

Letter to the editor: Responding to a call for action - where are we now?

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To the editor: In their recent editorial [1] Catchpole and Coulombier pointed out the urgent need of reliable information on infectious disease occurrence among refugees and newly arrived migrants in the European Union (EU), in order to ensure that public health interventions targeting this vulnerable population are relevant, proportionate and appropriately targeted. This call for action comes after the European Centre for Disease Prevention and Control (ECDC) published an analysis of the burden of infectious diseases among migrant populations based on EU surveillance data [2]. This report highlighted limitations in the data and differences in reporting between countries. In 2015, with the increase in the number of people migrating into the EU, the ECDC published numerous additional documents (expert opinion/rapid risk assessments) on the topic of migrant and refugee health [3]. To guide emergency response, information on epidemic prone diseases among newly arrived migrants has been collected in some EU countries for several years through aggregated syndromic surveillance [4]. These data, however, cannot be imported into case-based national and EU surveillance systems.

The recently concluded Monitoring Migrant Health project, funded by ECDC, aimed at gathering evidence to design an EU monitoring framework for migrant health and infectious diseases. We conducted systematic reviews to identify 1) the factors associated with the risk of contracting an infectious disease among migrants, and 2) the main biases that affect the accuracy of migrant health surveillance in the EU. Based on the evidence of the first review, we formulated a multidimensional monitoring framework comprising four domains: migration characteristics, behavioural, socioeconomic and demographic factors. The migration characteristics are those for which we have less information: we should be able to distinguish migrant legal status (e.g. refugee status), migration

trajectory (country of origin/travel route) and time since arrival. To date we can rely only on two variables in the European Surveillance System (TESSy) database: 'country of birth' and 'nationality'. Unfortunately, the completeness of surveillance data collected on these migrant-specific variables is either very poor or absent in TESSy [2]. Furthermore, these variables cannot accurately identify subgroups of migrant populations such as refugees and newly arrived migrants [5].

The review on the determinants of infectious disease surveillance accuracy with regards to migrant health, showed three main sources of bias in measuring the occurrence of disease. Firstly, behavioural factors and legal, cultural, logistical barriers, in society and health services, have been found to reduce the probability of a diagnosis in migrants, favouring under-reporting. The second bias was linked to increased screening for asymptomatic infections and increased attention to infectious diseases among migrants who are considered a vulnerable population group. Taking also into account that most EU countries have screening programmes in place targeting newly arrived migrants [6], this increases the probability of diagnosis. The third bias we found was the systematic underestimation of the denominator that favours an overestimation of disease occurrence in certain migrant population subgroups. The few studies we found that tried to compare under-reporting in migrant and native populations, observed a higher probability of reporting for infectious diseases, particularly tuberculosis, in migrants.

Migration is a long-term phenomenon, recognised as one of the key components of population change in Europe. The migrant population within the EU is extremely diverse. We propose to integrate a multidimensional approach to case-based national and EU surveillance, including migration characteristics, to help better cater for the health needs of this population. We

also found evidence that some of the information we have on infectious disease occurrence might be biased, mostly in the direction of overestimating the excess risk for migrants. We need to be aware that this situation could favour misconceptions, ungrounded threat perceptions and mislead public health decisions.

Authors' contributions

All the authors contributed to the work of the ECDC Monitoring Migrant Health Project described in this contribution. Flavia Riccardo and Paolo Giorgi Rossi drafted this letter. All authors were actively involved in the design and revision of the manuscript and approved the final version.

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