DIFFERENCES IN CHRONIC HEALTH ISSUES BETWEEN REFUGEES AND OTHER MIGRANTS: A CROSS-COUNTRY STUDY IN THE EU

Eleonora Miaci, Manuela Stranges, Eralba Cela

Abstract. This study investigates chronic health disparities between refugees and other migrants in Europe. While economic migrants often benefit from positive health selection, refugees face unique challenges related to trauma and vulnerabilities associated with forced displacement. Using data from the EU-MIDIS II survey (2015-2016), we analyze chronic health conditions by migration status. Descriptive results show variation in the distribution of health issues across a range of individual and contextual characteristics, including age, socioeconomic conditions, length of residence and context of destination. Regression analyses do not show statistically significant differences in the likelihood of reporting long-term health problems between refugees and other migrants. These findings highlight the importance of addressing migrant health disparities through targeted policy interventions, with a particular attention to on socio-economic integration, equitable access to healthcare services, and the role of family support in improving health outcomes across Europe.

1. Introduction

The relationship between migration and health is complex and multifaceted. A growing body of research consistently shows that migrants often arrive in destination countries in relatively good health, largely due to positive selection processes (McDonald and Kennedy 2004; Norredam et al. 2012). Typically, those who choose to migrate are younger, healthier, and more resilient than the broader populations they leave behind. The migration journey itself - often long, challenging, and fraught with risks - requires substantial physical, mental, and financial resources. As a result, only individuals with sufficient social, economic, and personal capital are likely to undertake and complete such journeys successfully. This process is commonly known as the "healthy migrant effect," whereby migrants tend to exhibit better health upon arrival than the average population in their countries of origin (Domnich et al. 2012). However, this positive selection mechanism, generally does not apply to refugees, who represent a distinct category of migrants (Nørredam et al. 2012). Refugees are often forced to flee their countries due to conflict, persecution, or disaster, leaving little time for preparation. As a result, they frequently arrive in destination countries in poorer health, having endured severe physical and psychological stress during their displacement (Crepet et al. 2017; Simonnot et al. 2016). The urgent and unplanned nature of their migration, coupled with limited

access to resources, means that refugees often do not benefit from the same positive selection processes that favour healthier individuals in other migrant groups. This distinction highlights the unique health challenges faced by refugees, who may require more comprehensive health support upon arrival and may face more barriers to access health services.

Numerous studies have examined the health outcomes of both international (Aldridge et al. 2018; Shor & Roelfs 2021) and internal migrants (Holz 2022), comparing them with those of native populations in destination countries and non-migrants in their countries of origin (Barbiano di Belgiojoso et al., 2024; Gruber, 2020; Kennedy et al., 2015). Recent research has increasingly examined the health of refugees in Europe, although most studies remain confined to national or local settings, such as Germany, Austria, Sweden or specific areas within Italy. These contributions predominantly focus on mental health problems including depression, anxiety and trauma-related symptoms (Leiler et al., 2019; Crepet et al., 2017), or on self-rated health and health-related quality of life (HRQoL) among refugees and asylum seekers (Georges et al., 2021; Gottvall et al., 2019; Jesuthasan et al., 2018; Nante et al., 2016).

Only a few works adopt a broader cross-national perspective, and these are mainly systematic reviews and meta-analyses synthesising evidence from multiple countries, yet they still concentrate largely on mental health outcomes (Lindert et al., 2009; Steel et al., 2009).

As a result, other dimensions of health, such as physical health and chronic health conditions remain underexplored in the literature on refugee populations. Moreover, only a limited number of literature reviews consider both migrants and refugees within the same analytical framework (Lindert et al., 2009; Lebano et al., 2020; Pavli et al., 2017). Among these, Lindert et al. (2009) is the only study that directly compares health outcomes between refugees and labour migrants**,** but this comparison is restricted to mental health and does not extend to physical or chronic health conditions.

Taken together, this evidence highlights a persistent lack of studies that compare refugees with other migrant groups in terms of health outcomes, particularly focusing on chronic health conditions and analyzing a broader European context.

To address these gaps, the present study draws on the Second European Union Minorities and Discrimination Survey (EU-MIDIS II), a valuable dataset which remains largely underutilized in migration and health research. EU-MIDIS II offers a unique opportunity to explore a large and diverse sample across European countries, providing detailed and comparable information on migrants' and refugees' socio-demographic and health-related characteristics.

This study adopts a cross-national European perspective and compares chronic health conditions between migrants and refugees. By incorporating legal and socio-

economic status into the analysis, this study contributes to a more comprehensive understanding of health inequalities within migrant populations in Europe.

2. Data

This study relies on data from the EU-MIDIS II (Second European Union Minorities and Discrimination Survey), collected during 2015–2016 (FRA, 2018). EU-MIDIS II was conducted across 28 EU countries, targeting specific population groups, including immigrants and their descendants from Turkey, North Africa, Sub-Saharan Africa, South Asia, and Asia. In addition, two ethnic minority groups were included: Roma communities and individuals of Russian background. The survey aimed to collect nationally representative data for each targeted group through face-to-face interviews using translated questionnaires (FRA, 2018). The final dataset includes a total net sample size of (Ni =) 77,656 interviews across the (Nj =) 28 EU member states.

2.1 Sample

The focus of our study is on assessing the health of migrants and refugees. To this end, we first excluded all respondents who were under 18 years old at the time of the interview (25,492 individuals), as the analysis targeted the adult population.

From the remaining sample, we retained only individuals explicitly identified as migrants or refugees, excluding 23,271 respondents belonging to non-migrant ethnic minority groups (such as Roma and Russian minorities). An additional 1,304 cases with missing information on target group membership were also removed. The exclusion criteria were aligned with those applied in a previous study based on the same dataset, which identified migrants using the same approach (Van Tubergen, 2025).

Our final analytical sample comprised 27,589 observations drawn from 19 EU member states: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom.

The reduction in the number of countries included in the analysis is due to the fact that, in several countries (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, and Slovakia), only non-migrant ethnic minority groups were surveyed. Additionally, for Poland and Slovenia, data identifying respondents' target group membership were not available.

Listwise deletion of observations was applied to handle missing data and to ensure internal consistency across analyses. These exclusions result in a clean

analytical sample - with no missing values - on which all models were estimated (N=11,476 observations).

In the weighted final sample, 8% of respondents are classified as refugees and 92% as migrants. Among them, 91% are first-generation migrants and 1% are second-generation individuals.

3. Methods

For the empirical analysis, we employed logistic regression models to estimate the likelihood of experiencing chronic health issues based on migratory status (refugee vs. migrant). The dependent variable was chronic health issues (0 = no; 1 = yes). The key independent variable was refugee status (0 = migrant; 1 = refugee). The set of control variables included demographic characteristics (gender, age and citizenship and residence permit), contextual factors such as ethnic group (Asian, Turkish, North African, South Asian, Sub Saharian Africa), country of residence (grouped according to the UN geoscheme: Eastern Europe, Northern Europe, Southern Europe, Western Europe) and length of residence. We also included family-related variables (marital status and the number of household members) and socio-economic factors such as education level (No formal education/Primary, Secondary, Upper Secondary, Vocational, Post-secondary or Tertiary), language proficiency and employment status. In addition, we considered other relevant aspects including experienced discrimination and access to healthcare services.

3.1 Variable description

The dependent variable is chronic health issues (CHI), measured through the EU-MIDIS II question: *"Do you have any longstanding illness or health problem?"*. Answers were coded as a binary outcome (1 = yes; 0 = no). This item captures the respondent's self-reported presence of any chronic or long-standing condition and does not provide a predefined list of specific diseases.

The key independent variable is migratory status coded as a binary outcome (1 = refugee, 0 = migrant). The migrant group includes both first- and second-generation migrants.

The questionnaire allowed respondents to select multiple reasons for coming to their current country of residence. Those who selected seeking asylum/protection were categorized as refugees, even if they also selected other options. Respondents who did not select this option were classified as migrants.

For the variable citizenship and residence permit, we assigned a value of 1 if the respondent reported in the EU-MIDIS II survey "National citizenship or residence permit" and 0 for "Limited, no residence permit, or other."

For the variable "Access to healthcare services", we used the EU-MIDIS II question: *"Does the national basic health insurance scheme currently cover your health care expenses?"* Responses were coded as 1 for "Yes" and 0 for "No".
For the variable "Experienced discrimination", we followed the approach of Van Tubergen & Kros (2024), who used the same dataset to explore ethnic harassment among immigrants. The EU-MIDIS II survey includes three questions related to face-to-face ethnic harassment (EH). Respondents were asked how often in the past five years, in their country of residence, someone had: (a) "made offensive or threatening comments to you in person, such as insulting you or calling you names," (b) "threatened you with violence in person," or (c) "made offensive gestures to you or stared at you inappropriately." If respondents reported experiencing any of these situations, they were further asked how often these incidents happened in the past five years "because of their ethnic or immigrant background." In cases where EH was reported, a follow-up question assed the frequency of such experiences in the past year. Based on these items we constructed a binary variable for EH coded 1 if the respondent reported experiencing any form of harassment due to ethnic or immigrant background in the past year, and 0 otherwise.

4. Results

4.1 Descriptive analysis

Weighted descriptive results (Table 1) indicate that chronic health problems appear slightly more prevalent among other migrants (27%) than among refugees (23%). With respect to origin, respondents from North African (25%), Turkey (22%), and Sub-Saharan Africa (22%) report higher levels of health issues compared to those from Asia (10%). Women report slightly higher levels of CHI (24%) than men (22%). As expected, the prevalence of CHI increases substantially with age, ranging from 9% among individuals aged 18–24 to 54% among those aged 60 and over.

Respondents with citizenship or residence status report a higher prevalence of CHI (24%) compared to those without such status (20%). However, this difference may reflect longer exposure to host-country conditions among individuals with legal status. In fact, individuals who have been in the host country for ten years or more report higher levels of chronic health issues (25%) compared to those with shorter durations of stays (14%). These patterns align with prior research on migrant health, which suggests that the initial health advantage observed among migrants tends to erode over time due to factors such as socioeconomic hardship, barriers to healthcare, and acculturation-related stressors (Wallace et al. 2019).

Table 1 - *Distribution of Chronic Health Issues Across Independent and Control Variables*

	Chronic health issues	
% weighted	Yes	No
Migratory status		
Refugee	23%	77%
Other migrants	27%	73%
Origin		
Asian	10%	90%
Turkish	22%	78%
North African	25%	75%
South Asian	20%	80%
Sub Saharian Africa	22%	78%
Gender		
Man	22%	78%
Woman	24%	76%
Age class		
18-24	9%	91%
25-29	8%	92%
30-34	12%	88%
35-39	19%	81%
40-44	19%	81%
45-59	34%	66%
60-85	54%	46%
Country		
Eastern Europe	0%	0%
Northern Europe	23%	77%
Southern Europe	8%	92%
Western Europe	25%	75%
Citizenship/Residence Status		
No	20%	80%
Yes	24%	76%

Table 1 (cont.) - *Distribution of Chronic Health Issues Across Independent and Control Variables.*

	Chronic health issues	
% weighted	Yes	No
Length of stay		
<10	14%	86%
=>10	25%	75%
Education		
No Formal/Primary	37%	63%
Secondary	26%	74%
Upper Secondary, Vocational	20%	80%
Post-secondary or Tertiary	17%	83%
Language proficiency		
No	31%	69%
Yes	22%	78%
Employment condition		
Unmployed	31%	69%
Employed	16%	84%
Marital status		
Unmarried	22%	78%
Married	24%	76%
Access to national health services		
No	18%	82%
Yes	23%	77%
Experienced discrimination		
No	73%	77%
Yes	24%	76%

Individuals with no formal or only primary education show the highest prevalence of chronic health problems (37%), whereas those with post-secondary or tertiary education report a substantially lower prevalence (17%). A similar pattern is observed with employment status: the proportion of respondents with chronic conditions is nearly twice as high among the unemployed (31%) compared to the employed (16%). Language proficiency also appears to play a role: respondents with limited language skills report a higher prevalence of chronic health problems (31%)

compared to those with good proficiency (22%). Although the difference is modest, a slightly higher prevalence of chronic health issues is observed among individuals who report having experienced discrimination (23.6%) compared to those who did not (22.6%). Finally, a higher prevalence of CHI is also observed among respondents covered by national health systems (23%) compared to those not covered (18%). This result likely reflects greater diagnostic opportunities and health awareness among individuals with access to national health insurance scheme, rather than a negative effect of coverage itself.

4.2 Multivariate analysis

Table 2 presents the results from the logistic regression models estimating the probability of reporting chronic health issues based on migratory status. We report findings for the full sample, as well as stratified models for women and men to assess possible gender-related heterogeneity.

Table 2 - *Logistic regression on Chronic health issues (reference no Chronic health issues) for the whole sample, sample stratified by gender (woman, man).*

Chronic Health issues	Whole sample	Woman	Man
Migratory status (ref. migrant)			
Refugee	0.13 (-0.17)	-0.22 (-0.48)	0.33 (-0.32)
N	11,482	4,746	6,736
Pseudo - R^2	0.17	0.14	0.22

Source: authors' elaborations on EUMIDIS II data.
Results from a weighted logistic regression controlling for age, gender, citizenship and/or residence permit, context of origin, country of residence, education, language proficiency, employment, marital status, household size, access to health services, and experienced discrimination. Control variables are at mean values, with 95% confidence intervals.
Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

In contrast to findings on mental health (Lindert et al., 2009), which generally document worse outcomes among refugees than among other migrant groups, overall, our empirical results indicate no statistically significant difference in the likelihood of experiencing chronic health problems between refugees and other migrants. This result holds both in the full model and in models disaggregated by gender.

Nevertheless, the absence of a significant association warrants reflection.

One possible explanation lies in cultural differences in health perception and reporting. Prior research has shown that different migrant groups may vary in how they conceptualize and disclose health problems - particularly chronic or psychosomatic conditions (Mazzetti, 2019). In addition, psychological resilience and

adaptive coping strategies, especially among those who have experienced forced displacement, may influence how health problems are experienced and reported.

Another contextual element that may help interpret this result concerns the temporal structure of our sample. All individuals included in the analysis arrived in Europe before 2015, prior to the large-scale refugee inflows associated with the so-called European migration crisis. It is plausible that those who arrived during earlier periods encountered relatively more stable and better-organized reception and integration systems, with broader access to social and healthcare services. These more favourable initial conditions may have contributed to mitigate the health vulnerabilities typically associated with forced migration.

5. Conclusion

This study contributes to the understanding of health inequalities among migrants in Europe by examining differences in the prevalence of chronic health issues between refugees and other migrants across 19 EU member states.

Drawing on data from the EU-MIDIS II survey (2015–2016), we focus on the presence of chronic health conditions as an indicator of individuals' physical health. Although this measure is based on self-reported information and therefore may be subject to reporting bias, it captures a concrete dimension of health status that is particularly relevant for assessing long-term health needs and vulnerabilities among migrant and refugee populations.

Our findings do not reveal statistically significant differences between refugees and other migrants in the likelihood of reporting chronic health issues.

Several elements may help to interpret this outcome. First, our sample includes individuals who arrived prior to 2015, a period marked by more structured and potentially more supportive reception and integration systems in many European countries. Second, cultural differences in health reporting, along with individual resilience and adaptative coping mechanisms, may have contributed to mitigating the perceived or reported health disadvantages among refugees.

Our results reinforce the importance of acknowledging the heterogeneity within migrant population and adopting a multidimensional perspective on migrant health. Policies aimed at reducing health inequalities should prioritize gender-sensitive interventions, as well as measures that support labour market participation, social inclusion, education, and equitable access to healthcare services. Family reunification and family-based services also play a key role by providing both emotional and practical support. Equally important is the need to address discrimination and foster inclusive environments that promote well-being across the life course. Tackling these systemic barriers is essential to improving the health of both migrant and refugee populations across Europe.

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Eleonora MIACI, University of Milan, eleonora.miaci@unimi.it
Manuela STRANGES, University of Calabria, manuela.stranges@unical.it
Eralba CELA, University of Milan, eralba.cela@unimi.it