SITUATIONAL BRIEF: MIGRATION AND COVID-19 IN SCANDINAVIAN COUNTRIES

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COVID-19 took centre stage in Scandinavian countries in early 2020, requiring a rapid and adaptable response to the pandemic. Countries with available data show higher COVID-19 mortality and morbidity among migrants (1-5), resulting in an urgent need to discuss and understand how and why COVID-19 impacts migrants differently (6). Considering the similarities and the differences that exist among Scandinavian countries, this region offers a unique opportunity to increase our understanding of the impact of the pandemic upon migrant populations living here. This situational brief will be informative for an academic audience, relevant for policymakers, and inspiring for public health scientists. In this paper, the term 'migrant' applies to a person who has changed his or her country of origin, irrespective of the reason for migration or legal status (7).

THE SCANDINAVIAN CONTEXT OF MIGRATION AND HEALTH

Denmark, Norway and Sweden are relatively similar in several regards. All three countries are advanced democracies with robust universal welfare systems of healthcare and social protection. All three have low levels of income inequality, rank highly on social cohesion indicators, have low perceived levels of corruption and high levels of interpersonal trust and trust in public institutions (8-10). Until the mid-twentieth century, Denmark, Norway and Sweden had relatively similar immigration histories characterized by inter-regional migration and the reception of international labour migrants. Due to economic recession, and in response to international conflicts, economic migration flows to the region since the 1970s were progressively replaced by refugees and asylum seekers from non-European origins (11). This shift was also reflected in the growing differences in the policy approach to migration adopted by each country, and is reflected in the proportion of migrants living in these three countries today: 19.6 per cent in Sweden, 14.7 per cent in Norway and 10 per cent in Denmark (12, 13). According to the Migrant Integration Policy Index (MIPEX), these countries today differ in their approach to the integration of international migrants, with Sweden being the most generous and Denmark the least (14).

Since the 1970s, Sweden stands out for its humanitarian approach to immigration, having received the largest share of refugees per capita in Europe and having adopted one of the most generous and integrative policies in the region and around the world (15, 16, 17). However, the political climate in the last years has affected the whole region, with all three countries implementing measures to restrict migration (18). All migrants legally registered in Scandinavia have equal access to healthcare and social services as the majority of the population. However, the universality of the healthcare system does not extend to undocumented migrants, who have no rights beyond emergency care (19, 20). Thus, undocumented migrants are only entitled to healthcare 'that cannot be postponed', in addition to maternal and childcare, and treatment for infectious diseases and severe mental health problems that might constitute a danger for the individual and society. However, since these services are not free, at least theoretically, in Norway, this may in fact deter undocumented migrants from seeking care, including emergency care (21).

Migrants from lower- and middle-income countries generally have poorer socio-economic conditions, including lower income and lower rates of employment compared to the majority populations in all Scandinavian countries. The gap in employment rates between migrants considered as a group and the rest of the population is 25 per cent in Sweden, 20 per cent in Denmark and 15 per cent in Norway (11). In addition, migrants are more likely to live in migrant-dense

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neighbourhoods with high overall population density (22, 23). Despite the social disadvantages, migrants in Scandinavia generally have lower mortality (24-26), though evidence shows mixed results when considering subgroups of migrants as well as the prevalence of specific morbidities. Some migrant groups show higher rates of certain chronic diseases (such as diabetes or cardiovascular diseases among migrants from some African and Middle Eastern countries) (27) and poor mental health (typically for refugees) (28), while most migrants have lower rates of cancer (29, 30). Poorer social and living conditions, as well as higher rates of underlying health problems, could contribute to higher COVID-19 morbidity and mortality among some migrant groups. However, this is not necessarily the case among other migrants, especially those from high-income countries (16, 31).

NATIONAL STRATEGIES DURING THE COVID-19 PANDEMIC

General measures⁹

Similar guidelines and information regarding hand hygiene, physical distancing cough etiquette and suspension from work, school or day care in the case of minor COVID-19 symptoms were given to residents in all three countries (32, 33). All unnecessary incoming and outgoing travel was suspended in the three countries soon after the outbreak in March. Citizens in risk groups, such as people aged 70+, were recommended to self-isolate at home and public gatherings of more than 50 people were forbidden. Schools (excluding elementary schools in Sweden) and universities and most public activities not strictly necessary were suspended or conducted from home offices. Restrictions were extended in Norway and Denmark in March to include legal action against people accessing public spaces in an attempt to suppress the spread of the virus. Sweden however continued to rely on public health recommendations and information instead of strict confinement actions or a general lockdown.

Information on COVID-19 and its transmission has been vital in helping people understand this new, challenging and unpredictable situation, and also in enabling them to follow the recommended protective measures. In all three countries, official advice and reports on outbreak severity were updated daily and communicated in frequent press conferences. The governments rapidly added COVID-19 information to their official websites, which served as portals for all the relevant public authorities. Information was also distributed to the public through national broadcasting institutions, press briefings and press releases. Sweden suffered severely during the early phase of the pandemic with very high numbers of those infected, high pressure on intensive care and a high number of deaths, especially among people aged 70+ and those living in elderly care facilities (34). The restrictions seemed to have a rapid impact in Denmark and Norway, considering the very low numbers of those infected and deaths during the lockdown. However, there were also early signs of a negative impact on the economy and well-being in society in general in all three countries (35, 36). Easing of restrictions started in April in Denmark and Norway, when plans for the gradual reopening of day-care centres and schools and society were announced. All three countries continued to emphasize the importance of following health and safety information and guidelines given by state authorities. The number of cases increased after restrictions were eased in Norway and Denmark, while the number of infected and deaths started to decrease in Sweden by the beginning of July. By November, the number of cases increased again in all three countries. This 'second wave', differs so far from the first one in that the COVID-19 cases are generally concentrated among young people who require less hospitalization and has resulted in relatively fewer deaths.

Measures targeted towards migrant populations

In response to the (suspected) high burden of COVID-19 among migrants, the Danish National Board of Health translated information on COVID-19 into 19 different languages and made it available online (37). This initiative, however, was somewhat delayed and initially only included four languages. The information was mainly translated using non-professional interpreters by non-governmental organizations (NGOs) with limited resources and qualifications, which to some extent compromised the timeliness and quality. More specific communication interventions for ethnically dense communities, including producing and providing information, was initially—and still is to a very large extent— also dependent on NGOs that often struggle with limited resources making them unable to engage with professional medical interpreters. Subsequently, audio-visual material from the Danish NBH was made available in August 2020 (38). A national expert group advising on the prevention of COVID-19 among ethnic minorities was also formed in August 2020. The local municipalities were criticized by health care professionals and NGOs for not engaging directly with the target groups when communicating with migrants and for leaving the responsibility of

⁹ This brief overview of the national strategies in the three Scandinavian countries does not consider all the details at the national level and aims to describe the situation in broad terms. It does not include information on different local initiatives in the countries. For more information, the reader must see the official information published on the national websites of the three countries.

18th December 2020

preventive work with the NGOs. Since then, Local Government Denmark has initiated several webinars and also has a section on their homepage dedicated towards dialogue and the exchange of materials and intervention ideas relating to COVID-19¹⁰. The national and local authorities in Denmark have been criticized in the media for lacking a clear and visible communication strategy that targets migrants. Additionally, the Danish Patient Safety Authority, which is in charge of contact tracing, has been criticized for not using professional interpreters systematically when tracing COVID-19 outbreaks among migrants.

In Norway, information on COVID-19 was translated into several languages, targeting those with a migrant background, and was made available through the National Institute of Public Health and the Directorate of Health, as well as through the websites of many municipalities in early April¹¹. The government set aside funding to boost communication efforts among the migrants, however, it was only after criticism that this money was actually made available to the NGOs and migrant communities. Thereafter, a small part of the information was adapted to the specific needs of a few subgroups of migrants in collaboration with migrant communities (e.g. targeting events like Ramadan or Eid and explaining the specific issues related to fasting and the risk of COVID-19 transmission). Some migrant organizations like Bydelsmødrene¹² actively engaged in spreading information on COVID-19, mainly in the Oslo area, but often without public health or epidemiological competence. In an attempt to offer relevant and available information to five of the biggest migrant groups in Norway, the University of Bergen, in April 2020, created a website for migrants providing information on COVID-19 in five languages, with the possibility of asking questions in Arabic, Polish, Somali, Spanish and Tamil, as part of the Incovid.Norge project (39). This project also aimed to gain a deeper understanding of how these migrant groups coped with the pandemic and its social fallout, and what choices and strategies were used to prevent COVID-19 transmision through a questionnaire available on the website (40, 41). At a clinical level, professional interpreters were no longer being hired because of the lack of safe technical digital solutions that could address privacy issues in health-related conversations and the risk of hacking by external actors. In November, the national health authorities, through the media, encouraged the municipalities to systematically use interpreters in contact tracing when tracking infected persons who did not speak Norwegian, as this was not yet being done¹³. As in the case of Denmark, a national expert group advising on the prevention of COVID-19 among migrants was formed in Norway in November 2020¹⁴.

In Sweden, health recommendations for COVID-19 were translated and published on the Public Health Agency of Sweden website in different languages in the middle of March^{15,16}, almost at the same time (or as a response to) the over-representation of deaths observed among the foreign-born population (42). Language barriers preventing access to relevant information amongst the migrant population could explain high early infection rates in some migrant groups, including Somalis (43, 44). Translations to information mainly consisted of basic information on hygiene and advice on what to do if COVID-19 symptoms manifest and who to contact. To the best of our knowledge, and at least at the national level, the information available was not adapted to respond to the specific needs of certain migrant groups. For example, no advice was offered on how to protect oneself and others when observing religious or cultural practices. Despite this lack of a central response targeting migrants, voluntary organizations in collaboration with local authorities targeted newly arrived migrants and those who lacked Swedish language proficiency. As an example, the Cooperative Organization for Migrant Unions (SIU) in Uppsala set up different WhatsApp groups in 15 languages to facilitate information sharing¹⁷.

Early on in the pandemic, it became apparent in all three countries that homeless individuals faced obvious challenges relating to self-isolation if tested positive¹⁸. All three countries organized accommodation for those who could not self-isolate or quarantine. However, these measures were organized at the local level and did not always address migrants effectively, although all countries lack official data on this. In Denmark, homeless undocumented migrants were faced with the reality of being quarantined in an asylum facility if they tested positive for COVID-19, but this would mean

¹⁶ https://www.krisinformation.se/en/news/2020/march/information-about-the-coronavirus-and-covid-19-in-other-languages

¹⁰ Local Government Denmark. Copenhagen, 2020. https://www.kl.dk.

¹¹ https://www.helsenorge.no/en/coronavirus/information-in-other-languages/ Information in other languages. Access 10th December 2020

¹² https://www.bydelsmor.no Bydelsmødre Norge

¹³ https://www.vg.no/nyheter/meninger/i/411MW6/ingen-er-trygge-foer-alle-er-trygge

¹⁴ https://www.regjeringen.no/no/aktuelt/ekspertgruppe-skal-foresla-ytterligere-tiltak-for-a-redusere-smitte-blant-innvandrere/id2785926/

¹⁵ https://www.folkhalsomyndigheten.se/smittskydd-beredskap/utbrott/aktuella-utbrott/covid-19/skydda-dig-och-andra/information-pa-olika-sprak/

¹⁷ http://www.siuppsala.se

¹⁸ https://uim.dk/nyheder/2020-04/covid-19-regeringen-ivaerksaetter-indsats-over-for-hjemlose-udlaendinge-uden-lovligt-ophold

their papers would be investigated and those without documentation would face deportation. This likely discourages many undocumented migrants from testing due to fear of deportation (45, 46). Access to treatment for COVID-19 and rehabilitation care is unclear for undocumented migrants in Denmark, including if they have to pay for the treatment.

COVID-19 AMONG MIGRANTS IN SCANDINAVIAN COUNTRIES

Despite the different strategies adopted in the Scandinavian countries in the early phase of the pandemic and the important differences in the number of deaths and infections—which are much higher in Sweden than in Denmark and Norway—it is clear that migrants are over-represented in most statistics relating to infection and death rates attributed to COVID-19 in all three Scandinavian countries (1, 47, 48). However, differences in the numbers of those infected and deceased, in the proportion of the population with a migrant background, and in the way of classifying migrants in the data available affect the ability to draw conclusions from the findings and compare the evidence so far. The reader should keep in mind that we are still in the midst of the pandemic and that our presentation refers to the limited knowledge we have at present. In the following section, we present the empirical findings for the disparities in COVID-19 morbidity and mortality by country of birth separately for the three countries.

DENMARK

Data from the Statens Serum Institut on the status of the COVID-19 infection show over-representation of migrants compared to Danish-born among those testing positive for the virus (49). In May 2020, non-Western migrants and descendants accounted for 18 per cent of COVID-19 positive individuals compared to 78 per cent of Danish-born, even though these two groups make up 9 per cent and 86 per cent of the population, respectively. Incidence rates (IR) were 315 per 100,000 non-Western migrants, 240 per 100,000 non-Western descendants and 128 per 100,000 ethnic Danes. Specifically, non-Western descendants aged between 18 and 64 years showed an IR of 499 per 100,000. Higher IRs were seen for migrants and descendants originating from Morocco, Pakistan, Somalia, and Turkey, while lower IRs were observed among migrants and descendants from China, Poland, Romania and Syria compared to ethnic Danes. It should be noted that the low IR among Syrian refugees could be explained by the fact that they have been geographically dispersed throughout Denmark when resettling (50). An updated report from Statens Serum Institut in October 2020 showed that non-Western migrants and descendants accounted for 26 per cent of those infected with COVID-19 compared to 69 per cent of ethnic Danes (51). Again, people of Somali, Turkish and Pakistani origin most frequently tested positive. The report also showed more COVID-19 hospital admissions for migrants and descendants with non-Western origins (15 per cent of admissions) even though these groups only make up 9 per cent of the total population. No differences in mortality were observed. Further, the report documented more migrants working in front-line jobs and living in more crowded housing conditions compared to ethnic Danes (52, 53). Unfortunately, the mentioned data are prone to 'testing bias', implying a higher detection rate in groups that are tested more often. However, more detailed analyses of the Danish context, including adjusted analyses regarding differences for the different migrant groups in hospitalization rates, disease severity and mortality, are not yet available.

A recent report documents migrants' experiences in Denmark during the COVID-19 pandemic using qualitative interviews (54). The study found that there was uncertainty among interviewees over government guidance on COVID-19, and that, depending on the country of origin, alternative sources of information were used to understand the pandemic. For example, the official press briefings/meetings were provided in Danish only without concurrent or subsequent interpretation. Further, although written material on COVID-19 was translated into 19 different languages, it was not always disseminated to the people most in need. Also, those with limited literacy lacked access to sources of information. Finally, excessive implementation of guidelines was reported, with some migrants and their children being self-isolated for longer than the official recommendation. Further, the ApartTogether study—an online worldwide questionnaire to migrants on the psychosocial consequences of the pandemic among migrants—has shown a fourfold burden among respondents from Denmark: job and housing security fears; feeling of isolation; fear of not understanding government guidance on the virus; missing family and relatives left behind in their country of origin (55).

NORWAY

By early March, the counties with the highest migrant density in Norway reported a fivefold increase in incidence rates of COVID-19. By April, Norwegian newspapers suggested that adherence to the recommended health and safety measures seemed to be low among some migrant groups living in these areas, especially those from Somalia (56). At the time, however, authorities lacked epidemiological data, by migrant group, to support the theory. Official

information on incidence rates for migrants became available by mid-May, but data on hospitalization and mortality among migrants first appeared only in July because the information came from different information sources.

Confirmed COVID-19 cases amongst migrants grew from 24 per cent in mid-May (57) to 53 per cent in July, stabilizing between 30 per cent and 40 per cent since mid-September, even though migrants account for 15 per cent of the population (5). Till 16 July, COVID-19 incidence, hospitalization and mortality rates per 100,000 were, respectively, 140, 18 and 4 for the majority population, and 315, 53 and 4 for migrants (58). The incidence rates were highest among migrants from Somalia, Pakistan and Afghanistan and the relative risks compared to the majority population increased when adjusting for age, especially for mortality. Migrants from Romania, Poland, Lithuania and Germany, on the other hand, had fewer COVID-19 cases per 100,000 at the time compared to the majority population, and this was especially so for Syrian-born people (58). A recent study shows that, once adjusted for socio-economic variables, migrants from Asia, Africa and Latin America have approximately 50 per cent higher risk of receiving mechanical ventilation and death compared to Norwegian-born individuals (47). During the second wave of infections in Norway in October 2020, other groups of migrants, especially people from Poland moving for temporary work and groups participating in religious ceremonies, became over-represented in the COVID-19 statistics of the country (9).

As part of the Inncovid.Norge project, 10 semi-structured interviews with Somali informants were conducted in April 2020 after a massive COVID-19 information campaign from health authorities and NGOs targeting this group (59). The informants, five women and five men between 30 and 60 years of age, who had lived in Norway from 10 to 32 years but still spoke Somali at home, stated that information on COVID-19 had not reached migrants from Somalia fast enough at the beginning of the pandemic, particularly those who did not speak Norwegian. In contrast, after the campaign, the community had too much information on COVID-19 through a multitude of channels, including social media, workplaces and schools, as well as from the municipalities and national health authorities. However, despite the information overload, migrants complained that information from official sources at times competed with the information they received from Somalia and that it was not specific enough to meet everyday life challenges. For instance, there were no specific guidelines or recommendations for people living in crowded and cramped accommodation or working in high-contact jobs. For this reason, the Somalis took it upon themselves to spread the word on how to stay safe, and key persons in the community tried to give advice to others. Specifically, they helped navigate situations regarding social distancing when symptoms were not present, which could be a source of personal and community conflicts, as following the recommendations (e.g. not visiting the sick or attending funerals) was often perceived as going against the cultural norms of the Somali migrant community. Over-implementation of recommendations was also reported, and some Somali migrants and their children self-quarantined beyond official recommendations and were sceptical of reopening society.

SWEDEN

The strongest evidence to date of disparities in the impact of COVID-19 by country of birth in Scandinavian countries is in Sweden when considering the large number of infected and deaths. This provides an opportunity to analyse data using sophisticated research methods and make group comparisons by specific country of birth. Despite universal access to healthcare and generous social provisions, by April, the Public Health Agency of Sweden found higher COVID-19 incidence rates among several migrant groups and in residential areas with a high proportion of foreign born (60). The highest incidence rates between 13 March and 7 May 2020 were found among people born in Turkey followed by those born in Ethiopia, Somalia, Chile and Iraq. A study on COVID-19 mortality by country of birth during the first phase of the pandemic in Sweden (31 January to 5 May) used sophisticated epidemiological methods, including a number of confounding and mediating variables. The results showed much higher mortality in migrants born in Middle Eastern countries and Africa, while a somewhat higher mortality was found among Nordic migrants when compared to Swedish-born. Migrants born in Somalia had a ninefold excess risk of dying from COVID-19, while the excess risk was sixfold among migrants from Lebanon, almost fivefold among migrants from Syria and twofold to threefold among migrants from Turkey, Iran and Iraq when compared to Swedish-born individuals. Income, education and employment status, number of working age household members and neighbourhood population density explained up to half of the increased COVID-19 mortality risks among migrants (1). Furthermore, the results only show an excess COVID-19 mortality in migrants, while no excess all-cause mortality risk excluding COVID-19 is found. This finding highlights migrants' particular vulnerability to the COVID-19 pandemic in Sweden.

Mortality among migrants is observed regardless of their partner's background (another migrant or ethnic Swede), which indicates that language barriers and unawareness of the recommendations are unlikely to explain their disadvantage (61). Given that mixed-origin couples have been considered as one of the best proxies for acculturation (i.e. a process through which migrants adopt the norms and values of the host society), the results also suggest that poor acculturation does not seem to explain excess mortality for COVID-19. In fact, the group expected to be more acculturated and whose adherence to the recommendations is therefore expected to be stronger, i.e. migrants partnered with Swedes, and particularly those from high-income countries, shows equal excess mortality. The results also suggest that genetic predisposition is unlikely to play a predominant role in explaining the excess mortality for COVID-19 among migrants, since higher levels of mortality are also observed among Swedes partnered with someone from a migrant background comparable to Swedish couples.

Areas of Stockholm County that predominantly comprise migrants are disproportionately impacted by COVID-19 mortality (62). Neighbourhoods with at least 50 per cent migrant residents are associated with a threefold higher risk of deaths from COVID-19 above and beyond their sociodemographic characteristics and housing conditions (61). This suggests that factors at the neighbourhood level (possibly related to infrastructure, neighbourhood deprivation, or healthcare access and quality) may help explain excess COVID-19 mortality among migrants.

DISCUSSION: WHAT DOES THE EVIDENCE FROM THE THREE COUNTRIES INDICATE?

The main conclusion that can be drawn by combining the experiences from Denmark, Norway, and Sweden is that migrants seem to have a higher vulnerability to COVID-19 in terms of higher morbidity and mortality relative to the majority populations in Scandinavia. This is evident regardless of whether they reside in countries that implemented lockdowns (Denmark and Norway) or live in a country that has adopted a less strict approach to deal with the pandemic (Sweden). Given that all three countries have similar public health policies, healthcare systems, welfare institutions and migration profiles, this conclusion suggests that, so far, the general pandemic response strategies implemented have played a limited role in avoiding poorer outcomes among migrants.

In all three countries, most migrant groups show higher incidence rates (positive tests) when compared with the majority population. Specifically, persons from Somalia and Middle Eastern countries seem to be over-represented in all three countries. Group differences in number of positive tests by country of birth should be interpreted with caution since they reflect the overall testing frequency in a specific group but not necessarily the overall number of infected. COVID-19 testing in migrant groups may be influenced by variations in the opportunity to understand health and safety information or implement recommendations. It may also be influenced by cultural norms and attitudes concerning infections and tests, access to healthcare services and socio-economic factors. Migrants in Norway had high numbers of hospitalizations relative to positive cases compared to non-immigrants, especially among Syrians, who had lower notification rates but higher hospitalization rates compared to the majority population. This gap suggests that some groups of migrants might be tested less frequently than the general population, or that they are tested when they are sicker. Nevertheless, the explanation for variation might not be the same for all groups of immigrants. It is yet unclear how other groups presenting lower notification rates in Denmark and Norway, like people from Poland, are being affected by COVID-19. Although the number of infected in this group has recently increased, they still do not seem to be over-represented in either hospitalizations or deaths, and are typically working migrants with different backgrounds and socialization patterns compared to other immigrants. Thus, studying the number of positive tests could lead to an overestimation or underestimation of infection rates.

Findings based on incidence (positive tests) in Scandinavian countries are in line with the findings on COVID-19 mortality by country of birth. Evidence from Sweden shows much higher COVID-19 mortality by both region and country of birth during the first three months of the pandemic, especially among migrants from Africa (primarily Somalia) and the Middle East. Recent findings from Norway corroborate these results, showing higher mortality among migrants. The Swedish study also found that part of the explanation for higher COVID-19 mortality relates to migrants' social and living conditions. Socio-economic status (education, income and employment), number of working age household members and neighbourhood population density attenuated up to half of the increased COVID-19 mortality risks among foreign born in Sweden.

The strategies in all three countries implicitly assume that migrants and natives are equally exposed to contagion and death (just because the COVID-19 virus does not discriminate against origin), yet migrants working in precarious jobs and/or in essential occupations might be unable to self-isolate when having mild symptoms even if they wished to

adhere to public health recommendations. Migrants also, to a greater extent, live in crowded households, across generations and in densely populated areas, which could lead to higher exposure and thereby account for their higher infection rates. Thus, it is important to consider that migrants' living and social conditions may influence their possibility to avoid infection when designing preventive policies and strategies related to COVID-19. Another explanation for a higher risk of COVID-19 death by country of birth relates to a higher prevalence of underlying risk factors and disease such as diabetes, obesity and high blood pressure in some migrant groups. So far there is limited evidence on to what extent such risk factors contribute to higher COVID-19 mortality in migrants.

In all three countries, official action specifically targeting migrant groups appeared only as a reaction to media alerting them to some migrant groups suffering an excess burden of disease, pointing to a danger for the rest of society. The presented qualitative evidence from Denmark and Norway points to late, confusing and poorly targeted information for migrant groups, especially people from Somalia, even if this was one of the most specifically targeted groups by April. The reported under- and over-implementation of recommendations has been linked to the lack of adapted information. In a changing and long-lasting scenario that the pandemic represents, concordance between the health authority's recommendations and behaviour of the population is decisive, and the whole community must be engaged and involved (62). Information is key to this purpose, but it has to reach the target groups in accordance with their needs, and via information channels that they use as part of their everyday lives.

Despite having advanced and reliable registers common for all three Scandinavian countries, the lack of systematically available empirical evidence at all levels of interest, notification, hospitalization and mortality by country of origin from the very beginning of the COVID-19 pandemic is evident. This situation seriously impedes preparedness, decision-making and evaluation of strategies for migrants during the pandemic, as well as the study of the complex underlying mechanisms that policymakers need to understand to develop long-term strategies. In addition, misinformation and crude, unexplained data pave the way for speculation, racism and discrimination, which all too often appear during pandemics and can worsen the health outcomes of people from migrant backgrounds (63, 64).

CONCLUSION

In conclusion, by combining available information from the three Scandinavian countries, this situational brief adds to the evidence of a high and disproportionate impact of COVID-19 among migrant populations. It sheds some light on the conditions that could explain the excessive burden of COVID-19 morbidity and mortality among migrants in Scandinavian countries. However, the scarcity of systematic evidence so far limits our ability to provide guidance on national recommendations. The conclusions from this situational brief should rather be considered as a starting point for discussion and debate on potential policies and preventive measures relating to COVID-19 for migrant populations until more scientific evidence is available.

The COVID-19 pandemic is a clear reminder that we are just as strong as the weakest segments of the population (15). The Scandinavian strategies have implicitly assumed that both migrants and majority populations are equally exposed to contagion and death, and none of the countries had a proactive, well-designed strategy to deal with these groups. The reports of higher morbidity and mortality of COVID-19 among migrant populations in Scandinavian countries are in line with the fundamental cause of disease theory introduced by Link and Phelan, who argue that country of birth/ethnicity is one of the most important fundamental causes of disease (66). According to the theory, groups deploy their resources (e.g. knowledge, money, power) to avoid risks and adopt protective strategies when faced by infectious diseases. Therefore, social health inequalities persist even if disease profiles and risk factors vary between different diseases. Key resources, such as favourable social, economic and living conditions, can be used to avoid COVID-19 or to buffer the consequences of the virus, but they are unequally distributed by country of birth. The increased risk of COVID-19 mortality and morbidity among migrants could thus reflect the fact that migrants who lack such important social and economic resources will be more afflicted by the virus. Therefore, it is important that societies consider migrants' social and living conditions underlying their higher COVID-19 morbidity and mortality when providing recommendations and designing policies and preventive measures.

There is an urgent need for innovative and more specific health, humanitarian, operational and research strategies, in the short and the long term, in order to avoid pandemics broadening the inequality gap between migrants and the host population. The COVID-19 situation has shown a need for leading health authorities to recognize the fact that we are modern multicultural countries and communication and tracing strategies need to be professionalized accordingly to ensure that we succeed with our preventive strategies. Although the main objective of this situational brief was to

consider COVID-19 death and infection by country of birth and the potential explanations for such disparities, we also have to consider the shorter- and longer-term negative social and economic effects of the pandemic on the migrant population. Given many migrants' vulnerable social position in Scandinavian countries, we could expect that the indirect consequences of the pandemic might have severe repercussions on their health in the future. On a more positive note, the pandemic has forced innovative and rapid solutions to acute problems and improved the dialogue between governmental offices and NGOs and migrant communities. This can be a source of inspiration and open the door to new possibilities to improve care for migrants in future pandemic situations and also gain insights on the determinants of disease with relevance for other population groups as well. Taking action to improve research and policy in the short and the longer term and grasping the new possibilities needs leadership, collaboration and mutual trust among actors and those people from migrant backgrounds.

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ORGANISATIONS AND ACKNOWLEDGEMENTS

This situational brief was authored by Esperanza Diaz, Marie Norredam, Siddartha Aradhya, Thomas Benfield, Allan Krasnik, Ahmed Madar, Sol P Juárez, Mikael Rostila; and expert reviewed by Teymur Noori (European Centre for Disease Prevention and Control – ECDC). Overall direction and review on behalf of the Lancet Migration global collaboration was provided by Miriam Orcutt and Bernadette Kumar. This series of situational briefs summaries key aspects of the COVID-19 response in relation to migrants and refugees at country or regional level. They include public health and policy recommendations and perspectives and build on the Lancet Migration Global Statement recommendations to ensure migrants and refugees: have access to healthcare; are included in prevention, preparedness and response; and are part of responsible and transparent public information strategies, during the COVID-19 pandemic. They are intended to be short briefs providing key information on particular migrant and refugee contexts and thematic, rather than fully comprehensive country or regional overviews. Situational briefs have been authored by experts working in academia, operational, or clinical areas of migration and COVID-19, and are hosted on the Lancet Migration website (www.migrationandhealth.org). Lancet Migration is a global collaboration between *The Lancet* and researchers, implementers, and others in the field of migration and health that aims to address evidence gaps and drive policy change building on the recommendations of the UCL-*Lancet* Commission on Migration and Health published in December 2018. Situational briefs represent the views of the authors. They are up to date at the time of writing, but will be updated by authors at intervals as feasible.

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