Review Article

Immigrants and the utilization of hospital emergency departments

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BACKGROUND: Immigrants with language barriers are at high risk of having poor access to health care services. However, several studies have indicated that immigrants tend to use emergency departments (EDs) as their primary source of care at the expense of primary care. This may place an additional burden on already overcrowded EDs and lead to a low level of patient satisfaction with ED care. The study was to review if immigrants utilize ED care differently from host populations and to assess immigrants' satisfaction with ED care.

DATA SOURCES: Studies about immigrants' utilization of EDs in Australia and worldwide were reviewed.

RESULTS: There are conflicting results in the literature about the pattern of ED care use among immigrants. Some studies have shown higher utilization by immigrants compared to host populations and others have shown lower utilization. Overall, immigrants use ED care heavily, make inappropriate visits to EDs, have a longer length of stay in EDs, and are less satisfied with ED care as compared to host populations.

CONCLUSIONS: Immigrants might use ED care differently from host populations due to language and cultural barriers. There is sparse Australian literature regarding immigrants' access to health care including ED care. To ensure equity, further research is needed to inform policy when planning health care provision to immigrants.

KEY WORDS: Emergency department; Health service; Immigrants; Language; Utilization

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INTRODUCTION

In recent decades, the world has experienced a dramatic increase in all types of migration—legal, illegal, and asylum seekers—which has increased the linguistic and cultural diversity in many countries. The number of immigrants increased around the globe from 150 million in 2000 to 214 million in 2010, and this number could reach 405 million by 2050.[1]

In Australia, migration is contributing significantly to the national population growth; the proportion of migrants increased from 45.6% in 2004 to 59.5% in 2008.[2] This steady rise was due to an increase in the number of international students, prosperous economy, and attractive immigration programmes.[1] The results of the 2006 Census revealed that 4.75 million (24%) out of the total Australian population of 20 million people were born overseas, which is higher than in most Western countries.[3] There are more than 260 languages spoken in Australian homes, with over 3 million (15.8%) people speaking a language other than English at home.[4] Those who do not speak English well or not at all have represented 2.8% of the total population in 2006.[5,6] This increase in language diversity and people who do not communicate effectively in English has imposed challenges in accessing public services.

Language is a key element for patients to access the health care system and to communicate with their health care providers.[7] Language is also the means by

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which physicians and nurses can learn about patients' illnesses, concerns, and emotions, which assists greatly in delivering effective health care management to the patients.[7,8] Several studies have shown that language and cultural barriers may affect how immigrants access health care, which may contribute to health disparities.[8] However, little is known about how immigrants utilize and access emergency department (ED) care.[9,10]

The purpose of this literature review is to examine how immigrants from different language backgrounds utilize hospital ED care in host countries.

METHODS

A literature search was conducted using MEDLINE, PubMed, and Google Scholar. The following keywords were used to search the databases: emergency department, immigrants/migrants, language, and utilization/use. The search was limited to English language articles from Australia, Canada, the United States of America, and some European countries. A total of 56 articles were retrieved and reviewed.

LITERATURE REVIEW

The hospital ED plays a vital role in the health care system. EDs are designed to care for emergencies, such as a life-threatening illness and major injuries, and to respond to public health threats, such as natural disasters.[11]

Pressure on hospital EDs

Overcrowding in EDs has become a serious and growing problem confronting public hospitals worldwide. Overcrowding refers to the situation where ED function is impeded primarily because the number of ED patients waiting to be seen, undergoing treatment process, or waiting to be discharged exceeds the physical or staffing capacity of the ED.[12] A report produced by the Australian Institute of Health and Welfare (AIHW) for the period 2008–2009 showed a higher increase in the use of public hospital EDs compared to other health care services.[13] Further, the AIHW report showed that there were over 7 million visits to EDs in 2008–2009, with an average annual increase of 4.6% since 2004–2005.[13] The report also indicated that almost 30% of the people visiting EDs were not seen in the recommended time for their triage category.[13] Moreover, ED overcrowding in Australia has resulted in ambulance diversions from hospitals.[12]

Australia is not unique in its experience of overcrowded EDs, as ED care delivery has also been increasing in other countries. In the United States, a study found that 92% of academic emergency medicine departments are overcrowded.[14] In Canada, the Canadian Association of Emergency Physicians (CAEP) and the National Emergency Nurses' Affiliation (NENA) released a joint position statement on ED overcrowding, declaring it a serious national issue.[15] ED overcrowding has also been reported in Spain and Taiwan of China.[16–18]

Derlet and Richards included language and cultural barriers as one of the most common causes of ED overcrowding due to increased length of stay and wait times.[19]

Patterns of ED care use

A number of studies[8,20,21] have demonstrated inequities in access to health care services among immigrants compared to the host population in developed nations. These studies have shown that immigrants tend to underutilize health care services compared to the host population.[8,22,23] The lower utilization of health care services by immigrants has also been explained by the "healthy immigrant effect", which argues that immigrants are normally in better health than local born populations, due to factors such as the selectivity of the immigration process (e.g. health screening prior to migration, education level, language proficiency, and age), healthier behaviours of immigrants prior to migration, and the financial and physical ability to travel whereby the wealthiest and healthiest individuals are the most likely to migrate.[3,24] However, "the healthy immigrant effect" might not apply to some categories of immigrants, such as those with refugee status.[25,26] Immigrants from refugee backgrounds may have different reasons for underutilizing health services, such as fear of discrimination, poor education, and lack of knowledge about the local health system.[26] Alongside the underutilization of health care services, these barriers may lead to inappropriate access to health care; for example, immigrants may utilize ED care for non-urgent conditions that can be treated in primary care settings.[8,27]

Correa-Velez and colleagues used a state-wide hospital discharge dataset to compare differences in hospital services utilization between people born in refugee source countries and the Australian born population in Victoria.[25] Their study showed that people born in refugee source countries have lower or similar rates of hospital services utilization in Victoria to the Australian born population.[25] They concluded that

patients from the Refugee and Humanitarian Program do not currently place a burden on the Australian hospital system in general.[25] However, their study found that people living in Victoria who were born in refugee source countries have a higher rate of ED care use (113.2, 95%CI: 108.2–118.4, per 1 000) than the Australian born population (100.9, 95%CI: 99.6–102.2, per 1 000). A similar finding of high ED care use among immigrants was found in two Danish studies.[27,28] The first study showed a highly significant association between rates of ED service use and country of birth (chi^2=79.1, df=8, P<0.0001).[28] The study revealed that people born in Somalia, Turkey, and the former Yugoslavia had higher utilization rates (RR=1.46, 1.36, and 1.23, respectively) than Danish born residents.[28] The second study found more inappropriate ED care use by immigrants of Middle Eastern origin and other non-Western origins compared to patients of Danish origin (92%, 82%, 73%, P<0.01, respectively).[27] Another study from Spain found that immigrants from low income countries use ED care more than the Spanish born population (RR=1.42 (1.38–1.47) and 2.19 (2.13–2.26) for men and women, respectively).[29] Additionally, a Swedish study showed that immigrants from Chile, Iran, and Turkey were more likely to have used ED care compared to the Swedish born population: odds ratios (ORs) 1.4, 95%CI: 1.2–1.7; 1.3, 95%CI: 1.1–1.7; and 1.5, 95%CI: 1.3–1.9, respectively.[30]

On the other hand, two studies conducted in the United States found that immigrants tend to underutilize ED care compared to American citizens.[31,32] Ku and Matani[32] found that non-citizens were, less likely to visit EDs than American citizens (9.2, P<0.01). Additionally, Cunningham[31] found that non-American citizens were less likely to use ED care than American citizens (10.2, P<0.05). The authors explained that this was due to insurance, socioeconomic status (SES), and possible fears among undocumented (illegal) immigrants about being asked about their immigration status in the ED.[31,32] Another study[33] from Spain showed a similar result of low ED care use among immigrants, with relative risk (RR) of 0.62 (95% CI: 0.52%–0.74%) for foreign born compared to Spanish born residents. The authors explained that this was probably due to the "healthy immigrant effect". However, this study did not adjust for SES and the length of stay in the host country. In addition, a study from Ontario, Canada, showed lower use of ED care by immigrants compared to Canadian citizens.[34] However, this study used the general Ontario Health Survey (OHS), without adjusting for any determinants of utilization.

Another Australian study[10] showed no difference in ED care use between infants from non-English speaking backgrounds (NESBs) and infants from English speaking backgrounds (ESBs) (OR 0.86, 95%CI: 0.57–1.28). The authors argued that the lower rates of ED care utilization during the first 12 months of life may have resulted in insufficient power to detect a difference in ED service use between NESB and ESB infants.[10]

In summary, there are conflicting results in the literature about ED care use among immigrants, which may be due in part to differences in immigrants' characteristics and the health systems in different countries. For example, in the United States, having health insurance is crucial for accessing primary health care, unlike in Australia, where Medicare is available for all Australians and permanent residents. Furthermore, Australia's borders and geography provide natural protection against illegal immigration, unlike other countries such as the United States and Spain.

Inappropriate use of ED care

Several studies have suggested that immigrants tend to use ED care for non-urgent conditions at the expense of primary health care services.[27,35,36] It has been argued that the utilization of EDs for non-urgent conditions can have serious implications. It may result in prolonged LOS and increased wait times in EDs which together reduce the quality of care provided, leading to an increased probability of complications for urgent conditions.[27,37,38] Further, the research has shown that the use of EDs for non-urgent conditions adds to increased patient dissatisfaction and can lead to frustration among ED care providers and administrators due to overcrowding and delay in treatment.[39] Moreover, ED presentations for non-urgent conditions are less likely to involve preventive care and are more costly than visits to primary health care clinics.[27,40] Exacerbating the situation, overcrowded conditions in EDs may result in prolonged pain and suffering, ambulance diversions, decreased physician productivity, violence associated with prolonged wait times, and miscommunication because of increased patient volumes.[15]

According to the literature, immigrants seek treatment in EDs for diverse reasons other than the urgency of their conditions.[27,41] These reasons might include the fact that emergency services are free to consumers at the point of care in most developed countries and do not require papers, which might be an obstacle for illegal immigrants, can be obtained at any time without prior appointment, and require

less administration steps to access, which can reduce language, cultural, and legal barriers.[27,42] Therefore, immigrants may be disadvantaged by a lack of access to primary health care facilities and thus place additional burden on ED care due to inappropriate access. On the other hand, immigrants might also be disadvantaged in the modes of access to critical ED care when needed. Sheikh and colleagues[9] found that newly arrived refugees to Australia do not call an ambulance when required, despite their ability to make such a call. The study revealed that one of the reasons why these people do not call an ambulance is previous experiences in their home countries, where the police would come as well when they hear the ambulance sirens.[9]

Length of stay in EDs

Length of stay (LOS) in EDs is defined as the time from a patient's registration until that patient's departure from the ED.[43,44] LOS is a marker of ED overcrowding and a key component of ED quality assurance monitoring.[45,46] LOS can be associated with ED overcrowding, decreased patient satisfaction with ED care, ambulance diversion, and poor clinical outcomes.[43,45] An association with a long LOS in the ED has also been found with language differences between health care providers and patients.[8,47]

The high number of immigrants with language barriers can increase the LOS by the need for extra time to get an interpreter and more time for interaction between the patient and care providers.[19]

Satisfaction with ED care

The quality of medical care is increasingly being measured by a range of perspectives, including clinical and economic perspectives, and more recently, by patients' opinions.[48–50] The emphasis on patient satisfaction with health and medical care has increased in recent years. Patient satisfaction has been defined as occurring when the patient's expectations of treatment and care are met (or exceeded).[51] There are several reasons for considering patient satisfaction as an important ED goal.[51] Patient satisfaction is an important indicator of the quality of care provided by the ED. It also shapes patients' first impression of their future actions towards medical services. Moreover, it has been shown to increase compliance with discharge instructions and improve job satisfaction among the physicians and other ED staff.[48]

Despite the growing recognition of language as a barrier to accessing health care, little data exist about patient satisfaction among immigrants and particularly among non-English speaking immigrants. Most studies on patient satisfaction have focused on participants from the host country.[51] Thus, most of these studies have chosen to exclude immigrants to prevent the introduction of translation and cultural biases.[51] Although a few studies have examined health care satisfaction among non-English speakers in the United States, these studies have shown the negative impact of language barriers and lack of proper communication on patients' satisfaction. A study[52] from Arizona revealed that the language of interview was a significant variable in determining satisfaction among Hispanic children patients. Furthermore, in another study,[53] it was suggested that language barriers may help explain the lower levels of satisfaction among Asian Pacific Islanders compared to those of the white population. A study[54] conducted in a public hospital ED in the United States showed that patients with limited English proficiency perceived their care provider as less friendly, less polite, and less concerned for them as a person. Carrasquillo and colleagues[55] reported that non-English speakers were less satisfied as compared to English speakers with their care they received in the ED, less likely to use the same ED if they had a problem they felt required emergency care, and documented more problems with emergency care.

Most of these studies were conducted in the United States and may be limited in the extent to which the results can be applied in the Australian context, due to differences in the health systems. For example, health insurance and immigrant status might play vital roles in patient satisfaction. Moreover, most of these studies did not address some of the cultural concepts among people from NESBs which may affect patients' satisfaction. For example, some patients from certain backgrounds might reject ED service in specific circumstances, such as embarrassment among some women from the Middle East at being examined by a male doctor. In addition, cultural concepts in rating satisfaction were not addressed. For example, some cultural groups may consider a certain level of health care as "good" while other cultural groups may consider the same level as "very good or excellent".[56] In addition, the results of these studies might be confounded by the presence of an interpreter, and some of them were a single-site study and used a phone survey, which may have increased bias (e.g. females are more likely to answer the phone).

Gap in the knowledge and recommendations

There are important limitations in ED care use

studies. In some cases, there was little analysis of the factors that may be related to health status and ED utilization, such as ethnicity, country of origin, language proficiency, SES, and age.[31–33] Some examined specific groups of immigrants in particular countries.[27, 28] Others looked at heath service utilization in general, using data not collected specifically for ED care use.[25,34] In addition, limited literature has shown whether the increased use of ED service is due to an increase in critical conditions that required ED care or to inappropriate ED access. Identifying the reasons for coming to the ED might provide additional insights about the different motivations for ED use among immigrants.

In general, the majority of the studies about immigrants' utilization of health services might not be applicable to Australia, as immigrants' characteristics in other countries as well as their health systems might differ from those in Australia. At present, a limited body of literature exists describing the use of ED care by immigrants from NESBs in Australia, and no literature exists about the satisfaction with ED care among immigrants from NESBs.

Therefore, there is a need for further Australian research focusing on hospital ED care utilization by immigrants from NESBs. This would be helpful in the development of policies that ensure equity when planning health care provision to immigrants.

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