MATERNITY NURSING

12TH EDITION/FITZPATRICK · REEDER · MASTROIANNI

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Twelfth Edition

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MATERNITY NURSING

Preface

Again, with the 12th edition of this book almost every chapter has been revised, and many have been rewritten extensively.

In the chapter "Orientation to Maternity Nursing" the vital statistics have been updated to reflect current trends. The concept of high-level wellness is introduced because we believe this has particular significance in the care of maternity patients. Health goals to maximize the patient's potential in the environment in which she finds herself are especially important for the care and well-being of essentially healthy patients experiencing normal childbirth, which is a normal physiologic process of the body.

Dimensions of effective nursing care have been enlarged, based on recent research and conceptual developments in nursing practice and related disciplines. The areas of antepartal care, parent education, the conduct of normal labor, care of the full-term and premature infant, nursing in emergency situations and in conditions with complications reflect this current thought.

Although the content on nurse-midwifery has been revised, it would be almost impossible to enlarge this chapter to include all of the expanding facets of this subject in the confines of this book.

Three new chapters have been added to this edition in an effort to include some of the vast amount of knowledge and thinking regarding the reproductive cycle, its participants, and their relationship to society in general at this time.

The focus in the chapter "Patient Teaching" is directed to teaching groups of patients in preparation for childbearing. Some of this content was presented in other sections of previous editions, but as preparation for parenthood programs have become more prevalent throughout the country, this approach is more appropriate. Some important concepts of the teaching-learning process which have particular relevance in patient teaching are introduced, and the student is encouraged to explore the subject more widely.

The chapter "Social Factors in Maternal Care" examines a number of issues related to maternal care, e.g., the meaning of human reproduction in our culture and the consequences it entails for the family as well as the larger society of which they are a part. Concepts of health, illness and the sick role are utilized to encourage the nurse to develop and explore innovations—which seem so necessary in this age of rapid social change—in her thinking and practice.

The entire subject of fetal medicine is relatively new to this generation but has already advanced beyond fetal diagnosis and now includes treatment and genetic assessment as well. In this new chapter some specific fetal problems are examined, and the present status of fetal diagnosis and treatment is reviewed.

The chapter on the care of premature infants has been extensively rewritten to include recent knowledge of the diagnosis and classification of low birth-weight infants, as well as the medical and nursing management of infants with such conditions. The disorders of the newborn and nursing in crises and emergency conditions have also been revised. The history of obstetrics has been enlarged to include the development and the present state of maternity nursing in the United States.

Many new developments and approaches to maternity care have been incorporated into this edition. In order to maintain a happy balance, some previous content has been refined and reorganized. As one example, mental hygiene of pregnancy and childbirth, per se, has been reorganized and mental health concepts have been incorporated throughout the text as an integral part of comprehensive maternity care.

Many new illustrations, both photographs and original drawings, have been added to this edition. The suggested reading lists that accompany each chapter have been brought up to date with references from current professional literature. The conference material and study questions at the end of the various study units, as well as the glossary, have been found essential by our readers and therefore have been retained.

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Acknowledgments

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The authors express their appreciation to colleagues, publishers and organizations for the use of illustrations in this text. We wish to express our gratitude to the nursing students and parents who granted permission for photographs to appear in this book.

Finally, we take this opportunity to thank the J. B. Lippincott Company, particularly Mr. David T. Miller, Miss Mary Dennesaites, Dr. Walter Kahoe and Mr. J. Stuart Freeman, Jr., for their steadfast interest, cooperation and assistance.

THE AUTHORS

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INTRODUCTION

The study of obstetrics and of the nursing care of women during the various phases of childbearing includes the study of anatomic and physiologic adaptations to human reproduction and, in the full meaning, the study of human growth and development and the many interdependent relationships concerned. The vast importance of professional maternity care to mothers, infants and families of our country must be fully understood by all who participate in their care.

This chapter is planned to begin the student's orientation to maternity nursing. Certain basic terminology will be defined. Basic concepts of maternity care will be introduced, as well as the childbearing mother and her infant—all as they form a part of the expanding family found in our society.

The subsequent chapters of this unit survey the anatomy and the physiology related to human reproduction. Knowledge of the anatomy and the physiology of the reproductive organs and of the development of the unborn child from conception to birth is basic to the understandings required of every maternity nurse. The physiologic mechanism by which conception takes place and a new human being develops is not only a fascinating story in itself, but also one that has far-reaching implications for the mother, the child and the family. All that a human being becomes depends on many factors: his heritage, his prenatal environment, his care at birth and his care thereafter throughout infancy and childhood. Thus, it is all the more important that the safety, the health and the well-being of each mother and infant be protected, and, simultaneously, that the highest level of health possible for every childbearing family be achieved in the broader sense of physical, emotional and social well-being.

Unit One concludes with a consideration of the various positions which the fetus in utero may occupy. A clear grasp of the material in this unit is essential to a basic understanding of maternity care. The illustrations should be studied in close correlation with the text.

OBSTETRICS

Obstetrics is defined as that branch of medicine which deals with parturition, its antecedents and its sequels. It is concerned principally, therefore, with the phenomena and the management of pregnancy, labor and the puerperium under both normal and abnormal circumstances.[1]

The etymology of "obstetrics" is mentioned here to serve as basic information. For many students it will undoubtedly arouse curiosity and interest for further study. Briefly, the word "obstetrics" is derived from the Latin *obstetricia* or *obstetrix,* meaning midwife. The verb form *obsto* (*ob,* before, plus *sto,* stand) means "to stand by." Thus, in ancient Rome a person who cared for women at childbirth was known as an *obstetrix,* or a per-

[1] Eastman, N. J., and Hellman, L. M.: Williams Obstetrics, ed. 13, p. 1, New York, Appleton, 1966.

son who "stood by" the woman in labor. In both the United States and Great Britain this branch of medicine was called "midwifery" for several centuries—in fact, until the latter part of the 19th century. The term "obstetrics" really came into usage little more than a century ago, although reference to a variety of words of common derivation can be found occasionally in earlier writings. With the use of new terminology that has developed down through the years, it is not unusual to find that from the standpoint of semantics, changes have developed also in the present era. Today, in light of the various changes which have evolved in the total care of childbearing women, the usage of the term "obstetric care" is open to question. In the current frame of reference it seems more appropriate to use the term "maternity care," since this term implies a broader meaning of the care of the mother and her offspring throughout the childbearing experience. Moreover, it focuses attention on the care of a *person,* on the importance of interpersonal relationships—particularly those relationships which are *significant to her*—and the kind of patient care which will assist in promoting the health and the well-being of the expanding family group.

The World Health Organization Expert Committee on Maternity Care has defined maternity care as follows:

> The object of maternity care is to ensure that every expectant and nursing mother maintains good health, learns the art of child care, has a normal delivery, and bears healthy children. Maternity care in the narrower sense consists in the care of the pregnant woman, her safe delivery, her postnatal examination, the care of her newly born infant, and the maintenance of lactation. In the wider sense it begins much earlier in measures aimed to promote the health and well-being of the young people who are potential parents, and to help them develop the right approach to family life and to the place of the family in the community. It should also include guidance in parentcraft and in problems associated with infertility and family planning.[2]

MATERNITY NURSING

Maternity nursing involves direct, personal ministrations to maternity patients and their newborn infants, or related activities on their behalf, during the various phases of the childbearing experience. Maternity nursing differs from the practice of nursing in any of the other areas only in that the clinical focus primarily involves the care of maternity patients (in contrast, for example, with the care of surgical patients or psychiatric patients). How the maternity nurse meets the nursing needs of mothers and their newborn infants cannot be spelled out in stereotyped activities any more than it can in any other situation in which individualized nursing care is the underlying objective. In fact, the nurse may be called on at times to perform what superficially appears to be rather elementary nursing tasks; for example, in relation to body cleanliness. It is *how* the nurse carries out her care of the patient, the depth of problem-solving ability she employs, that makes the difference between truly professional nursing and nursing on a technical level.

In the practice of nursing, the nurse intervenes to relieve or to reduce the patient's problems due to physical, physiologic or psychologic stress. A significant aspect of maternity nursing on the professional level is that patient care involves purposeful, sustained interaction between the nurse and the patient, during which the nurse assesses the patient's problems (i.e., makes a nursing diagnosis as to the nature of the discomfort or the dysfunction) and takes action to relieve the problem if it can be alleviated properly with nursing measures.

Begetting children is a family affair; thus, the nursing care of maternity patients is properly a family-centered activity. In most situations today the maternity patient is a healthy woman involved in the normal physiologic process of childbearing. However, like individuals facing any other new experience in the family life cycle, maternity patients may begin the experience at various stages of preparation for pregnancy and childbirth, with various kinds of stress and at various levels of contentment. It is safe to say that in almost no other normal physiologic process does one find such individual extremes of reactions within a normal context. These individual reactions may be based on events going back to childhood, to certain experiences shared in growing up, or to later happenings. Certainly, they are influenced by the home environment from which the mother comes and to which, a short time after the delivery, she will return with her newborn infant. The level of satisfaction with which the expectant mother leaves the clinic or the level of contentment with which the newly delivered mother leaves the hospital en-

[2] World Health Organization Technical Report Series, No. 51, Geneva, Switzerland, World Health Organization, 1952.

vironment with her baby will be modified somewhat by the interpersonal relationships of those most significant to her in that environment. Thus, the nurse can provide more continuity in the time spent with patients than other professionals and by the nature of her position has it within her ability to make a significant contribution to maternity care.

The usual reference to the maternity patient as a healthy woman involved in the normal physiologic process of childbearing has almost become a cliché. Some nurses acknowledge that they find little challenge in maternity nursing because the majority of the patients are healthy, with similar nursing care problems. Most are also ambulatory soon after delivery and are capable of taking care of their own physical needs.

High-Level Wellness

Good health (i.e., wellness) is not a static condition, but may be manifest in degrees of well-being or overlapping levels of wellness. Providing optimal maternal care requires an explanation of the many facets and factors responsible for the good health of maternity patients. From this point we may then be able to make statements in objective terms about what high-level wellness means for the individual, the family and others who are significant to the patient.

In maternity nursing the concept of high-level wellness is particularly appropriate in the promotion of good health for patients, whether the patient is pregnant, is in the course of labor or is the newly delivered mother with her infant.

"High-level wellness is a term which has been devised to make the person who uses it think about well-being in degrees or levels. High-level wellness for the individual is defined as an integrated method of functioning which is oriented towards maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning."[3] Wellness, then, is a direction in progress towards an even higher potential of functioning for the total individual in all of his uniqueness. Dunn has proposed that in order to utilize the goal of high-level wellness it is essential to think in terms of disease and health as a graduated scale.[4] This scale is conceptualized as one axis of the "health grid" (Figure 1-1). The health

[3] Dunn, H. L.: High-Level Wellness, pp. 4-5, Arlington, Virginia, R. W. Beatty, 1961.

[4] Dunn, H. L.: High-level wellness for man and society, *in* Folta, J. R. and Deck, E. S., p. 214. A Sociological Framework for Patient Care. New York, John Wiley and Sons, 1966.

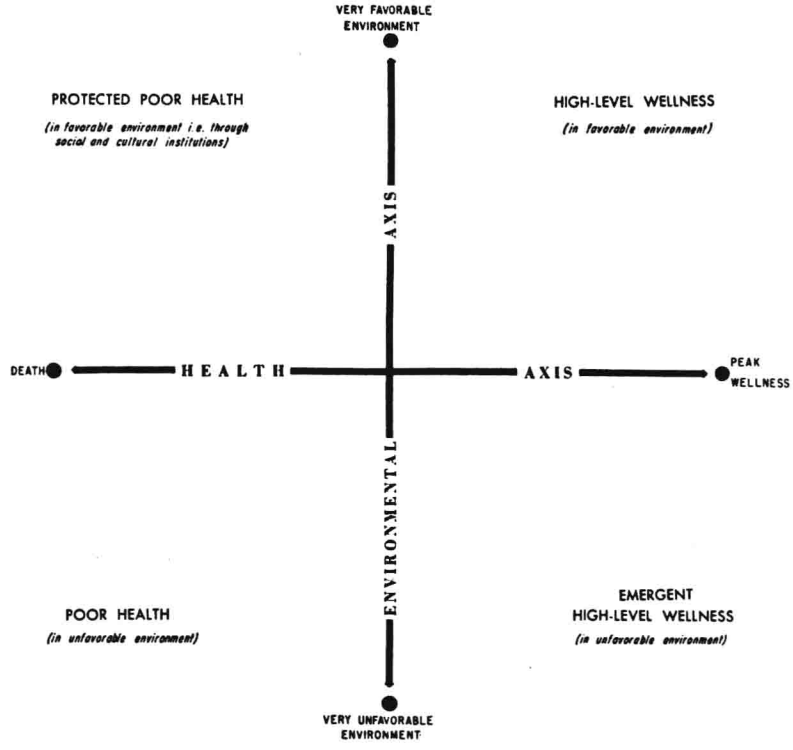

FIG. 1-1. The health grid, its axes and quadrants. (Data from U.S. Department of Health, Education, and Welfare, Public Health Service, National Office of Vital Statistics.) (Dunn, H. L.: High-level wellness for man and society. Am. J. Public Health 49: 220, June, 1959)

grid is made up of (1) the health axis, (2) the environmental axis, and (3) the resulting health and wellness quadrants. The environmental axis includes the physical and biological factors of the environment, as well as the socioeconomic components affecting the health of the individual. The health axis ranges from death at the left extremity to peak wellness at the right.

As one looks at the health grid, with its health axis and its environmental axis, it seems relatively easy to appreciate the extremes from severe illness and death on one side to the maximum or peak wellness on the other side of the axis. Man lives in a very complex environment today and, as with progress, the environment tends to become more complicated. Freeman divides the environment into three major areas: the physical, the biologic, and the social.[5] We are in daily interaction with physical factors (or the "elements" in the environment). Temperature and humidity alone can contribute to the comfort or the extreme discomfort of a pregnant woman. Considering the various aspects of atmospheric pressure, one might consider the changes in altitude; for example, creating a situation comparable to "Mt. Everest in utero." In the biologic environment, there are forces from the plant and animal kingdom constantly interacting with man (e.g., microorganisms), some of which contribute to health rather than illness. The biologic area includes the sources which contribute to our food and clothing. Freeman says that the biologic environmental area provides the major source for physiologic growth and development, and that the social segment of our environment provides the major source for psychological growth and development. As far as the social area of the environment is concerned, we are in constant interaction with people and the culture around us through many avenues of communication, such as the arts, the press, the radio, and television.

When we learn how to diagnose high-level wellness through objective measures we shall probably find that a substantial amount of creative expression and love of daily life is essential in the approach to a high state of well-being. The goal of high-level wellness for man can be achieved. The needs are for clear-cut concepts, for understanding and for a reassessment of our basic values. "We must dare to dream, for dreams are the seedlings of realities."[6]

MATERNAL AND CHILD HEALTH

Despite the fact that today the use of the term "maternal and child health" seems to imply a relatively new concept of care, it actually was in usage more than 50 years ago. In 1912 the United States Children's Bureau was created by an act of Congress for the purpose of promoting maternal and child health "among all classes of people." It was said to be a public health nurse who first conceived the idea of a Federal bureau of this kind and originally suggested the plan to President Theodore Roosevelt in 1905. The Children's Bureau has continually stressed the importance of public health nursing in maternal and child welfare. Between the years 1921 and 1929, public health nursing consultants were employed by the Bureau, and their services were offered to the states for maternal and infant hygiene. In rural areas throughout the United States, public health nursing services were greatly extended, and 2,978 centers for prenatal and child health work were established.

Since these early beginnings the Children's Bureau has continued to make significant contributions to the promotion of maternal and child health in this country (see Suggested Reading).

Maternal and child health nursing has been interpreted in many different ways, often depending on the individual's frame of reference. To some it means a combination of the traditional courses in maternity and pediatric nursing. To others it is a concept of patient care which takes into consideration the relationship of the mother to the care of a child, or the relationship of the mother and her newborn infant in maternity care. To still others it refers to the care of healthy mothers and children.

The authors of this textbook refer to maternal and child health nursing as a philosophy of patient care rather than a special area of nursing. Whether it concerns maternity nursing, pediatric nursing, the nursing of children or maternal-child health nursing, the patient care involves the nursing of mothers or children. Thus, the crux lies in the care of families. There is a body of knowledge which specifically pertains to maternity nursing, and, likewise, there is a closely related but sepa-

[5] B. J. Freeman: Human aspects of health and illness: beyond the germ theory, *in* Folta, J. R., and Deck, E. S.: A Sociological Framework for Patient Care, p. 84, New York, Wiley, 1966.

[6] Dunn, H. L.: High-level wellness for man and society. Am. J. Public Health, 49:219, June, 1959.

rate body of knowledge which pertains to the nursing of children or pediatric nursing. As one develops knowledge, understanding and skills in these areas, a philosophy of maternal and child health also evolves.

This is a philosophy of nursing that is shared by many colleagues. For example, Bruce and Hall have said:

> When maternity and pediatric nurses study and work together in providing nursing care for parents and children, the whole family benefits. . . . The members of each field bring with them their own unique skills and understandings which, when put together, cannot help but enrich the total practice.[7]

EXPANDING FAMILIES IN AMERICA

An awareness of the many facets involved in a changing society, especially as they relate to young childbearing families, should help the maternity nurse to develop an understanding of the forces that these changes exert on family life and, in addition, to see wherein they have implications for maternity care.

[7] Bruce, S. J., and Hall, E. J.: Maternity and pediatric nurses study and work together. Am. J. Nurs. 63:105, March, 1963.

In recent years it has been said repeatedly that family life in the United States is rapidly changing due to the impact of socioeconomic pressures. This is reflected in a change in American family structure, a change in traditional male and female roles, a change in family relationships, and even a change in concepts of maternity care.

The objective of this brief discussion is merely to introduce some observations that concern young childbearing families in our society and to stimulate the student's interest. It is in no way any attempt to pursue the broad and complex subject of trends in American family life.

Young couples today marry at a younger age than their elders did. The average age of the young bride is 20 years, and many brides are in their late teens. The average age of the groom is a little more than 2 years older than his bride. Nearly all young couples establish a household of their own when they marry. In many situations the young bride may still be completing her formal education; if she has been employed, she is likely to continue working outside the home. These couples not only spend more of their leisure time together, but they share in the homemaking responsibilities as well.

Young married couples today appear to be interested in having children, not only more chil-

FIG. 1-2. An expectant family.