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A universal health care system? Unmet need for medical care among regular and irregular immigrants in Italy

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Abstract

Italy has a universal health care system that covers, in principle, the whole resident population, irrespective of citizenship and legal status. This study calculates the prevalence of unmet need for medical care among Italian citizens, regular and irregular immigrants and estimates logistic regression models to assess whether differences by citizenship and legal status hold true once adjusting for potential confounders. The analysis is based on two Surveys on Income and Living Conditions of Italian households and households with foreigners. Controlling for various factors, the odds of experiencing unmet need for medical care are 27% higher for regular immigrants than for Italian citizens and 59% higher for irregular immigrants. The gaps by citizenship and legal status are even more striking among those with chronic illnesses. These results reveal the high vulnerability of immigrants in Italy and the need to develop more effective policies to achieve health care access for all residents.

Keywords: unmet need; health care access; immigrants; legal status; Italy

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Introduction

The Italian public universal health care system covers - in principle - the whole resident population, irrespective of citizenship and legal status. As such, it is classified as one of the most inclusive health care systems in Europe [1-3]. Health as a right for all is explicitly recognised in article 32 of the Italian Constitution, according to which *"The Republic safeguards health as a fundamental right of the individual and as a collective interest, and guarantees free medical care to the indigent"*.

Despite this fact, there are significant inequalities in access to medical care. There is a higher prevalence of unmet need for medical care for those who have a low income [4], and geographical disparities in access to medical care have been exacerbated in the last two decades by the progressive decentralisation of health services to regional administrations [5].

Inequality in access to medical care between citizens and immigrants is a phenomenon of growing importance in Italy [6-9]. Immigrants seem to experience specific barriers to medical care, which are in addition to existing economic and geographical inequalities [10]. Some studies have argued that social class is the underlying determinant of this inequality [6], while others have contended that ethnic discrimination compounds economic deprivation [7,11]. The concept of social capital has also been used in explaining immigrants' additional obstacles to accessing medical care compared to the Italian population [12]. Lack of knowledge about national laws and administrative regulations may limit immigrants' ability to access health services, while language difficulties and cultural factors may also represent serious barriers to access [13,14].

Unmet need for medical care may be related to socio-demographic characteristics and health profiles. The international literature has shown that after an initial "healthy immigrant effect" - owing to a self-selection process prior to migration - immigrants' health tends to deteriorate with the time spent in the host country, and this results in an increased need for medical care [15-17]. The worsening health conditions after resettlements have been attributed to health-impairing work environments, inadequate salaries, poor housing, as well as real and perceived social exclusion [18]. This is increasingly the case in Italy, where the health profiles of immigrants have significantly deteriorated over the last decade [19].

Little is known, however, about the links between health care access and legal immigration status. Immigrants in an irregular situation - i.e. those who do not fulfil conditions for entry or stay in the country - constitute a particularly vulnerable group because they are more likely to be subjected to exploitative working conditions and precarious housing [2]. Typically, they are also fearful that their irregular status could be reported to the migration authorities, are largely unaware of their rights, and often suffer from hostile and discriminatory attitudes [2]. The health of irregular immigrants is of particular concern with respect to chronic illnesses such as respiratory disease, high blood pressure, cardiovascular disease, diabetes, and cancer, as well as health problems arising from hard

living/working conditions, unhealthy lifestyles, and a lack of adequate access to preventive care. Furthermore, their precarious situation makes continuity of care especially difficult [2].

To date no study has been carried out to quantify the extent of unmet need for medical care in Italy by legal status. The present paper fills this knowledge gap and contributes to the growing body of research on health inequities by assessing differences in unmet need for medical care between Italian citizens, regular and irregular immigrants. The aim is to show whether differences exist, and whether they remain after adjusting for socio-demographic characteristics, subjective health, poverty measures, and geographical residence. We also examine whether the differential unmet need by legal status widens in case of chronic illnesses that require long-term continuous care, and the extent to which our findings are different for male and female immigrants. The importance of our results is not limited to the Italian context as they provide useful insights for the health protection of regular and irregular immigrants in other European countries who, like Italy, are currently experiencing sustained immigration flows, including the onward flow of non-Italian immigrants from Italy.

Methods

This study is based on merged data from the 2009 standard Italian Survey on Income and Living Conditions (SILC) and the 2009 special Italian Survey on Income and Living Conditions of households with foreigners. Both surveys were conducted by the Italian National Institute for Statistics (Istat), they used the same methodological tools (questionnaires, survey techniques, methods of correction, imputation and integration of data, etc.), covered the same time period, and interviewed all individuals aged 16 and over living in the selected households.

The standard Italian SILC was carried out on individuals living in about 26,000 households selected with a standard two-stage stratified sampling design typically used by Istat in face-to-face household surveys representative of the Italian population [20]. The special SILC is the largest survey of the immigrant population ever conducted in Italy, covering over 6,000 households with at least one foreign member. The sampling techniques took into account the size of different foreign-national groups and their geographical distribution across the country [21]. All interviewees were asked about their legal status; those who reported no regular resident permit constituted more than 17% of the sample. As asserted by Istat, the sample of households with at least one foreigner members from the special SILC survey is comparable with that of households made up exclusively of Italians from the standard SILC survey.

Besides collecting a wide range of socio-demographic and economic variables, both surveys included a series of questions about health. Unmet need for medical care was assessed using the following question: *"During the last 12 months, was there ever a time when you felt you needed a medical examination or treatment for a health problem but you did not receive it?"*. Interviewees who replied affirmatively were considered to have experienced unmet need.

Our analytical sample includes 43,636 Italian citizens, 8,133 immigrants with a regular resident permit, and 1,704 immigrants who are classified as irregular. This classification is based on a question which asks immigrants whether they have a residence permit or a visa. The question includes different response options to account for the variation in residence requirements for different immigrant groups. All non-EU foreigners require a resident permit or a visa to reside in Italy regularly, and although EU foreigners can circulate in Italy without any restriction, they are also required to register their residence if they stay in Italy for more than 3 months. In order to be classified as 'regular' in our analysis, this implies (in almost all cases) that immigrants either have a job, are studying full-time, are a legal partner of a legal resident, or can demonstrate that they have enough money to qualify for health insurance.

We calculate the prevalence of unmet need for medical care separately for Italian citizens, regular and irregular immigrants. Next, we estimate logistic regression models to assess whether differences by legal status hold true after controlling for potential confounders such as sex, age, education, labour force participation, self-assessed health, and self-rated poverty. A regional variable is also included to account for geographical disparities in supply and quality of health services. We run the analysis on the whole sample and on the sub-sample of those who reported suffering from chronic illnesses. We conclude by repeating the analysis separately for male and female immigrants, excluding citizens, which shows how the differential in unmet need for medical care varies by sex when comparing regular and irregular immigrants.

Results

Overall, around 7% of individuals in the sample reported to have experienced unmet need for medical care during the last 12 months. Differences by legal status are notable: the prevalence of unmet need is 7% among Italian citizens, 8% among regular immigrants, and 11% among irregular immigrants. Unmet need for medical care is higher for the sub-sample with chronic illnesses, and differences by legal status are more substantial: the prevalence is 12% among Italian citizens, 20% among regular immigrants and 32% among irregular immigrants (see figure 1).

Table 1 shows the results from two logistic regression models for the association between legal status and the odds of experiencing unmet need for medical care. Model 1 refers to the whole sample, and Model 2 only to the sub-sample of those suffering from chronic illnesses. Both models control for self-rated health, self-assessed poverty, socio-demographic characteristics, and region of residence.

After adjusting for potential confounders, there are still significant differences in access to healthcare by legal status. For both regular and irregular immigrants, the odds of having unmet need for medical care are significantly higher than Italian citizens, and the size of this differential is even higher for those with chronic illness.

Immigrants with a regular resident permit are more likely to experience unmet need for medical care than Italian citizens (Odds ratio, OR = 1.27), and immigrants in an irregular situation are even more likely to experience unmet need than Italian citizens (OR = 1.59). For the sub-sample of those suffering from chronic illnesses, legal status is an even a stronger predictor of unmet need for medical care. The differences are striking: the odds of experiencing unmet need for medical care are 1.4 times higher for regular immigrants with a chronic illness as compared with Italian citizens who have a chronic illness, and 2.5 times higher for irregular immigrants.

In both models, there is a strong health gradient, whereby individuals with poorer subjective health are progressively more likely to experience barriers to accessing medical care. In particular, the odds of experiencing unmet need for those with very bad self-rated health are around 8 times higher than for those who declare very good health, in the model including the whole sample, and 4.5 times higher in the model restricted to those with chronic illness.

As widely documented in Italy, and elsewhere in Europe, we find that one of the main determinants of unmet need for medical care is poor living conditions [23,26,27]. Our model shows that better off individuals are progressively less likely to experience unmet need for medical care when compared to those who report 'making ends meet' with great difficulty. Those who have the lowest self-assessed poverty constitute an exception to the general gradient: although this may be due to the inability of the public welfare system to satisfy individuals with higher standards of service.

Specific to the Italian context is the large geographical disparity in the odds of experiencing unmet need, such that individuals living in the centre, and even more so the south, are more likely to experience barriers to care than those living in the north [5]. Both self-assessed poverty, and region of residence, remain similarly strong and significant for the sub-sample of those suffering from chronic illnesses.

Consistent with previous research, we find that the odds of experiencing unmet need for medical care increase with age by about 4% per year, but slowly decline at older ages [26]. With the exception of those who have post-secondary education in model 1, education has no significant (conditional) relationship with unmet need. Similarly, we do not detect any significant difference in unmet need for medical care between those who are employed, self-employed and unemployed. Despite this, those who are not in the labour force (i.e. inactive) are significantly less likely to report having experienced unmet need (in both the overall model and the model for those with chronic illness).

In our final analysis, we present the results of a focussed comparison between irregular and regular immigrants. Our analysis is identical to that used to produce table 1, except that we now exclude Italian citizens and estimate separate models for men and women. This is broadly equivalent to a full interaction between sex and all other variables. By excluding Italian citizens, we seek to establish the extent to which irregular immigrants are significantly different from regular immigrants.

The results show that there is a significantly higher unmet need for medical care for irregular male (versus regular male) immigrants, and that the same is true for females, although to a lesser extent (see figure 2). For the sub-samples with chronic illness, this difference between men and women is exacerbated, such that the odds of unmet need are 3 times higher (and significant) for irregular male immigrants, as compared with regular males. This is in contrast to females with chronic illness, where the odds ratio is smaller and non-significant.

Discussion

Health as a right for all is a core objective of the Italian public universal health care system. Despite this, many individuals in Italy experience barriers to accessing medical care due to unaffordability and unavailability of health services [4,5]. The situation is especially challenging for immigrants, who often lack knowledge of national laws and administrative regulations, tend to experience cultural and language difficulties, and suffer from precarious living conditions and social exclusion [2,13,14].

In this paper, we focus on differences in unmet need for medical care between citizens, regular and irregular immigrants in Italy. Our analysis documents that, other things being equal, there are considerable disparities in access to care not only between citizens and non-citizens, but also between regular and irregular immigrants.

Compared to Italian citizens the odds of experiencing unmet need are greater for regular and irregular immigrants, and these gaps are even more striking for the sub-sample of those suffering from chronic health conditions. Research in Italy and elsewhere in Europe suggests that chronic illnesses are becoming a serious concern for both the immigrant and native populations. Our results show that regular and irregular immigrants with chronic illnesses are much more likely to experience unmet need for medical care than Italian citizens with similar conditions.

Our results also demonstrate the importance of sex for understanding immigrant inequalities in unmet need. Table 1 shows that there is a significant gender gap in unmet need for medical care, with women being more likely to experience barriers accessing care than men. A similar gender gap has been noted in both public and private health care systems [24,25]. But after excluding Italian citizens, and making direct comparison between irregular and regular immigrants, the direction of this association is reversed. Irregular female immigrants are less likely than men to experience unmet need, especially if they have a chronic illness. One implication of this finding is that policies to reduce the unmet need for medical care among immigrants must take account of differences between men and women, and may even benefit from targeting men.

It is important to highlight that our analysis has some limitations due to data availability. First, the use of the Survey of Income and Living Conditions of households with foreigners (i.e. individuals living in households with at least one foreign member from population register) means that irregular immigrants are included in the sample if and only if they live with someone that is in the population register. This implies the exclusion of some immigrants who have an irregular migration status, in

particular those who are living in camps, are homeless, or have no stable residence. Given that these immigrants may be even more marginalised than those in our study, we may in fact be underestimating unmet need. On the other hand, some immigrants will acquire Italian citizenship by naturalization, or by marriage to an Italian citizen, and if they are less likely than other immigrants to experience unmet need, then there may be a bias in the other direction.

Another limitation is the cross-sectional nature of the survey. Our cross-sectional data do not allow for a proper measurement of health status and health access change over time. With these data, it is not possible to verify if immigrants' health deteriorates with duration spent in Italy, and if their need for medical care increases consequently. In particular, it is not possible to verify if immigrants develop severe chronic illnesses because they lack adequate access to preventive health care services, or to study other more complex aspects of health selection. Finally, although our data provide information about immigrant origins and ages at arrival, the heterogeneity across these variables does not allow us to measure the links between unmet need for medical care and membership of different immigration cohorts.

Conclusion

This study has revealed the high vulnerability of immigrants in Italy, and the urgent need to develop more effective policies if the goal of health for all is to be achieved. Culturally-sensitive interventions should be adopted to promote knowledge about the right to health, in particular among irregular immigrants. These policies must pay attention to differences between men and women, and in the case of irregular immigrants with chronic illness, may need to target men. Interventions addressing the difficult and health-impairing environments in which irregular immigrants often live and work are also required. More general policies should be oriented towards assisting individuals with a high level of self-perceived poverty, and towards expanding availability of health services in the central and southern regions. Finally, more detailed studies on the most vulnerable groups of immigrants are necessary. These include irregular or regular immigrants (especially asylum seekers and refugees) who do not have access to medical care (neither general practitioner nor specialist consultations) and do not have enough economic resources to buy medications at full price in pharmacies.

"Compliance with Ethical Standards"

Author A declares that she has no conflict of interest. Author B declares that she has no conflict of interest. Author C declares that he has no conflict of interest.

This article does not contain any studies with human participants or animals performed by any of the authors.

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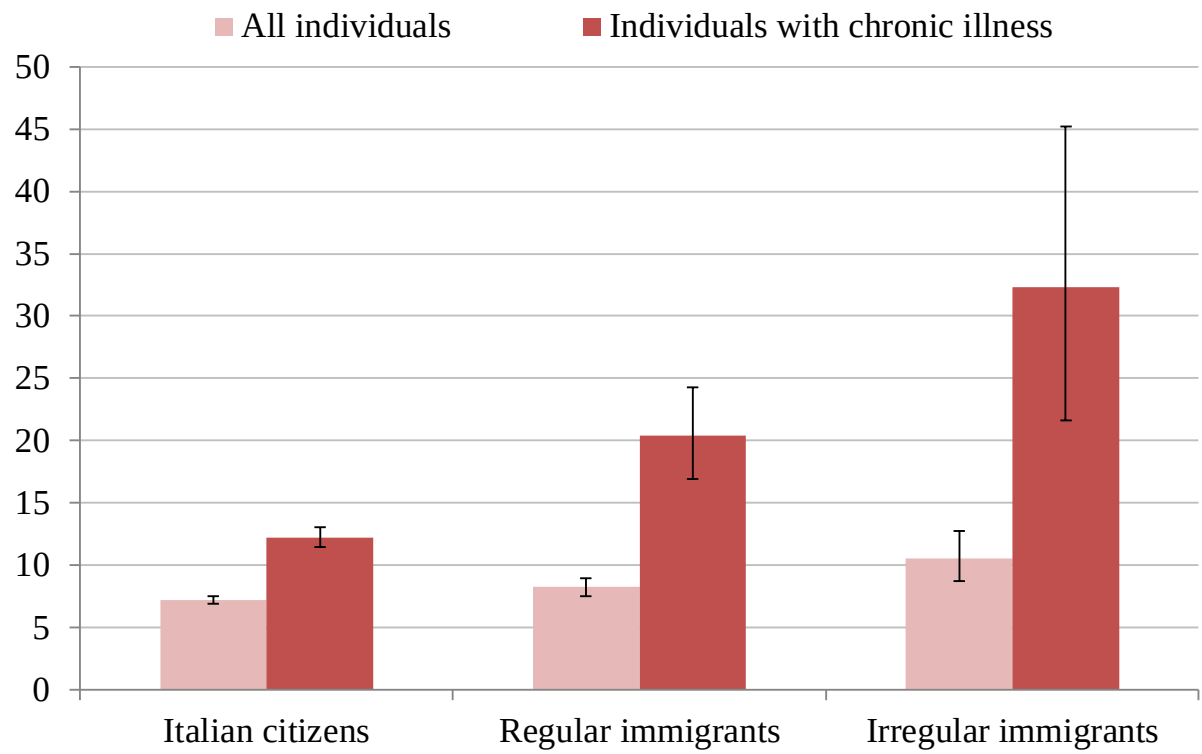
Figure 1 Percentage of individuals who have experienced unmet need for medical care during the last 12 months



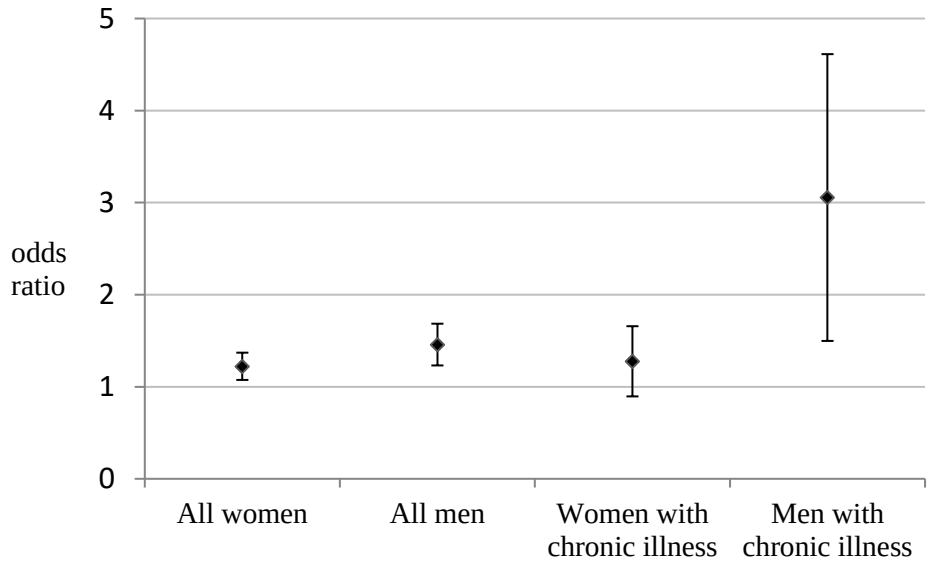
Note: The figure shows estimated percentages with 95% confidence intervals, where the estimation uses survey weights to account for survey design and unit non-response. Source: Authors' sample based on Istat (2009a) "Income and Living Conditions" survey (SILC) and Istat (2009b) "Survey of Income and Living Conditions of households with foreigners".

Table 1 Results of the logit models of unmet medical needs among all individuals, and among only those who reported chronic illnesses

	All individuals		Individuals with chronic illness	
	Odds ratio	**Std. Err.**	**Odds ratio**	**Std. Err.**
Legal status (ref. Italians)				
Regular immigrants	1.27***	0.06	1.37**	0.15
Irregular immigrants	1.59***	0.14	2.52***	0.59
Self–assessed health (ref. very good)				
Good	1.85***	0.13	1.45	0.48
Fair	4.88***	0.36	3.06***	0.99
Bad	7.04***	0.60	3.68***	1.20
Very bad	7.93***	0.90	4.41***	1.48
Position in the labor market (ref. employed)				
Self-employed	1.00	0.07	1.04	0.15
Unemployed	0.96	0.06	0.91	0.13
Inactive	0.81***	0.04	0.67***	0.07
Self-assessed poverty (ref. making ends meet with great difficulty)				
With difficulty	0.53***	0.02	0.50***	0.04
With some difficulty	0.28***	0.01	0.26***	0.02
Fairly easily	0.18***	0.01	0.16***	0.02
Easily	0.12***	0.02	0.08***	0.03
Very easily	0.15***	0.05	0.25**	0.11
Highest ISCED level attained (ref. up to lower secondary education)				
Secondary	1.00	0.04	1.01	0.09
Post-secondary	1.20***	0.07	1.07	0.11
Region (ref. North)				
Centre	1.30***	0.06	1.25**	0.11
South	1.71***	0.07	1.89***	0.14
Female	1.26***	0.05	1.41***	0.09
Age	1.04***	0.01	1.04**	0.01
Age squared	0.9996***	0.00006	0.9996***	0.00012
Number of observations	52,940		10,147	

Note: *** p-value<0.001; ** p-value<0.01; * p-value<0.05. Source: author's analysis based on Istat (2009a) and Istat (2009b).

Figure 2 Comparison of conditional odds ratios for the risk of unmet need, irregular versus regular immigrants



Note: The figure shows the results of the same comparison (conditional odds of unmet need for irregular immigrants as compared to regular immigrants) from four separate models, one for each subpopulation (as specified on the x-axis), where each model excludes Italians, but includes the same controls as Table 1. Source: author's analysis based on Istat (2009a) and Istat (2009b).