

Infection Tracking in Travellers Using A Mobile App (ITIT) : The Pilot Study

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Background:

Current surveillance of travellers' health is top-down and captures only a small proportion of illness events. We aimed to evaluate the usability and feasibility of the ITIT app for travellers to self-report illness.

Materials and methods:

This pilot study assesses a novel mobile application called Illness Tracking in Travellers (ITIT) that records travel-related symptoms with associated geolocation and weather data. Participants were recruited in three Swiss travel clinics between December 2021 and March 2022. A feedback survey was used to examine app ease of use and detailed feedback from participants, and data from the app was used to examine travel and illness patterns as a proof-of-concept for the larger ITIT study.

Results: 63 participants were recruited from Zürich, Basel, and Geneva, of which 37 completed at least one daily questionnaire. A total of 394 questionnaires were completed in 116 locations in Asia, Africa, the Americas, and Europe, including 6 participants from the Beijing Olympics. 41 % of participants reported at least one illness symptom, 67% of which were respiratory. The post-travel questionnaire showed that 63% of users used the country information tool and accessed outbreak alerts. All participants found the app easy to use and 63% said they would recommend it to others. Several users provided suggestions for improved usability.

Conclusion:

The app fulfilled its function as a research tool linking infection symptoms with geolocation and climate data. Certain improvements including a personalised travel and symptom itinerary will be implemented in the final version of the app for release in April 2022.