodgers G. Cultural competence in refugee service settings: a scoping review. Health Equity. 2021;5(1):124-134.

98. Biehl KS. Governing through uncertainty: experiences of being a refugee in Turkey as a country for temporary asylum. Soc Anal. 2015;59(1):57-75.

99. Haas BM. Citizens-in-waiting, deportees-in-waiting: power, temporality, and suffering in the US asylum system. Ethos. 2017;45(1):75-97.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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