FISEVIER

Contents lists available at ScienceDirect

Best Practice & Research Clinical Obstetrics & Gynaecology

journal homepage: www.elsevier.com/locate/bpobgyn



Preface

Best practice and research clinical obstetrics and gynaecology volume 92



1. Preface

Obesity is rising world-wide and has become the most common risk factor for non-communicable diseases. The increase is disproportionate, being higher in the low- and middle-income countries compared to high-income countries. In 2016, the WHO estimated that about 1.9 billion people world-wide were overweight and 650 million of these were obese. If current trends are not reversed, then it is estimated that by 2030, approximately 1:5 women (most of whom will be in the reproductive age groups) would be obese. The percentage of medical spending on obesity health-related complications varies from 3% to 21% depending on the country. Obesity is associated with severe morbidity and mortality including hypertension, diabetes and 13 cancers amongst which are ovarian, breast and endometrial. Several reasons have been advanced for the rise in obesity rates including genetic, epigenetic, environmental, cultural, political, and socioeconomic. Overall, obesity is now considered one of the most important threats to human health.

It is within this context that this series on Obesity and Reproductive Health is timely and welcome. The series includes up-to-date coverage of key topics that address the reproductive consequences of obesity and the challenges in providing care to these women. The overview of the epidemiology puts into perspective the magnitude of the problem and the challenges posed by rising trends as well as how this may be arrested. Collective action from individuals, industry, national and international agencies, and governments is crucial to be successful.

How the vaginal microbiome is affected by obesity or affects obesity and its implications for reproductive health are extensively covered. The impact of obesity on reproductive physiology is covered in the chapters on obesity and pubertal, endocrine, and menstrual disorders. Here the emphasis is on the dysregulation of the hypothalamic-pituitary-ovarian axis by metabolic changes associated with obesity. Pregnant women with obesity have an increased risk of miscarriages, congenital malformations, and various complications. Why miscarriages are more common and how these can be managed and prevented is covered.

The physiological changes that are a consequence of obesity impact on fertility not only in women but also in men. In women, anovulation, co-morbidities, and endocrine dysfunction affect fertility potential while in men, obesity has a negative impact on semen quality. These and other related factors that result in poorer fertility in obese men and women are covered next. Since obesity is an important factor in reproductive health, would weight loss be a way to overcome these? While advocating for a proactive approach to losing weight there are certain conditions under which this is unlikely to be achieved other than through bariatric surgery. This procedure is not without consequences and consequently the chapter extols the benefits of bariatric surgery on reproductive health, the physiological basis for this and the unwanted consequences of bariatric surgery.

Ageing has significant consequences on the reproductive anatomy and physiology. Anatomically, changes in the genital tract result in prolapse abnormalities while physiologically, changes around menopause can have severe effects that are often grouped as menopausal disorders. These two areas are extensively covered and thereafter an overview of the impact of morbid obesity on gynaecological practice. This chapter not only outlines the ergonomics of morbid obesity in gynaecology but detailly covers how this may influence accuracy of investigations and indeed management. The last chapters focus on gynaecological malignancies associated with obesity and the anaesthetic challenges of obese women.

The articles in this series provide evidence-based reviews of aspects of obesity related to reproductive health. Enormous challenges remain and the authors have identified some of those that are yet to be addressed exhaustively while providing some guidance on management. Hopefully over the coming years, more evidence will emerge on not only how to reduce the rising trends but on how to

reverse obesity once it sets in.

Justin C. Konje*

Obstetrics and Gynecology, Weill Cornell Medicine Qatar and Emeritus Professor of Obstetrics and Gynaecology, University of Leicester, UK
Feto-Maternal Centre, Al Markhiya Street, Doha, Qatar

Badreldeen Ahmed

Obstetrics and Gynecology, Weill Cornell Medicine Qatar and Professor of Obstetrics and Gynaecology, Qatar University, Feto-Maternal Centre, Al Markhiya Street, Doha, Qatar

* Corresponding author.

E-mail address: jck4@leicester.ac.uk (J.C. Konje).