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A Review of Refugees' Access to Health Insurance in the USA

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Abstract

Current literature indicates an increased disease burden among refugees resettled worldwide as well as in the U.S. Both prevalence and incidence of infectious diseases, chronic diseases, and health conditions are high or higher compared to the general American population. The question raised is how well refugee populations have been responding to their medical expenses. The purpose of this study is through a systematic literature review to identify the challenges of accessing health insurance among U.S. refugees, and to advocate for a healthcare policy change. More than 400 peer-reviewed journal articles and book chapters obtained from major databases, and published between 2005 and 2018 were reviewed. Fourteen articles related to the U.S. refugees and health insurance, were included in the final analysis. Seven themes emerged. Results suggested that (1) Compared to the general or minority populations, U.S. refugees were more likely to be uninsured or underinsured; (2) Refugees demonstrated the unaffordability of medical co-payments; (3) There was a lack of full coverage of medical needs; (4) There was a lack of affordable private insurance plans; (5) There was a lack of understanding of the U.S. health insurance application; (6) U.S. refugees struggled to navigate both government and private health insurance; And (7) Refugees had difficulty in understanding the U.S. healthcare policies. More research is needed to specifically examine the accessibility and affordability of health insurance among multiethnic refugee populations in the U.S. Social determinants (e.g., employment, education, and income) should also be addressed in consideration of getting refugees fully insured.

Key Words: Disease Burden, Refugees, Healthcare, Health Insurance.

Introduction

There has been an increased burden of both communicable and non-communicable diseases among refugees either overseas or in the U.S. [1-22]. In 1999, 2,545 refugees resettled in Minnesota from Eastern Europe, Southeast Asia, and Sub-Saharan Africa at all ages were screened for tuberculosis, hepatitis B, and parasites. About 49% of the tested had a strong positive tuberculosis response with being higher in men and adults and the highest in Ethiopian refugees followed by refugees from Vietnam, Somalia, Bosnia and Herzegovina, Ukraine, and Liberia [1]. About 7% of the refugees had hepatitis B surface antigen positive, and 30% of the refugees younger than 18 years old were tested positive for one or more types of parasites [1]. Overseas screening for tuberculosis among 378,506 refugees who arrived in the U.S. from 1999 to 2005 from countries, including Ukraine, Vietnam, Somalia, Sudan, Bosnia and Herzegovina and others, as well as among 2,714,223 US-bound immigrants arrived in the U.S. during the same time period, indicated that compared to the immigrant counterparts, the refugee participants had slightly higher smear-negative tuberculosis but had 3.4 times higher inactive tuberculosis prevalence rate [2]. Hepatitis B prevalence rates during 2006 -2011 obtained from four U.S. sites among 6,175 refugees largely from Bhutan, Burma, and Iraq, and from smaller groups, including Eritrea, Ethiopia, Somalia, and the former Soviet Union, suggested that both Burmese and the multiethnic smaller refugee groups had a significantly higher prevalence rate (43% and 40%) than Bhutanese and Iraqi [3]. Studies also indicated a high prevalence of non-communicable and chronic diseases among U.S. refugees [4-22]. A retrospective medical record review was conducted among 180 refugees arrived in the U.S. during 2006-2010 from Middle East, South Asia, Africa, Latin America, Asia-Pacific, and Europe. For the first eight months after arrival, the medical records showed that more than half of the adults had one or more chronic non-communicable health issues, such as depression, post-traumatic stress disorder (PTSD), hypertension, dyslipidemia, and impaired vision [4]. The participants also carried the heavy burden of risk factors for chronic diseases, including obesity, obese, and smoking [4]. A recent study compared 490 refugee adults mainly came from Europe, Central Asia, Latin America, and the Caribbean and lived in the U.S. for at least one year, with 3,715 aged-matched U.S. immigrants. The findings suggested that compared to the immigrant participants, refugee participants were more likely to report a poor or fair health status, hypertension, arthritis, health disease, stroke, and behavioral health concerns [5]. Literature also emphasized a heavy presentation of mental disorders among different US-bound refugee populations across different age ranges due to pre-migration, migration, and post-migration traumas [6-8].

Recent studies further looked into individual refugee populations have also demonstrated the significance of non-communicable chronic diseases and health risks [9-22]. For instance, questions related to the information, such as health status, nutrition, and dietary knowledge, attitudes, and practices, were asked among 120 Bhutanese refugee women aged 18–65 years resettled in Northeast Ohio. More than 60% of the participants lived in the U.S. for less than 2 years. The prevalence rates of self-reported overweight and/or obesity,

asthma, hypertension, diabetes, heart disease and cancer among women aged 40 and older were greatly higher compared the younger age group with the highest rate of being hypertension (42%). More than half of the women were measured being overweight or obese [9]. A chart review of 66 adult Bhutanese refugee patients during 2009-2010 also indicated that 59% of the patients had at least one chronic disease, 52% of them had overweight or obesity, 23% had hypertension, along with other chronic diseases, including diabetes, Vitamin B12 deficiency, and depression [10], which are consistently with the findings from a health assessment among Bhutanese refugee adults living in Houston [11]. The health assessment also revealed other chronic health conditions (e.g., dizziness, arthritis, swelling/ inflammation of joints, and high cholesterol) [11]. Depression, anxiety, PTSD, and suicidal acts among Bhutanese refugees were as prevalent as among many other refugee populations due to persecution, separation from family, financial constraint, job dissatisfaction, and lack of social support [12, 13]. About 56% of 497 Iraqi refugees in a study conducted in 2011 in Utah disclosed their traumatic experiences [14]. Increased pre-and post-resettlement traumas/stressors were associated with Iraqi refugees' weight development, mental disorders, and poor physical health [14-18]. Approximately, 35% of 18,990 US-bound Iraqi refugees screened between 2007 and 2009 by the International Organization for Migration had at least hypertension, diabetes, and/or obesity. Other health concerns were also reveled in this population, including vision, ear, throat, dental, hearing problems [18]. Compared to the age- and gender-adjusted rates of the general U.S. population, prevalence rates of hypertension, diabetes, hyperlipidemia, and other health problems can be significantly higher for the U.S. refugees, such as Cambodians [19, 20]. Cambodian refugees rated their health status as being unusually poor after 20 years' displacement in the U.S., which cannot be solely explained by their low socio-economic status [20]. Unsurprisingly, health concerns were exceedingly presented among African and other Southeast Asian refugee groups in different states as well [21, 22]. The significance of the disease burden among the U.S. refugees raised the concern about how well refugee populations have been responding to their medical expenses. The purpose of this study is through a systematic literature review to identify the challenges of accessing health insurance among U.S. refugees, and to provide recommendations for a healthcare policy change.

Methods

Inclusion and Exclusion Criteria

Only peer-reviewed journal articles, reports, and book chapters that were related to healthcare insurance among U.S. refugees only or among U.S. refugees, and immigrants and/or asylum seekers, and published between 2005 and 2018 were included. Primary research, systematic review, and meta-analysis using either quantitative or qualitative data were included. Refugees at different age ranges were included. Articles only addressed immigrants' or asylum seekers' healthcare insurance in either the U.S. or other countries, were excluded.

Search Strategy

"Health insurance and refugees in the US" was used as the search phrase. More than 400 peer-reviewed journal articles, book chapters, and reports published during 2005-2018 were reviewed. Only 14 peer-reviewed journal articles through major databases, including EBSCO, CINAHL Plus, PubMed, Medline, Medline Plus, and Google Scholar explicitly discussed healthcare insurance among U.S. refugees either quantitatively or qualitatively were included in the final data analysis. Articles only focused on U.S. immigrants were not included.

Data Extraction and Synthesis

Data was extracted from the 14 peer-reviewed journal articles and synthesized based on the themes, which were related to U.S. refugees access to health insurance and healthcare. Results were presented both quantitatively and qualitatively.

Results

Table 1 presents an overview of major findings from 14 peer-reviewed journal articles published between 2005 and 2018, which are related to U.S. refugees, healthcare access, and health insurance. There were 11 primary research articles and three review articles. Seven themes emerged from the current literature review: (1) Compared to the general or minority populations, U.S. refugees were more likely to be uninsured or underinsured [21, 23-35]. Refugees indicated a significant low level of socio-economic status, which prevented them from being insured or fully-insured [21, 23-35]. It was common that a refugee household earned less than $15,000 annually. Rarely did a refugee family earn more than $35,000 per year [21, 23, 24]. Refugee Medical Assistance (RMA) program only covered refugees' healthcare for the first 8 months of their arrival, and often time, medical professionals were reluctant to accept RMA or charity care [25]. For example, Arab refugees became uninsured after initial months of government assistance, and medical costs had to be paid by out of pocket with a low-pay employment [26]. Many refugee participants also mentioned that they lost state-offered Medicaid [27]. One study indicated that approximately 44% of U.S. refugees did not expand Medicaid, which resulted in a high rate of uninsured medical visits [28]. Even with refugees who were employed, health insurance was often not available through their employment [29, 30]. Moreover, lack of job security brought refugees a huge concern of themselves losing health insurance at any time [27, 31]. Elwell et al. found out in their study that 95.3% of refugees within three months of arrival in the U.S. were unemployed; 100% of refugees were unemployed after living in the U.S. for more than 3 months but less than 8 months; and 70.4% was unemployed after living in the U.S. for more than 8 months [31]. Furthermore, nearly half of the refugees with chronic health conditions reported being uninsured [30]. (2) Refugees demonstrated the unaffordability of medical co-payments [27, 29, 32]. As one study participant described, a Bhutanese family was shocked by the size of their medical bill after an emergency surgery and treatment [27]. About 69% of refugees in a study reported that they could not afford their monthly medical bills [32]. (3) There was a lack of full coverage of medical needs [21, 25, 28, 29]. Only 38% of Sudanese refugees in a study reported they had dental coverage, and 27% reported pharmacy coverage. About 36% of Sudanese refugees could cover their prescription costs through Medicaid, however, 30% paid out of pocket [21]. Consistently, barriers to health insurance coverage were particularly predominant among low-income refugee families [28]. (4) There was a lack of affordable private insurance plans [24, 27, 30]. Compared to other immigrants, refugees were more likely to rely on public health insurance and less likely to afford private insurance [30]. Most refugees could not afford private health insurance [27]. In Misra et al. study, although 61% of refugee participants had some forms of healthcare coverage, majority of them had a "gold card," which referred to a county indigent care program for refugees to access county health resources. Only 2 participants had insurance through their employment [24]. (5) There was a lack of understanding of the U.S. health insurance application [29, 33, 34]. Refugees were often challenged by the health insurance application process. They illustrated the hardship of enrollment of public insurance programs [29] as well as filling out the insurance applications and healthcare forms [33]. Many refugees failed to follow the U.S. health insurance procedures. For instance, Medicaid required reapplication on a biannual or annual basis. Refugees easily lost their insurance coverage due to missing the reapplication deadline [34]. (6) U.S. refugees struggled to navigate both government and private health insurance [35]. Some refugee informants stated that refugees were not even aware that there were insurance programs that can cover their medical expenditures [35]. And (7) Refugees had difficulties in understanding the U.S. healthcare policies [25, 28, 33]. One Somali refugee described that she was going in and out of her health insurance because she did not understand the insurance policies [33]. Refugees had limited knowledge of health insurance regulations so they did not know what they could expect from having an insurance plan [25], which became a significant problem when the Affordable Care Act (ACA) was being promoted to the refugees [28].

Author(s)/ Date of Publication	Study Purpose/Study Population	Key Finings*
Marshall GN, Berthold SM, Schell TL, Elliott MN, Chun CA, et al. (2006)	Examine the rates of mental health seeking behavior and its correlated factors. A stratified random sample of 339 Cambodian refugee adults living in Long Beach, California with Post-Traumatic Stress Disorder (PTSD), major depression disorder, or alcohol use disorder	1. "Most lived in poverty, received government assistance, and about 91% had some form of health insurance."
Willis MS, Nkwocha O (2006)	Identify Sudanese refugee community's health needs; inform the service providers; and advocate for a policy change for refugee health screening 263 Sudanese refugee adults from both Lincoln, Lancaster County and Omaha, Douglas County of Nebraska.	1. "Among 107 refugee respondents (40%), household incomes were less than $15,000 per annum. 16% households earned $15,000 but less than $25,000. 2% earned more than $35,000 each year." 2. "Refugees have significantly lower proportional rates of health insurance coverage compared to either the general or minority populations (p = 0.00). Only 60% of the refugees in this study have a current health care plan. Just 38% of the refugees from Sudan report dental coverage. Similarly, 27% of the refugees report pharmacy coverage through a work plan. Another 36% cover prescription costs with Medicaid and 30% use cash to cover pharmacy-related costs."
Othieno J (2007)	Examine the barriers to healthcare of treating HIV among African immigrants and refugees through the Rapid Assessment, Response, and Evaluation (RARE) 5 African immigrant and refugee adult patients and 35 individual interviews and 8 focus groups with adult refugee cultural experts including religious leaders from the Twin Cities, Minnesota. Participants came from Countries including Cameroon, Kenya, Liberia, Uganda, Ethiopia, Somalia, Sierra Leone, Nigeria, and Tanzania.	1. "Cultural experts stated that most African PLWH are also not aware that there are programs that can pay for medication. Even in cases in which employers are able to pay for insurance, there is fear that if people disclose their HIV status, they may lose their jobs. At times, people have even claimed that they had personal health insurance already to avoid having deductions taken from their already meager pay." 2. "Discussing the difficulties faced by women, Somali cultural experts said that women may not seek care because they do not have as many resources readily available to them as men (such as education and driving skills). Others felt that women with children would not seek care due to insurance costs."
Morris MD, Popper ST, Rodwell TC, Brodine SK, Brouwer KC (2009)	Examine refugees' health condition and the structural and social barriers to healthcare services faced by refugees 40 adult refugee informants from Albania, Ethiopia, Iraq, Poland, Somalia, Sudan, and Vietnam, employees of voluntary resettlement agencies, personnel of mutual assistance agencies, and refugee service providers, living in San Diego County, California	1. "Barriers related to insurance included gaps in coverage due to hurdles with enrollment of public insurance programs or unavailability through one's employment. Financial hardship was also a dominant barrier within this theme—specifically the financial burden of insurance fees, co-payments, and out of coverage prescriptions."
Patil CL, McGown M, Nahayo PD, Hadley C (2010)	Examine individual and structural factors that impact refugees' diet and mental and physical well-being 30 refugees adults from Bhutan, Liberia, and Somalia living in Midwest	1. "Fortunately the bills associated with Neena's miscarriage were covered by her insurance. But because she lost her job cleaning at the hotels, she was no longer insured; they both worried about what could happen in the future. With some pensiveness, Neena told us a story about another Bhutanese family who was shocked at the size of the bill they received after emergency surgery and treatment." 2. "Many respondents talked about losing state-offered Medicaid. will become underinsured or uninsured—most cannot

Table 1: Cont.....

		afford private health insurance. Fear of healthcare costs, is one reason that refugees avoid or delay getting treatment; Chandra and Neena were no exception."
Pavlish CL, Noor S, Brandt J (2010)	Examine the health disparities among Somali refugees and their interactions with U.S. healthcare system 57 Somali adult refugee women and 13 key informants from the Minnesota Department of Health, local non-governmental refugee assistance organizations, and local health care organizations in Minnesota	1. "Several participants in three focus groups described difficulty understanding insurance applications and healthcare forms. One Somali participant described 'going in and out of insurance because I don't understand the policies.' Women described receiving healthcare forms in the Somali language, but since some cannot read, 'It's [translation] not helpful.' Waiting for application approvals was also difficult. One woman stated, 'I asked for assistance for all my medications, but the office told me, 'It's a process. You have to wait until it goes through.'"
Eckstein B (2011)	Examine the common health issues among refugees and provide primary healthcare providers with a guide Systematic review of current literature; general refugee populations in the U.S.	1. "Finally, many refugees do not understand the U.S. health insurance process. In States in which Medicaid requires reapplication on a biannual or annual basis, many refugees have a lapse in insurance coverage because they missed the reapplication deadline."
Inhorn MC, Serour GI (2011)	Examine the barriers, including cultural barriers, to healthcare in the U.S. among Arab-Muslim refugee patients. 24 articles published after September 11, 2001 in English about Arab-Muslim refugees' health and access to healthcare were included in the review; general Arab-Muslim refugees and immigrants, and Muslim patients in the U.S.	1. "Lack of health insurance: Arab immigrants are often not insured after initial months of refugee assistance; Medical care paid out-of-pocket by Arab immigrants in low-pay employment, so most health care is unaffordable; Reliance on charity for catastrophic coverage; Inability to return to war-torn countries to access affordable medical care."
Yun K, Fuentes-Afflick E, Desai MM (2012)	Examine the prevalence of chronic disease and insurance coverage among U.S. refugees after their immediate post-arrival period; test the hypothesis that refugees had higher prevalence of chronic disease and lower insurance coverage than other U.S. immigrants 490 U.S. adults refugees from Europe and Central Asia, Latin America and Caribbean and Africa compared with 3,715 U.S. adult immigrants from Latin America and Caribbean, Asia, and Europe	1. "Nearly half of refugees and other immigrants in this sample were uninsured (49.0 and 47.4 %, respectively). Refugees were less likely to have private insurance (34.8 vs. 47.8 %, P<0.001) and more likely to have public insurance (16.2 vs. 4.8 %, P<0.001) than other immigrants. Nearly one-quarter (23.1 %) of uninsured refugees reported at least one chronic condition." 2. "Furthermore, 46.5 % of refugees with any chronic condition reported being uninsured (data not shown). The majority of uninsured refugees (87.6 %) were from households in which either the primary immigrant or the spouse was employed. In these households, the median household income was $24,500 (data not shown). After adjusting for differences in socioeconomic variables and health status, refugees remained less likely to have private insurance and more likely to have public health insurance."
Elwell D, Junker S, Sillau S, Aagaard E (2014)	Examine the barriers and gaps to healthcare services among the Denver refugee community and provide recommendations for improvement and advocacy 64 refugee adults who arrived in Denver, Colorado within three months of enrollment in the study and were attending the Refugee Clinic at the Lowry Family Health Center	1. "The two most common reasons cited for not seeking medical attention for a problematic mouth was not being able to afford it (24%) and not having insurance (22%)." 2. "95.3% of new arrival refugees are unemployed, 100% for supported refugees, and 70.4% for established refugees."

Table 1: Cont.....

Author(s)/ Date of Publication	Study Purpose/Study Population	Key Finings*
	for either their first or second visit were in the New Arrival group; 28 refugee adults who arrived in the Denver Metro Area within eight months of enrollment in the study and were supported by a local refugee volunteer agency at the time of enrollment were in the Support group; 28 refugee adults who lived in the Denver Metro Area for longer than eight months at the time of enrollment were in the Established group; Participants were from Asia, Middle East, Africa, and Europe	3. "Fifty- five percent of new arrival refugees reported health insurance. This number increased to 89% among supported refugees. However, only 37% of established refugees reported health insurance ($p < .001$). Overall, established refugees were less likely to report health insurance than refugees who arrived less than eight months ago (OR 0.31, 95% CI 0.13–0.76, p- value = .009)."
Mirza M, Luna R, Mathews B, Hasnain R, Hebert E, et al. (2014)	Examine the barriers to healthcare access among newly resettled disabled and chronically ill U.S. refugees; Develop a Community Advisory Board; Engage the Board to identify research needs and develop research agenda 18 adult key informants including representatives from state Bureau of Refugee and Immigrant Services and Department of Public Health, refugees healthcare providers, and community leaders from the three largest refugee groups since 2008 (Iraqi, Burmese, and Bhutanese)	1. "System level barriers: Refugee Medical Assistance (RMA) coverage limit to 8 months; funding shortage; Supplemental Security Income (SSI) denials." 2. "Providers level barriers: Medical specialists reluctant to accept RMA/charity care; limited awareness and capacity among refugee service provides." 3. "Individual level barriers: limited awareness of insurance regulations; don't know what to expect."
Navuluri N, Haring A, Smithson-Riniker K, Sosland R, Vivanco R, et al. (2014)	Examine the differences in healthcare barriers including structural barriers among refugee groups from different countries A random sample of 49 refugee adults from Bhutan, Nepal, Iraqi, Iran, Burma, Burundi, Congo, Cameroon, and Sri Lanka, living in San Antonio, Texas	1. "47.7% of our study population reported being unemployed and 69% of refugees reported that they could not pay their medical bills every month. Interestingly, 79.1% of respondents reported having some current form of health payment system or insurance."
Pace M, Al-Obaydi S, Nourian MM, Kamimura A (2015)	Examine the limitations of U.S. federal health policies related to refugees' health including health insurance, health screening, health promotion, and Survivor of Torture Program, and suggest for improvement. A policy review; general refugee population in the U.S.	1. "The percentage of uninsured individuals decreased from approximately 18% to 9% after the introduction of the Affordable Care Act (ACA) (Hall & Lord, 2014). However, it is predicted that 36 to 45 million individuals will still be uninsured by 2019 (Geyman, 2015)." 2. "Low-income families reported barriers to insurance coverage, access to healthcare services, and healthcare costs (DeVoe, et al., 2007). These barriers remain regardless whether they are eligible for healthcare coverage through the ACA (Sommers, Maylone, Nguyen, Blendon, & Epstein, 2015). Research indicates that the lack of knowledge is a significant problem when promoting enrollment in the ACA insurance (Evans & Demko, 2014). Uninsured visits remain high, especially in states that opted out of Medicaid expansion (Angier, et al., 2015). Approximately 44% of refugees resettled in a state that did not expand Medicaid (Agrawal, & Venkatesh, 2015)." 3. "Furthermore, refugees may need expanded health insurance coverage due to high burden of chronic conditions (Yun, Fuentes-Afflick, & Desai, 2012). Even though refugees are theoretically covered by health insurance, they still have a risk for being un- or under- insured."

Table 1: Cont.....

Misra SM, Nepal VP, Banerjee D, Giardino AP (2016)	Examine the health status for chronic diseases, mental disorders, and physical activities and dietary behaviors among Bhutanese refugees in Houston, Texas 100 refugee adults living in Houston, Taxes, from Bhutan and Nepal	1. "One third had an annual household income less than $15,000. Only 2 % made more than $50,000." 2. "Sixty-one percent had some type of health care coverage, majority having the 'Gold card' (a county indigent care program) that allowed them to use county health resources. Only two respondents had insurance from their workplace."
* Key findings related to income, employment, and health insurance		

Table 1 Overview of Peer-Reviewed Journal Articles related to Refugees, Healthcare and Health Insurance in the U.S. 2005-2018

Discussion

current findings indicated that refugees were more likely to be uninsured or underinsured than the general and minority populations. They consistently struggled with limited insurance coverage, high co-payment, and unaffordability of private insurance plans [21, 23-35]. Most refugees are enrolled in RMA for their health insurance for the first eight months in the U.S. Refugee resettlement agencies helps refugees become a member of RMA upon their arrival. After eight months, refugees will have to seek other health insurance programs, such as ACA, to cover their medical expenditures [36]. The ACA aimed to achieve a nearly-universal health care and provide a majority of U.S. citizen and legal residents including refugees with health insurance and quality care at a lower cost and expanded Medicaid coverage [36-40]. By ACA law, U.S. refugees are eligible to purchase health insurance in Health Insurance Exchanges (HIE). Refugees who earn above 133% of the federal poverty line without either private or employment-based insurance can purchase quality affordable healthcare through HIE. Refugees who earn up to 133% of the federal poverty level and are under age of 65 are covered by Medicaid [37-40]. However, according to a five-year assessment of ACA implementation, besides the significant gains, by 2019, approximately 36 million out of 50 million uninsured will remain uninsured, and 5 million will still not be covered by Medicaid in states who opted out from Medicaid expansion. The insured, especially newly insured, has been challenged by a limited number of physician and hospital choices because of narrow networks, shortage of primary care physicians, increased medical costs including prescription drug costs, devalued insurance policies and increased insurance premiums. And there is no clear evidence demonstrating that ACA has improved the quality of healthcare [41]. The recent presidential Executive Order also compromised the implementation of ACA. It limited the advertisement of ACA and shortened the open enrollment period; eliminated the government cost-sharing subsides for reducing deductibles and out-of-pocket costs; eliminated the individual mandate, which could increase the number of the uninsured; gave individual state to add more restrictions to Medicaid; encouraged sale of short-term health insurance plans which could exclude buyers with pre-health conditions; and weakened the cost coverage of contraceptive measures [42].

Compared to other immigrants and U.S.-born adults, although U.S. refugees presented a similar or even slightly higher employment rate, refugees had significantly lower occupational status and earnings [43, 44]. Refugees were more likely to live on public welfare, such as food stamps, cash welfare, government health insurance [44]. Refugees' household income also varied by refugees' country of origin and gender. Refugees from countries, including Somalia, Iraq, Burma, Bhutan, Liberia, and Cuba, are more likely to be at an economic disadvantage and live in poverty [44]. Low literacy and education levels, pre-existing mental health issues due to wars and persecution, difficulties in adopting new values and beliefs in a new country, foreign language capacity, low self-efficacy due to immigration stressors, social oppression and discrimination, inconvenience of residential locations, and unacceptance of former trainings prior to immigration, contributed to both occupational and economic disparities among refugees [44, 45]. A state report by the Maine Department of Labor indicated that although the average earnings of refugees relocated in Maine increased over time, compared to the regular earnings of other workers in Portland, Maine, refugees' earnings remained lower [46]. Most refugees worked for a temporary help services industry with low pay, such as administrative and support services, eating and drinking places, and accommodation industries [46]. Instead of working for a career development, refugees are working for survival [45]. Refugee families' financial constraint was further illustrated by the studies related to food insecurity [47-50]. Earning less than $2,000 per month was highly prevalent among refugee households [47, 48]. More than half of the study refugee families were worried about running out of food and/or lack of money to buy sufficient food. Nearly half of the families had to cut the size of their meals to meet their limited budget [47]. About 98% of refugee families in a study ever used food stamps, and 48% of them were still using the food stamps [48]. Approximately 42% of Liberian refugee households experienced child hunger, and 85% of them experienced food insecurity [49]. The seriousness of both the economic and occupational disadvantage among U.S. refugees largely accounts for the status of refugees being uninsured or underinsured and stresses the significance of unaffordability and unavailability of health insurance for refugees.

The current review also revealed the refugee populations' concerns about understanding the U.S. health insurance application process, navigating both government and private insurance plans, and understanding the general U.S. healthcare policies [25, 28, 29, 33-35]. In an effort to respond to these challenges faced by refugees, most recently, the International Refugee Committee in Denver, Colorado, implemented a new pilot program, entitled "Engaging refugees in their health coverage options," to help refugees navigate the U.S. healthcare system including health insurance system and improve refugees' insurance literacy. The Program aimed to provide refugees, especially newly-arrived refugees, with individualized support, and culturally and linguistically competent knowledge and skills to empower refugees to successfully navigate local health insurance exchange programs, to retain their health insurance plans, and enhance their understanding of how changes made to the healthcare system can impact each individual refugee's health insurance coverage [51]. United Nations High Commissioner for Refugees (UNHCR)'s guidance note on health insurance schemes for refugees and other persons of concern to UNHCR also identified six strategies to expand refugee populations' health insurance access worldwide, including not only adopting "innovative enrollment strategies, improving management and organization of health insurance programs, improving healthcare delivery, and increasing

public awareness" but also making refugees more eligible to health insurance plans and making premiums more affable to them [52]. The Guidance emphasized the consideration of refugees' socio-economic status in strategizing health insurance programs, prioritizing the types of medical expenses for coverage, and sustaining refugees' healthcare; emphasized the importance of continuing advocacy on behalf of refugees in assuring refugees' access to healthcare in their resettlement countries [52].

Conclusions

As suggested by the current literature, in general, U.S. refugees struggle to obtain and retain their health insurance because of both individual and contextual disadvantages [21, 23-35]. However, there is a significant lack of research specifically looks into the essentials of both accessibility and affordability of health insurance among multiethnic refugee populations in the U.S., and how exactly refugees' country of origin, gender, and socio-economic status, including employment, occupation, income, and education, has factored in their insurance buying-power in the short-term and the long-term. More research is needed to examine such as how refugee individuals and their families have been prioritizing their medical expenditures, including expenses on chronic diseases and preventive care; how accessible the care has been with their current health insurance; and how ACA has impacted on refugees' health insurance and healthcare access after its implementation. Data are vital to support a healthcare policy change.

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