INCIDENCE OF TUBERCULOSIS INFECTION IN CHILDREN TRAVELLING TO COUNTRIES WITH HIGH PREVALENCE OF TUBERCULOSIS (PRELIMINARY RESULTS).

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Introduction

Children residing in low-incidence countries for tuberculosis (TB) travelling abroad to endemic TB regions for visiting friends and relatives (VFR) are at risk of latent TB infection (LTBI). The identification of the risk factors associated with TB infection would allow us to improve screen programmes pre-post travel.

Aim

To determine the incidence and risk factors associated with LTBI in VFR children travelling to countries with high-incidence of TB.

Results

Until now a total of 264 children were recruited, finally 252 were included for analysis (12 not screened with TST). Median[IQR] age was 5.83 [2.84-9.02] years; 50.8% female; 86.7% were born in Spain; 4.8% were BCG-vaccinated; 41.3%(104/252) travelled to Africa, 36.9%(93/252) to Asia, 20.6%(52/252) to America/ Caribbean, and 1.2%(3/252) to Eastern Europe (figure1). Median[IQR] travel duration was 1.3[1.0-1.8] months. TST was performed at a median[IQR] of 16[7-22] days before date of departure; 4/252 (1.6%;95%CI:0.6-4.2%) were TST positive: 3/252 (1.2%;95%CI:0.4-3.6%) classified as LTBI, and 1/252 (0.4%) catalogued as positive TST due to BCG. Regarding post-travel analysis, TST and/or QFT were performed in 58.5%(145/248) of children at a median[IQR] of 74[53-95] days after returning date, and no LTBI have been detected due to travel itself.

Conclusions

No LTBI cases have been detected after travelling in these preliminary results. However, 3 children with LTBI (1.2%) were diagnosed due to the study itself before the trip. VFR children could be a high-risk group for LTBI susceptible to be screened.

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Materials and methods

A multicentric prospective cohort study is being developed between the years 2017 to 2019, including different health-care levels (4 hospitals and 16 health-primary care centres), of a cohort of VFR children <15-year-old travelling to countries with a TB incidence of >50 cases/ 10^5 inhabitants (4-fold increase to Catalonian TB-incidence). Patients were screened before travelling with a tuberculin skin test (TST), LTBI definition was defined as a the TST conversion and/or a positive QuantiFERON-TB Plus® (QFT) performed after the trip. We collected data of age, gender, country and travel time, BCG vaccination, and passive smoker. Categorical variables were described with frequencies, and quantitative variables with medians and interquartile ranges (IQR). Statistical analysis was carried out through PASW Statistics 23. Ethical approval was obtained from all the participating centres.

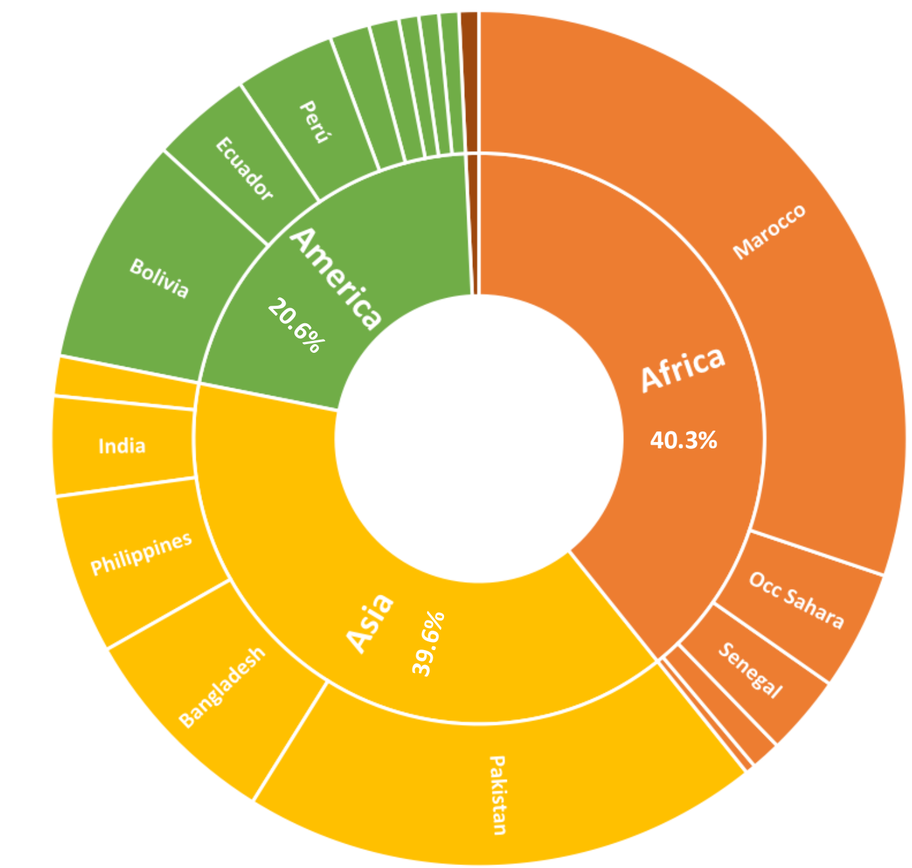

Fig1. Destination countries VFR children