## **BOOK REVIEW**

## Environmental Impacts on Reproductive Health and Fertility

Tracey J Woodruff, Sarah J Janssen, Louis J Guillette Jr, Linda C Giudice (eds). Cambridge, UK: Cambridge University Press, 2010. ISBN-13: 978-0-52151-952-6. Price: £70.00. Pages: 262 (hardback)

Environmental reproductive health is a relatively unexplored field that considers the impact of environmental factors on fertility and developmental well-being. The book focuses primarily on exposures to environmental contaminants and examines their potential effects on all aspects of reproductive health from conception through to adult health.

This is undoubtedly topical at a time of increasing concern about sustainability and the interrelationship between mankind and our global system. The authors cite worrying trends in reproductive health in the USA and in Scandinavia and attempt to link these to potential environmental causes: increasing subfertility in younger women;

reducing age of puberty and menarche in girls, increasing incidence in testicular cancer; reducing sperm concentration and increasing incidence of congenital malformations affecting the male reproductive system, such as cryptorchidism and hypospadias.

The book contains a useful overview of both male and female developmental anatomy, and also considers potential mechanisms for environmental impacts on human reproduction, including carcinogenesis. The evidence base relating to environmental contamination on human reproductive health is, however, poorly developed and may not yet have reached a level of scientific scrutiny sufficient for strong conclusions to be drawn. A particularly interesting chapter explores the identified environmental impacts on wildlife as 'sentinel' markers for human reproductive health. There is also a chapter on communicating with patients and the public, which lists useful sources of further information, although these are largely USA resources.

The book is written in a densely scientific style and is aimed primarily at

interested clinicians and epidemiologists. It would be a heavy read for policymakers, although it contains much food for thought across a wide spectrum of environmental interests, and the final chapter sets the scene. It focuses almost entirely on environmental contaminants and does not consider other aspects of environmental impact on reproductive health on a more global scale, for example, climate change, mass population movement and fertility control. Public health messages, while undoubtedly highly relevant, are not easy to retrieve. There is little critical challenge to the environmental science underlying many of the proposed relationships between environmental contamination and reproductive health. This is a useful reference book but needs to be considered as only part of an emerging and fast-moving story.

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