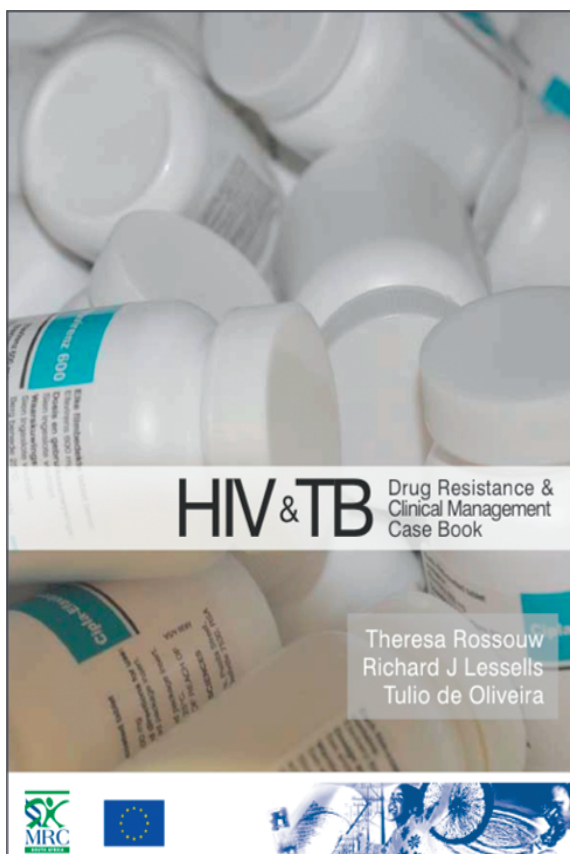




BOOK REVIEW

'HIV & TB Drug Resistance & Clinical Management Case Book'

by T Rossouw, R J Lessells, T de Oliveira. Cape Town: South African Medical Research Council, 2013. ISBN 978-1-920014-91-9.



South Africa (SA) is home to the highest number of HIV-infected people in any country, and has the largest HIV treatment program worldwide, with 2 million patients currently receiving combination antiretroviral therapy (ART). The country also has a massive tuberculosis (TB) epidemic, and TB/HIV co-infection is a common challenge for clinicians. The increasing number of patients who are infected with drug-resistant strains of TB and/or HIV in Southern Africa poses a mounting threat to successful treatment. Drug-resistance testing for patients failing therapy is available at reference laboratories, which contrasts the situation in many countries in sub-Saharan Africa. This provides an important tool to protect the sustained effectiveness of available TB and HIV therapies; however, interpretation of drug resistance reports is complex and expert guidance to clinicians may be required for optimal clinical management.

In this context, the recently published *HIV & TB Drug Resistance & Clinical Management Case Book* by Rossouw, Lessells and de Oliveira, is an important aid to clinicians in SA and beyond, who are managing complex cases of patients with HIV and TB drug resistance. It provides a comprehensive background to the development of drug resistance as well as up-to-date clinical knowledge on how to diagnose and manage

drug-resistant infections. The book uses an instructive case-based learning approach, with 14 HIV and 6 TB cases. After a brief review of technical details, each clinical case is presented in a structured manner. The description of the case is followed by the clinical chart and drug-resistance results. The drug-resistance report is translated into a clear and evidence-based recommendation for clinical management. Lessons from each case are excellently summarised in 'key learning points'. The cases cover diverse and illustrative examples of adult and paediatric patients with therapy failure, thus addressing actual problems that clinicians will deal with in daily practice.

Many of the cases in the book highlight errors in management that contributed to the emergence of drug resistance. These 'preventable' cases of drug resistance provide important lessons; avoiding these mistakes will advance clinical practice and benefit patients. Preventing acquired drug resistance in patients receiving treatment will also have major public health consequences, as these cases are the source of onward transmission of drug resistance to newly infected individuals.

A common feature of the HIV cases is that they used the SATuRN RegaDB drug resistance database to construct a complete clinical chart and resistance report for each patient. This database conveniently summarises all clinical and laboratory information into a clinical chart including treatment history, CD4 counts and viral load results. It also interprets the drug-resistance genotype using the Stanford HIVDB algorithm. The SATuRN information management system provides an excellent example of how bioinformatics tools can be utilised to the benefit of the physician and patient.

In conclusion, this book is an excellent practical compendium of knowledge in the field of HIV and TB drug resistance, set in the highly relevant context of Southern Africa where drug-resistant strains of HIV and TB are increasingly reported. It provides expert guidance in difficult clinical situations and explains the steps to be taken to prevent the emergence and transmission of drug resistance. This book highlights the fact that education and training are fundamental steps in the implementation of technologies such as viral-load and drug-resistance testing, so that they can be used to full advantage.

K C E Sigaloff, MD, PhD

R L Hamers, MD, PhD

Department of Global Health, Academic Medical Center of the University of Amsterdam, Amsterdam Institute for Global Health and Development, Amsterdam, The Netherlands

Conflict of interest. Both authors are clinicians and investigators in the PharmAccess African Studies to Evaluate Resistance (PASER) network established in sub-Saharan Africa to monitor HIV drug resistance.