

## Book Review

# Pharmaceutical sector in Yemen

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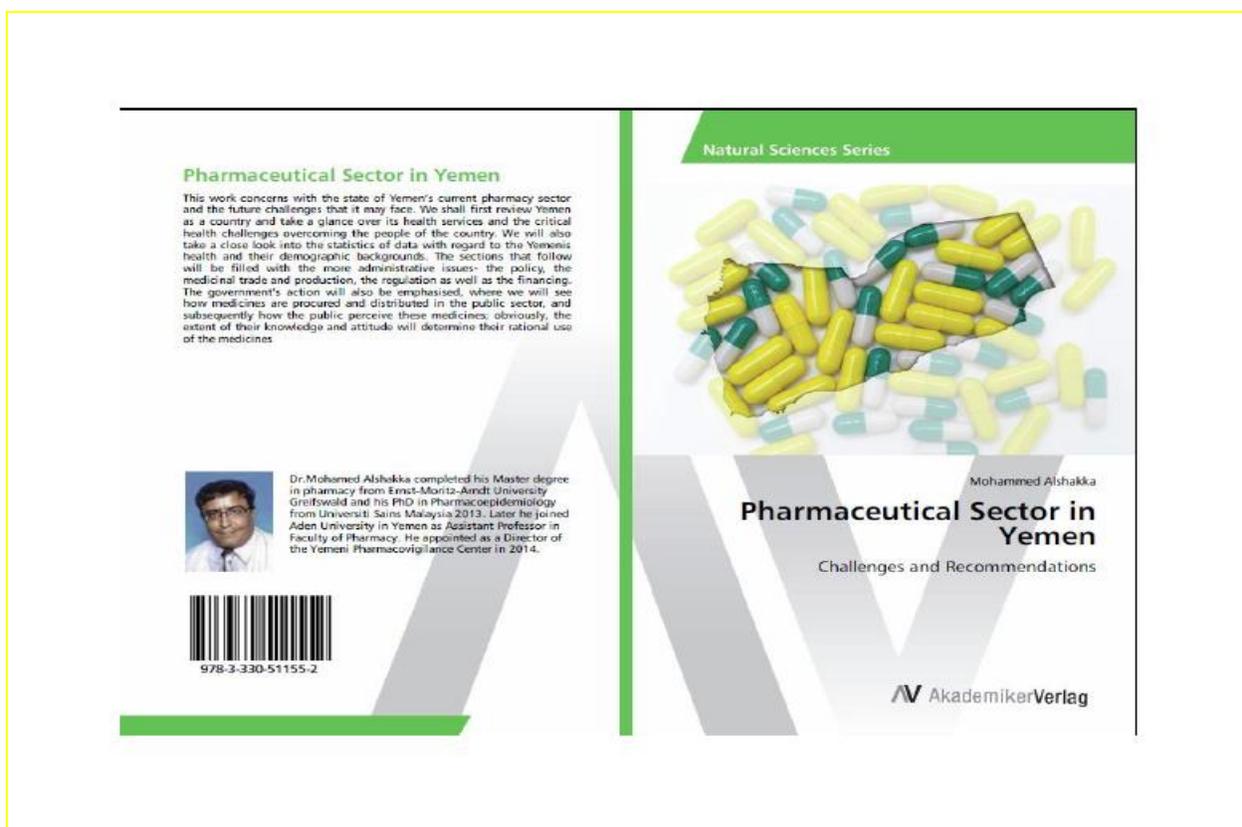
Yemen is a developing country in the Middle East which faces a number of challenges including a prolonged civil war. Prof. Alshakka works at Aden University in the country and has been active in promoting rational use of medicines in the country. He has written extensively about the pharmaceutical sector and use of medicines in Yemen. Recently, he has published a report on the pharmaceutical sector in Yemen.

Yemen faces a number of challenges in the pharmaceutical sector like most other under-resourced developing nations. The book is divided into four chapters. The first chapter deals with Current pharmaceutical situation (services) in Yemen while the focus of the second chapter is on Medicines related problems in Yemen. The third chapter describes challenges and recommendations while the fourth chapter provides an overview of the pharmaceutical industry in the country.

Like most developing nations Yemen suffers from the double whammy of both communicable and non-communicable diseases. At the beginning of the first chapter, the author provides an overview of the health

situation in the country and mentions that the life of a Yemeni who is just beginning is far from promising. The total annual per capita expenditure on health is only USD 60. The authors briefly mentions the effect of conflict on the health sector which may be of particular interest to readers in Nepal, considering that the country has dealt with and recovered from a decade long conflict. Yemen does have a national health policy but there are problems with its implementation. The country has faced a number of economic challenges which has resulted in reduced financing for the health sector.

The book provides a detailed perspective on the historical development of the health and pharmaceutical sector in Yemen. The national list of essential medicines is updated infrequently and the last alignment between the list and the standard treatment guidelines occurred in 2010. The country does not have regulations requiring hospitals to have a medicine/drug and therapeutics committee which creates challenges with regard to rational use of medicines. The country established a pharmacovigilance programme in 2011 but information about the number of



adverse drug reactions (ADRs) and how the reports are processed is lacking.

Among the major medicine related problems in the country are smuggling of medicines, fake drugs, pharmaceutical companies adopting 'different' standards in the developing world, lack of an active national drugs policy, weakness of the local pharmaceutical industry, registering medicines without valid scientific criteria, unregulated distribution of medicines, problems with prescribing and dispensing, improper use of medicines by consumers, problems with ADR monitoring, and medical errors.

Challenges and recommendation to deal with the same have been put forward by the author. Problems with the supply chain from the bottom up have been noted in many

developing nations. Also Yemen like many developing countries suffers from weak regulatory systems and implementation of existing laws is weak.

The author provides an overview of the situation of the pharmaceutical industry in Arab countries including Yemen. Domestic production only meets a small part of the medicines requirement in most Arab countries. In Yemen most of the local requirement is met by imports. The Yemen pharmaceutical company was one of the oldest manufacturers and recently seven national factories have been built in addition. The numbers of and capabilities of the local manufacturers have been described. The author provides a succinct overview of the major challenges facing the Arab pharmaceutical industry also. The book ends

with a comprehensive list of references and materials for further reading.

Language and grammar can be improved at some places in the book and the formatting can also be improved. A greater number of charts and tables can further improve readability. This book will be of interest to all those interested in the pharmaceutical situation in Yemen and the Arab world.

### **AUTHOR'S CONTRIBUTION**

**PRS-** PRS was involved in reading the book and writing the book review.

**SOURCE OF SUPPORT:** Nil

**CONFLICTS OF INTEREST:** The author of the book review has collaborated on many research projects and articles with the author of the book.

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