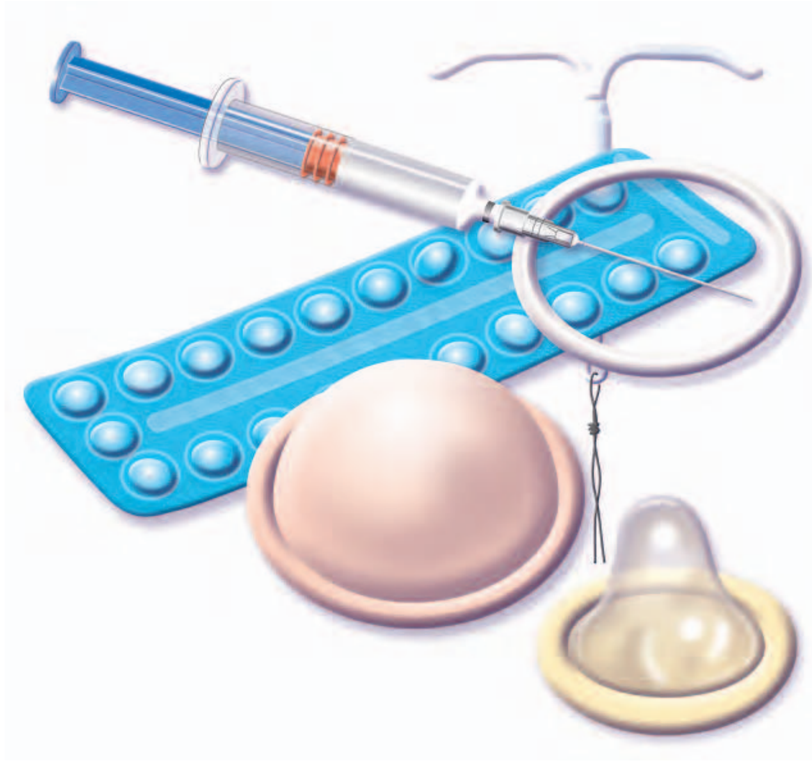
Fast Facts

Fast Facts: Contraception

Ailsa E Gebbie and Katharine O'Connell White

Third edition



© 2009 Health Press Ltd. www.fastfacts.com

Fast Facts

Fast Facts: Contraception

Third edition

Ailsa E Gebbie MB ChB FRCOG FFSRH
Consultant Gynecologist
NHS Lothian Family Planning Services
Edinburgh
Scotland, UK

Katharine O'Connell White MD MPH FACOG
Assistant Clinical Professor
Department of Obstetrics and Gynecology
Columbia University
New York
NY, USA

Declaration of Independence
This book is as balanced and as practical as we can make it.
Ideas for improvement are always welcome: feedback@fastfacts.com

HEALTH PRESS

© 2009 Health Press Ltd. www.fastfacts.com

Fast Facts: Contraception
First published 2000; second edition 2005
Third edition February 2009

Text © 2009 Ailsa E Gebbie, Katharine O'Connell White
© 2009 in this edition Health Press Limited
Health Press Limited, Elizabeth House, Queen Street, Abingdon,
Oxford OX14 3LN, UK
Tel: +44 (0)1235 523233
Fax: +44 (0)1235 523238

Book orders can be placed by telephone or via the website.
For regional distributors or to order via the website, please go to:
www.fastfacts.com
For telephone orders, please call +44 (0)1752 202301 (UK and Europe),
1 800 247 6553 (USA, toll free), +1 419 281 1802 (Americas) or
+61 (0)2 9351 6173 (Asia–Pacific).

Fast Facts is a trademark of Health Press Limited.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the express permission of the publisher.

The rights of Ailsa E Gebbie and Katharine O'Connell White to be identified as the authors of this work have been asserted in accordance with the Copyright, Designs & Patents Act 1988 Sections 77 and 78.

The publisher and the authors have made every effort to ensure the accuracy of this book, but cannot accept responsibility for any errors or omissions.

For all drugs, please consult the product labeling approved in your country for prescribing information.

Registered names, trademarks, etc. used in this book, even when not marked as such, are not to be considered unprotected by law.

A CIP record for this title is available from the British Library.

ISBN 978-1-905832-50-7

Gebbie, Ailsa E
Fast Facts: Contraception/
Ailsa E Gebbie and Katharine O'Connell White

Medical illustrations by Dee McLean, London, UK.
Typesetting and page layout by Zed, Oxford, UK.
Printed by Latimer Trend & Company Limited, Plymouth, UK.

Text printed with vegetable inks on biodegradable and recyclable paper manufactured from sustainable forests.

© 2009 Health Press Ltd. www.fastfacts.com

Glossary of abbreviations 4

Introduction 5

Choosing a contraceptive method 7

Combined hormonal contraception 19

Progestogen-only methods 37

Intrauterine devices and systems 46

Barrier methods 57

Emergency contraception 70

Female sterilization 80

Vasectomy and hormonal methods for men 88

Biologically based methods 94

Postpartum contraception 102

Useful resources 111

Index 113

© 2009 Health Press Ltd. www.fastfacts.com

Glossary of abbreviations

BBT: basal body temperature

BMD: bone mineral density

COC: combined oral contraceptive

DMPA: depot medroxyprogesterone acetate

ED: every-day [preparation]

FAB: fertility-awareness-based [biological method]

FSH: follicle-stimulating hormone

HFI: hormone-free interval

HIV: human immunodeficiency virus

HPV: human papilloma virus

IUD: intrauterine device

LAM: lactational amenorrhea method

LARC: long-acting reversible contraceptive

LH: luteinizing hormone

LNG-IUS: levonorgestrel–intrauterine system

MI: myocardial infarction

PFI: pill-free interval

POP: progestogen-only pill

STI: sexually transmitted infection

VTE: venous thromboembolism

WHO: World Health Organization

© 2009 Health Press Ltd. www.fastfacts.com

Introduction

This is the third edition of *Fast Facts: Contraception*. On quick inspection, you would be forgiven for thinking that the past few years have seen relatively few new contraceptive methods emerge and little overall change in the areas of family planning and sexual health. This, however, masks the fact that huge initiatives have been taking place on both sides of the Atlantic to raise the profile of contraception, traditionally a rather Cinderella service, for it to become a thriving specialty encompassing all sexual and reproductive health issues.

Contraception and sexually transmitted infections (STIs) are now finally being managed in many fully integrated services. Common sense and logic has brought together the two specialties, which after all are both intimately concerned with sex!

Individuals who work in sexual health services are often passionate about their work and the issues that they deal with. They are often prepared to put their heads above the parapet and fight for the cause, particularly when health inequalities, women's rights and freedom of choice are at stake. Sexual health is a truly multidisciplinary specialty: the roles of nurses, pharmacists and other professionals have been extended and they are highly valued as hands-on providers.

Education means everything in life and poor educational attainment is an accurate predictor of reproductive health status. It determines your chance of teenage pregnancy, contracting an STI and having an abortion. One of the major roles of anyone working in sexual health is that of educator. Numerous guidelines now exist to lead evidence-based practice. However, for many professionals, time is very short and downloading weighty guidance documents is a step too far. We hope that this concise book will give practical and easy-to-read information to those working in primary care and as family physicians. If we have given you new information that can be directly translated into offering individuals a broader range of contraceptive options then we will feel writing this book has been a task well done.

© 2009 Health Press Ltd. www.fastfacts.com

1 Choosing a contraceptive method

Men and women will use contraception for many years, often over decades. Their needs will change over time; for example, what worked for a young woman during her years of education may be less appropriate once she is a busy working mother. Some individuals know exactly what method of contraception they want to use and require no medical assistance or only a brief appointment to obtain a prescription. However, many men and women are unaware of the full range of contraceptive options.

Decision-making may be daunting, so individuals will often look to healthcare professionals to help make sense of all the options. Whilst it is true that women take most of the responsibility for contraception, the needs and wishes of both partners must always be considered if contraception is to be used effectively.

Unintended pregnancy is common in both the UK and USA. Almost 50% of women who have an unintended pregnancy conceive while using no method of contraception; the other 50% report use of contraception in the month of conception but many have not used the method consistently or correctly.

It is important to remember that most contraceptive methods are possible options for most healthy women and, in general, the best method for a given woman is the method she chooses for herself. It is easy to over-medicalize contraception, particularly when the consultation is used as an opportunity for health screening, such as performing cervical (Pap) cytology. The prevalence of use of the common methods of contraception in the UK and USA is shown in Figure 1.1.

The consultation

When discussing contraception, there is much information to convey – and often not much time. The discussion about each method should cover mechanism of action, efficacy/effectiveness, benefits, risks, side effects and use of the method.

© 2009 Health Press Ltd. www.fastfacts.com

Ultimately, the aim is to allow the contraceptive user to make an informed choice of a method with which she feels confident and safe, and that she knows how to use correctly.

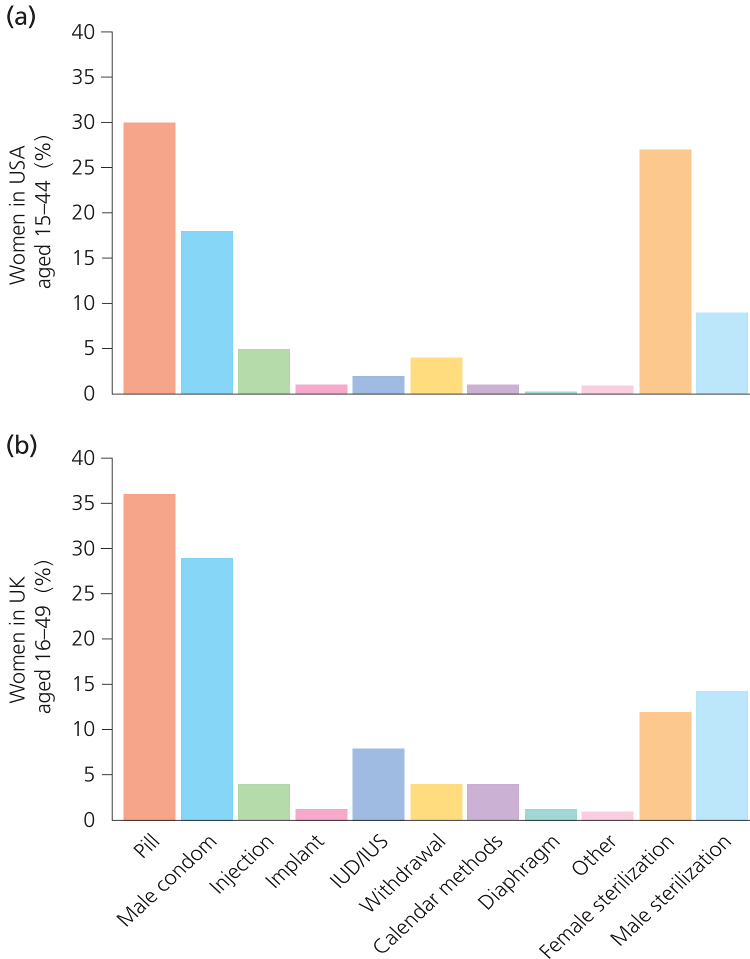


Figure 1.1 Patterns of contraceptive use by women who practice contraception: (a) aged 15–44 in the USA (2004); (b) aged 16–49 in the UK (2008). US data adapted from Vital and Health Statistics, Mosher et al. 2004; UK data adapted from the Office for National Statistics Omnibus Survey, Lader and Hopkins 2008. 'Other' includes female condom and spermicides. IUD/IUS, intrauterine device/system.

© 2009 Health Press Ltd. www.fastfacts.com

4 Intrauterine devices and systems

Intrauterine devices (IUDs) are the most commonly used method of reversible contraception worldwide. Nevertheless, they remain the source of more myths and taboos than almost any other method. Intrauterine contraception is growing in popularity in the western world and is highly cost-effective. Healthcare professionals play a key role in giving women balanced information and individual counseling on intrauterine contraception.

Types of intrauterine contraception

The key characteristics of copper IUDs and the Mirena intrauterine system (IUS) are summarized in Table 4.1. Further details of the different types of intrauterine contraception are given below.

Intrauterine devices. IUDs were first introduced in the early 1960s; the original devices were made of plastic. The addition of copper onto the stem of the IUD improved efficacy, allowing the development of smaller T-shaped IUDs with fewer menstrual side effects. The modern 'gold standard' copper devices have more copper wire on the stems than their predecessors, and copper sleeves on the arms, resulting in greater efficacy and a longer duration of action (Figure 4.1).

In the UK, where some 7% of couples using contraception rely on an IUD, seven different copper IUDs are available. They vary in shape, size and in the amount of copper, allowing flexibility of choice to suit the individual woman. In the USA, negative publicity damaged the reputation of the IUD during the 1980s, and nowadays fewer than 2% of American women using contraception use an IUD. Reflecting this decline in popularity, only one copper model (the ParaGard T 380A) is available in the USA.

A frameless IUD is also available in the UK. It comprises six copper beads threaded on to a non-biodegradable polypropylene thread; the top and bottom beads are crimped to keep all the beads in place. The upper end of the thread is knotted and embedded to a depth of 1 cm into the

© 2009 Health Press Ltd. www.fastfacts.com

TABLE 4.1

Key characteristics of copper intrauterine devices versus the Mirena intrauterine system

	Copper IUD	Mirena
Duration of action	Usually 10 years	5 years
Failure rate (first year of use)	0.8%	0.1%
Protection against endometrial cancer	Yes	Yes
Other therapeutic benefits	None	Can use to treat heavy menstrual periods and as part of an HRT regimen
Menstrual spotting	May increase	Increases initially but usually settles within 3–6 months
Hormonal side effects	None	May cause breast pain, fluid retention, acne
Average price	UK £9 $200–400	UK £80 $300–500

HRT, hormone replacement therapy.

fundal myometrium (Figure 4.2). Efficacy appears to be equivalent to the framed copper models, but removals because of pain are fewer.

Intrauterine rings. In China, stainless steel intrauterine rings are still widely used, and immigrant women to the UK and USA may present with these devices. Stainless steel rings cause less menstrual disturbance than modern copper IUDs but are not as effective.

Mirena (intrauterine system). The Mirena, a hormone-releasing intrauterine system (T-frame LNG-20 IUS), has been available for contraception in the UK since 1995. It has a capsule of the progestogen levonorgestrel around its stem from which it releases a daily dose of

© 2009 Health Press Ltd. www.fastfacts.com

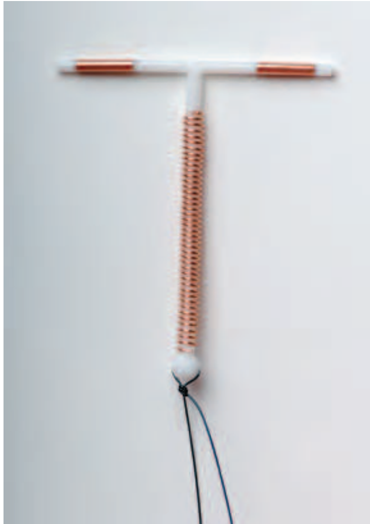


Figure 4.1 Copper intrauterine device with central copper core and copper banding on the arms. Reproduced courtesy of Durbin PLC.

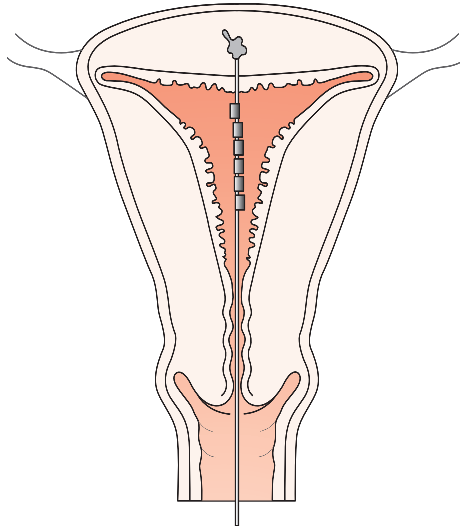


Figure 4.2 The frameless intrauterine device in position. The knot is embedded in the myometrium by means of a special insertion device.

20 µg (Figure 4.3). The only IUS on the market in the UK and the USA, Mirena lasts for 5 years; in the UK, it is also licensed for the treatment of menorrhagia and as the progestogen component of a hormone replacement therapy (HRT) regimen. In the USA, it is not yet licensed for treating menorrhagia but has been approved for contraception since December 2000.

© 2009 Health Press Ltd. www.fastfacts.com