The influence of pulse oximetry on decision-making in general practice.

No registrations found.

Ethical review	Not applicable
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON24542

Source
NTR

Brief title
SABEL

Health condition

dyspnoea; pulse oximetry; general practitioner; dyspneu; saturatiemeter; huisarts

Sponsors and support

Primary sponsor: Radboud University Medical Centre Nijmegen
Source(s) of monetary or material Support: Radboud University Medical Centre Nijmegen

Intervention

Outcome measures

Primary outcome

Percentage of change in decisions regarding patient management, including prescription of medication, change in current doses of medication, use of oxygen and referral to the hospital.

Secondary outcome

Level of confidence about the preferred decisions regarding patient management, measured on a scale of one to ten.

Study description

Background summary

Background:

Lately pulse oximetry has become one of the standard diagnostic tools used in primary care. Despite this rapid development, it is still unknown in what way the use of pulse oximetry influences the decisions made by general practioners upon patient management, including prescription of medication, change in current doses of medication, use of oxygen and referral to the hospital. The aim of this empirical research is to provide a clear insight in the role of pulse oximetry in the management of patients with dyspnoea in general practice.

Methods:

A cluster randomized trial based on 10 standardized written case descriptions, executed in a crossover design with 55 general practitioners in the Netherlands. The general practitioners are asked to assess the patient cases twice, with an interval of at least 5 weeks. The cases are presented to them using an online survey. Depending on randomization, the SaO2 value will be visible during the first or the second measurement. For every case, general practitioners have to answer questions about their decisions regarding choice of treatment, including prescription of medication, change in current doses of medication, use of oxygen and referral to the hospital. They are also asked to report their level of confidence about the decisions they made.

Conclusion:

This study will provide new evidence on the influence of pulse oximetry on decision-making by general practitioners concerning their management of patients with dyspnea.

Study objective

Pulse oximetry is a non-invasive method allowing monitoring of the oxygen saturation of a patient. For many years now, it has been used in secondary care with great success. Recently, it is noticed that pulse oximetry is used more often in the general practitioner’s

office. General practitioners are quite satisfied with the use of pulse oximetry and most often they use it to support their decisions in the management of dyspnoeic patients. Though, the exact consequences of the use of pulse oximetry in primary care for patients and society are still unknown. Do general practitioners change their management, including the prescription of drugs, use of oxygen and referral to a hospital, when they use pulse oximetry? The current literature doesn't provide an evidence based answer to these questions. That's why the aim of this empirical research is to provide a clear insight of the role of pulse oximetry in patient management in general practice.

Study design

The first round of assessments of the set of case descriptions by the GPs is followed by a second round of assessments of the same case descriptions at least 5 weeks later.

Intervention

In the intervention condition the study subjects (i.e., general practitioners) are provided with pulse oximetry results (SaO2) when assessing 10 standardised written case descriptions of patients with dyspneu. In the control condition, the general practitioners assess the same case description without having information about the SaO2.

Contacts

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Eligibility criteria

Inclusion criteria

Possession of a pulse oximeter and/or use a pulse oximeter regularly during out of office hours.

Exclusion criteria

Previous involvement in the development of the patient cases used in this research.

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-12-2010
Enrollment:	55
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

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	NL2527
NTR-old	NTR2645
Other	Universitair Medisch Centrum St Radboud, Nijmegen : 1113
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
Schermer T, Leenders J, in 't Veen H, van den Bosch W, Wissink A, Smeele I, Chavannes N. Pulse oximetry in family practice: indications and clinical observations in patients with COPD. Fam Pract 2009 Dec;26(6):524-31.