

Bridging gaps in migrant health competencies for infectious and tropical diseases specialists: the experience of the University of Bari from Lampedusa to Apulian Ghettos

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Migrants and refugees often face significant barriers in accessing healthcare, including linguistic, cultural, and systemic challenges. These obstacles highlight the urgent need for healthcare professionals trained in equitable and culturally sensitive care, as emphasized by the WHO's Global Competency Standards for Health Workers.¹ Despite Italy's role as a major transit and destination country, migrant health remains underrepresented in both medical school curricula and postgraduate training. Essential competencies in this field are typically acquired through sporadic, elective activities, often driven by individual initiative rather than through structured educational frameworks. This gap is particularly evident in Infectious and Tropical Diseases specialization programs, where formal training on migrant health is still lacking. To address this gap, the University of Bari's Specialization Program in Infectious and Tropical Diseases has developed—and integrated in the 4-years standard curriculum—a comprehensive Migrant Health Training Portfolio, that integrates clinical training, public health practice, and research, ensuring that future specialists acquire cultural competences, policy awareness, and the ability to navigate healthcare disparities in diverse and resource-limited environments. A distinctive feature of the Portfolio is its real-world trainings in two key migration contexts: Lampedusa, Europe's frontline for migrants' arrivals by sea, and the Apulia Ghettos, home to thousands of migrant workers in informal settlements, as summarized in [Box 1](#).

In Lampedusa, residents participate in a one-month clinical rotation in partnership with the Italian Ministry of Health (USMAF-SASN), gaining first-hand experience in emergency medical response, infectious disease screening, and cross-border health regulations implementation. Here, residents operate in high-pressure settings, where sudden surges in migrant arrivals demand rapid assessment and multidisciplinary coordination with different actors including UNHCR,

IOM, EUAA. This initiative, recognized by the WHO's Dashboard on Global Experiences in Refugee and Migrant Health² provides an immersive, real-world training experience that enhances both clinical expertise, the ability to deliver patient-centered, equitable healthcare resources-limited settings but also trains empathy. The first medical contact is not just a preventive/clinical act but a moment of profound humanity, as many migrants arrive after treacherous journeys, often dehydrated, traumatized, or suffering from neglected health conditions.

In Apulia, where many migrants work in exploitative labor conditions,³ the University runs a mobile clinic program in collaboration with Doctors with Africa CUAMM. This initiative provides primary healthcare, infectious disease management, ensuring access to medical care for otherwise marginalized populations. Residents engage in epidemiological surveillance of diseases like malaria, zoonoses, and AMR, while also improving sanitation, vaccination, and treatment access. Recognized as a best practice by the WHO,⁴ this initiative merges clinical medicine with public health interventions, reinforcing the critical role of community-based healthcare in tackling health inequities.

As the WHO continues to advocate for standardized migrant health training, this program serves as a scalable model for other academic institutions seeking to integrate real-world migration health competencies into their curricula. The intersection of infectious diseases and migration demands a new generation of clinicians capable of navigating complex clinical, social, and policy-driven landscape. University of Bari's specialization program in Infectious Disease and Tropical Medicine is a step forward in bridging these gaps, preparing physicians to advance health equity with expertise, empathy, innovation, and a deep understanding of the emotional determinants of health.⁵



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Box 1.


Focus on real-world trainings

Lampedusa Project: Frontline Medical Training at Europe's Gateway

 **Location:** Lampedusa, a small Mediterranean island (20 km²), a key entry point for migrants.

 **Start Date:** 2022 (ongoing).

 **Total Medical Visits:** 170,000.

 **Partners:** Italian Ministry of Health (USMAF-SASN Sicily, Lampedusa office).

◇ **Objective:** Provide hands-on training in emergency refugees and migrants' health response.

◇ **Key Activities:**


✓ **Medical screening and urgent care** for newly arrived migrants.


✓ **Application of cross-border health regulations** (International Health Regulations-IHR).


✓ **Crisis management in resource-limited settings**, collaborating with **Coast Guard, UNHCR, IOM, EUAA**, and local health authorities.


WHO Recognition: Featured in the **WHO's Dashboard on Global Experiences in Refugee and Migrant Health**, enhancing clinical and humanitarian training.

Apulian Ghettos Project: Mobile Clinics and Public Health Interventions

 **Location:** Informal settlements in Foggia province, hosting thousands of migrant workers.

 **Start Date:** 2017 (ongoing).

 **Total Medical Visits:** 130,000.

 **Partners:** Regione Puglia, Doctors with Africa CUAMM.

◇ **Objective:** Ensure healthcare access for marginalized migrant workers and train residents in community-based medicine.

◇ **Key Activities:**

✓ **Primary healthcare and infectious disease management** (TB, STIs, parasitic diseases).

✓ **Health promotion and community engagement** for migrants' health.

✓ **Disease surveillance and epidemiological research** to inform policy and public health interventions.

WHO Recognition: Identified as a **best practice in migrant health training**, combining clinical care, epidemiology, and policy advocacy.

Contributors

Francesco Di Gennaro and Annalisa Saracino contributed to the conceptualization, drafting, and revision of the manuscript. Both authors have accessed and verified the underlying data and approve the final version of the paper.

Declaration of interests

The authors declare no competing interests.

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