

MATERNAL AND CHILD HEALTH

Edited by
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Dedicated in honor of Dr. C. Arden Miller, Chair, Dean,
Vice Chancellor, whose exemplary vision, enduring leadership
and unwavering advocacy has improved the health and welfare
of generations of families, parents, women, children and
communities in the United States through sound policies
and programs.

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FOREWORD

Herbert Peterson, MD, FACOG

With the 100th anniversary of the Children's Bureau in 2012 and the approaching target date of 2015 for achieving the Millennium Development Goals, we celebrate the achievements in global MCH to date and renew our commitments to the challenges ahead. While the approximately 30% decrease in maternal mortality since 1990 is greatly encouraging, the associated annual rate of decline of 2.3% is less than half of that needed to achieve MDG 5, and approximately 1000 women still die each day from complications of pregnancy and childbirth—with 99% of these deaths in developing countries (WHO, 2010). Likewise, we've seen a one-third decrease in under-5 child mortality since 1990 with about half of deaths in 2009 occurring in only five countries (You et al., 2010), yet 63% of these child deaths are preventable (Jones et al., 2003). The proportion of child deaths that are in the neonatal period has increased to 41%, and a 2011 report on trends in neonatal mortality highlights the challenges remaining in the United States, which now ranks behind 40 countries including Cuba, Malaysia and Poland (Oestergaard et al., 2011).

Since the second edition of this book was published, we've seen remarkable and encouraging new forces and dynamics around family planning. Globally, the Reproductive Health Supplies Coalition launched a campaign in 2010 to reduce unmet need for family planning in support of the United Nations Secretary-General's Global Strategy for Women's and Children's Health. The Campaign's goal is to have 100 million new users of modern contraception by 2015 and, thereby, meet the needs of 80% of women in low-middle income countries. Domestically, we have reason to hope for greater availability and access to contraceptives as well through the Department of Health and Human Services' decision in 2011 to make contraceptives available as a preventive health service at no additional cost through the Affordable Care Act.

This third edition of our book thus comes at an important time for both global and domestic MCH as we strive to train the MCH leaders of tomorrow. We have appreciated the success of the first two editions of this text in contributing to this effort and are pleased to present the third. It reflects the way we teach MCH at UNC-Chapel Hill and brings together the stages of the cycle of MCH, including reproductive health, maternal and infant health, and child and adolescent health, through a state, national, and global lens. In this edition we have provided updates and enhancements to chapters from the second edition and have highlighted the life course perspective on MCH. We hope the new edition will be helpful as we move forward together in preparing to seize the opportunities and address the challenges ahead.

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INTRODUCTIONⁱ

Women, children and families have had their ups and downs in the six years since the 2nd edition of this textbook was published. Infant mortality and low birthweight have improved slightly, whereas racial and ethnic disparities have not.¹ Teen pregnancy went down, but so did children's participation in physical education classes.² Although children in poverty has increased, health insurance coverage among children has not decreased, thanks to public health insurance programs such as Medicaid and the Child Health Insurance Program.³ Internationally, although under-five deaths continue to decline, that decline is slowest in the countries with the highest child mortality rates.⁴ In the developed world, the biggest child health problem is obesity.

During the course of writing and editing the second edition, I had the pleasure of discussing and corresponding with the late Dr. Greg Alexander, Chair of the Department of Maternal and Child Health of the School of Public Health, University of Alabama at Birmingham at the time. We had each discovered on our own that there was no definition of MCH in the first edition of *Maternal and Child Health: Programs, Problems and Policies in Public Health*. Greg was gracious enough to share his definition:

*MCH is the professional and academic field that focuses on the determinants, mechanisms and systems that promote and maintain the health, safety, well-being and appropriate development of children and their families in communities and societies, in order to enhance the future health and welfare of society and subsequent generations.*⁵

The above definition I would characterize as linear, that is, it starts with “determinants, mechanisms and systems”, and ends with the “future health and welfare of society”, a goal no one can argue with. I prefer a more circular approach, captured in Figure 1, a contribution of the late Earl Siegel and affectionately known to his students as “Siegel's Circles.” One can hop on board this life cycle-go-round at any point, and find common ground with colleagues in women's health, perinatal health, reproductive health, and children's health. The means to achieving optimal health and well-being for all children and women of reproductive age are just as important as the ends.

ⁱThe author would like to thank Dr. Helen M. Wallace for her review of this Introduction.

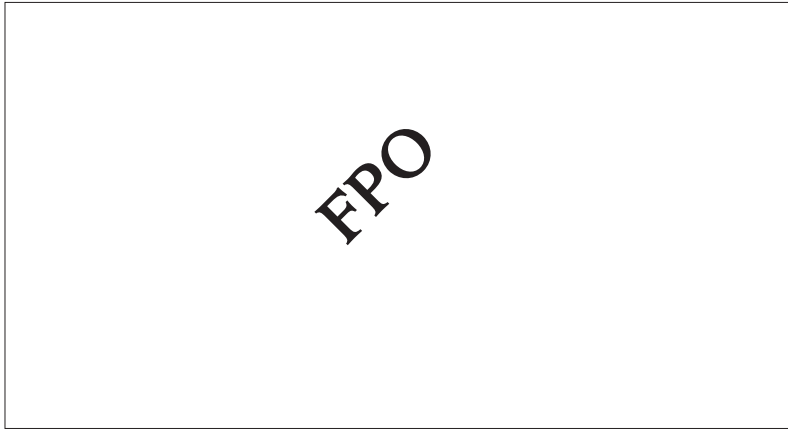


Figure I.1

Maternal and Child Health (MCH) is a profession rather than a discipline. It is a big tent, characterized by a multidisciplinary cast of characters who share a commitment to a vulnerable population. While a source of strength, the focus on a specific population rather than a theory or methodology can be a weakness in an academic setting, placing MCH training programs on the defensive. Are MCH programs training public health practitioners or future faculty and MCH researchers?

The answer, of course, is that we need to train all of the above, academics, researchers, and MCH practitioners, in order to improve the health status of women, children, and families. In doing so MCH borrows from many health and social science disciplines, but increasingly MCH is developing a set of knowledge and skills of its own, including life course theory as a unifying paradigm. (See Chapter 4.) It was as recently as 1993, for example, that the Association of Schools of Public Health (ASPH) and the Association of Teachers of Maternal and Child Health (ATMCH) (1993) first developed the competencies that MCH training programs across the country are striving to implement.⁶ These have been revised in February, 2001.⁷

This book is an attempt to present, in a consolidated form, the way one such MCH training program, the Department of Maternal and Child Health of the UNC Gillings School of Global Public Health, approaches the task of educating Master's students in the core material necessary for entering the field of MCH. With a few important exceptions, all of the contributors to this edited volume are faculty (current or former), students, or alumni of The University of North Carolina at Chapel Hill (UNC-CH). The chapters by and large correspond with courses that students at UNC-CH must take to satisfy the requirements of the Master of Public Health degree or the Master of Science in Public Health degree in MCH. As such, the scope of this book is not intended to be comprehensive, nor is any individual topic pursued in depth. Rather, this book is an introduction to MCH for students, hopefully with some prior health training or experience, approaching formal training in MCH for the first time.

The structure of the book is straightforward. The first two chapters, which cover children's rights and MCH history, provide the ethical and philosophical underpinnings without which MCH would be a mechanical exercise at best. The chapter on families provides background to the changing social context affecting the health and development of all children. The fourth chapter on the life course perspective is a new look at how life course theory informs the study and the practice of MCH. The next five chapters follow the developmental cycle, beginning

with family planning and proceeding through maternal and infant health, preschool, school-age and adolescent health. In these chapters, to the extent possible, the authors have followed a similar, but not identical, outline, from demography to history to epidemiology, to programs, policy, and current or future issues.

The next seven chapters deal with issues which cross-cut the developmental stages of the previous five chapters and are more idiosyncratic in structure as befits the various topics – health disparities, women’s health, children with special needs, children’s environmental health (new), nutrition, oral health (new), and global MCH. Finally, the last four chapters present public health skills no MCH professional should leave home without, namely, MCH research, planning, monitoring and evaluation (new, with a global focus), and MCH advocacy. While necessarily succinct, these chapters should inspire readers to seek hands-on experience to complement the didactic presentations herein.

As with any edited text, there are bound to be a variety of styles, but the faculty of the UNC-CH Department of MCH and the other contributors have provided material of uniformly high quality, making my job as editor that much easier. It is a credit to the Department, both to those currently in residence and to those who have since moved on, that such a book can be produced almost entirely from within.

Because the focus of the book is on how MCH is taught at UNC-CH (with additional contributions from colleagues at other institutions), there are many important areas which, in another format, would deserve chapters, indeed whole books, of their own. Injuries, HIV/AIDS, immunizations, mental health, and other key public health issues overlap with core MCH areas and are discussed, to a greater or lesser extent, within one or more chapters. Yet none of these topics is unique to MCH. To do them justice, one would have to call upon the skills of disciplines such as health behavior, epidemiology, health policy and management, etc. In fact, this is exactly how courses in these areas are offered at UNC, sometimes with, and sometimes without, MCH faculty participation. There are only so many of us to go around.

At the end of the day, we hope we have produced a readable introduction to MCH problems, programs and policies for the beginning graduate student. If some of our readers go on to careers which promote and protect the health of women and children, then this effort will have been a success.

Jonathan B. Kotch

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