



Migrants' Healthcare Utilization in Europe: A Comprehensive Review of Emergency Room Utilization and Hospitalization

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ABSTRACT

There is an increasing number of migrants living in European. The increasing percentage of migrant population requires the assessment of their health needs and health service utilization to allow potential to guide appropriate programs and policies. This study aims to analyze the differences in healthcare service utilization, particularly regarding emergency room contacts and hospital admissions, by first-generation migrants compared to native residents in European countries in the last decade. Original publications in English language were identified by a systematic PubMed search. Their relevance was judged based on the abstracts, whereas further searches were guided by the references of the selected articles. We considered studies conducted in the EU countries and published in the last ten years, investigating emergency use and hospitalization rates in adult first-generation migrants. We excluded studies focusing on illegal migrants and asylum seekers or on a single gender. The final number of studies included was ten. The results of our study highlighted a lack of data regarding migrant healthcare utilization in Europe. Furthermore, our review underlines the yet unresolved problems of comparability between studies, due to discrepancies in terminology and registration between countries as well as over time. The studies considered in this review have found higher, equal and lower emergency room use and higher or equal hospitalization rates for migrants compared to non-migrants.

Keywords: Emergency room, First generation immigrants, Hospitalization, Public health, Review.

JEL Codes: L1, P21, P22, P46.

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1.0 INTRODUCTION

The percentage of migrant population in European countries increased substantially in the last decade, with the inflow peaking in 2007 (Eurostat, 2014: figure 1 below). This was precipitated by the collapse of

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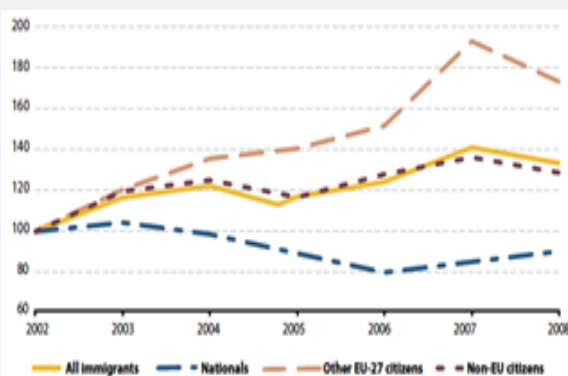
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the Soviet Union, the expansion of the European Union (EU), the political instability in Northern Africa and the wars in the wider area of Middle East and Asia, with foreign natives coming to European countries either as legal immigrants or as refugees and asylum seekers. In 2013 alone, Europe hosted 72 million international migrants (United Nations, 2014; figures 2-3 below). In the second half of 2015, Europe's migrant crisis is constantly in the spotlight of international media, as European countries struggle to cope with managing large groups of migrants. In southern European countries, particularly in recession-hit Greece and Italy, where migrants tend to arrive from the Middle East or Northern Africa, the crisis has been brewing for several years to further escalate in the last few months. This unprecedented influx of migrants clearly puts further pressure on already strained public services, such as healthcare. The yet evolving migrant crisis has divided public opinion throughout Europe, with anti-immigration groups often highlighting the financial burden imposed by the newcomers to all public sectors, including health services. These developments clearly render the analysis of healthcare utilization patterns by migrants crucial, in order to develop appropriate policies that address the needs of this fast growing population group.

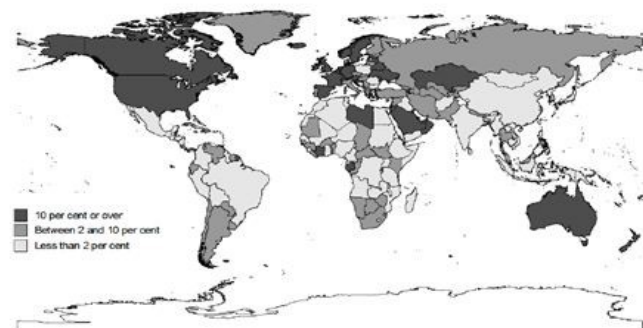
Figure 1



Source: Eurostat (online data code: migr_imm1ctz) and Eurostat estimates

Figure 2

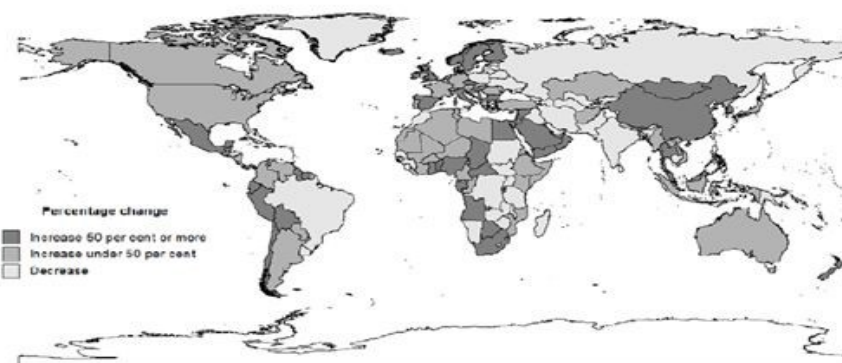
Share of international migrants in total population



Source: Department of Economic and Social Affairs, Population Division, Trends in international migrant stock: the 2013 revision (United Nations database, POP/DB/MIG/Rev.2013) (forthcoming).

Figure 3

Change in the international migrant stock, 2000-2013



Source: Department of Economic and Social Affairs, Population Division, Trends in international migrant stock: the 2013 revision (United Nations database, POP/DB/MIG/Rev.2013) (forthcoming).

Healthcare is a fundamental human right that should be provided by a society to all people, including migrants. Good health is the prerequisite for the integration, participation and contribution of migrants to the receiving society, rendering the adequate management of migrant healthcare especially crucial. However, this constitutes a major challenge for the healthcare system, since migrants 1) represent a potentially vulnerable population exposed to health risks before, during and after migration, 2) may present different epidemiological profiles compared to the native population, and 3) are often confronted by considerable barriers in the utilization of healthcare. These obstacles arise from the lack of adequate information regarding the healthcare system as well as from their poorer economic and

social conditions. This particularly applies to first-generation migrants that often have special health needs and encounter substantial difficulties in gaining access to and making use of the healthcare system.

The disparity in healthcare use between first-generation migrants and the native population may arise from differences in initial health, which inadvertently affect health needs, as well as healthcare-seeking behavior. Migrants may also have different perceptions of illness, contributing to the differences in health service use (Hjelm et al., 2003). Moreover, a positive selection effect i.e. "the healthy immigrant effect" was noted in several past studies (McDonald et al., 2004; Buron et al., 2008). Since immigration has both monetary (transportation expenses) and non-monetary (emotional) costs, the more robust and educated are more likely to change their residence. Thus, recently arrived migrants are expected to have better health compared to native residents, due to a previous "natural selection" in their country of origin, resulting in lower health care utilization in the receiving country. However, this effect may decline over a longer length of residence, due to the relative worsening of the immigrants' health and the improved knowledge regarding healthcare services, ultimately leading to their increased use (Stronks et al., 2001; Newbold, 2005).

Hospital care is an important component of health care both for migrant and native populations. Especially emergency room (ER) contacts and hospital admissions are often appreciated as an objective measure of health care use by immigrant populations, as opposed to the discretionary use of other services, such as screening contacts (Norredam et al., 2004; Antón & Muñoz de Bustillo, 2010). This may be partly attributed to the ease of access to hospital facilities and to the dearth of knowledge regarding the health care system in the receiving country (Norredam et al., 2004).

In this review, we aimed to analyze the differences in the utilization of somatic healthcare services, particularly of ER contacts and hospital admissions, by first-generation migrants compared to native residents in European countries in the last decade. This should shed some light on critical issues and potentials concerning migrants' healthcare utilization and serve as a basis for further research.

2.0 METHODS

We identified relevant publications through a systematic PubMed search based on: [migrants OR immigrants OR immigration] AND [access OR health services use OR health services utilization OR healthcare use OR healthcare utilization OR emergency room OR hospital OR hospitalization]. We included only original, quantitative peer-reviewed studies in English language, published in the last 10 years and conducted in the EU countries, investigating ER use and hospitalization rates in adult first-generation migrants. We considered studies with 1) migrants and non-migrants originating from the same source population and 2) non-migrants serving as the reference group. We excluded studies concerning exclusively illegal migrants and asylum seekers, since these populations generally have restricted access to healthcare services due to their precarious status and thus differ from other migrants. Furthermore, we excluded studies concerning a specific gender (i.e. women).

3.0 RESULTS

The 10 studies finally included in this review were conducted in 6 countries situated in geographically diverse parts of Europe: 3 in Northern Europe: Denmark (2 studies), and UK (1); 2 in central Europe: Germany (1), the Netherlands (1); and 5 in southern Europe: Spain (3) and Italy (2). None were conducted in Eastern Europe.

The number of migrants included in the studies varied from 53 to 56610 persons, with 8 of 10 studies concerning more than 1000 migrants. Information on the country of origin varied. In 6 of 10 studies, at least one country of birth was specified for migrants. The type of migration (i.e. refugee vs. labor migrant) was only employed in 3 of 10 studies. Five studies derived from registry and 4 from survey data, whereas one study relied on a combination of both registry and survey records. Three of the studies were carried out at a national level, whereas 7 were carried out at a regional or local level.

The included studies varied considerably regarding the receiving countries, healthcare services covered, migrant characteristics as well as methodological approach. This precluded the assessment of potential variations across different European countries or between migrant subgroups. Findings are presented in chronological order of publication in table 1 (in Appendix).

3.01 EMERGENCY ROOM UTILIZATION

Five of 7 ER studies considered in this review showed higher utilization rates among migrants compared to non-migrants (Norredam et al., 2004; Dyhr et al., 2007; Rue et al., 2008; Carrasco-Garrido et al., 2009). Among migrants, higher ER use was most pronounced for the following countries of origin: Turkey, Somalia and Former Yugoslavia (Norredam et al., 2004), Morocco or other African countries and Albania (De Luca et al., 2013), Palestine, Pakistan, and Iran/Iraq (Dyhr et al., 2007), Maghreb, Latin America, Eastern Europe, Sub-Saharan Africa and high-income countries (Rue et al., 2008). Furthermore, two studies from Italy and Denmark reported higher ER use among younger migrants (Dyhr et al., 2007; De Luca et al., 2013). High rates of ER use related to inadequate access to other services by migrants in an Italian study (De Luca et al., 2013). However, a German study showed that migrant status did not predict inappropriate ER use (David et al., 2006).

On the other hand, a Spanish study reported lower utilization of ER services among foreign-born from less developed countries (Buron et al., 2008). Additionally, one study showed no significant differences between migrants and the native population even after controlling for several socio-demographic factors (David et al., 2006).

3.02 HOSPITALIZATION

Regarding hospital admissions, 2 of 3 studies considered in this review showed equal rates for migrants compared with non-migrants (Uiters et al., 2006; Baglio et al., 2010). Furthermore, a study from the U.K. has shown no significant difference in the duration of hospitalization for migrants compared with non-migrants (Cooke et al., 2007). As opposed to the above studies, a Spanish study found higher hospitalization rates among migrants (Carrasco-Garrido et al., 2009).

4.0 DISCUSSION

Our results highlight the diversity of healthcare utilization by migrants throughout Europe in the last decade. The studies considered in this review revealed higher, equal and lower ER use and higher or equal hospitalization rates for migrants compared to non-migrants.

4.01 METHODOLOGICAL ISSUES AND STUDY COMPARABILITY

This review highlights the persisting problems of comparability between studies, due to inconsistencies in terminology and registration between countries as well as over time. A glossary discussing the concepts and terminology applicable in healthcare utilization studies of minority ethnic and racial groups has been proposed 10 years ago (Bhopal, 2004). However, common definitions applied in practice to facilitate data comparability have not been established so far.

Furthermore, this review reveals a paucity of data regarding migrant healthcare utilization in Europe. This may be attributed to the fact that the registration of migrant status and ethnicity are yet challenging for various technical and political reasons. The specification of race and migrant status is still considered discriminatory in Europe nowadays. Moreover, pooling data concerning migrants of the same origin is impracticable due to the widely variable methodology in different studies across Europe. The categorization of migrants is an issue that deserves some attention, since the geographical origin of migrants as well as the type of migration may define their views of illness and their epidemiological profiles and ultimately dictate their utilization of healthcare services. However, most studies use broad

categories containing heterogeneous populations for pragmatic reasons, thus potentially missing relevant information.

4.02 REASONS FOR DIVERGING HEALTHCARE UTILIZATION BETWEEN MIGRANTS AND NON-MIGRANTS

Differences in healthcare utilization between migrants and non-migrants may be partly explained by obstacles hindering access to healthcare that are related to the migrant status (Rechel et al., 2013). These obstacles consist in 1) *formal issues* related with the healthcare system, e.g. restrictions on healthcare access for undocumented immigrants and asylum seekers, and 2) *informal issues* related to communication abilities and socio-cultural differences, e.g. language barriers, lack of information about available services, difficulties in making appointments for primary care, and differences in health beliefs and behaviors (van Wieringen et al., 2002; Hjelm et al., 2003; Newbold, 2005; Fassaert et al., 2009).

In this context, language ability is crucial for migrant integration and participation in the host society, including the access to and utilization of healthcare services. Patients who are unable to communicate adequately in the language of the receiving country are more likely to access health care at emergency departments, even when inappropriate, or access health care late, often with dire consequences. On the other hand, improved language skills are reportedly concomitant to an increased use of health services (Fassaert et al., 2009). Thus, migrants tend to use emergency services upon arrival, but revert to regular sources of care over time. Poor communication skills may result in the "The Happy Migrant Effect," in which there is reluctance to assert healthcare rights. Patients appear "happy" and satisfied, despite problems with their hospital care. This may be due to extreme powerlessness related to being unable to communicate, a positive appraisal of healthcare in the new country compared with the old, patriotism for the new country, cultural norms that proscribe acceptance, politeness or social desirability, self-denigration for not having learnt English and, for a few, a fear of reprisals if they spoke out in complaint (Garrett et al., 2008).

4.03 EMERGENCY ROOM UTILIZATION

ER use is linked to health needs, barriers to access to primary care services or similarities in the way migrants access health care in their countries of origin. In a Danish study, higher ER utilization rates for migrants were attributed to lack of information regarding the healthcare system and obstacles to seeking primary care including language, fear of discrimination, and low satisfaction with primary care (Norredam et al., 2004). This over-utilization of ER services by migrants compared to the native-born population has been reported for several European countries (Hargreaves et al., 2006; Buron et al., 2008; Rue et al. 2008; Antón & Muñoz de Bustillo, 2010). On the other hand, some studies report equal or even lower rates of ER utilization (David et al., 2006; Buron et al., 2008), possibly linked to the "healthy immigrant effect" (McDonald et al., 2004; Buron et al., 2008).

4.04 HOSPITALIZATION

Several European studies on hospitalization rates of migrants compared to the native population have found lower admission rates for migrants, the main causes of hospital admission being reproductive events among females, injuries and infectious diseases among males (Stronks et al., 2001; Cacciani et al., 2006; Sabbatani et al., 2006). Overall, the most common reasons for hospital visits and admissions among immigrants related to the health needs of the younger population (Dyhr et al., 2007; Rue et al. 2008).

4.05 LIMITATIONS

In this review, we only considered studies published in English language in the last decade, thus excluding potentially relevant studies written in other European languages or published before 2004. Furthermore, potentially significant studies on this topic may not be published in medical journals covered by our PubMed research, but appear in reports, websites and books.

5.0 CONCLUSIONS AND POLICY IMPLICATIONS

Overall, changing immigration trends pose new challenges for the healthcare system in receiving countries and structured, comparable data is urgently needed to facilitate provision of services to migrant groups and to ensure their access to appropriate health care. On the other hand, health services across Europe have gained a rich experience in providing health care for migrant patients, especially in the past decade. This experience is expected to stimulate novel insights regarding healthcare provision to migrant populations and to altogether improve access and utilization of services by this patient group.

In a survey among health care professionals working in areas with high proportions of migrant populations in 16 countries (Priebe et al., 2011), several problems and respective components of good practice were identified in providing care for first generation immigrant populations. These included language barriers, difficulties in arranging care for migrants without health care coverage, social deprivation and traumatic experiences, lack of familiarity with the health care system, cultural differences, different understandings of illness and treatment, negative attitudes among staff and patients, and lack of access to medical history. The suggested components of good practice to overcome these problems or limit their impact included among others organizational flexibility with sufficient time and resources, good interpreting services, working with families and social services, cultural awareness of staff, educational programs and information material for migrants, positive and stable relationships with staff, and clear guidelines on the care entitlements of different migrant groups. Implementing all good practice components as identified in this study is desirable, but feasibility has yet to be assessed.

The findings of our comprehensive review point out a surprising paucity of data regarding healthcare utilization by migrant populations in European countries. Furthermore, our review highlights the heterogeneity of migrants regarding geographical origin and migration patterns as a key factor to consider in the decoding of discrepancies between studies. Both observations apparently have important policy implications for further research work in this field. Future studies should aim to unequivocally classify both migrants and health services. This should facilitate the collection and analysis of homogenous data, enabling comparisons between different migrant populations as well as within different countries and healthcare systems. Furthermore, healthcare utilization is clearly linked to comprehensive information regarding the health care system itself and, ultimately, to the overall integration of migrants in their host country. Health authorities in host countries should urgently promote these issues, in order to fight inequity and facilitate migrant access to necessary healthcare services.

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APPENDIX

References and country	Inclusion period	Utilization indicator(s)	Sample and number of migrants	Country of birth	Type of migration	Data source	Major findings
Norredam et al., 2004 <i>Denmark</i>	1997	Number of ER contacts	Citizens residing in the catchment area of a specific hospital in Copenhagen, Age: ≥ 20 years, N= 24433	Former Yugoslavia, Pakistan, Iraq, Somalia, Turkey, Nordic countries, EU, North America, Rest of Europe, Other countries	No information	Registry	Higher among Turks, Somali and Former Yugoslavia
David et al., 2006 <i>Germany</i>	n. a.	Appropriateness of ER use	Patients at three gynecological/internal medicine emergency clinics in Berlin, Age: 15–65 years, N= 230	Turkey/Kurdistan	No information	Registry/survey	No significant differences
Uiters et al., 2006 <i>The Netherlands</i>	2001	Hospitalization	Population within a geographically representative sample of 104 GPs across the Netherlands, Age: ≥ 18 years, N= 1339	Turkey, Antilles, Morocco, Surinam	No information	Survey	No significant differences
Cooke et al., 2007 <i>U.K.</i>	n. a.	Duration of hospitalization	Patients attending an infectious disease department in an inner-city London teaching hospital, Age: n.a, N=53	Born in a country outside the British Isles	(i) Labor migrants (ii) Refugees/asylum Seekers	Survey	No significant differences
Dyhr et al., 2007 <i>Denmark</i>	1998	ER use	Citizens residing in Copenhagen Age: 19–59 years, N= 2132	(i) Labor migrants (Turkey, Pakistan, former Yugoslavia, Morocco) (ii) Refugees (Former Yugoslavia, Somalia, Palestine, Iran, Iraq)	(i) Labor migrants (ii) Refugees	Registry	Higher among immigrants aged 19–59, especially persons from Palestine, Pakistan, and Iran/Iraq
Buron et al., 2008 <i>Spain</i>	2004	ER use	Citizens residing in the catchment area of Hospital del Mar, Barcelona, Age: ≥ 16 years, N=10224	Foreign-born	No information	Registry	Lower among foreign-born
Rué et al., 2008 <i>Spain</i>	2004-2005	ER use	Patients attending a public hospital in Lleida, Spain, Age: 15–64 years, N=20663	Maghreb, Latin America, Eastern Europe, Sub-Saharan Africa, Other low-income countries, High-income countries	No information	Registry	Higher among Maghreb, Latin America, Eastern Europe, Sub-Saharan Africa and High-income countries
Carrasco-Garrido et al., 2009 <i>Spain</i>	2006-2007	(i) ER use (ii) Hospitalization	National population Age: ≥ 18 years, N=1436	Latin America, Africa, Europe (non-EU), Asia	Labor migrants	Survey	Higher among migrants

Baglio et al., 2010 <i>Italy</i>	2005	Hospitalization	Citizens residing in the catchment area of the Lazio Region Hospital, Age: ≥ 18 years, N= 56610	Less Developed Countries (Istituto Nazionale di Statistica: Istat, 2004)	No information	Registry	No significant differences for acute care, but lower among migrants for day care.
De Luca et al., 2013 <i>Italy</i>	2004-2005	ER use	National population Age: 0-64 years, N= 3509	Foreign-born	(i) Labor migrants (ii) Refugees	Survey	Higher among young male migrants, especially Moroccans or other Africans and Albanians

n.a.: not available; ER: emergency room; N: number; EU: European Union