
CONFRONTING THE CHALLENGE
OF REPRODUCTIVE HEALTH
IN AFRICA

CONFRONTING THE CHALLENGE OF
REPRODUCTIVE HEALTH IN AFRICA:
A TEXTBOOK FOR STUDENTS AND
DEVELOPMENT PRACTITIONERS

Edited By

Friday E. Okonofua



WOMEN'S HEALTH AND ACTION RESEARCH CENTRE (WHARC)

*Confronting the Challenge of Reproductive Health in Africa:
A Textbook for Students and Development Practitioners*

Copyright © 2014 Women's Health and Action Resource Centre

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the publisher.

BrownWalker Press
Boca Raton, Florida
USA • 2014

ISBN-10: 1-62734-508-6
ISBN-13: 978-1-62734-508-8

www.brownwalker.com

Typeset by Medlar Publishing Solutions Pvt Ltd, India

Publisher's Cataloging-in-Publication Data

Okonofua, Friday.

Confronting the challenge of reproductive health in Africa: a textbook for students and development practitioners/Friday E. Okonofua.

pages cm

Includes bibliographical references.

ISBN: 978-1-62734-508-8 (pbk.)

ISBN: 978-1-62734-513-2 (hardcover)

ISBN: 978-1-62734-509-5 (e-book)

1. Reproductive health—Africa. 2. Family planning—Africa. 3. Sex instruction—Africa. 4. Mothers—Mortality. 5. Public health. I. Title.

RG101 .O36 2014

362.109'6—dc23

2014943321

Acknowledgements

This book was conceived and was implemented under the guidance of the editorial Board of the *African Journal of Reproductive Health (AJRH)*. AJRH is published by the Women's Health and Action Research Centre (WHARC), a non-Governmental, non-profit organization founded in 1994 with the mission to promote the health and social well-being of women. WHARC receives core funding from the Ford Foundation for its publications and strategic communication activities.

We are grateful to Ipas (USA and African Regional Office) for providing additional funds for the publication of this book. We deeply appreciate the invaluable advice and support of Barbara Crane, Executive Vice President of Ipas at various stages of the preparation of the book.

We appreciate the editorial support of Theresa Ezeoma, the Managing Editor of AJRH, and her staff for their tireless editorial support for the book.

Shereen Siddiqui of Universal Publishers Inc., USA provided the front and back cover graphic designs for the book.

This book is dedicated to the memory of late Madam Agnes Abhaigbe Okonofua (nee Ofino) who laboured tirelessly to educate her children to the highest level possible despite her limited resources, and to all women everywhere working under similar circumstances.

Table of Contents

International Advisory Board Membership	ix
Contributors and Authors of Chapters	xi
Foreword <i>Friday E. Okonofua, Editor</i>	xix
1 The Concept of Sexual and Reproductive Health <i>Oluwole E. Akande</i>	1
2 Evidence-Based Decision Making <i>Bukola Fawole</i>	7
3 Research Methods in Sexual and Reproductive Health <i>Olufemi A. Olatunbosun</i>	21
4 Social Determinants of Sexual Reproductive Health and Rights in Africa <i>Olayiwola Erinosh</i>	41
5 Enhancing Maternal Survival in Africa <i>Staffan Bergström</i>	57
6 Youth Sexuality, Reproductive Health and Rights <i>Friday E. Okonofua and Biodun Olagbuji</i>	91
7 Abortion in Africa <i>Charlotte E. Hord</i>	125
8 The Concept and Practice of Sexuality Education in Africa <i>Adenike O. Esiet and Corinne N.C. Whitaker</i>	155
9 The Impact of Early Marriage in Africa <i>Judith-Ann Walker</i>	185
10 Gender-Based Violence <i>Olufunmilayo I. Fawole</i>	207
11 The Control of Sexually Transmitted Infections through Integrated Reproductive Health Services <i>Lindsay Edouard and Olufemi A. Olatunbosun</i>	237

12	Promoting Sexual and Reproductive Health in Africa: The Role of Family Planning	261
	<i>Anthony O.U. Okpani, Rosemary N. Ogu and Friday E. Okonofua</i>	
13	The Impact of Infertility on Sexual and Reproductive Health in Africa	279
	<i>Friday E. Okonofua</i>	
14	HIV/AIDS in the Context of Sexual and Reproductive Health in Africa	307
	<i>Paula Tavrow and Janell Moore</i>	
15	Prevention of Mother-to-Child Transmission (PMTCT) of HIV	345
	<i>Chris Ovoroyegun Agboghroma</i>	
16	Malaria in Pregnancy and Its Reproductive Health Effects	367
	<i>Ehije F.O. Enato</i>	
17	Female Genital Cutting/Mutilation and Its Reproductive Health Consequences	389
	<i>Friday E. Okonofua</i>	
18	Preventing Reproductive Tract Cancers in Africa	413
	<i>Michael Ezeanochie</i>	
19	Preventing Pelvic Floor Dysfunction	423
	<i>Olukunle Adegboye Ajayi and Victor Ngozi Chilaka</i>	
20	Monitoring and Evaluation of Sexual and Reproductive Health Programmes	439
	<i>Kolawole Azeez Oyediran, Olusesan A. Makinde and Stephanie Mullen</i>	
	Afterword	473
	<i>Mahmoud F. Fathalla</i>	
	Afterword	475
	<i>Sabaratnam Arulkumaran</i>	
	Afterword	477
	<i>Kole Shettima</i>	
	Index	479

International Advisory Board Membership

Andrzej Kulczycki, PhD

Associate Professor
Department of Health Care Organization
& Policy
Maternal & Child Health Concentration
University of Alabama at Birmingham (UAB)
320 Ryads Public Health Bldg.
1665 University Blvd, Birmingham
AL 35294-0022
Email: andrzej@uab.edu

Barbara B. Crane, PhD

Executive Vice President for Technical
Leadership and Advocacy Ipas
300 Market Street, Chapel Hill
North Carolina, 27517, USA
Email: craneb@ipas.org

Dorothy Shaw, MBChB, FRCSC

Professor of Obstetrics and Gynecology at
the University of British Columbia
VP Medical Affairs. B2 (B242)
4500 Oak Street, Vancouver, BC, V6H 3N1
Email: dshaw@cw.bc.ca

**Friday E. Okonofua, MD, PhD, FMCOG,
FWACS, ad eundem FRCOG, FAS**

Professor of Obstetrics and Gynaecology
College of Medical Sciences
University of Benin, Benin City, Nigeria
Email: feokonofua@yahoo.co.uk

Julia Hussein, MD, PhD, FRCOG

Senior Clinical Researcher
Impact University of Aberdeen
Email: j.hussein@abdn.ac.uk

Kunle Odunsi, MD, PhD, FRCOG, FACOG

The M. Steven Piver Professor and Chair
Department of Gynecologic Oncology
Director, Center for Immunotherapy
Roswell Park Cancer Institute
Elm & Carlton Streets
Buffalo, NY 14263
Professor of Obstetrics and Gynecology
School of Medicine and Biomedical Sciences
University of Buffalo – SUNY
Email: kunle.odunsi@roswellpark.org;
kunleodunsi@juno.com

**Lindsay Edouard, MBBS, MSc, FFPHM,
FFSRH, FRCOG**

International Adviser in Reproductive
Health
Port Louis, Mauritius
Email: soranae@gmail.com

Nimi Briggs, MD, FRCOG, OON, FAS

Emeritus Professor of Obstetrics and
Gynaecology
University of Port Harcourt, Nigeria
Email: nimi@profbriggs.net

Olufemi A. Olatunbosun, FRCSC, FACOG

Professor & Past Head
Department of Obstetrics
Gynecology & Reproductive Sciences
College of Medicine
University of Saskatchewan
Royal University Hospital
Saskatoon, Saskatchewan S7N 0W8, Canada
Email: femi.olatunbosun@usask.ca

**Roland Edgar Mhlanga, MB, ChB;
DMCH (Natal), FCOG (SA),
MPH (UNC-Chapel Hill)**

Chief Provincial Specialist:
Obstetrics and Gynaecology
Department of Health, Mpumalanga
South Africa
Tel: +27 13 766 3304 (office),
+27 82 445 6736 (mobile)
Email: rolandeddie@yahoo.co.uk;
xijekana.mhlanga@gmail.com

**Sabaratnam Arulkumaran, PhD, DSc,
FRCOG, FRCSE**

Professor Emeritus of Obstetrics
and Gynaecology
St. George's University of London
Cranmer Terrace, London SW17 0RE.UK
Email: sarulkum@sgul.ac.uk

Staffan Bergström, MD, PhD

Professor of International Health
Senior Consultant
(Obstetrics and Gynaecology)
Karolinska Institutet, Stockholm, Sweden
Email: staffan.bergstrom@ki.se

Victor N. Chilaka MD, FRCOG

Consultant Obstetrician and Gynaecologist
Derby City Hospital
Uttoxeter Road
Derby, DE22 2NE, UK
Email: vnchilaka@gmail.com

Contributors and Authors of Chapters

Adenike O. Esiet

Adenike O. Esiet is Co-founder and Executive Director of Action Health Incorporated, a non-profit organization which promotes young people's sexual and reproductive health and rights to ensure their successful transition to adulthood. Esiet received a BSc in Sociology and Anthropology from the University of Nigeria Nsukka in 1984. With 25 years' experience in programming and policy advocacy for adolescents, she serves as an expert resource. She is a recipient of the Ashoka International Fellowship for Public Innovators and the first Joan B. Dunlop Award for her outstanding work to advance the sexual and reproductive health and rights of adolescents in Nigeria.

Anthony O.U. Okpani

Anthony O.U. Okpani is a graduate of The College of Medicine, University of Ibadan, Ibadan, Nigeria. He is a Professor and Consultant Obstetrician/Gynaecologist at The University of Port Harcourt and its Teaching Hospital, Port Harcourt, Nigeria, and Coordinator of the University's Science and Technology Post Basic Project in Infectious Diseases. He is also Chairman of The Port Harcourt Teaching Hospital's Institutional Review Board and The Family Planning Clinic Coordinator. He has served on The Board of Examiners, West African College of Surgeons for the past fifteen years. His current interests are in fertility research and clinical research administration.

Biodun Olagbuji

Biodun Olagbuji is currently a doctoral candidate at the Women's Health Research Unit, School of Public Health and Family Medicine, University of Cape Town, South Africa. He received his MBBS from University of Benin, Nigeria. He is a Fellow of the West African College of Surgeons and National Postgraduate Medical College of Nigeria (Faculty of Obstetrics and Gynaecology). After his clinical residency training in obstetrics and gynaecology, Dr. Olagbuji decided it was time to juxtapose public health with clinical practice, and proceeded to The Johns Hopkins University, USA, for Masters of Public Health program (Women's and Reproductive Health Concentration). Since 2012, Dr Olagbuji has been an academic staff of Ekiti State University, Nigeria.

Bukola Fawole

Bukola Fawole is a Senior Lecturer at the College of Medicine, University of Ibadan and Honorary Consultant Obstetrician & Gynaecologist to the University College Hospital, Ibadan. He is a Clinical Trialist with a bias for perinatal medicine. As a member of the Pregnancy & Childbirth Group of the Cochrane Collaboration, his special focus is the generation of best evidence to promote maternal and newborn health.

Corinne N.C. Whitaker

Corinne N.C. Whitaker offers 25 years' experience strengthening technical, organizational, evaluation, and financial capacities of gender transformative and rights-based initiatives, advocates, and networks addressing adolescents' sexual and reproductive health and rights, and girls' and women's economic, personal, and political empowerment. She has documented global trends and best practices for foundations, technical, and academic agencies. With a Ph.D. in International Health (Johns Hopkins Bloomberg School of Public Health, 1996), Whitaker was Senior Program Officer, Africa, with the International Women's Health Coalition for 9 years. She speaks French, Spanish, some Kiswahili, and has published on adolescent health, girls' livelihoods, rights-based approaches, and abortion.

Chris Ovoroyeguono Agboghroma

Chris Ovoroyeguono Agboghroma is a Chief Consultant Obstetrician and Gynaecologist and former Head of the Department of Obstetrics and Gynaecology, National Hospital Abuja, Nigeria. He was a lecturer at the College of Medicine of the University of Lagos. He is the Secretary General of the Society of Gynaecology and Obstetrics of Nigeria (SOGON). He is a medical graduate of the University of Benin, Nigeria. He is a Fellow of the West African College of Surgeons (FWACS-1996) and Nigerian National Postgraduate Medical College (FMCOG-1997). He is an examiner in the Faculty of Obstetrics and Gynaecology of both postgraduate medical colleges. He holds Masters degrees in Public Health (MPH-1997) and Health Programme Management (MA-1995) from the University of Lagos, Nigeria and University of Exeter, UK respectively. He also holds a Post Graduate Award in Assisted Reproductive Technology from the University of Warwick, Coventry, UK (PGA-ART, 2007). He received training in HIV/AIDS and Prevention of Mother-to-Child Transmission (PMTCT) of HIV from the Institute of Human Virology, University of Maryland, Baltimore, US. He is a pioneer member of the Nigerian Task Team on PMTCT of HIV. He was a British Chevening scholar (1994–95).

Charlotte E. Hord

Charlotte E. Hord is Policy Director at Ipas, which she joined in 1987. Ipas's Policy Division was created under her leadership in 1995. Ms. Hord developed Ipas's strategy for obtaining progressive change in reproductive health policies, has written and edited publications on safe abortion including Ipas's basic advocacy manual, *Making Safe Abortion Accessible: A*

Practical Guide for Advocates, and has consulted widely with partners implementing abortion law reform strategies. Under her guidance Ipas has developed a body of work on emerging or neglected issues in reproductive health, including links between abortion and refugee reproductive health, sexual violence, and adolescence.

Ehijie F.O. Enato

Ehijie F.O. Enato (BPharm, MPharm, PhD) is Associate Professor and Head, Department of Clinical Pharmacy & Pharmacy Practice, Faculty of Pharmacy, University of Benin, Nigeria. His areas of professional and research interests include Clinical pharmacy, Pharmacotherapy, Global public health (Malaria, Maternal and child health, Medicine management/PSM, etc.), and Health systems development. Dr Enato is a member of several international scientific, professional, and health advocacy organizations. A versatile researcher, motivator & mentor, who has taught & mentored several (under) graduate students in University of Benin and elsewhere. In addition, he is a peer reviewer for several (inter)national journals on public health, medicine, and pharmacy.

Friday E. Okonofua

Friday E. Okonofua (MD, PhD, ad eundem FRCOG, FWACS, FMCOG, FAS) is a professor of obstetrics and gynaecology at the University of Benin in Nigeria and a Fellow of the Nigerian Academy of Science. He has served variously as Secretary General, Society of Gynecology and Obstetrics of Nigeria (SOGON), Secretary of the Faculty of Obstetrics and Gynaecology of the National Postgraduate Medical College of Nigeria, Executive Director of the International Federation of Gynecology and Obstetrics (FIGO) and as Honorary Adviser on Health to President Olusegun Obasanjo of Nigeria. Professor Okonofua is a global champion of women's health, a discipline where he has published more than 240 journal articles and obtained up to 50 international research grants. He is the founder of the Women's Health and Action Research Centre, one of Nigeria's leading NGOs, and the founding editor of the *African Journal of Reproductive Health*. He is a member of the editorial board of the *British Journal of Obstetrics and Gynecology*, and several international journals and non-profit organizations. He has served as consultant to the World Health Organization and as program officer to the Ford Foundation.

Janell Moore

Janell Moore, MPH, received her degree from the Department of Community Health Sciences at the UCLA Fielding School of Public Health in Los Angeles, California (USA). In 2013, she conducted a study for John Snow, Inc. on the impact of the mentor mother program on infant health in Eastern Uganda.

Judith-Ann Walker

Judith-Ann Walker is a founding member and Director of the development Research and Projects Centre (dRPC) in Kano, Nigeria. Born in the Republic of Trinidad and Tobago, Judith-Ann

has lived and worked as a development practitioner in Northern Nigeria for the past 20 years. She holds a PhD in Development Studies from the International Institute of Social Studies, Erasmus University, Rotterdam. She is an ASHOKA Innovator and is currently an Echidna Guest Scholar at the Centre for Universal Education, Brookings Institution. The dRPC is a non-profit third sector think tank which utilizes participatory approaches to mobilize indigenous knowledge on development issues and problems impacting negatively on the lives of women and children in particular. The small 'd' in the dRPC reflects the founders' commitment to the software of development.

Kolawole Azeez Oyediran

Kolawole Azeez Oyediran, PhD: Kola Oyediran is currently working with John Snow Inc., as Senior M&E Advisor in the Washington DC office and has extensive experience in the fields of health, education and development programmes. He was formerly the Country Director of MEASURE Evaluation project in Nigeria before moving to the US. He has good skills in monitoring, evaluation and research of health care, reproductive health, family planning, gender and HIV/AIDS programmes. Oyediran has a good knowledge of donor agencies, particularly USAID, CDC, World Bank and the Global Fund, implementing partners and government institutions through his previous working experiences. Kola Oyediran is a well-rounded evaluator and researcher with expertise in both quantitative and qualitative methods.

Lindsay Edouard

Lindsay Edouard graduated from the University of London and was elected Fellow of the Faculty of Sexual and Reproductive Health Care, Faculty of Public Health Medicine and Royal College of Obstetricians and Gynaecologists where he is currently the Advisory Editor of the *Journal of Family Planning and Reproductive Health Care*. Besides an appointment as Professor at the College of Medicine of the University of Saskatchewan in Canada, he was a Medical Officer with the World Health Organization in Geneva, Senior Reproductive Health Adviser with the United Nations Population Fund in New York and Representative of the United Nations in Algeria.

Michael Ezeanochie

Michael Ezeanochie is a Fellow of the West African College of Surgeons and Consultant Obstetrician and Gynaecologist at the University of Benin Teaching Hospital in Nigeria. His sub-specialty is Gynaecological Oncology. In 2013, He was the recipient of the prestigious Travelling Scholar Fellowship from the International Gynaecological Cancer Society for sub-specialty training at the Gynaecological Oncology Unit of the University College London Hospitals (UCLH) United Kingdom. He has dedicated himself to the prevention and treatment of Gynaecological Cancers. He is also an award-winning author of several peer reviewed academic articles in leading International journals.

Olayiwola Erinosh

Olayiwola Erinosh, a retired professor of Health Sociology, obtained BSc honours Sociology from Ibadan (1968), M.A. (1971) and PhD (1975) from the University of Toronto. He previously served as Head of Sociology and Foundation Dean of Social & Management Sciences at the Olabisi Onabanjo University; Executive Secretary, Social Science Academy of Nigeria, Executive Secretary, Health Reform Foundation of Nigeria, Consultant to major bilateral and multilateral agencies like UNDP, UNFPA, Codesria, Dakar, USAID, WHO and as the Co-Chair, TDR/WHO Thematic Group on health systems and implementation research. He is currently the President, African Sociological Association.

Olufemi A. Olatunbosun

Olufemi A. Olatunbosun is Professor of Obstetrics & Gynecology and Vice Dean Faculty Affairs at the University Of Saskatchewan College Of Medicine, Saskatoon Saskatchewan Canada. Following fellowship certification from the Royal College of Physician & Surgeons of Canada in 1981, Dr. Olatunbosun held academic and clinical appointments in Nigeria and Saudi Arabia and was one of the early pioneers of in vitro fertilization in sub-Sahara Africa. Returning to Canada in 1992, Dr. Olatunbosun served as chair of the Department of Obstetrics, Gynecology & Reproductive Sciences from 1999 to 2009 and was Chief of Staff Saskatoon Health Region, from 2006 to 2008. He serves as a reviewer for several journals and is a member of the editorial board of African Journal of Reproductive Health and a Trustee of the Commonwealth Medical Trust. Dr. Olatunbosun's research interests are in perinatal research, reproductive medicine and reproductive health involving more than 100 papers, book chapters and abstracts.

Olufunmilayo I. Fawole

Olufunmilayo I. Fawole is a Lecturer and Honorary Medical Consultant with the Department of Epidemiology and Medical Statistics, College of Medicine, University and the University College Hospital, Ibadan. She is also a Fellow of the Nigerian and West African Colleges of Public Health. She also has a Masters in Epidemiology and Biostatistics from the University of The Witswatersrand, South Africa. She has also worked full time as an epidemiologist with The World Health Organization (2001–03) and the African Field Epidemiology Training Programme (2013–14). She provides technical expertise to the Federal Ministry of Health on women's issues and is a consultant to implementing partners such as the UN women. Her research on the prevention of gender based violence has involved various target groups including students, youths in the informal work sector, civil servants, rural/indigenous women, married men, health care providers, media journalist and law enforcers. She has many publications on ending violence to women and empowering women.

Olukunle Adegboye Ajayi

Olukunle Adegboye Ajayi graduated from the University of Ibadan in 1998. He started post-graduate obstetrics and gynaecology training at the University College Hospital, Ibadan and

as a senior registrar moved to the United Kingdom. He became a member of the Royal College of Obstetricians and Gynaecologists in 2009, obtained BSCCP certification in Colposcopy in 2012 and completed postgraduate medical training in Obstetrics and Gynaecology with special interest in Urogynaecology in 2013. He is presently pursuing a masters degree in medical education at the University of Nottingham in his spare time. Kunle was a consultant Obstetrician and gynaecologist to Harrogate Hospital Foundation Trust prior to his present appointment as a consultant Obstetrician and Gynaecologist with the York Teaching Hospital NHS Trust.

Olusesan A. Makinde

Olusesan A. Makinde, MBBS, MSc, MS, PMP, OCP: Dr. Makinde trained as a physician at the University of Ibadan in Nigeria. He earned his first Master of Science degree in epidemiology and medical statistics at the same university in 2006 and a second in applied health sciences informatics at the Johns Hopkins University in Baltimore in 2011. In addition, he is professionally certified in project management and Oracle 10g database administration. Dr. Makinde has several years of experience as a physician, project manager, and monitoring and evaluation specialist in health and development projects. He also has experience in building, implementing, and assessing health information systems.

Oluwole E. Akande

Oluwole E. Akande was Professor of Obstetrics and Gynaecology at the University of Ibadan, Nigeria (1975-1986) and the King Saud University, Riyadh, Saudi Arabia (1987-1992) prior to joining the World Health Organization (WHO) Headquarters, Geneva, Switzerland as the Programme Manager directing WHO's activities in strengthening Reproductive Health Research Capacities of Institutions in Africa and the Eastern Mediterranean Regions (1992-2000). He was the First Chief Medical Director (CMD) of the University College Hospital, Ibadan (1978-1984) and the Foundation Provost, College of Medicine, University of Ibadan (1980-1984). He is a recipient of the Nigerian National Honours of "Officer of the Order of the Niger" (OON) and currently he is an Emeritus Professor of Obstetrics & Gynaecology, University of Ibadan.

Paula Tavrow

Paula Tavrow, PhD, MSc, MALD is an Associate Adjunct Professor in the Department of Community Health Sciences at the UCLA Fielding School of Public Health in Los Angeles, California (USA). She is also Co-Director of the Center of Expertise in Women's Health & Empowerment at the University of California Global Health Institute, and Director of UCLA's Bixby Program in Population and Reproductive Health. From 1984-2001, Dr. Tavrow implemented or managed public health programmes or operations research in Zaire (now DRC), Somalia, Tanzania,

Malawi, Kenya, Uganda, Zambia, Zimbabwe and South Africa. She received her doctorate from the University of Michigan (USA).

Rosemary N. Ogu

Rosemary N. Ogu graduated (MBBS) with distinction from the University of Benin, Benin City, Nigeria, in 1999. Her residency training in Obstetrics and Gynaecology at the University of Port Harcourt Teaching Hospital from 2003 to 2008 earned her the Fellowship of both the West African College of Surgeons and the National Post Graduate Medical College of Nigeria (FWACS, FMCOG). She is currently a Senior Lecturer and Fellow; International College of Surgeons (FICS). She has special research interest in the areas of advocacy, sexual and reproductive health and feto-maternal medicine.

Staffan Bergström

Staffan Bergstrom, senior consultant, obstetrics and gynaecology, has spent more than 35 years devoted to research on maternal and newborn health in impoverished countries. He was Director of the Department of Obstetrics, Maputo Central Hospital, Mozambique in the 1980's. He was then appointed Professor of International Health at the University of Oslo and was nominated Chairman of the Department of International Health at the same Faculty of Medicine in 1994 and was appointed to the first chair in Sweden of "Women's reproductive health" at the University of Linköping. In 1996 he was appointed Professor and Chair of International Health at the Division of Global Health (IHCAR) at the Karolinska institutet in Stockholm, Sweden. Over the last 20 years he has been involved particularly in research on the crisis of human resources for maternal and newborn survival with emphasis on research on task-shifting of comprehensive emergency obstetric care (CEmOC) to "non-physician clinicians". He is involved in the EC-supported ETATMBA project in Tanzania entitled "Enhancing Human Resources and Use of Appropriate Technologies for Maternal and Perinatal Survival In Sub-Saharan Africa".

Stephanie Mullen

Stephanie Mullen has a doctorate in Public Health (Dr.PH) from Tulane University, School of Public Health and Tropical Medicine. She has been a Senior M&E Advisor with the MEASURE Evaluation project at JSI since 2002 and Team Leader for the project since 2008. For 20 years, she has been working in international health managing and evaluating reproductive health, HIV/AIDS, and tuberculosis programmes. Her technical areas of expertise are monitoring and evaluation of health programmes and building capacity of local organizations and individuals in the areas of reproductive health, HIV/AIDS, maternal health and infectious disease programmes, adolescent reproductive health. She has provided technical assistance on monitoring and evaluation, data collection and analysis in the Southeast Asia, Eastern Europe, Sub-Saharan Africa, Latin America and the Caribbean.

Victor Ngozi Chilaka

Victor Ngozi Chilaka qualified at the University of Ibadan Nigeria in 1982. He started residency training at the University of Nigeria Teaching Hospital, Enugu before travelling to the UK in 1992. He obtained MRCOG in 1994 and FWACS the same year. In England, he continued training at University Hospitals of Leicester, and worked for extended periods of time with the Urogynaecology Team in Leicester. He obtained CCST in 2003, and in the same year, he was appointed consultant at Royal Derby Hospital with special interest in Urogynaecology. (Mr Chilaka is a dedicated teacher and a willing volunteer in programmes for reduction of maternal mortality worldwide). He became a Fellow of the Royal College of Obstetricians and Gynaecologists in 2006.

Foreword

Sexual and reproductive health was re-defined as a new scientific discipline after the International Conference on Population and Development (ICPD), which took place in Cairo, Egypt, in 1994. Governments affirmed at ICPD that couples should experience sexuality in an informed and rights-based manner and that they should be able to mitigate some of the most challenging and adverse consequences of sexuality and reproduction without coercion or repression. As a continent, Africa has experienced some of the most harmful outcomes of sexuality and reproduction. It was expected that the beneficial efforts to improve sexual and reproductive health would therefore have greater impact in Africa than in other parts of the world. Unfortunately, this has not been the case. Despite years of investment in reproductive health programming in Africa, the continent is still characterised by high population growth rates, and some of the highest rates of HIV/AIDS, maternal mortality, unsafe abortion and infertility in the world. These conditions are due in part to the prevalence of harmful traditional and cultural beliefs and practices and the high rates of illiteracy and poverty on the continent.

More importantly, poor sexual and reproductive health outcomes in Africa can be attributed to the lack of integration of the principles of ICPD into indigenous development planning on the continent. Support and funding for sexual and reproductive health in Africa has come mainly from international development partners, and practitioners have largely been international academics or advocates with interest in Africa. There has been limited indigenous funding for reproductive health everywhere in Africa, and indigenous practitioners continue to remain in short supply.

These omissions pose considerable challenges, but they must be rectified in any efforts aimed at sustaining the promotion of sexual and reproductive health in Africa after 2015. Going forward, the development of local capacity for implementing policies and programmes in sexual and reproductive health should be a major agenda item in development planning on the African continent. Specifically, the integration of the principles and science of sexual and reproductive health into undergraduate and post-graduate curricular in African educational systems would be one way to deepen the effectiveness and sustained impact of development planning on the African continent. This should either be through the development of new undergraduate and post-graduate courses in sexual and reproductive health or through the strategic integration of its principles into existing courses. Courses such as sociology, anthropology, demography, social statistics, economics, medical geography, the health sciences and law would benefit from the integration of the principles and science of sexual and reproductive health and rights.

To date, only a few universities in Africa offer specific courses in sexual and reproductive health and only very few have reviewed their training curricular to include the principles and science of sexual and reproductive health. Additionally, apart from journal articles, there are few purposely designed textbooks geared towards enabling and facilitating the teaching of sexual and reproductive health within Africa's educational systems. Additionally, a sampling of existing indigenous practitioners of sexual and reproductive health on the continent indicate that many do not have specific background training in the discipline, while a large proportion report that the lack of relevant textbooks limits their ability to implement effective policies and programmes.

This textbook was written to fill this gap, with the sole purpose to provide an easy-to-read and scientific resource to assist practitioners and students engaged in the discipline, in Africa and beyond. The 19 chapters in the book are written by individuals with long years of research and programmatic experience in sexual and reproductive health in Africa. Each writer chose topics for which they have personal experience in research and programming in Africa. Consequently, they were able to identify what is known about effective interventions in the relevant issues as well as, perhaps, what is yet unknown. Thus, each topic identifies possible areas for further research, policy development and interventions for promoting sexual and reproductive health on the African continent. The book is, therefore, meant for practitioners and students of today as well as for those who would enlist in the discipline in future.

It begins with a chapter that reviews the definition of sexual and reproductive health, a chapter that is an essential foundation for beginners and new entrants into the discipline. Thereafter, topics on evidence-based decision-making, research methods and the social context of sexual and reproductive health are presented to underscore the scientific principles and methods as well as the multi-disciplinary nature of the subject matter. Furthermore, essential and dominant topics in sexual and reproductive health in Africa were described in sufficient detail to leave the reader with a superb understanding of the emerging issues relating to policies and programming within the context of Africa. Topics covered include: maternal mortality, unsafe abortion, female genital mutilation, infertility, adolescent reproductive health, family planning, gender-based violence, comprehensive sexuality education, the reproductive health consequences of malaria in pregnancy, sexually transmitted infections, HIV/AIDS, the prevention of mother-to-child transmission of HIV/AIDS, reproductive tract cancers and the prevention of child marriage. The book ends with a chapter on Monitoring and Evaluation to emphasize the importance of measurement and results-reporting as an integral part of any efforts to promote sexual and reproductive health in Africa.

This book is intended for use by undergraduate and post-graduate students as well as development practitioners and those interested in understanding the domains and determinants of sexual and reproductive health in Africa. Its goal is to contribute to a more nuanced understanding and greater integration of sexual and reproductive health into educational and development frameworks on the continent.

Friday E. Okonofua, MD, PhD, ad eundem FRCOG, FAS

Editor, January 5, 2014

The Concept of Sexual and Reproductive Health

Oluwole E. Akande

The second half of the twentieth century witnessed a vast expansion of health technologies and of health care services related to reproduction and sexual health. These services were, however, fragmented and not oriented to respond to the need of women and men in a holistic fashion. This fragmentation of services and their lack of orientation resulted in the recent emergence of the concept of Sexual and Reproductive Health that offers a comprehensive and integrated approach to health needs related to reproduction and sexual health. The concept puts women at the centre of the process and recognizes, respects and responds to the needs of women and not only to those of mothers.

The concept of reproductive health received great attention in the United Nations International Conference on Population and Development (ICPD), held in Cairo in 1994¹. It was endorsed as showing the way forward, as a preferable alternative to narrowly focused family planning programmes.

■ WHAT IS REPRODUCTIVE HEALTH?

Reproductive health, according to the consensus definition agreed on at the ICPD in 1994, is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. This definition was made within the context of the positive definition of health in the constitution of the World Health Organization (WHO) as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”².

■ SEXUAL HEALTH

The ICPD in Cairo also expanded the definition of reproductive health to include “a satisfying and safe sex life”, a theme that was further elaborated at the 1995 World Conference on Women in Beijing³. The ICPD Programme of action stated that “reproductive health implies that people are able to have a satisfying and safe sex life and that their capacity to reproduce

and the freedom to decide if, when and how often to do so"¹. Reproductive and Sexual health, therefore, encompasses freedom from fear of unwanted pregnancy, disease and abuse, and from the shame and guilt that surround sexuality in many cultures⁴.

Sexual Health is, therefore, part of reproductive health and includes healthy sexual development; equitable and responsible relationships and sexual fulfilment; and freedom from illness, disease, disability, violence, and other harmful practices related to sexuality⁵.

Sexual and Reproductive health also implies that people have the ability to reproduce, to regulate their fertility, and to practice and enjoy sexual relationships. It further implies that reproduction is carried to a successful outcome through infant and child survival, growth and healthy development. It finally implies that women can go safely through pregnancy and childbirth, that fertility regulation can be achieved without health hazards, and that people are safe in having sex^{2,5}.

■ COMPONENTS OF SEXUAL AND REPRODUCTIVE HEALTH

The following constitute the basic components of sexual and reproductive health:

- Fertility Regulation
- Infertility: Prevention and treatment
- Safe Motherhood
- Infant and child survival, growth and development
- Sexually Transmitted Disease including HIV/AIDS
- Unsafe Abortion: Prevention and management
- Reproductive system cancers

To these should be added the following other important considerations:

- Gender equity
- Sexual behaviour
- Adolescent reproductive health and sexuality
- Harmful traditional practices and violence against women
- Reproductive tract malignancies
- Reproductive health of older women and men

■ WHAT IS NEW ABOUT THE CONCEPT OF SEXUAL AND REPRODUCTIVE HEALTH?

The comprehensive approach to sexual and reproductive health described in the ICPD Programme of Action seeks to build upon the strengths of existing service delivery systems and the gains that have been made in providing family planning, maternal and child health (MCH), and other vertical (stand-alone) programmes.

At the same time, the ICPD approach aims to improve service quality and broaden existing programmes to offer clients a full range of sexual and reproductive health services, through integration of services or strong links between components of care. Such an approach recognizes that providing care for one aspect of sexual and reproductive health (e.g., prevention of STDs) can have a positive impact on other aspects (e.g., healthy pregnancy and delivery, as well as the prevention of infertility) and help prevent future ill health. In addition to improving health status, this integrated approach to service provision can also reduce duplication of efforts, promote the efficient use of existing human resources, and improve client satisfaction and the use of available services.

Sexual and reproductive health, therefore, does not start out from a list of diseases or problems—such as sexually transmitted diseases, maternal mortality—or from a list of programmes—such as maternal and child health, safe motherhood, family planning etc. Instead, reproductive health must be understood in the context of relationship: such as fulfilment and risk; and the opportunity to have a desired child or alternatively to avoid unwanted pregnancy. Reproductive health contributes enormously to physical and physiological comfort and closeness, and to personal and social maturation—poor reproductive health is frequently associated with disease, abuse, exploitation, unwanted pregnancy and even death.

Programmes dealing with various components of reproductive health exist in some form almost everywhere. But they have been delivered in disparate and separate ways, unconnected to programmes dealing with closely interdependent topics. For example, the objectives, design and evaluation of family planning programmes were largely driven by demographic imperatives, without due consideration to related health issues such as a maternal health or STD prevention and management. Evaluation was largely in terms of quantity rather than quality—such as numbers of contraceptive acceptors, as opposed to the ability and opportunity to make informed decisions about health issues. In general, such programmes exclusively targeted women, taking little account of the social, cultural and intimate realities of their reproductive lives and decision-making powers. They tended to serve only married people, excluding, in particular, young people. Services were rarely designed to serve men even though they have reproductive health concerns of their own. Moreover, the involvement of men in reproductive health is important because they have a role to play as family decision-makers with regard to family size, family planning and the use of health services.

A reproductive health approach would differ from a narrow family planning approach in several ways. It would aim to build on what exists and at the same time to modify current narrow, vertical programmes to the ones in which every opportunity is taken to offer women and men a full range of reproductive health services in a linked way. The underlying assumption is that people in need in one particular area—say treatment of sexually transmitted diseases—also have needs in other areas—such as family planning or antenatal and postpartum care. Such programmes would recognise that dealing with one aspect of reproductive health could have synergistic effects in dealing with others. For example, management of infertility is difficult and expensive but it can be largely prevented through appropriate care during and after

delivery and prevention and management of STDs. Promotion of breast-feeding has an impact on reproductive health in many ways—it helps prevent certain postpartum problems, delays the return to fertility, may prevent ovarian and breast cancer, and improves neonatal health.

Another important difference between existing programmes and those developed to respond to the new concept of reproductive health is the way in which people—particularly women and young people who are the most affected by reproductive health concerns—are involved in programme development, implementation and evaluation. When women become more involved in programmes, it becomes clearer to them that they have concerns beyond motherhood. Also, dealing with reproductive health leads to a profound rethinking of the behavioural, social, gender and cultural dimension of decision-making that affect women's reproductive lives.

■ WHY IS SEXUAL AND REPRODUCTIVE HEALTH IMPORTANT?

Sexual and reproductive health, probably more than any other health field, has an impact that extends beyond the individual and family, to the society at large and even to the world as a whole. This impact involves crucial areas of global concern such as health, population development, status of women and the environment. Reproductive health is a crucial part of general health and a central feature of development. It is a reflection of health during childhood, and it is crucial during adolescence and adulthood. It sets the stage for health beyond the reproductive years for both women and men, and affects the health of the next generation. The health of the newborn is largely a function of the mother's health and nutrition status and her access to health care.

Sexual and reproductive health is a universal concern, but it is of special importance for women particularly during the reproductive years. Although most reproductive health problems arise during the reproductive years, in old age general health continues to reflect earlier reproductive health life events. Healthy sexual and reproductive behaviour sets the stage for good health before, during, and beyond the reproductive years for both women and men, and has a significant impact on the health of the next generation. While sexual and reproductive health is a universal need, it is of special importance to women, particularly during the reproductive years. Women bear by far the greatest burden of sexual and reproductive health problems, due to their physiology, their ability to give birth, and the limited power many women have over sexual decisions⁶. Women are at risk of complications from pregnancy and childbirth; suffer the complications of unsafe abortion; and bear most of the burden of using contraception.

The Role of Men in Sexual and Reproductive Health

Men, too, have reproductive health concerns and needs, though their general health is affected by reproductive health to a lesser extent than women. Not only do men have reproductive

health concerns of their own, but their health status and behaviours also affect women's reproductive health. Men's reproductive health needs include sexuality, protection against sexually transmitted diseases, infertility prevention and management, and fertility regulation. Protection against prostatic hypertrophy and prostatic cancer is another concern. Men can play a positive role in promoting women's reproductive health by sharing responsibility of family planning using a male method, by supporting their partners in using female contraception and deciding on appropriate family size, and by responsible sexual behaviour. Young men need to be educated to respect women and treat them as equals, to support efforts to enhance the status of women, and to prevent gender-based violence.

Because of men's central roles, it is imperative that men join women in sharing responsibility for sexual and reproductive health and achieving gender equity and equality.

At each stage of life, individual needs differ. However, there is a cumulative effect across the life course—events at each phase having important implication for future well-being. Failure to deal with problems at any stage in life sets the tune for later health and developmental problems.

Because reproductive health is such an important component of general health, it is a prerequisite for social, economic and human development. The highest attainable level of health is not only a fundamental human right for all; it is also a social and economic imperative because human energy and creativity are the driving force of development⁷.

■ THE CONCEPT OF SEXUAL AND REPRODUCTIVE HEALTH: A PARADIGM SHIFT IN POPULATION ACTIVITIES

The International Conference on Population and Development (ICPD) held in Cairo in 1994 represented a significant shift in the world's perception of population dynamics. For the first time, the conference not only focused on population but also on development. The ICPD represented a paradigm shift in population activities. Pre-Cairo, emphasis was on population size versus resources as well as population growth versus economic development. Post-Cairo, the emphasis shifted to human rights, reproductive health and individual choice. Pre-Cairo, the major players were economists and development planners whilst Post-Cairo the major players shifted to health professionals and human right activists.

The concept of sexual and reproductive health and rights was firmly put in place at the Cairo conference. Significantly, it also placed sexual and reproductive health at the centre of development efforts making it clear that the aim of interventions is to enhance reproductive health and promote reproductive rights rather than population policies and fertility control. This implies the empowerment of women (including through better access to education); the involvement of women and young people in the development and implementation of programmes and services; reaching out to the poor, the marginalized and the excluded; and assuming responsibility for reproductive health on the part of men.