**The awareness of healthcare professionals on the influence of critical dynamics on the use of medicines (medication safety)**

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Introduction

A study of 2006 showed that 5,6% of all the hospitalizations in the Netherlands were medication related. Of these hospitalizations 46% was potentially avoidable.

The goal of the Global Initiative for Medication Safety (GIMS) Foundation is to minimize health risks originated by the use of medicine.

This study, conducted within the GIMS framework, focuses on two goals.

The main goal is gaining insight in the degree of awareness of professionals and concerned directors (in the medical chain in different countries) regarding the health risks through the use of medicines

The second goal is gaining insight in the policy and law, process of prescribing, dispensing and the guiding of patients with the use of medicines in the different countries.

Methods

This bachelor thesis is made by Negina Nangrahary and Chuck van de Cappelle, two bachelorstudents in Pharmacy at the University of Utrecht, under supervision of Erik Ten Hoff of the board of the Global Initiative of Medication Safety Foundation.

Three healthcare specialists in each of the twenty-six countries in different regions in the world were approached to answer a questionnaire about the influence of the critical dynamics for medication safety in their country. The specialists were questioned about several critical dynamics which included policy and law, diagnosis and prescribing, processes in pharmacy, availability and accessibility of medicines, contact among professionals, culture, religion, war, socioeconomic status, knowledge, education and awareness of critical dynamics.

Results

Twenty-two pharmaceutical healthcare specialists were finally interviewed in twelve different countries. The included countries were Afganistan, Armenia, Ghana, Laos, The Netherlands, South Africa, Australia, Belgium, Iran, Rwanda, United Kingdom and the United States of America.

First of all, technology has a clear positive influence on the medication safety. Strong differences between low and high income countries were noticed. High income countries have advanced ICT technologies in which patients are uniquely identified and medical records are kept. Also they see a clear own professional role on the subject of medication safety.

Also religion and culture have an influence on the medication safety. Especially in rural areas traditional healers play a major role in therapy of patients. If religion plays an important role in the culture, the population for example will not vaccinate themselves.

Education, war, government, culture, religion and economic state of country have a significant impact on availability and access to medicines.

The healthcare specialists have awareness of the influence of the contact with other professionals. A poor contact between healthcare professionals might result in a poorer pharmaceutical therapy for patients.

Conclusion

Based on this research there are large differences found in regulations and legislation, prescription and delivery, availability and access to medicines among the countries studied. Factors such as education, war, government, culture and religion and economic state of a country have a significant impact on both regulating and monitoring these rules. The level of passive awareness among the healthcare specialists was high for nearly all the studied critical dynamics for all the countries. However the level of active awareness (in a way that one sees, or participates actively in, progress) was low in especially low and middle income countries.

This study didn’t provide hard outcomes, but can certainly provide a basis for a follow-up study in the field of global medication safety. Especially firstly in the analysis of the obstructions for increasing the active awareness of healthcare professionals.