



ALMA MATER STUDIORUM
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Systematic active tuberculosis screening in asylum seekers in Emilia Romagna Region, Italy



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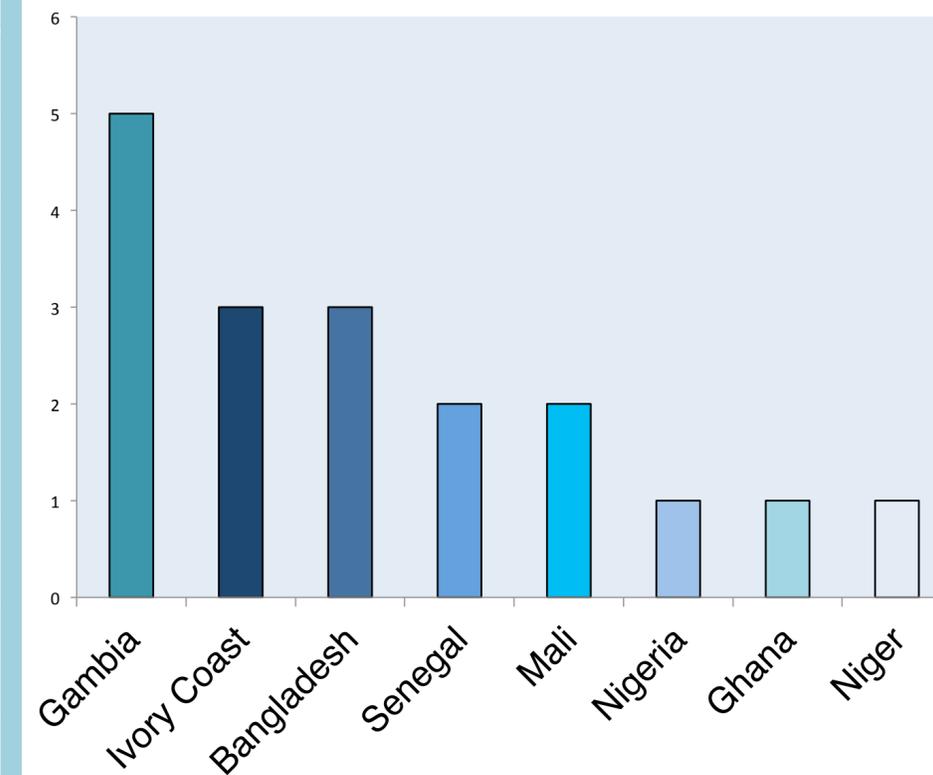
Background: Different screening algorithms for tuberculosis (TB) have been proposed for migrants arriving from high incidence countries to low incidence ones. In Italy there is no national guideline defining how to screen migrants for active TB, therefore different approaches have been adopted by the various Regions. Results of systematic TB screening among asylum seekers hosted at the Emilia Romagna Regional reception center (hub) are reported.

Material and methods: Active TB screening through symptoms screening and chest X-ray (CXR), taken irrespective of symptoms, was carried out for all registered asylum seekers within three days after arrival at the regional hub. CXRs were taken inside the hub, where a digital X-ray equipment had been installed. In case of TB suggestive symptoms and/or abnormal CXR, respiratory samples for smear microscopy, Xpert MTB/RIF and culture were collected. Results of TB screening between August 2014 and July 2015 are presented.

Results:

TB screening results (Aug 2014-Jul 2015)	
Asylum seekers screened for TB	3,366
Asylum seekers identified with TB	18
M:F	18
Mean age in years [range]	25 [17-38]
PTB/EPTB	17/1
Bacteriologically confirmed cases	12/18 (66%)
Asymptomatic TB cases	6/18 (33%)
Prevalence of active TB	535/100,000 (95%CI 317-844)
Number Need to Screen (NNS)	187

TB cases country of origin



Conclusions: A high prevalence of active TB among screened asylum seekers has been detected through combined symptoms and radiological screening. The high proportion of asymptomatic cases (33%) confirms the higher sensitivity of CXR screening compared to patient-reported symptoms screening alone. Early case identification allows timely initiation of treatment and minimizes the risk of spread of the disease among migrants. It is essential to continue monitoring TB screening results and share all Italian hubs' findings to identify the most effective screening approach for early identification of TB among migrants.