A new strategy for screening infectious diseases amongst migrants: the STRADA study

Martin Duracinsky (1;2), Frédérique Thonon (1), Olivia Rousset (1), Sabrina Lakhdari (1) France Lert (3), Christophe Lalanne (1), David Zucman (4), Svetlane Dimi (4) Philippe Sogni (5), Thanh Leluong (6), Olivier Joseph (6), Françoise Roudot-Thoraval (7), Ingrid Normand (6), Olivier Chassany (1;8)

1) EA 7334 REMES, Patient-Centered Outcomes Research, Université Paris-Diderot, Sorbonne Paris Cite, Paris, France, 2) AP-HP, Hôpital Bicêtre Département de médecine interne et maladies infectieuses, Le Kremlin-Bicêtre, France, 3) ANRS, Paris, France, 4) Hôpital Foch, Hépatologie, Suresnes, France, 5) Hôpital Cochin, Paris, France, 6) Office Français de l'Immigration et de l'Intégration, Paris, France, 7) Hôpital Henri Mondor, Hépatologie, Créteil, France, 8) Université Paris Diderot, Paris Sorbonne Cité, Paris, France

Background: High prevalence of infectious diseases such as Tuberculosis (TB), HIV, Hepatitis B (HBV) and Hepatitis C (HCV) amongst migrants

TB:

- 4536 cases notified in France in 2015; 2/3 of them are amongst migrants.
- All legal migrants undergo a mandatory medical check-up that includes a tuberculosis screening by chest X-ray
- An electronic questionnaire has been developed in Switzerland to screen tuberculosis amongst asylum seekers (TB screen). It could detect active tuberculosis and replace systematic chest X-rays.

HIV, HBV, HCV:

- Almost half the HIV new diagnoses in France concern migrants.
- Prevalence of hepatitises amongst migrants coming from a highly endemic country are 4,01% (HCV) and 10% (HBV)
- The mandatory medical visit is an opportunity to offer rapid HIV and hepatitis testing.
- A screening questionnaire for risk factors (TROD screen) has been developed and could help target the screening offered.

Objective: To evaluate the efficacy of a screening strategy for infectious diseases based on risk-factor questionnaires amongst migrants during the medical check-up.

TB: To evaluate the performance of a risk-factors based questionnaire compared with the chest X-ray to screen for TB amongst migrants.



HIV, HBV, HCV: To validate a risk-factor based questionnaire (TROD screen) for the three infections and demonstrate its superiority to target screening compared with a screening based on the prevalence in the country of origin.



Methods: Prospective, multicenter, observational study.

HIV, HBV, HCV:

- Introduction of a combined rapid testing for HIV, HBV and HCV at OFII during medical check-up
- Phase 1: A risk score will be validated (10,000 participants)
- Phase 2: Its performance will be compared with a screening based on the country of origin (5,000 participants)
- Health economics analysis

Primary results

HIV, HBV, HCV:

- Study started in December 2017; 18 centers recruiting
- 4908 migrants have participated in the study and taken a test
- A sub-study found a good acceptability of those three tests by migrants
- Barriers to inclusion:
 - Language gaps, as health professionals don't feel comfortable offering a test to migrants with a low level of French
 - Organizational problems (ensuring enough staff are available to carry out tests and send to a medical service if necessary)

Conclusion:

- This study will determine the acceptability, performance, utility, costs and impact of a targeted optimized screening strategy for migrants in France.
- The presence of infectious diseases amongst migrants is a major public health issue. STRADA is an innovative initiative that has the potential to improve screening.
- Next steps
 - Developing electronic multilingual tools (application) to help health professionals suggest and explain test to migrants
 - Widening inclusions to other medical services serving migrants







