

## Book review

Tim Halliday and Basiro Davey (editors) *Water and Health in an Overcrowded World*. Oxford, UK: Oxford University Press, 2007. 104pp. Price £18.99 (paperback) ISBN 978019 9237302

This book focuses on three of the Millennium Goals: increasing the availability of safe water, access to sanitation and decreasing child mortality by two-thirds before the year 2015. Safe water and access to sanitation are major inputs to achieve the reduction in child mortality. These are giant tasks in themselves. In seventeen French-speaking West African countries, 1000 wells and 3000 latrines need to be constructed every day to achieve the water and sanitation goals<sup>(1)</sup>. An understanding of the interrelationships between water, sanitation and child health is of paramount importance to taking the correct steps on the troublesome pathway to the fulfilment of these goals.

The book consists of three chapters, 'Living in the human zoo', 'Measuring the world's health' and 'Water and human health'. The first two chapters provide background for the third chapter. The book gives a well-illustrated background on how the human race has taken over the globe during the last 100–150 years. This short span has obviously not allowed us to realise that we should also take over responsibility for its care. The second chapter gives a detailed insight into how health can be measured. The third chapter deals with the subject of the book's title. The chapter begins with an excellently illustrated section about the hydrologic cycle. An important and well-written part deals with the water requirement to feed the growing world population. The reviewer read with self-satisfaction that the diet of a vegetarian demands much less water for its production than that of a meat eater. The possible effects of climate change are mentioned in a short but well-balanced section. The often complicated life cycles of water-related parasites causing human health problems are nicely illustrated.

The ecotoxicology of pesticides is described using DDT (dichloro-diphenyl-trichloroethane) as an example. DDT in general does not reach man through water but rather through the food chain. However, it is well worth a section as it is widely used in combating water-borne diseases. Mercury and its transfer through food chains to predators like alligators and man are given a thorough description. The various effects of the increasing use of

nitrogenous fertilizers are given an illustrated section. It is mentioned that methaemoglobinaemia is fairly common in the USA and The Netherlands. This disease generally affects children below 6 months of age who are fed formula made with high-nitrate water. For many reasons a continued battle for breast-feeding is needed, not only in developing countries and not just for the risk for methaemoglobinaemia. Arsenic threat to human health in especially Bangladesh is described. The appearance of groundwater naturally polluted with arsenic has been an unwelcome surprise in many countries in recent years. One water and health problem that is not mentioned is the narrow therapeutic range of fluoride posing a threat of dental and skeletal fluorosis to about 65 million Indians. Each chapter ends with a number of questions for self-assessment after reading.

The book can be read without excessive previous knowledge as each subject is given a rather complete background. This makes it suitable in many educational fields, whether for health personal or in technical education. A lot of memorable striking facts and figures are presented which should make the book very attractive for students. An extensive index makes it useful for fast checking of different subjects. There is also an interactive DVD with the book along with numerous learning activities. Anyone engaged in water and public health programmes should take a look at this book. It gives a good coverage from the global problems to the local conditions predisposing for the spread of water-related diseases.

Gunnar Jacks  
The Royal Institute of Technology  
Stockholm, Sweden  
Email: gunnjack@kth.se

### Reference

1. Dr A. Klutse at 14th Conference of Training Network for Water and Waste Management, Ouagadougou, 26–29 November 2007.