FAMILY PLANNING MASTERCLASS: Evidence-based Answers to 1000 Questions

Gillian Penney, Susan Brechin and Anna Glasier





© 2006 Faculty of Family Planning and Reproductive Health Care and RCOG

First published 2006

All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means, without the prior written permission of the publisher or, in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency in the UK [www.cla.co.uk]. Enquiries concerning reproduction outside the terms stated here should be sent to the publisher at the UK address printed on this page.

Registered names: The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant laws and regulations and therefore free for general use.

Product liability: Drugs and their doses are mentioned in this text. While every effort has been made to ensure the accuracy of the information contained within this publication, neither the authors nor the publishers can accept liability for errors or omissions. The final responsibility for delivery of the correct dose remains with the physician prescribing and administering the drug. In every individual case the respective user must check current indications and accuracy by consulting other pharmaceutical literature and following the guidelines laid down by the manufacturers of specific products and the relevant authorities in the country in which they are practising.

ISBN 978-1-904-75233-2 Paperback

All images © 2006 Science Photo Library

Published by the **RCOG Press** at the Royal College of Obstetricians and Gynaecologists 27 Sussex Place, Regent's Park London NW1 4RG

Registered Charity No. 213280

RCOG Press Editor: Jane Moody Index: Liza Furnival Design & typesetting: Karl Harrington, FiSH Books

CONTENTS

About this editors		vi
Ab	breviations	vii
About this book		ix
Sec	ction One: Contraceptive methods	1
1.	Combined hormonal contraception	3
	Combined oral contraception	3
	Combined transdermal contraception	46
	The cyproterone acetate-containing pill	48
2.	Progestogen-only contraception	57
	Progestogen-only pills	57
	Progestogen-only injectable contraceptives	82
	Progestogen-only implants	116
3.	Intrauterine contraception	136
	Copper intrauterine devices	136
	The levonorgestrel-releasing intrauterine system	181
4.	Barrier methods	205
	Condoms	205
	Diaphragms	206
5.	Sterilisation, fertility awareness-based methods	
	and non-UK methods	209
	Female sterilisation	209
	Male sterilisation	212
	Fertility awareness-based methods	214
	Contraceptive methods not licensed in the UK	215

iv FAMILY PLANNING MASTERCLASS: Evidence-based Answers to 1000 Questions

6.	Progestogen-only emergency contraception	222
	Patient selection	222
	Dose, timing and efficacy	226
	Use more than once in a cycle	229
	Continuing contraception after emergency contraception	232
7.	Induced abortion	233
Sec	tion Two: Service issues for community services	245
8.	Organisation of family planning services	247
	Service design	247
	Legal and ethical issues for family planning services	257
9.	Gynaecological problems in the family planning clinic	265
	Pregnancy testing, cervical smears and infection	265
	Menarche and menopause	276
	Miscellaneous gynaecological problems	287
Sec	tion Three: Contraception for women with medical disorders	297
10.	Drug interactions with contraception	299
	Antibiotics	309
	Immunosupressants	317
	Retinoids	321
	Complementary medicines	326
	Miscellaneous drugs	333
	Illegal 'recreational' drugs	340
11.	Neurological disorders and cerebrovascular disorders	343
	rear of ogical disorders and ecrebiovasediar disorders	575
	Epilepsy	343
	-	
	Epilepsy	343
	Epilepsy Migraine	343 350
	Epilepsy Migraine Benign intracranial hypertension	343 350 360

12. Congenital and acquired cardiovascular diso	rders	395
Congenital heart disease	lucis	395
Acquired heart disease		410
Ischaemic heart disease		417
Venous thromboembolism and associated dis	sorders	434
13. Liver disease and associated disorders		447
Gall bladder disease		447
Pregnancy-related cholestasis		449
HELLP syndrome		452
Cirrhosis		453
Gilbert's disease		455
Wilson's disease		457
Hepatitis		458
Liver transplants and immunosuppressants		461
Miscellaneous liver disorders		462
14. Renal disease		463
15. Skin disease		472
16. Breast cancer		484
Personal history of breast cancer		484
Family history of breast cancer		489
17. HIV		493
18. Miscellaneous medical disorders A–C		503
19. Miscellaneous medical disorders D–H		519
20. Miscellaneous medical disorders I–Q		532
21. Miscellaneous medical disorders R–Z		548
Index		568

ABOUT THE EDITORS

Gillian Penney MD FRCOG FFFP is Director of the Scottish Programme for Clinical Effectiveness in Reproductive Health and was Director of the Clinical Effectiveness Unit of the FFPRHC from 2002 to 2005.

Susan Brechin MD MRCOG MFFP ILTM is a Senior Lecturer in Sexual and Reproductive Health with Aberdeen University and has been the Director of the Clinical Effectiveness Unit of the FFPRHC since 2005.

Anna Glasier MD DSc FRCOG FFFP is Head of Service for Sexual and Reproductive Health with NHS Lothian and has been Chair of the Clinical Effectiveness Committee of the FFPRHC since 2002.

Acknowledgements

Alison de Souza, Gillian Stephen and Lisa Allerton (Research Assistants at the Clinical Effectiveness Unit of the FFPRHC) drafted the original responses to Members' Enquiries which form the basis for this book. Lisa Allerton also assisted in collating the bibliography. Tracey Chiverton and Jane Carmichael provided secretarial support in administering the Enquiry Service and collating responses.

ABBREVIATIONS

ACTH	adrenocorticotrophic hormone
AMNR	acute macular neuroretinopathy
BASHH	British Association for Sexual Health and HIV
BMI	body mass index
BNF	British National Formulary
BSCC	British Society for Clinical Cytology
CEU	Clinical Effectiveness Unit
CI	confidence interval
CIN	cervical intraepithelial neoplasia
CLE	cutaneous lupus erythematosus
COC	combined oval contraception
CSM	Committee for Safety of Medicines
CT	computed tomography
DEXA	dual energy X-ray absorptiometry
DMARDs	disease modifying anti-rheumatic drugs
DVT	deep vein thrombosis
DMPA	depot medroxyprogesterone acetate
EBM	evidence-based medicine
FFPRHC	Faculty of Family Planning and Reproductive Health Care
fpa	Family Planning Association
FSH	follicle-stimulating hormone
GBS	group B streptococcus
GnRH	gonadotrophin-releasing hormone
HAART	highly active antiretroviral therapy
hCG	human chorionic gonadotrophin
HDL	high-density lipoprotein
HIV	human immunodeficiency virus
HPV	human papillomavirus
HRT	hormone replacement therapy
IgA	immunoglobulin A
IUD	intrauterine contraceptive device
IUS	intrauterine system
	•

viii FAMILY PLANNING MASTERCLASS: Evidence-based Answers to 1000 Questions

kg/m ²	kilogram/square metre
LDL	low-density lipoprotein
LLETZ	large loop excision of the transformation zone
LNG-IUS	levonorgestrel-releasing intrauterine system
MCA	Medicines Control Agency
MHRA	Medicines and Healthcare products Regulatory Agency
mmHg	millimetre of mercury
MRI	magnetic resonance imaging
MRSA	methicillin-resistant Staphylococcus aureus
MS	multiple sclerosis
NHSCSP	NHS cervical screening programme
NICE	National Institute for Health and Clinical Excellence
NSAID	non-steroidal anti-inflammatory drugs
OR	odds ratio
PCOS	polycystic ovary syndrome
PGD	Patient group directions
PID	pelvic inflammatory disease
PMS	Premenstrual syndrome
POP	progestogen-only pil
RCOG	Royal College of Obstetricians and Gynaecologists
SIGN	Scottish Intercollegiate Guidelines Network
SLE	systemic lupus erythematosus
STI	sexually transmitted infection
TIA	transient ischaemic attack
TSH	thyroid-stimulating hormone
VSD	ventricular septal defect
VTE	venous thromboembolism
vWf	von Willebrand factor
WHO	World Health Organization

ABOUT THIS BOOK

Family Planning Masterclass is not a comprehensive textbook of contraception. Rather, it addresses questions asked by experienced family planning clinicians when answers could not readily be found in standard texts. We hope that this volume will prove useful to practitioners, who can 'enquire within' when faced with a dilemma in practice relating to a rare condition or contentious issue.

The questions and answers summarised in this book are based on the first 1000 members' enquiries received by the Aberdeen-based Clinical Effectiveness Unit of the Faculty of Family Planning and Reproductive Health Care (FFPRHC). The Unit was established in September 2002 and one of our core tasks is to provide evidence-based answers to clinical enquiries submitted by individual clinician members of the FFPRHC. Full versions of all members' enquiry responses are available within a searchable database on the FFPRHC website. This book contains abbreviated, edited and updated summaries of the first 1000 answers, grouped according to topic area. We suggest that clinicians use this volume as a first point of reference when faced with a clinical dilemma. If your question is not addressed here, it may be among the more recent enquiries included on the website. Questions that remain unanswered may be posed to the Clinical Effectiveness Unit team at ffpceu@abdn.ac.uk.

Our strategy for answering members' enquiries

The Clinical Effectiveness Unit aims to provide evidence-based answers to members' questions using the principles outlined by David Sackett and colleagues in their seminal text, *Evidence-based Medicine: How to Practice and Teach EBM*.¹

FAMILY PLANNING MASTERCLASS: Evidence-based Answers to 1000 Questions

Asking an answerable question

The first task for the Unit team is to convert the often lengthy, convoluted and highly individual problem posed by our enquirer into a generalisable clinical question. We simplify each enquiry into a three-part question using evidence-based medicine (EBM) principles, comprising: a population, intervention(s), and outcome(s).

For example, an enquirer's email to our Unit might read:

'Last Wednesday, I saw a 32-year-old, para 3+1 woman in the surgery, along with her 3-year-old child. She is using the combined pill for contraception but feels constantly worried about pill failure. This is because her second child, born 2 years ago, was a result of pill failure. Despite these worries, she seems even more unhappy about using any other form of contraception. She likes the reassurance of regular periods and the idea that the pill is rapidly reversible. Is there any particular pill that would be less likely to result in future failure?'

We simplify the question using the three-part EBM approach:

Population:	Women who have experienced unintended pregnancy while using combined oral contraception.
Interventions:	Combined oral contraceptives of different formulations.
Outcome:	Efficacy.

We then formulate a generalisable, answerable, clinical question: 'Which combined oral contraceptive would provide greatest efficacy for a woman with a previous unintended pregnancy while using combined oral contraception?'

Finding current best evidence

The second task for the Unit team is to search for published evidence relevant to the enquiry. Using search terms derived from the three-part EBM question, we routinely search the following electronic sources:

- existing guidance from the FFPRHC and the Royal College of Obstetricians and Gynaecologists (RCOG)
- the National Guidelines Clearing House
- the World Health Organization (WHO) publications: *Medical Eligibility Criteria for Contraceptive Use* and *Selected Practice Recommendations for Contraceptive Use*

ABOUT THIS BOOK

xi

• the Cochrane Library

• MEDLINE and EMBASE from 1996 onwards.

In addition, we frequently refer to manufacturers' Summaries of Product Characteristics for individual contraceptives and extend our MEDLINE and EMBASE searches back to 1966 if relevant evidence is not found in the more recent literature.

Appraising evidence

Titles and abstracts of publications identified from searches of our routine sources are scrutinised. Some publications are eliminated at this stage if considered to be of no direct relevance to the enquiry. For the remaining publications, we obtain the full text of the paper if it is available electronically or already in our files. We undertake basic quality appraisal of each paper using standard checklists.² Time constraints mean that the depth of critical appraisal is less than that applied in the development of formal FFPRHC guidance and that we sometimes rely on information available in publication abstracts only, if the full text is not readily available.

Answering the question

Our final task for each Member's enquiry is to formulate an answer to the original question based on the evidence identified. Answers provided by the Clinical Effectiveness Unit team are based on published evidence, not on personal opinion or anecdotal experience. On occasions when our literature searches identify no evidence relevant to a Member's enquiry, our response is that we cannot provide an evidence-based answer. In these circumstances, a practitioner must manage a clinical dilemma on the basis of personal experience and the advice of colleagues. The EBM approach means that good clinical practice is based on the complementary strengths of research evidence and clinical judgement and experience.

The first 1000 questions

Between September 2002 and March 2005, the Clinical Effectiveness Unit team answered 1000 Members' enquiries using the approach outlined above. The topic areas of these 1000 questions are summarised below (Table 1). Over one-

xii FAMILY PLANNING MASTERCLASS: Evidence-based Answers to 1000 Questions

TOPIC	Questions (n)	Percentage of total
Contraception for women with medical disorders	339	34
Copper intrauterine devices	124	12
Injectable progestogens	96	10
Concurrent drugs with hormonal contraception	90	9
Combined hormonal contraception	76	8
Progestogen-only pills	51	5
Gynaecological problems in the family planning clinic	48	5
Levonorgestrel intrauterine system	36	4
Progestogen-only implants	31	3
Organisational aspects of family planning provision	29	3
Progestogen-only emergency contraception	25	2
Cyproterone acetate-containing pill	18	2
Barrier methods	15	1
Abortion care	13	1
Methods of contraception unavailable in the UK	5	< 1
Male and female sterilisation	3	< 1
Fertility awareness-based methods	1	< 1
TOTAL	1000	100

Table 1. Topic areas of 1000 questions submitted to the Clinical Effectiveness Unit by Members of the FFPRHC between September 2002 and March 2005

third of enquiries related to contraceptive choices for women with medical disorders of varying degrees of rarity and complexity. For many topics, several Members submitted identical or similar questions. In these instances, the answer summarised in this book is based on the most recent Member's enquiry (which may reflect more recent evidence than the previous versions). Throughout the book, we have indicated the number of Members who posed a similar question. Where more recent information than was available at the time of the enquiry is known, this is noted in an update to the answer.

World Health Organization categories

WHO categories, as set out in the *Medical Eligibility Criteria for Contraceptive Use*, are used throughout the book. The conditions affecting eligibility for the

ABOUT THIS BOOK xiii

use of each contraceptive method are classified by the WHO under one of the following four categories:

Category 1	A condition for which there is no restriction for the use of the contraceptive method.
Category 2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
Category 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method.
Category 4	A condition that represents an unacceptable health risk if the contraceptive method is used.

Common references

The following documents are cited throughout this book and will not be referenced within each chapter:

British Medical Association, Royal Pharmaceutical Society of Great Britain. *British National Formulary*. London: BMJ Publishing Group and Royal Pharmaceutical Society of Great Britain [www.bnf.org].

Faculty of Family Planning and Reproductive Health Care. *UK Selected Practice Recommendations for Contraceptive Use*. 2002 [www.ffprhc.org.uk]

Summaries of Product Characteristics for all drugs available in the UK are accessible via the Electronic Medicines Compendium [http://emc.medicines.org.uk].

World Health Organization. *Medical Eligibility Criteria for Contraceptive Use*. 3rd ed. Geneva: WHO; 2004 [www.who.int/reproductive-health/publications/mec/index.htm].

World Health Organization. *Selected Practice Recommendations for Contraceptive Use*. 2nd ed. 2005 [www.who.int/reproductive-health/publications/spr_2/index.html].

References

- 1. Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB. *Evidence-based Medicine. How to Practice and Teach EBM*. Toronto: Churchill Livingstone; 2000.
- 2. Scottish Intercollegiate Guidelines Network. *A Guideline Developers' Handbook*. Edinburgh: SIGN; 2004.