

# **Ethical and public health concerns based on the retrospective analysis of referrals for diagnostic parasitology of immigrants and autochthonous population in Lampedusa island (Italy)**

Livia Bellina<sup>1</sup>, Marcella Maugeri<sup>1</sup> and Eduardo Missoni<sup>2§</sup>

<sup>1</sup>Azienda Sanitaria Locale 6, Regione Sicilia, Via G. Cusmano 24, 90141 Palermo, Italy

<sup>2</sup>Centre for Research on Health and Social Care Management, CER GAS, Università Commerciale Luigi Bocconi, via Roentgen 1, 20136 Milano, Italy

§Corresponding author

## **Objectives:**

Based on the cases referred to the Pathology Laboratory, the paper explores the incidence of parasitic diseases in the immigrant and autochthonous population of the Italian Island of Lampedusa, and examines possible ethical and public health concerns related to the results.

## **Methods:**

The study retrospectively reviews the parasitological diagnosis made on blood, urine and stool samples of all cases referred to the sole clinical laboratory of Lampedusa Island, during the period from January 2008 to May 2009. Separate statistics were built for indigenous and immigrant population.

## **Results:**

Over a total of about 7000 regular residents of Lampedusa Island, 3.928 persons were referred to the laboratory for diagnostic parasitology during the observation period. Out of these, 3600 blood smears, 3700 urine sediments and 111 stool samples were examined with following results. In 5 cases infection with *Giardia lamblia* was diagnosed, and in 45 cases *Ascaris lumbricoides* eggs and 29 cases of other helminths were found in stool samples. No parasitological findings were reported from the observation of blood smears or urine sediment.

In contrast, over the total declared number of 40.140 immigrants disembarked on Lampedusa (35.540 in 2008 and 4.600 to may 2009) and hosted in the temporary camps over the observed period, only 18 were referred to the laboratory for further diagnostic investigation. Out of these, one case of *Malaria falciparum* was diagnosed through blood examinations, one case of *Schistosoma haematobium* was found in urine, while stool examinations resulted in one case of *Entamoeba histolytica*, 3 of *Giardia lamblia* and a constant presence of a variety of helminthic infections.

## **Conclusions:**

The high disproportion between cases referred from the indigenous population and those belonging to the immigrant population highlights the scarce attention given to the latter. The high proportion of confirmed cases of parasitic infection shows the relevance of these diseases among the immigrant population and elicits concerns

about the potential risk of the emergence or the increased incidence of communicable diseases in the island (especially for those with an oral-faecal route of transmission). Concerns are raised both from an obvious public health perspective, and from an ethical point of view, i.e. in relation with the right to health of immigrant population whose access to care is limited, with a call for more attentive screening and health care provision to immigrant population, which current immigration policies and official attitude do not favor.