



PHARMACEUTICAL CARE NETWORK EUROPE

Working Conference 2013 – Abstract

Collaborative pharmaceutical care in research and practice

Title/Name	: Vandael Eline	Phone	: 0479/502305
Institute	: KULeuven, Research Centre for Pharmaceutical Care and Pharmacoeconomics	Fax	:
Street	: Herestraat 49	Skype	:
Postal code + City	: 3000 Leuven		
Country	: Belgium	Email address	: eline.vandael@pharm.kuleuven.be

The above mentioned participant in the PCNE WC 2013 wishes to submit following abstract for a poster or oral communication. If accepted and presented, the abstract will be published in the International Journal of Clinical Pharmacy. Please make sure the abstract is no longer than 350 words, excl. author-details.

Title: Development of decision support systems to manage QT-prolongation in clinical practice: study protocol		
Author(s): Vandael E., Willems R., Vandenberghe J., Foulon V.		
Type of abstract		
Research	Practice development	Practice implementation
Aim of project/study		
The overall aim of this project is to develop algorithms that can be used in clinical practice to prevent Torsades de Pointes and sudden cardiac death related to the use of (combinations of) QT prolonging drugs.		
Method		
The study consists of different parts:		
<ul style="list-style-type: none"> • <u>Pharmaco-epidemiological study</u>: deliver data on the prevalence of the use of (combinations of) QT prolonging drugs in clinical practice. • <u>Medication management</u>: document how physicians and pharmacists currently deal with the risk for QT prolongation. • <u>Clinical studies</u>: demonstrate the QT prolonging effect of the addition of a QT-prolonging drug to medication profiles that already contain a drug with risk on QT-prolongation. • Develop and validate <u>algorithms</u> to support health care professionals in the medication management of QT prolonging drugs; and investigate possibilities for integration of these algorithms in electronic decision support systems. 		

In a pilot study, 600 medication profiles were collected in six psychiatric hospitals in Flanders and these profiles were checked on drug interactions by using an online drug interaction checker. Questionnaires about medication management were sent to all psychiatric hospitals in Flanders.

Result(s)

365 of the 600 patients (60.8%) had a drug interaction in their medication profile. In total, 954 drug interactions were found (568 classified as 'serious' and 25 as 'very serious'). 44 patients (7.3%) had an interaction with an increased risk on QT-prolongation (116 of 954 interactions, 12.3%). The QT-prolonging drugs that were most prescribed were: risperidone, sertraline, olanzapine and quetiapine.

Questionnaires were completed by 12 physicians and 14 pharmacists of 14 psychiatric hospitals. In 5 of the 14 hospitals there is very little attention for drug interactions. 80% of the physicians often ignore an interaction warning. 5 of the 12 physicians admitted that they rarely bother about the risk of QT-prolongation. The answers on questions about the clinical relevance of QT-prolongation were very divergent. These results prove the uncertainty that is left with physicians and pharmacists on the relevance of QT prolonging effects and on how to deal with this risk in clinical practice.

+++ NB: PhD students still pay the early bird fee for their abstract if their abstract is accepted ++++