EXPLORING THE LINK BETWEEN SELF-RATED HEALTH AND VULNERABILITY AMONG REFUGEES IN ITALY

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Abstract. The literature indicates that migrants tend to be a selected group from the population of their country of origin, particularly with respect to health status. In contrast, asylum seekers and refugees typically represent a less selected group as highlighted by empirical evidence. The health status of these specific subgroups of migrants remains under-researched for the Italian context. However, asylum seekers and refugees may have specific health needs stemming from their pre-migration and travel experiences that warrant further investigation. This study addresses this gap by examining self-rated health among asylum seekers and refugees residing in Italy. Health status is analyzed in relation to socio-demographic characteristics and various dimensions of vulnerability. We draw on data from a unique survey conducted in 2024 on asylum seekers and refugees living in Italy with a total sample of 1,327 individuals. Our results highlight a positive relation between social support networks and health status. Conversely, experiences of discrimination, economic deprivation, female gender, and older age are negatively associated with health outcomes.

1. Introduction

Literature suggests that migrants often represent a selected group from their country of origin in various aspects, including health (Aldridge *et al*., 2018). In contrast, refugees tend to be less selected, as their migration is often forced, urgent, and unplanned due to conflict or disaster, leaving them with limited preparation and resources. As a result, they face increased physical and mental vulnerability, shaped by traumatic experiences both before and during migration (Crepet *et al*., 2017; Simonnot *et al*., 2016). Although research on refugee health has grown in recent years, this subgroup remains underexplored, particularly beyond the domain of mental health (Lindert *et al*., 2009; Steel *et al*., 2009; Kirmayer *et al*., 2011; Schweitzer *et al*., 2011). Moreover, in Italy, the health status of refugees remains significantly under-researched (Barbiano di Belgiojoso *et al*., 2024). Asylum seekers and refugees may have specific health needs stemming from their pre-migration and travel experiences that warrant further investigation. The existing literature highlights the significant challenges, arising from legal and informal barriers, that migrant populations face in accessing healthcare services across different host

countries. In many European countries healthcare access for irregular migrants and asylum seekers is limited to emergency services only (Norredam *et al*., 2006; Cattacin and Björngren-Cuadra, 2010). Additionally, migrants often encounter further obstacles such as lack of awareness of their entitlements, language barriers, cultural misunderstandings, and administrative difficulties (Harmsen *et al*., 2003; Biffl, 2003; Allegri *et al*., 2025).

In this study, vulnerability is conceptualised as a dynamic and multidimensional condition shaped by socio-economic disadvantage, social exclusion, and post-migration living conditions, which influence both exposure to health risks and the ability to cope with them. Within this framework, self-rated health represents a suitable outcome for capturing vulnerability, as it reflects both objective health conditions and individuals' subjective evaluation of their overall well-being. Importantly, self-rated health is sensitive to cumulative disadvantage linked to economic hardship, discrimination, and barriers to healthcare access, which are central dimensions of refugees' vulnerability. Several studies indicate that limited access to healthcare contributes to worsening health outcomes, particularly in managing chronic or long-term conditions (Robjant *et al*., 2009; Coffey *et al*., 2010). Research specifically focused on refugees has further shown that those with regular healthcare access report higher social inclusion, better mental well-being, and improved self-rated health (Jaschke *et al*., 2021; Bozorgmehr *et al*., 2015; Morris *et al*., 2009).

The aim of this study is to address this gap by analyzing how self-rated health among asylum seekers and refugees living in Italy is associated with key dimensions of vulnerability. Specifically, we ask whether socio-economic disadvantage, experiences of discrimination, and social support are related to self-rated health, and whether these associations vary by age and gender.

2. Data and method

2.1 Data and sample

We used data from the project *Assessing the Vulnerability of Refugees and Asylum Seekers in Italy (AVRAI)*, which investigates multiple dimensions of vulnerability among asylum seekers and refugees, including economic status, health, social networks, integration, and discrimination. Data were collected through the *ITRAS* survey, an ad hoc survey conducted between April and July 2024, involving 1,327 asylum seekers and refugees residing in Italy who arrived after 2011. The survey targeted individuals aged 18 and older, encompassing a wide range of legal-administrative statuses, including refugee status, subsidiary protection, temporary

protection, humanitarian permits, long-term residence permits (EU), residence permits, and citizenship. It also included individuals awaiting the outcome of their asylum application or those in the appeal process following a rejection. Conversely, rejected applicants without an active appeal and individuals with expired permits and no pending appeal were excluded from the survey. While the dataset includes individuals with multiple nationalities, for our analysis we focused to the most represented citizenship groups in the sample (those with at least 70 respondents): Bangladesh, Egypt, Eritrea, Nigeria, Pakistan, Ukraine, and a residual other category.

2.2 Methods and variables

To examine the relationship between different dimensions of vulnerability and health outcomes, we estimated a logistic regression model using self-rated health (SRH) as a binary dependent variable.

Our models control for age, along with its squared term to account for potential nonlinear effects, as well as gender and level of education. In addition, we included selected socio-demographic characteristics and key dimensions of vulnerability. Economic vulnerability was assessed through reported experiences of economic deprivation, while integration was proxied by experiences of discrimination, the availability of a social support network in case of need, and the presence of a cohabiting partner. Finally, to capture the stability of the migration experience, we included the length of stay in Italy along with its squared terms to account for potential non-linear effects on health outcomes.

2.2.1 Variable description

Regarding the construction of the dependent variables, self-rated health was measured as a binary variable, where respondents who answered "very good" to the question *"How is your health in general?"* (on a scale from 0 to 5, with 5 indicating very good) were assigned a value of 1, while all other responses were coded as 0.

The dependent variable was dichotomized to isolate respondents reporting the highest level of self-rated health. This operationalization aims to capture a condition of optimal health and is supported by evidence indicating that individuals tend to use extreme response categories sparingly when assessing their health, often favoring intermediate options instead (Barbiano di Belgiojoso *et al*., 2024).

Regarding the independent variables, economic deprivation was measured as a dummy variable based on 13 items reflecting the respondent's inability to afford essential goods and services, including furniture, heating, meat, clothing, shoes, internet, holidays, unexpected expenses, leisure activities, meeting friends, pocket

money, and car ownership. Following the Eurostat definition[1], severe economic deprivation was defined as scoring 7 or more on this scale. The variable *experienced discrimination* was constructed based on responses to the question: "Have you ever experienced discrimination?" Respondents who reported who reported having been subjected to any of the following experiences - receiving threats or harassment, being treated with less respect, receiving worse service, being perceived as less intelligent, or being treated as though others were afraid of them - were classified as having experienced discrimination. Those who reported none of these experiences were classified as not having experienced discrimination. The presence of a social network was captured through two variables: Italian network and non-Italian network. Respondents were classified as having a social support network if they reported having at least one friend with whom they could easily discuss personal problems. Those who reported having no friends or being unlikely to discuss their problems were classified as not having a support network.

3. Results

Descriptive results show that 27% of respondents rated their health as "very good," while 48% described it as "good". Reports of poor health were relatively infrequent: only 7% of the sample indicated either "poor" or "very poor" health.

When comparing their current health status to that prior to migration, 18% reported improved health, 63% reported no change, and 20% reported worse health. Additionally, 16% of respondents reported an unmet need for healthcare.

Among those with unmet healthcare needs, the most commonly reported reasons were waiting lists (38.6%), financial constraints (24.3%), inability to take time off work (23.6%), bureaucratic obstacles (23%), language barriers (17%), and a decision to wait and see if the problem would resolve on its own (12%).

[1] Eurostat defines material and social deprivation as the inability to afford a set of specific goods, services, or social activities that are considered by most people as essential for an adequate quality of life. The material and social deprivation rate is defined as the share of the population unable to afford five or more of these thirteen items. The severe material and social deprivation rate applies to those unable to afford seven or more.

Table 1 –*Odds ratios, significance and confidence intervals (in parentheses) of the logistic regression model*

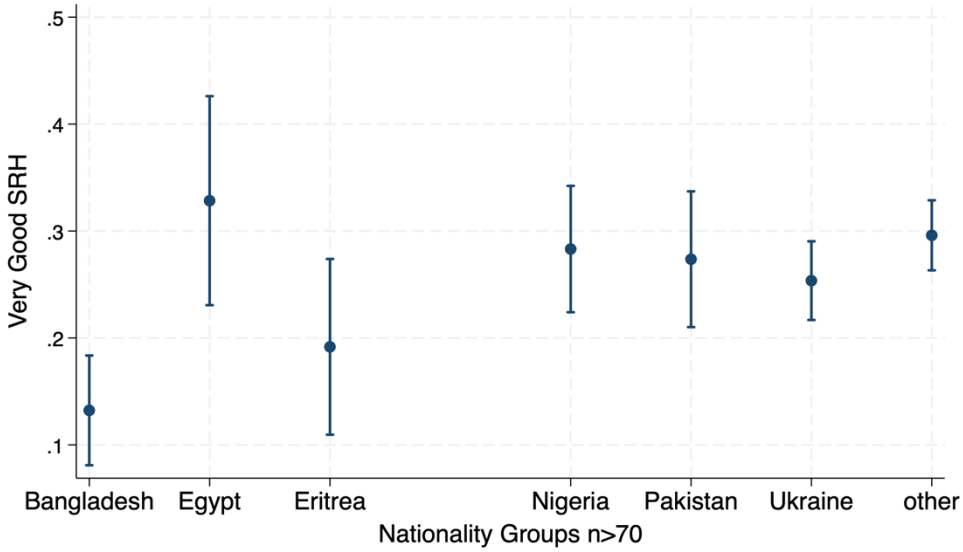
Odds Ratios	*Very good SRH*
Gender (ref. male)	
Female	0.66**[0.48; 0.91]
Age	0.94**[0.91; 0.98]
Age squared	0.92[0.67; 1.27]
Severely Deprived (ref. no)	
Yes	0.67**[0.48; 0.93]
Education (ref. lower)	
Medium-higher	0.94[0.68; 1.32]
Length of stay	0.98[0.82; 1.16]
Length of stay squared	1.01[0.99; 1.02]
Experienced discrimination (ref. no)	
Yes	0.67**[0.48; 0.91]
Italian friendly network (ref. no)	
Yes	1.5**[1.10; 2.05]
Not Italian friendly net. (ref. no)	
Yes	0.54**[0.38; 0.78]
Relationship status (ref. single or widow)	
Cohabiting partner	3.01***[2.11; 4.26]
Non-cohabiting partner	2.41***[1.60; 3.63]
Nationality (ref. Bangladesh)	
Egypt	3.64**[1.38, 9.61]
Eritrea	1.62[0.55; 4.71]
Nigeria	2.86**[1.26; 6.47]
Pakistan	2.71**[1.18; 6.18]
Ukraine	2.41** [1.11, 5.23]
Other	3.07**[1.50; 6.25]

Source: authors' elaborations on AVRAI data.
Notes: Odds ratios reported, with 95% confidence intervals in brackets.
** p < 0.05; ** p < 0.01; *** p < 0.001.*

Our empirical findings (Table 1) indicate that men are more likely to report very good self-rated health while age is negatively associated with this outcome. Economic deprivation is associated with lower probabilities of reporting very good health while no association emerges with the educational level. With regard to length of stay in Italy, the results do not suggest a linear relationship with health outcomes. Individuals who have experienced discrimination are less likely to report very good self-rated health. Social networks are associated with health outcomes. Having a support network composed of Italian friends is related to a higher likelihood of reporting very good self-rated health. In contrast, having a network composed of non-Italian friends appears negatively related to the probability of reporting very

good self-rated health. Most importantly, a strong association with the partnership status emerged: individuals with a partner, whether cohabiting or not, are more likely to report very good self-rated health. The size of this effect is substantial, with odds ratios exceeding 2.4 and reaching values around 3 for cohabiting individuals, suggesting that partnership status captures a combination of protective factors such as emotional support, shared economic resources, and greater stability in everyday living conditions. Nationality also appears strongly associated with health outcomes (Figure 1).

Figure 1 - *Adjusted Predicted Probabilities of Reporting Very Good Self-Rated Health by country of origin.*



Source: authors' elaborations on AVRAI data.

Respondents from Egypt, Nigeria, Pakistan, Ukraine, Eritrea, and other nationalities are more likely to report very good self-rated health compared to the reference group (Bangladesh). However, the relatively large odds ratios observed for several national groups should be interpreted with caution, as they may reflect unobserved heterogeneity in migration trajectories, legal pathways, and post-migration conditions rather than inherent health differences between nationalities. We also tested an alternative model using a binary health variable in which the value 1 included both "good" and "very good" self-rated health, rather

than only "very good." This alternative model confirmed the same general patterns, although the results were less pronounced.

4. Discussion and Conclusion

Our findings align with previous literature on the association between poor health outcomes, female gender and older age (Pavli *et al*., 2017; Gerritsen *et al*., 2006). Similarly, individuals who experience discrimination are more likely to report poor self-rated health (Noh and Kaspar, 2003; Kenny *et al*. 2024; Van Tubergen, 2025). In addition, social network support, family reunification, and marital status emerge as protective factors for health, underscoring the critical role of social integration in migrant well-being (IOM, 2021; Grochtdreis, 2020; Fuller-Thomson *et al*., 2011). The health disparities observed across nationalities in our data may also reflect cultural differences in the way health is perceived and reported (Mazzetti, 2019). The differing roles of Italian and non-Italian support networks observed in our results can be interpreted in light of existing literature on migrant social networks (e.g. Ortensi and Barbiano di Belgiojoso, 2017). Research suggests that in the early stages of migration, social ties are primarily formed with individuals from the same geographical or cultural background (Ryan, 2011; Village *et al*., 2017). These *bonding ties* provide immediate support and reinforce a sense of belonging within the migrant community. However, they may also limit access to resources and opportunities outside of that community. In contrast, successful integration into the host society and the development of a broader sense of belonging to the new environment require the formation of *bridging ties*, which extend beyond ethnic and cultural boundaries (Pearce, 2008; Lancee, 2016). These connections facilitate access to more diverse forms of support, information and opportunities that are often unavailable within co-national networks. The negative association observed for non-Italian networks should not be interpreted as a detrimental effect of these ties per se. Rather, it may reflect selection processes whereby individuals in poorer health or more vulnerable conditions rely more heavily on co-national networks due to limited access to broader social resources.

This study has some limitations. First, self-rated health may be subject to reporting bias and cultural differences in health perception across groups. Second, the sample does not include the most vulnerable irregular migrants, which may lead to an underestimation of health inequalities.

Given the extensive range of variables available to assess vulnerability, further analysis is necessary to test the robustness of these findings. Other dimensions, such as the characteristics of the area of residence in Italy and of the dwelling will be

explored in future work. Moreover, we aim to incorporate other health outcome variables available in the dataset, which capture additional dimensions of well-being.

This study provides valuable insights into the health of refugees and asylum seekers in Italy, a context that remains underexplored in migration and health research. The findings highlight the importance of targeted policies to mitigate the adverse health impacts of migration. In particular, gender-sensitive policies, interventions that promote economic integration, and measures fostering social inclusion are essential to improving health outcomes among refugees and asylum seekers. Ensuring equitable access to healthcare services is equally crucial to addressing unmet healthcare needs and enhancing the overall well-being of migrant and refugee populations.

Policymakers should prioritize the reduction of barriers to healthcare, address discrimination, and strengthen support networks to facilitate better health outcomes for refugees and asylum seekers.

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