



The health status of Q-fever patients after long-term follow-up

Introduction

In the Netherlands, 3,368 Q-fever cases from three outbreaks were notified between 2007 en 2009. Previous studies suggest that symptoms can persist for a long period of time, resulting in a reduced quality of life (QoL). The aim of this study is to qualify and quantify the health status of Q-fever patients after long-term follow-up.

Methods

870 Q-fever patients of the 2007 and 2008 outbreaks were mailed a questionnaire 12 to 26 months after the onset of illness. We assessed demographic data and measured health status with the Nijmegen Clinical Screening Instrument (NCSI). The NCSI consists of eight sub-domains of functional impairment, symptoms, and QoL. The NCSI scores of Q-fever patients older than 50 years were compared with patients younger than 50 years, and with norm data from healthy individuals and patients with chronic obstructive pulmonary disease.

Results

The response rate was 65.7%. The long term Health Status of two thirds of Q-fever patients (both younger and older than 50 years) was severely affected for at least one sub-domain. Patients scores were most severely affected on the sub-domains general QoL (44.9%) and fatigue (43.5%). Hospitalization in the acute phase was significantly related to long-term behavioural impairment (OR 2.8, CI 1.5-5.1), poor health related QoL (OR 2.3, CI 1.5-4.0), and subjective symptoms (OR 1.9, CI 1.1-3.6). Lung or heart disease, depression and arthritis significantly affected the long-term health status of Q-fever patients.

Interpretation

Q-fever patients present 12 to 26 months after the onset of illness with severe -clinically relevant- on all measured domains of the Health status: subjective symptoms, functional impairment, and impaired QoL. Especially patients that have been hospitalized and those with chronic co morbidity score worse. More attention is needed for the prevention and treatment of these long-term consequences.

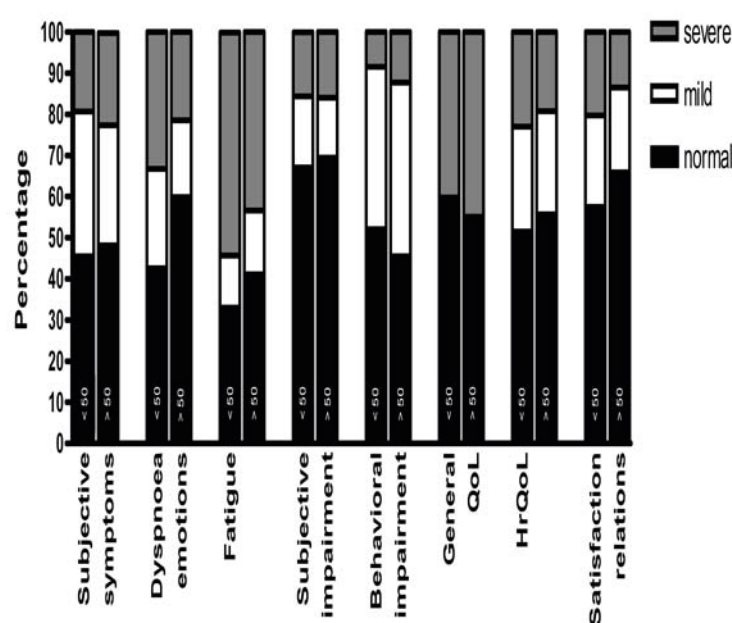


Figure 1. Percentage of normal, mild or severe problems in the 8 sub-domains of the NCSI for Q-fever patients older than 50 years (n= 277) and younger than 50 years of age (N=238).

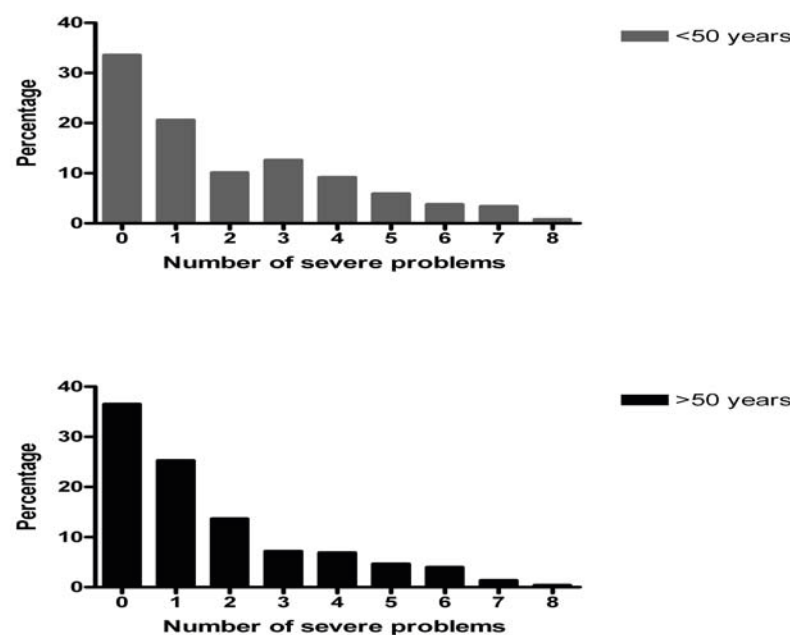


Figure 2. Percentage of Q-fever patients with the number of severely affected domains of the health status

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