Ann Ist Super Sanità 2016 | Vol. 52, No. 3: 424-427
DOI: 10.4415/ANN_16_03_14

Quality of life in refugees and asylum seekers in Italy: a pilot study

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Abstract
Interest in measuring the Health Related Quality of Life (HRQoL) of the immigrants increased in recent years in Italy as in other countries. Our purpose was to evaluate the HRQoL of refugees welcomed in Tuscany using the SF-36 questionnaire. We collected 114 questionnaires from 2011 to 2015. Our samples was constituted by 98 males and 16 females, coming from different regions of the world; the mean age was 27.4. Statistical analysis showed that gender, length of stay and educational qualification are not associated with a poorer HRQoL. Instead, elderly refugees showed lower scores; refugees from African region reported a better HRQoL than the others, and there are also differences between refugees welcomed in different cities of Tuscany. Our purpose is to continue this study enlarging the sample size and the geographical coverage, in order to have a more interesting description of the health perception of refugees welcomed in Italy.

Key words
- refugees
- quality of life
- public health
- SF-36 Questionnaire

INTRODUCTION

Migration can be defined as "a process of moving, either across an international border, or within a State. Encompassing any kind of movement of people, whatever its length, composition and causes; it includes refugees, displaced persons, uprooted people, and economic migrants" [1]. Over 300 000 refugees and migrants have crossed the Mediterranean in 2015, with an estimated 3000 dead or missing [2]. At the end of 2014, there were 19.5 million refugees worldwide, 86% of whom were in poorer countries, and 38.2 million people were internally displaced [3].

Population census carried out in 2011 showed that immigrants with a permanent right to stay in Italy are almost 5 million, representing the 8.1% of resident population. Economic and social crisis of our country has debunked the dynamics of the migratory flow, however the trend is constantly increasing [4].

The most interesting phenomenon is, however, the emergency connected to the refugees, who arrive in Italy, escaping from war, violence and extreme poverty. This phenomenon became important in 2011, with a peak of 64 000 persons coming from the sea and landed in Lampedusa, or in other Sicilian coasts, which asked for international protection. In 2014 this phenomenon reached big dimensions, because of the political instability of South countries and Middle East countries, with almost 170 000 refugees coming from 77 countries. All Italian Regions were involved in welcoming, especially Sicily which accepted 22% of the refugees, Lazio 13%, Puglia and Lombardia 9%, collecting 66 000 accepted persons [5].

Tuscany is one of the regions with the higher percentage of foreigners in Italy (9.1%), preceded only by Emilia Romagna (10.5%), Umbria (10.4%), Lombardy (10.0%) and Veneto (9.8%).

The distribution of foreigners by country of origin shows that they come especially from Albania (22.3% males; 16.9% females), Romania (18.8% males; 23.1% females), China (9.2% males; 7.7% females) and Morocco (9.6% males; 7.7% females) [6].

Interest in measuring the aspects of health most closely related to quality of life, usually known as health-related quality of life (HRQoL), has increased in recent years in Italy as in other countries [7, 8]. Other studies tried to analyze the quality of life of the immigrants, often using other questionnaires as a tool to measure it [9-12]. Moreover, in Italy there are few studies which analyze health of the refugees, and they focused especially on the aspect of the infectious diseases [13]; the aim of this study is therefore the evaluation of the quality of life of refugees and asylum seekers welcomed in Tuscany. According to the Italian Law asylum seekers are people who have been persecuted or fear to suffer individual persecution because of their race, their religion, their nationality, their membership to a particular social group or their political opinions. They can apply for asylum in our country presenting an application for the recognition of refugee status. Refugees are people who obtained the recognition of refugee status.

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MATERIALS AND METHODS

Study design

We conducted a cross-sectional study, with analytical component, from July 2011 to February 2015, using the Short-Form Questionnaire (SF-36 Italian version) to evaluate the perception of the health of the immigrants [7]. Among the so-called generic measures, the 36-Item Short Form Health Survey (SF-36) is known for its comprehensiveness, brevity, and high standards of reliability and validity [8-10].

The questionnaire SF36 was created in the USA, in the mid-80s and was then translated and culturally adapted in early 1991, in the countries participating to the project "International Quality of Life Assessment" (IQOLA).

It is a generic questionnaire on quality of life, made up of 36 items and 8 scales Physical Activity (PA); Physical Role (PR); Physical Pain (PP); General Health (GH); Vitality (VT); Social Activities (SA); Emotional Role (ER); Mental Health (MH).

The questionnaire has been designed to provide, through the scores, a profile which let us to understand the differences in the mental and physical health status of the population.

The score for each scale ranges from 0 to 100: a high score implies a better quality of life. The scales PA, PR, PP, SA and ER define the state of health as the absence of limitations or disabilities. In these scales the maximum possible score of 100 is reached when there are no limitations or disabilities. Scales GH, VT, MH are bipolar and span a much broader range of positive and negative health conditions. In these scales the score of 100 is reached when the subjects report positive health conditions and consider their health very favorably [14].

We decided to include in our study the asylum seekers and refugees with the legal age, accommodated in facilities managed by Arci Regional Tuscan Committee, sited in the territories of Siena, Arezzo, Florence, Prato, Lucca, Viareggio, Cecina and Pontedera, and funded by the Ministry of Interior through the project System of Protection for Asylum Asylum and Refugees (SPRAR).

We collected information from the SF-36, but also information about age, sex, weight, height, smoking, education level, country of origin, date of admission in the project, project location. Questionnaires were administered in three ways: directly, through an interview, or using an interpreter to help who had and insufficient language proficiency; the languages used to administer the questionnaires were: Arabic, Farsi, French, English, Italian, Russian, Spanish and Turkish.

Data managing

A code has been assigned to each questionnaire in order to ensure the anonymity of the compiler.

The questionnaires were processed and collected in a single database containing the results of the demographic variables and the results of the questionnaire SF-36. We decided to divide our population in three groups calculating the 33rd and the 66th percentile: in the first group composed by persons from 18 to 23 there were 39 persons, in the second group composed by persons from 24 to 30 there were 40 persons, in the third group composed by persons over 30 years old there were 35 persons. The final score of each scale of the questionnaire SF-36, has been obtained using Profisalute, a spreadsheet made by the Laboratory of Planning and Organization of Health Services of the University of Siena [15].

Data analysis

From the answers percentages, means and medians have been extrapolated for the creation of graphs and tables. The relationship of socio-demographic variables with outcomes (eight domains) has been assessed using the Mann-Whitney test for dichotomous variables; Kruskal-Wallis test for variables with more than two categories and Spearman correlation for continuous variables. The data from the questionnaires were organized and processed by software Stata® SE, version 12.1 (StataCorp, College Station, Texas, USA). The level of significance was set at $p < 0.05$.

RESULTS

The project SPRAR in Tuscany included 200 refugees and asylum seekers, but 32 were excluded from our study because were minors, and 54 refused to participate, so we collected 114 questionnaires from 2011 to 2015. Our sample was constituted by 98 males (85.96%) and 16 females (14.04%). The younger was 18 years old, the older 57, and the mean age was 27.4 (standard deviation 7.04). The refugees and asylum seekers came from 25 countries (Afghanistan, Albania, Armenia, Côte D'Ivoire, Ethiopia, Gambia, Ghana, India, Iraq, Kenia, Kossovo, Kurdistan (Iraq), Kurdistan (Turkey), Mali, Nigeria, Pakistan, Somalia, Sudan, Syria, Guinea, Senegal, Congo, Cameroon, Iran, Guinea Bissau, Eritrea), so we decided to group them according to the Definition of Region Groupings furnished by WHO [16]: African region (43.86% of them), European region (19.30% of them), Eastern Mediterranean region (36.84% of them).

The 14.91% of the participants were illiterate, 45.61% had a low education level, 39.47% a medium-high education level (diploma or graduation); 32.46% were not smoker, 53.51% were smoker, 14.04% were ex smoker.

Twentyfive of them (21.93%) were welcomed in Florence, 19 (16.67%) in Prato, 9 (7.89%) in Pontedera, 8 (7.02%) in Cecina, 8 (7.02%) in Viareggio, 8 (7.02%) in Lucca, 17 (14.91%) in Arezzo, 20 (17.54%) in Siena.

Kruskal-Wallis test shows significant differences due to language in Physical Activity ($p = 0.04$) and Social Activity ($p = 0.01$). Mann Whitney test shows significant differences in the scales Physical Role ($p = 0.001$), Physical Pain ($p = 0.001$) and General Health ($p = 0.03$), due to the age. Refugees and asylum seekers from 18 to 23 years have the best results in Physical Role (median 100); Physical Pain (median 84); General Health (median 77); contrariwise the worst results are in the group with an age > 30 years: PR median 50; PP median 62; GH median 65.

There are significant differences also in the scales Physical Pain ($p = 0.01$), General Health ($p = 0.02$) and Vitality ($p < 0.01$) due to the stay in one of the 8 cities of Tuscany. Refugees and asylum seekers in Cecina have the worst performance in Vitality (median 25); those in

Firenze have the best performance in PP (median 84), those in Viareggio have the best performances in General Health (median 84.5).

The provenience from a particular WHO region is instead a significant variable in the scales Physical Activity (p = 0.03) and Social Activity (p = 0.04). Refugees and asylum seekers of the African Region have the best results in Physical Activity (median 100) and Social Activity (median 87.5). *Table 1* resumes the SF-36 scores influenced by significant variables.

DISCUSSION

Data show that age represents an influencing variable: in fact persons older than 30 years have the worst results in three scales (PR, PP, GH). This is in line with another study where young participants were found to be physically healthier [17]. As Daher, *et al.* suggest, this may be explained by the fact that younger participants experience lower morbidity due to their ability to better adapt to new environmental conditions [18].

In our study gender, length of stay and educational qualification have not represented factors influencing the scores of the SF-36. A study made by L. Gargiulo, *et al.* reported instead that persons with low education tend to have worst health conditions [19]. Likewise, Pahwa, *et al.* reported that depressive symptoms seem to be more common among immigrant women in Canada, as well as among people with low levels of education, while mental distress seems to be less common among immigrants with an intermediate length of stay [20]. Moreover, a Swedish study showed that Iranian women immigrants with a shorter time of residence in Sweden had an impaired vitality compared to Iranian women in Iran, which agreed in part with Bentham's theory [21, 22]. As Bentham said, in areas with good medical services and best conditions there is a higher prevalence of less healthy migrant population, because migrants have a high prevalence of diseases, which might be the real reason for them to migrate in these areas. A study conducted on Chinese immigrants in New York showed that women were more likely to report poor mental health, poor physical health, and limited activity days than men [11].

Several European studies have also found that being male is a predictor for better physical and mental health. Among women high social support is a predictor for better physical and mental health [17].

The differences in health perception among refugees welcomed in different cities could be explained by the particular organization of single facilities. The asylum seekers and refugees are welcomed in small buildings composed by apartments that could welcome four or five people with all the essential services of everyday life. Particular attention is given to the families that are designed to self-contained accommodation. This scheme is almost identical in all regional offices, with the exception of Florence where guests are welcomed in a big building, called "Pieragnoli Villa", where there are 55 persons and there is a central canteen. Although the discomfort bound to the central canteen and the particular localization of the structure, far from the city, hosts in Florence have good scores in several scales and the best in Physical Pain.

Arci Tuscany tries to furnish to everyone the instruments to find a job, counseling and legal guidance, support to housing, and other services such as literacy classes, school placement and cultural linguistic mediation and a specific psychological or psychiatric support. This support is necessary because a study conducted in London found that approximately 50% of asylum seekers and refugees suffer from depression, and 14% of these show psychotic symptoms [23].

Refugees coming from the African Region have the best results in Physical Activity and Social Activity. This result is in contrast with a study conducted by Hollander, *et al.* which showed that refugee women from low-income countries seem to be at special risk for mental ill health [24]; probably the higher percentage of males in our study explains this difference.

Language influences Physical Activity and Social Activity. Salinero-Fort, *et al.* founded that there were not statistically significant differences between Latin American-born immigrants settled in Spain and Spanish-born residents. The possible explanation could be that immigrants in their sample share the same language (Spanish) with the Spanish-born participants, which could be a protective factor throughout the integration process [12].

The main limit of our study has been the exiguous number of collected questionnaires. This limit is due to the particular dynamics of the welcoming structures where there are constant new arrivals and departures: when they obtain refugee status, guests generally leave the structure to take an independent course. So the total number of users welcomed in the time frame of our study is rather difficult to accurately quantify. The low percentage of women in our study is not a true limit: in fact the subdivision by gender in the structures is decided by the Ministry, but we do not know the criteria used to do that. Another limit is the way used to administer

Table 1
Main variables influencing SF-36 scores of refugees

Influenced scale	Variable	Category	Scores (medians)
Physical Role (PR) (p=0.001)	Age	18-23 years old	PR 100 PP 84 GH 77
Physical Pain (PP) (p=0.001)			
General Health (GH) (p=0.03)		> 30 years old	PR 50 PP 62 GH 65
Physical Pain (PP) (p=0.01)	City	Firenze	→ PP 84
General Health (GH) (p=0.02)		Viareggio	→ GH 84.5
Vitality (VT) (p<0.01)		Cecina	→ VT 25
Physical Activity (p=0.03)	Native Region	African Region	PA 100
Social Activity (p=0.04)			SA 87.5

the questionnaires because in some cases a linguistic mediation has been necessary.

CONCLUSIONS

Our study shows that gender, length of stay and educational qualification are not associated with a poorer health-related quality of life among refugees welcomed in Italy; however, the effect varies with age, country of provenience, language and with the city where they are welcomed. Elderly refugee showed low scores in three dimensions of the SF-36. Refugees from African region reported a better HRQoL than the others, which may be due to a different perception of health. Language influences the scores of some scales because it is a fundamental part of the racial integration process. Differences in the scores of refugees welcomed in different cities are due to the specific internal organization of each structure. This is a pilot study, therefore our purpose is to continue this study enlarging more and more the sample size and the geographical coverage, in order to have a higher and more interesting description of the health perception of refugees welcomed in Italy.

Conflict of interest statement

None to declare.

Received on 23 December 2015.
Accepted on 20 April 2016.

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