Infectious disease health services for refugees and asylum seekers during a time of crisis: A scoping study of six European Union countries

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A B S T R A C T

Background: Systematic information on infectious disease services provided to refugees and asylum seekers in the European Union (EU) is sparse. We conducted a scoping study of experts in six EU countries in order to map health system responses related to infectious disease prevention and control among refugees and asylum seekers.

Methods: We conducted 27 semi-structured in-depth interviews with first-line staff and health officials to collect information about existing guidelines and practices at each stage of reception in first-entry (Greece/Italy), transit (Croatia/Slovenia), and destination countries (Austria/Sweden). Thematic coding was used to perform a content analysis of interview material.

Results: Guidance on infectious disease screening and health assessments lack standardisation across and—partly—within countries. Data collection on notifiable infectious diseases is mainly reported to be performed by national public health institutions, but is not stratified by migrant status. Health-related information is not transferred in a standardized way between facilities within a single country. International exchange of medical information between countries along the migration route is irregular. Services were reported to be fragmented, and respondents mentioned no specific coordination bodies beyond health authorities at different levels.

Conclusion: Infectious disease health services provided to refugees and asylum seekers lack standardisation in health assessments, data collection, transfer of health-related information and (partly) coordination. This may negatively affect health system performance including public health emergency preparedness.

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1. Introduction

In 2015, the European Union (EU) received the largest number of forced migrants since World War II: over 1.2 million asylum seekers were registered of which more than 50% were from Syria, Afghanistan, and Iraq [1]. Most of these migrants entered the EU through a combination of land and sea routes, with Greece and Italy being the main countries of arrival into the EU, receiving 853,650 and 153,842 migrants, respectively [2]. Subsequently, newly-arrived refugees continued to travel further north to intended destination countries. About 764,000 migrants were registered in the Western Balkan region, crossing the borders from Greece via the former Yugoslav Republic of Macedonia and Serbia into Hungary and Croatia towards western Europe [3]. Main destination countries were Germany, Austria and Sweden which registered 441,800, 156,000 and 85,000 first time asylum applicants (54% of all asylum applicants in the EU) in 2015, respectively [1].

This sudden and rapid immigration of refugees has given rise to public health challenges for recipient and transit countries, including ad hoc emergency responses to address health and humanitarian needs. The challenges are, however, far beyond emergency responses but also include the provision of safe passage in line with the human right to health and social protection [4].

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Effective health system responses are necessary for meeting these challenges, especially in the context of infectious disease prevention and control. Treatment of acute infectious diseases (e.g. of respiratory tract infections, diarrheal diseases and skin infections), prevention of transmission in shelters (e.g. of tuberculosis), health screening (e.g. for acute or chronic infections) and vaccination (e.g. for measles and chicken-pox), as well as provision of care for physical or mental co-morbidities are only a few examples of the broad array of required responses [5]. Nonetheless, the current state of knowledge of health system responses to the recent migration movements remains limited and haphazard (Panel 1). In turn, this dearth of systematic information on ground-level practices impedes health system responsiveness.

This article surveys aspects of infectious disease services provided to refugees and asylum seekers in early 2016. We conducted a scoping study of experts in first-entry, transit, and final-destination countries to collect information about the practices at each stage of reception. Here, we focus on three key issues: coordination of actors and exchange of infectious disease-related information within and between countries; financing structures for services; and standardisation issues related to screening and health assessments.

2. Methods

2.1. Study design, study sites and observation period

To examine the provision of infectious disease screening, prevention and treatment for refugees and asylum seekers, we conducted a scoping study of national experts in six EU countries between March and June 2016. Following the 1951 Geneva Convention [6], we defined asylum seekers as “persons seeking to be admitted into a country as refugees and awaiting decision on their application for refugee status” and refugees as “persons who have received legal protection in the country under study”. Countries were selected as proxies for the three stages of the EU part of the migration journey: initial entry into the EU (Greece/Italy), transit (Croatia/Slovenia), and destination (Sweden/Austria) [7]. Germany was not included since a nation-wide assessment of health system responses related to care provision to asylum seekers had already been conducted at the time when this study was prepared [8]. Inclusion of Hungary, a transit country which received about 14% of all asylum first applicants in 2015 [1], was not possible due to resources constraints and the limited budget of this scoping study. Within each country, we considered the three stages of the reception process: at arrival (short-term reception and registration centres); in reception centres (long-term centres); and outside reception centres (e.g. accommodations in the community).

2.2. Data collection and participants

We conducted 27 semi-structured interviews with frontline professionals from the public or non-profit sector performing tasks of health reception in any of the above stages and officials of a national health authority responsible for infectious disease control. Frontline professionals were recruited via snowball sampling based on focal contact points identified by the International Organization for Migration (IOM). These focal points included both authorities (e.g. Ministries of Interior Affairs) and non-governmental organisations (NGOs). Officials of national health authorities were suggested by European Centre for Disease Prevention and Control (ECDC) focal contacts and contacted by the research team. Six interviews were conducted in Greece, five in Italy and Croatia, four in Slovenia and Sweden, and three in Austria.

The participating frontline professionals worked either in care settings of the regular health system or in NGOs, and provided care either immediately at arrival (e.g. in border areas), or in reception centres or outside reception centres in community placements. This sampling frame was applied to achieve a comprehensive picture of care provision for infectious disease across different sites within a country. Interviews were conducted face-to-face or via the telephone by different interviewers in the six countries. We sought to conduct all interviews in English to facilitate comparability and analysis of findings, but this was not always possible in Italy, Slovenia, and Croatia due to interviewees’ language skills. In such cases, the questions were verbally translated by the interviewers, the interviews were conducted in the native language, and the answers were translated in English following an aligned coding scheme for the purpose of cross-country comparability. Their duration was between 1.5 and 2h, and all but six were digitally recorded and transcribed verbatim. Six interviews—one in Slovenia and those in Italy—were not recorded due to technical limitations, and detailed notes were taken during the interview. Interviews were granted after securing informed consent and under the condition of anonymity; Web Appendix A lists the profiles of the persons interviewed. Importantly, the interview findings reflect practitioners’ and officials’ responses on ground-level practices, rather than the formal regulations that were in place. We reflect on these issues in the concluding section.

The interview guide—presented in Appendix B—was based on instruments previously applied to a nation-wide assessment of health system responses related to care provision to asylum seekers in Germany [8], and IOM’s Equi-Health Situational Assessment Report tools [9,10]. The German instruments were translated into English, and adapted by the research team to meet the specific focus on this study with respect to infectious disease prevention and control and the geographical coverage. The ensuing interview guide was divided into five parts: (1) Infectious diseases health service provision, (2) Financing of infectious diseases health service provision, (3) Exchange of information and coordination on infectious diseases, (4) Communication, and (5) Structural resources and needs.

Here, we focus on reported guidelines and practices in terms of governance and coordination of actors, exchange of infectious disease-related information within and between countries, the financing structures for services, and standardisation issues related to screening and health assessments. All interviewees were asked separately about policies and procedures related to refugees and asylum seekers—in most cases, these were identical. Nonetheless, when differences in infectious disease service provision for each group were reported, we indicate this in our analysis.

2.3. Analysis

To perform content analysis, we mainly relied on concept-driven (deductive) thematic coding [11] of the transcripts and the interview material, with concepts drawn from interview guide modules. The ensuing interview guide included discussion of infectious diseases health service provision, financing of infectious diseases health service provision, exchange of information and coordination on infectious diseases, communication, and structural resources and needs. To organize our analysis, we then focus on reported guidelines and practices in terms of: (1) Governance and coordination of actors; (2) Exchange of infectious disease-related information within and between countries; (3) Financing structures for services; and (4) Standardisation issues related to screening and health assessments. Within each module of the interview guide, responses were categorised by major themes mostly defined a priori among the research team. Informative interview sections were paraphrased, condensed and extracted by country, and (where applicable) type of migrants. No double-coding or comparison of analyses between different researchers was performed.
Inductive (data-driven) elements contributed to the interpretation of the results but were not rigidly coded into a (inductively developed) code structure.

2.4. Role of the funding source

The study was funded by ECDC, but the findings do not reflect official ECDC positions and should solely attributed to the authors. All authors had access to the data, and the corresponding author had the responsibility to submit this article for publication.

3. Results

3.1. Governance and coordination of infectious disease care provision

According to respondents in all countries, the following actors play an important role in shaping service provision for infectious diseases for asylum seekers and refugees: ministries of health and interior, public health authorities, primary health care centres, hospitals, infectious Disease Departments and NGOs (including individual volunteers). When asked which of these actors functioned as the main coordination body of healthcare provision county, regional and national health authorities were generally identified as organizations exercising these functions. In Greece and Slovenia, most respondents mentioned different actors (i.e. the answers were inconsistent and there was apparent lack of clarity about mandates for coordination) and some expressed a perceived lack of coordination with respect to infectious disease care provision for asylum seekers and refugees. In Austria, a lack of coordination was perceived by a frontline health worker affiliated to NGOs, who described the situation in the field with respect to care provision outside reception centres as widely chaotic and uncoordinated. Coordination of care provision in Sweden, Italy and Slovenia was perceived to be limited as well by most, but not by all, respondents.

3.2. Coordination of information exchange

Most respondents (18 out of 27) reported that the national institution responsible for collecting data on notifiable diseases was also commonly responsible for infectious disease data collection on asylum seekers and refugees. The remaining respondents (9/27) did not know whether there was any specific entity in charge of collecting data.

Approximately half of the respondents indicated that this entity provides guidance to first-line staff on data collection, although this may not have been available to all healthcare professionals within countries. Interviewees indicated no major differences in the surveillance guidance for asylum seekers or refugees.

Interviewees (16/27 for asylum seekers and 15/26 for refugees) generally reported awareness of medical information exchange and coordination regarding reportable infectious diseases between the site of data collection and relevant public health authorities within each country. Respondents noted that data was transferred from local- and county-level health institutions to county, regional and national public health authorities and/or ministries of health, as required by established national surveillance systems for notifiable infectious diseases. Interviewees in Italy reported that data is not divided by migration status, and Greek participants noted that there is a lack in provision of feedback as to the results of further studies commissioned on specific infectious conditions reported in the field.

Few respondents reported the existence of international exchange of medical information on reportable infectious diseases between different countries along the migration route. Six out of 25 respondents (one from each of Greece, Italy and Slovenia, and three from Croatia) replied affirmatively to this question and primarily referred to data reported to ECDC and the receipt of periodical updates on infectious disease epidemiology in other EU countries. It appears that the other respondents were either not aware of this type of exchange, or did not regard this information as relevant for their frontline work. This mostly consisted of clinical service provision requiring information on medical histories and individual patient data across the migration trajectory rather than aggregate epidemiological outbreak reports.

Within countries, interviewees noted that they primarily relied on paper-based records, as well as institution- and NGO-specific paper-based templates, to register health interventions during the reception process. Only Sweden consistently reported using digital records and nation-wide templates for data collection, though only for reportable infectious diseases.

Health-related information for refugees and asylum seekers also was not transferred in a standardized way between facilities within a single country, according to the interviewees. Most respondents from Greece, Italy, Slovenia and Sweden reported that health documents were given to migrants in paper form, and the migrants then brought them to other facilities within the country. Respondents from Croatia reported the use of migrant health files that are transferred via the ministry of interior, which also transmits the files to whichever facility migrants are transferred.

In the studied settings, most interviewees stated that they received non-standardized paper-based medical records or informal communications from other health facilities or no information at all when asylum seekers or refugees are transferred from other cities and medical facilities to the area under their responsibility. If such information is received, the usual means of communication is by phone and/or paper documents provided by the asylum seeker or refugee.

Overall, interviewees reported unavailability of infectious disease-related medical information. Newly arrived asylum seekers and/or refugees in the area of responsibility of our interviewees rarely provided comprehensive medical information on services provided in other EU countries after arrival or during transit (e.g., on past vaccinations or paediatric health issues). To the extent that such information was available, it primarily related to the results of previous medical screenings performed in EU countries.

3.3. Financing of infectious disease service provision

Informants were asked how medical expenses for health service provision would be covered for different types of migrants (asylum seekers, refugees and irregular migrants). There was uncertainty among frontline health workers about the regulations for different type of migrants, especially in countries in which they were not immediately covered by regular health services. Financing structures for the provision of infectious disease health services remained fragmented, and in all countries under study, national governments, the EU and some NGOs financed a range of interventions.

Among public sources, funding structure fragmentation was pronounced: while ministries of health were reported as a key financing agent, their funds were complemented by resources from the ministry of interior (Italy, Austria, and Sweden), or regional and local health services. This fragmented financing structure was similar across services offered at arrival, and inside or outside reception centres. Nonetheless, respondents noted that—to their knowledge—costs of service provision were generally covered through public funds, especially in the registration phase and in reception centres. Most respondents reported no major changes in national public funds being available for overall healthcare provision compared to the period prior to the refugee crisis.
The reported knowledge about financial protection through entitlements to use health services differed between countries. Asylum seekers were entitled to medical care without restrictions in Greece, Italy and Austria through vouchers (Greece), access to the national health service (Italy) or to the regular healthcare system through electronic health cards (Austria). In Croatia, and Slovenia entitlements to free care were reported to be restricted to emergency care.

NGO interventions were financed through a range of sources, including own funds and public or EU grants. Further, NGOs became particularly relevant for primary healthcare service provision to asylum seekers or refugees outside reception centres. In these instances, volunteer work performed by healthcare workers remained a key non-monetary input that enabled service provision.

3.4. Standardization of screening and health assessment

In terms of standardisation of the health reception procedures, 12 out of 27 respondents noted the presence of a standard procedure, six noted there was no procedure, and eight noted that the procedure was partly standardized, with responses varying even within countries. The interviews revealed variation in what was perceived to be a standardized procedure between and within institutions and at country level. In general, screening programmes for asylum seekers and refugees differed considerably with respect to their approach (regular for everyone, targeted based on some socio-demographic characteristic, or based on the existence of symptoms) and with respect to the voluntariness (compulsory or patient-initiated), both within and between countries.

The obligation to report surveillance data for notifiable diseases was considered by some of the respondents a standardized health reception procedure with respect to infectious diseases. Further, respondents considered regular health assessment/check-up performed at some facilities for specific groups of migrants as the standard procedure referred to in the question regarding infectious diseases. Only in Croatia did all respondents give the same answer; in the context of recent increased migrants, the country created a Crisis Management Committee within the MoH, prepared national protocols on infectious diseases, and designated a responsible body (Croatian Institute for Public Health).

4. Discussion & conclusions

Our study suggests that infectious disease health service provision for asylum seekers and refugees was characterised by a high degree of fragmentation during the study period (early 2016). Coordinating bodies can be found at different levels of administrative governance, but the exchange of information and coordination of information transfer were challenges in all surveyed countries. Guidance on data collection was largely perceived to be inadequate by interviewees, thereby giving rise to localised approaches to the documentation of health-related information. Financial resources for infectious disease services came from disparate sources, reflecting the needs and priorities of the multiple actors involved in service provision.

Overall, the findings of the scope study suggest that standardized procedures for screening and health assessments of newly received refugees and asylum seekers were not communicated or inadequately communicated to respondents. A pertinent example is the field of screening for infectious diseases: different types of screening are conducted for several infectious diseases (tuberculosis, HIV, hepatitis C, hepatitis B, syphilis, intestinal parasites). The lack of standardisation of screening and health assessments within countries, and the lack of harmonization of these approaches between countries, further contributed to the perception among interviewees that service provision was haphazard.

Before discussing the implications of the findings presented here, it is important to note some limitations. First, by the nature of this scoping study, our analysis pertains primarily to the field experiences of local actors within six countries, and future academic research can take on the task of developing a comprehensive mapping of infectious disease health service provision among asylum seekers and refugees across the European Union. Second, while we made efforts to include health practitioners providing frontline communicable disease services to asylum seekers and to refugees at all stages of the reception process in each country, the sample is relatively small to be representative of all aspects of such service provision for these migrant groups. Our interview findings are limited by the number of interviewees, but with respect to the governmental perspective they provide the view of officials in charge of the topic at national level. The perspectives of frontline workers in the field may not be generalizable across time or space, but they provide important insights into the perceptions of interviewees on the aspects under question in this study. Furthermore, a more inductive and interpretative analysis would potentially have yielded further insights that may not have been identified by our deductive analytical approach.

An important note is that our analysis is intended to highlight ground-level practices; we did not conduct a comprehensive review of legal frameworks and formal regulations [12], which—as interviewees noted—were occasionally defunct. We reflect on these issues below. Findings here point to a clear need for more research on the discrepancies between de jure and de facto procedures and the ways in which different actors interact on the ground. Another area for further research is the comparative analysis of differences between countries categorised as entry, transit and destination countries, particularly with the role that each country plays along the migration trajectory. Such an analysis was not possible due to the limited number of interviews conducted in each country, but could be subject of future large-scale multi-site studies.

Despite limitations, our research has important implications for infectious disease health system design for refugees and asylum seekers. First, formal state-level rules and regulations [12] are not always adhered to by officials involved in designing healthcare responses or providing services. In addition, the suddenness and intensity of the so-called ‘refugee crisis’ prompted further ad hoc responses to the ground-level reality. This experience brings to the fore questions about health system preparedness. The nature of crises necessitates ad hoc health system responses that can deviate from established legal procedures. However, opportunities remain for countries to develop broad frameworks on how to deal with healthcare emergencies [13]. In this case, such measures would facilitate effective and timely responses to urgent but also long-term health needs of refugees and asylum seekers. Given the cross-border nature of these issues, international institutions are well-placed to offer advice and technical assistance on the modalities of healthcare provision and its transnational coordination [14].

Second, a key weakness in health service provision relates to the inadequate information exchange among relevant actors within and between countries. Steps towards addressing this problem may include the development of a common electronic platform for data sharing, improved coordination, more training, and harmonizing patient record systems. Recent efforts by the international community have included the development of a unified health assessment tool and personal health record (PHR) for asylum seekers and refugees, a handbook for physicians by IOM and the European Commission (DG Santé) and the e-PHR electronic platform, currently being piloted in Italy and Croatia.

Third, screening for infectious diseases should be based on solid evidence on both benefits and harms. The examined coun-
tries performed screening for a wide range of infectious diseases with different levels of voluntariness. This raises ethical issues on patient autonomy and highlights the importance of the principles of screening formulated by Wilson and Jungner [15] and further criteria which emerged over the past 40 years [16]. These principles have been defined not only to guide the selection of conditions that would be suitable for screening, but also to specify the criteria that need to be fulfilled by medical screening programmes, e.g. ensuring access to treatment for those screened positive, acceptability of the test, integration of quality assurance, mechanisms to minimize the risks of screening, and ensure informed choice, confidentiality and respect for autonomy [16]. A recent systematic analysis of screening policies in Germany, for example, shows that these criteria are not always sufficiently addressed [17].

To address the lack of a systematic approach to screening in the EU, ECDC is developing guidance on screening for infectious diseases among newly arrived migrants to the European Union and the European Economic Area which are expected to be published in the fall of 2017. The guidance will consider the individual and public health benefits and harms of assessment, their limitations and ethical considerations, assessment options, treatment options, and cost-effectiveness of assessment and treatment.

What have been the public health implications of the fragmented, occasionally poorly-funded and haphazard response to the high number of refugees and asylum seekers seeking international protection? To our knowledge, academic studies have not tackled this question, in part because of methodological difficulties. However, social-scientific scholarship has noted that organizational failures—e.g., in administering interventions or collaborating and coordinating with other relevant actors—can lead to preventable adverse socioeconomic consequences [14,18,19]. A pertinent example is an insufficient provision of vaccination services in reception centres and asylum seeker shelters. This has been well documented, for instance in Germany before [20] and during the period when numbers of immigrating asylum seekers peaked in 2015 [8]. Outbreaks of vaccine-preventable diseases in asylum seekers’ shelters [20] may fuel fears of immigrants importing diseases, although such outbreaks can be attributed to post-migration structural determinants such as crowded accommodations and failure of public health services to effectively deliver needed services. Organizational failure of institutions to effectively handle the societal and health-related challenges of large scale immigration may contribute to the “othering” [21] of asylum seekers and refugees. Institutional factors that encourage country residents to construct immigrants as elements of disturbance of the public order may fuel resentments and the rise of an anti-immigrant climate. Ensuring organizational functioning in the health system may thus not only have positive public health effects, but contribute to overall social cohesion and greater acceptance of immigrants. To pre-empt problems of organizational failure, recent policy proposals have focused on the potential for health impact assessments before the design and implementation of interventions. Such assessments can be pursued even in the context of pressing crises [22], and the United Nations’ Human Rights Council is currently developing a toolkit for governmental and non-governmental organizations [23].

In conclusion, our scoping study suggests a lack of standardization in screening and health assessments, data collection, transfer of health-related information and insufficient clarification of roles and mandates for the coordination of infectious disease health services (except for reportable diseases) provided to asylum seekers and refugees. There was no single country in which all aspects considered as relevant in this study were standardized, but a few countries had implemented standardized procedures in some of the analysed areas (e.g. Croatia with respect to screening and health assessments, or Sweden with respect to documentation of notifiable diseases). In relations to the infectious disease services surveyed in this study, we note important variation both between and within countries, especially vis-à-vis financing of interventions and actors involved in service delivery. Formulation and implementation of adequate policies are needed to protect the right to health of refugees and asylum seekers and to avoid negative effects on health system performance with respect to effectiveness, quality and continuity of services including public health preparedness.

Panels

Panel 1: Research in context

Evidence before this study
A desk review of health system responses was conducted by the Migrant Health Division of the International Organization for Migration, Regional Office in Brussels. The review covered reports on the situation on the ground in the EU region, including national health system responses and migration policy-relevant documents in the selected six EU countries (Greece, Italy, Croatia, Slovenia, Austria, and Sweden), EquiHealth project situational reports, findings from the health strand of the Migration Integration Policy Index, WHO PHAME project reports, as well as ECDC migration health series, reports of NGOs and other relevant sources, which have described the situation in the field at local level.

Added value of this study
The scoping study provides a comprehensive account of infectious diseases healthcare services provided to asylum seekers and refugees in arrival, transit and final destination European countries. On the basis of interviews of frontline health workers and national health authorities, the study highlights the gaps between de jure and de facto procedures, and the ways in which different actors interact on the ground.

Implications of all the available evidence
Infectious disease health services provided to refugees and asylum seekers lack standardisation in health assessments, data collection, transfer of health-related information and (partly) coordination. Formulation and implementation of appropriate policies is necessary to improve health system performance.

Conflicts of interest
KB was consultant to IOM Brussels and received funds for designing data collection instruments and methodology.

Contributors
Conceived the study: AK, MS, RPB, KB. Data collection and development of instruments: KB, PP, EG, MS. Data analysis: KB, AK, PP, EG, MS, RPB. Writing of first and final draft: KB, AK. Revision of manuscript for important intellectual content: PP, EG, MS, RPB.

Disclaimer
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Appendix A. Supplementary data

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