

Reasons for hospitalizations, (medical) repatriation and causes of death among Dutch travellers - a retrospective study

Published: 14-09-2015

Last updated: 03-03-2024

The aim of our descriptive study was to quantify the disease burden leading to hospital-based care, repatriation or death in Dutch travelers during their stay in a foreign country, including Europe. The outcome of this study could be...

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	Infections - pathogen unspecified
Study type	Observational non invasive

Summary

ID

NL-OMON21324

Source

Nationaal Trial Register

Brief title

HAZARD study

Condition

- Infections - pathogen unspecified

Synonym

Every health condition is possible. Medical diagnosis is set using the ICD 9 and 10 classification.

Health condition

Elderly, travellers, hospitalization, death, repatriation, ouderen, reizigers, ziekenhuisopname, overlijden, repatriëring

Research involving

Human

Sponsors and support

Primary sponsor: Leiden University Medical Center

Source(s) of monetary or material Support: Travel Clinic, Leiden University Medical Center

Intervention

Outcome measures

Primary outcome

Reason for hospitalization and/or repatriation and death (exacerbation or new illness), stratified per age group, gender and diagnosis.

Secondary outcome

- Type of traveller
- Travel purpose
- Area of travel destination (western industrialised countries, developing countries)
- Co-morbidity
- Medication use
- Country of hospitalization, repatriation or death
- Length of hospital stay
- Types of repatriation used (stratified per destination)
- Mortality

Study description

Background summary

Travellers can experience a variety of health problems during travel. Sometimes hospitalization or even repatriation is needed. Rarely it happens that a traveller dies while

staying abroad. In almost all cases, an alarm center will be contacted for support and arranging administrative issues.

Study objective

The aim of our descriptive study was to quantify the disease burden leading to hospital-based care, repatriation or death in Dutch travelers during their stay in a foreign country, including Europe.

The outcome of this study could be used as background information to support the risk-based pre-travel health advice worldwide, which ideally should not be restricted to tropical diseases alone.

Study design

A retrospective study of health problems in Dutch travelers. Data were collected from the case records of three MACs with an office based in the Netherlands (Eurocross Assistance, Royal Dutch Touring Club [ANWB] and International SOS). We included all pseudonymized case records of all subsequent Dutch travelers who were hospitalized or who died abroad between January 1st, 2010 and December 31st, 2014. We approached the Dutch Ministry of Foreign Affairs (MoFA) to include Dutch nationals who might not appear in the MACs records.

Intervention

No intervention (retrospective case record study)

Contacts

Public

Leiden University Medical Center

Jessica A. Vlot
Albinusdreef 2

Leiden 2333 ZA
The Netherlands
071-5265684

Scientific

Leiden University Medical Center

Jessica A. Vlot
Albinusdreef 2

Leiden 2333 ZA
The Netherlands
071-5265684

Eligibility criteria

Age

Babies and toddlers (28 days-23 months)

Babies and toddlers (28 days-23 months)

Children (2-11 years)

Children (2-11 years)

Adolescents (16-17 years)

Adolescents (16-17 years)

Adolescents (12-15 years)

Adolescents (12-15 years)

Adults (18-64 years)

Adults (18-64 years)

Elderly (65 years and older)

Elderly (65 years and older)

Inclusion criteria

Dutch nationality or residency in the Netherlands

Exclusion criteria

None

Study design

Design

Study phase:	N/A
Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown
Primary purpose:	Other

Recruitment

NL
Recruitment status: Recruitment stopped
Start date (anticipated): 01-02-2015
Enrollment: 77741
Type: Actual

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion
Date: 02-06-2015
Application type: First submission
Review commission: METC Leiden-Den Haag-Delft (Leiden)
metc-ldd@lumc.nl

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL5377
NTR-old	NTR5478

Register

Other

ID

: C15.067 METC Leiden University Medical Center

Study results

Results posted: 18-08-2023

Actual enrolment: 77741

Summary results

"Data was available for 77,741 travelers' incidents: 75,385 medical consultations and 2,356 deaths. Four in five travelers received inpatient care, of which 36% concerned older travelers (65+) who had significantly longer hospital stays. Overall the top three diagnoses were: injuries (29%), infectious diseases (17%), and cardiovascular diseases (17%). Mental illness was reported in nearly 1.5% of the travelers. Incidence proportions were highest in South-Eastern Asia, with enteric infections as most common diagnosis. Injuries and communicable diseases occurred most often in South-Eastern Asia, while non-communicable diseases were mostly reported in South America. One in five travelers who consulted a physician was repatriated back home, mostly on a scheduled flight with or without medical escort.

Cardiovascular diseases and injuries were the leading causes of death.

Conclusions: Not only communicable diseases, but also injuries and chronic diseases (in particular cardiovascular diseases) frequently affected travelers' health while staying abroad and frequently necessitated hospital-based care. This should be addressed during the pre-travel counseling."

First publication

14-04-2022