Is Pregnancy Really Normal?

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During the past decade we witnessed an increasing amount of clamorous debate about birth control, sterilization and abortion. These discussions have been enlightened at times, but more often, they have been both confused and confusing. The medical profession has offered ambivalent and vacillating leadership, at best, on these very perplexing issues. This may be partially because of the life sustaining and extending philosophy which, historically, has been the honored and historic underpinning of medical education, and which may make physicians tend to shun activities they consider to be avoidance or termination of "new life."¹

It would appear, however, that a more basic reason for this ambivalence is that most physicians accept, implicitly or explicitly, the widely shared teleological definition of a female as essentially a reproductive machine. One physician has suggested that woman be defined as "a uterus surrounded by a supporting organism and a directing personality."² Adherence to this perspective clearly tends to inhibit critical examination of the corollary assumption that human pregnancy is not only a "normal" but is an especially *desirable* event from the viewpoint of woman's physiological, psychological and social functioning, and that failure (or, worse, refusal) to become or remain pregnant is, therefore, pathological. In this context, it is not surprising that even the major textbooks of obstetrics pay little or no attention to how a *woman* feels when she is pregnant, how *she* feels after an abortion, whether *she* regarded her pregnancy as normal or desirable.

Suchman has pointed out that the way an individual perceives his health status may be more predictive of how he behaves in the face of illness than the actual medical diagnosis.³ However, physicians trained in the Western tradition of medical practice tend to be much more disease-oriented than patient-oriented. Thus, their definitions of normality and abnormality tend to be stated in terms of the physician's perceptions and cognitive categories rather than those of the patient.⁴

Normality in pregnancy is defined in many ways, directly and indirectly. Medical professionals, and particularly obstetricians, almost all of whom are men, have certain personal role investments in defining pregnancy as woman's most normal and desirable health state. This view derives from a broader cultural inheritance, including Calvinist puritanism, whereby sex, the details of reproduction and the desire to know about them (as well as about reliable means of contraception) are stigmatized. According to this view it is a woman's duty (and function) to carry a pregnancy to term even if she does not want a baby. This is especially true in the case of out-of-wedlock pregnancies, which are traditionally viewed as punishment for unsanctioned sexual activity. Since so few women

have become doctors, ministers or theologians, they have had little opportunity to dispute these doctrines on an official level.

The institutionalized view of pregnancy as a hypernormal state is perpetuated and enhanced by the linguistic categories of medical education and practice. The typical, routine pregnancy in a young and otherwise healthy female is called a "normal" pregnancy unless it is complicated by various problems such as Rh incompatibility, preeclampsia, polyhydramnios, threatened abortion, abruptio placentae, hypofibrinogenemia, amniotic fluid embolism, or any one of the other numerous clinical syndromes associated with pregnancy.

In the 1961 edition of Eastman and Hellman's standard textbook, *Williams' Obstetrics*, the authors state:

From a biologic point of view pregnancy and labor represent the highest function of the female reproductive system and a priori should be considered a normal process. But when we recall the manifold changes which occur in the maternal organism it is apparent that the borderline between health and disease is less distinctly marked during gestation than at other times, and derangement so slight as to be of but little consequence under ordinary circumstances may readily be the precursor of pathologic conditions which may seriously threaten the life of the mother or the child or both. It accordingly becomes necessary to keep pregnant patients under strict supervision and to be constantly on the alert for the appearance of untoward symptoms. . . . It is in the prevention of such calamities (as eclampsia and dystocia) that care and supervision of the pregnant woman has been found to be of such value. Indeed, antepartum care is an absolute necessity if a substantial number of women are to avoid disaster; and it is helpful to all.⁵

The authors then describe in detail a very sound regimen of antepartum care. The implications of this preface, to the chapter on antepartum care are clear: Pregnancy is normal ö "the highest function" of woman's reproductive system. Ergo, that "highest function" is not reached while a woman remains not pregnant. Yet the risks of serious morbidity and mortality are so much increased over the nonpregnant state that constant medical supervision is required when pregnancy occurs, particularly at the extreme ends of the reproductive spectrum.⁶ If the risks were not so considerable, there would be no need for medical supervision.

There is a contradiction here: Pregnancy is a process in which the normal (nonpregnant) physiology is markedly altered for a period of time and which carries a significantly higher risk of morbidity and mortality than non-pregnancy. But if nonpregnancy is normal, how is it possible that pregnancy also is normal? Answer: If we say it is normal, it is normal. Eastman and Hellman, of course, are seeking primarily to describe the difference between an uncomplicated (normal) and a complicated (abnormal) pregnancy, a highly useful distinction in the context of obstetrical practice. Their "highest function" argument, however, is extended by others to define woman as most "normal" when she is pregnant or delivering.*

"Normality" has always been subject to social and cultural definition. If normal health is defined as the existing average, it is likely to have a different connotation than if it is regarded as a goal to be attained.⁷ For example, if almost every child in the village has such a heavy roundworm burden that his stools look like spaghetti and the existing average is taken as "normal," it is "normal" for a child to have worms. If the average woman in the same village is pregnant for 25 or 30 percent of her reproductive years,^{**} it is more "normal" for her to be pregnant than it is for the middle-class housewife in Greenwich,

Connecticut, who may be pregnant for only five percent of her fertile years. Medical sociologist David Mechanic points out that many diseases are not defined as illness states because they occur so frequently as to be regarded as the common state of humanity.⁸ Perhaps pregnancy is such a condition, which previously had certain advantages for the species.

Our culturally defined linguistic categories have accordingly come to shape our perceptions of biological reality and thereby reinforce patterns with survival value. It is worth pointing out, however, that other groups such as the Cuna Indians and the Tikopia have held markedly different views of pregnancy and childbearing.⁹ The more recent plight of rapid population growth documented by Firth¹⁰ among the Tikopia may be seen to some degree to be the result, through Western contact, of disruption of their previous patterns of belief and practice which included abortion and infanticide. In general, however, human pregnancy can be seen in the evolutionary process as a successful biological adaptation to the survival needs of the species. The view of pregnancy as "normal" by most human societies, and particularly Western society, has been a *cultural* adaptation with a high survival value until very recently. As Medawar¹² and others have pointed out, however, adaptations with advantages for the group may have adverse consequences for individuals,¹³ and even, in the long run, certain disadvantages for the group itself.

The present situation is changed in three significant respects from previous human evolutionary experience:

- A greater assurance of individual survival has lessened anxiety that the majority of a given couple's offspring will not survive to adulthood.
- Technological developments such as effective contraception and safe abortion techniques now provide new choices and offer new perspectives about pregnancy which previously were unavailable.
- Under current conditions of phenomenal human population growth, "normal" (unlimited) reproduction, if anything, endangers survival of the species.

There has been a cultural lag, however, with respect to our view of pregnancy. We cling to the outmoded view of pregnancy as women's highest, most "normal" function, even though, functionally speaking, Western medicine has begun treating pregnancy as a specialized kind of illness requiring prenatal care, obstetrical supervision and postpartum follow-up with positive results which the patients themselves recognize and seek out. Clearly, the view that pregnancy is woman's most "normal" state has low survival value for the individual in terms of our growing understanding of the morbidity and mortality risks inherent in pregnancy; and it has a decreasing survival value for the species in the context of rapid population growth.

The use of the term "normal pregnancy" in obstetrical practice, then, is the extension of the broader cultural influence into the professional setting. The term is useful, in a specialized sense, to distinguish pregnancies which are complicated from those which are routine. Unfortunately, its continued use by physicians is carried back to the nonprofessional context and reinforces the folk idea that pregnancy is more "normal" than the non-pregnant state. Its use within the medical profession results in certain awkward dilemmas, particularly when the pregnancy is unwanted.

This reaches to the core of our current difficulties and controversy about abortion, since pregnancy has traditionally been defined in Western culture as "normal," and the desire to terminate the pregnancy therefore, as, "pathological." It follows that every woman who wants an abortion must need to have her head examined, and that is exactly what has

happened. Liberalized abortion laws in several states have resulted in a situation in which psychiatric consultation is mandatory for women seeking a legal hospital abortion; and hospital boards and the medical community still maintain this ritual in some places where there are no legal reasons for its maintenance.

According to this logic, deviation from the accepted norm of pregnancy, especially once the pregnancy has occurred, is prima facie evidence of abnormality. Thus, psychoanalyst May Romm in 1953 declared that intense conflict about a pregnancy or about giving birth to a child is "psychopathological."¹⁴ The treatment suggested for unfortunate women with these allegedly psychopathological tendencies has been, variously, psychotherapy, marriage, offering the baby for adoption or some combination of these measures.

In fact, a woman seeking an abortion is making a circumstantial self-definition of pregnancy as an illness for which she considers the appropriate treatment to be abortion. She is displaying "illness behavior," in David Mechanic's terminology.¹⁵ Similarly, the woman who perceives the signs and symptoms of a wanted pregnancy may also display illness behavior and seek medical attention in the form of prenatal care.

With this introduction in mind, we may examine the phenomenon of pregnancy from several perspectives to determine whether it is an illness in comparison with the nonpregnant state. These perspectives are:

- the subjective feelings of the pregnant woman and other psycho-cultural aspects,
- the physiological and metabolic changes that accompany pregnancy,
- epidemiological patterns (i.e., risk factor of pregnancy vs. nonpregnancy), and
- socio-economic aspects.

Subjective and Psycho-Cultural Aspects

In most textbooks of obstetrics, the subjective feelings and symptoms of the pregnant woman receive only cursory attention in comparison with other, more technical details. It is widely recognized, however, that the early stages of pregnancy bring about marked changes from the subjective sense of physical and emotional well-being in most women, although reliable epidemiological studies of this are not available. Aside from amenorrhea, authorities cite nausea and vomiting as among the most prominent signs and symptoms of early pregnancy, being seen in half or more of all pregnant women. ¹⁶

Women who experience these symptoms describe a continuous sense of discomfort accompanied at times by powerful waves of nausea; these occur most often upon arising but may happen at any time during the day. The nausea may or may not be accompanied by vomiting, which itself may become so frequent as to require hospitalization. Later on, the nausea may disappear and be replaced by a ravenous appetite and a craving for unusual foods and substances such as dirt, coal or toothpaste.¹⁷

Another commonly reported symptom of pregnancy is severe fatigue and lassitude with a loss of interest in one's surroundings. In addition, many women report an increased irritability with a tendency to burst into tears at the slightest provocation, unusual fears of rejection, feelings of depression and marked fluctuations in libido.^{17a}

Other symptoms of early pregnancy include breast tenderness and tingling, increased urinary urgency and frequency and constipation. The later stages of pregnancy bring leg

cramps, abdominal pain due to round-ligament stretching and Braxton-Hicks contractions, backache and dyspnea.

In this context of subjective feelings of discomfort, it is worthwhile noting the effects of therapeutic abortion, particularly during the first trimester when the symptoms of nausea, vomiting and lassitude are most pronounced. Clinicians have noted that, in many patients, evacuation of the uterine contents under anesthesia results in an immediate and dramatic relief of symptoms which is experienced as soon as the effects of anesthesia have worn off. Although such experiences are commonly reported by physicians who perform abortions in their clinical practice, there is virtually no mention of this phenomenon in the medical literature so far as the author can determine.

The symptomatic aspects of pregnancy, while based on certain physiological changes, are undoubtedly accentuated when the pregnancy is unwanted or when it occurs in the context of disturbed interpersonal relationships or other forms of stress. This has been demonstrated by Grimm,¹⁸ Rosengren, ¹⁹ Poffenberger,²⁰ and other investigators.²¹ Sontag and others have suggested that this may also have adverse effects on the fetus.²² There is clearly an interaction between physiological changes, cultural patterns and psychological stress, and this is particularly true when the pregnancy does not occur under socially approved circumstances. Accordingly, it appears that "unwantedness" may be regarded as a major complication of pregnancy with surgical intervention in the form of abortion as the indicated treatment, rather than medical management as would be the case with a wanted pregnancy.

In spite of a woman's desire to terminate a pregnancy or a certain physiological basis for a sense of physical illness or discomfort, the behavior and statements of health professionals often summarize the predominant cultural view that it is not the woman's physical condition or the fact of pregnancy which is the "illness" but her *thinking* which is "diseased."

Newman has described certain kinds of ritualistic and symbolic communications with pregnant women by nonphysicians which imply urgency and danger while calling attention to the status of pregnancy.²³ These communications, while tacitly or unconsciously recognizing the pregnancy itself as an "illness," may be seen as magical attempts to ward off such "unhealthy" or dangerous patterns of thinking by ritual affirmation of the pregnant status.

Physiological Changes

The physical and functional alterations of pregnancy involve all the body systems, although some are affected much more than others.²⁴ The most obvious change is the enlargement of the uterus within the abdominal cavity with the subsequent displacement and compression of other abdominal contents. This has a direct effect on the circulation of blood, for example, and increases venous pressure leading in many cases to varicose veins, thrombophlebitis, hemorrhoids and other maladies.²⁵ It also has an adverse effect on the urinary tract.²⁶

Among the many other metabolic and physiological changes which occur, estrogen and progesterone levels increase significantly during pregnancy.²⁷ The rise in estrogen may account for the symptoms of nausea and vomiting when they occur early in pregnancy,²⁸ and it appears that the increase in progesterone is directly related to the feelings of fatigue, lassitude and inability to concentrate which are often reported in early pregnancy.²⁹

Other important changes include sodium and water retention,³⁰ calcium depletion,^{***31} hypercoagulability of blood,³² a high incidence of folic acid deficiency and depletion of iron stores.³³

It should be noted that all the alterations mentioned here are present in a so-called "normal" pregnancy. Since such alterations contribute directly to the increased morbidity and mortality associated with pregnancy and cannot be regarded as "normal" in comparison with the usual physiological state, perhaps it would be better to divide pregnancies into two categories: uncomplicated and complicated.

Epidemioiogical Patterns

Space does not permit an extensive discussion of epidemiological and socio-economic considerations, but they deserve a brief mention.

In the beginning of this century, deaths in the United States due to causes associated with pregnancy and the puerperium accounted for a large proportion of mortality among women of childbearing age. By 1930, maternity directly or indirectly caused 11 percent of all deaths in women aged 15-45, whereas this proportion declined to three percent by 1959.³⁴

Since the 1920s, maternal mortality has declined from 680 per 100,000 to 38 per 100,000.³⁵ Tietze estimates 20 per 100,000 as the current standard for the United States.³⁶

While the statistical trend is downward, pregnancy and the puerperium are still among the leading causes of death for women of childbearing age.³⁷ The decrease in maternal risk has come about in large part due to the assiduous efforts of physicians in both the preventive phase and the medical management of pregnancy. Better living conditions appear to have had a great impact on these statistics. Studies regarding the disadvantages for both mother and offspring of short birth intervals suggest that these improvements in mortality may also be the consequence of greater practice of fertility control with resultant smaller completed family size and greater intervals between births.³⁸ Indeed, the greater "normality" of pregnancies in recent years (that is, fewer complications and risks to the average mother) is certainly to some extent the result of a greater prevalence of normal *non-pregnancy*.

Socio-economic Aspects

Recent studies by Bumpass and Westoff indicate that from 750,000 to more than one million births annually in the United States are unwanted by one or both parents.³⁹

Other studies indicate that the reasons for this large proportion of unwanted births are primarily those which may be broadly defined as socio-economic. Either the additional child results in increased economic hardship for the family unit or the birth occurs in the context of disturbed social relationships, or some variation of this theme.⁴⁰

In addition to this large number of unwanted births, an estimated one million or more abortions occur annually in the United States.⁴¹ Fragmentary statistical evidence and consistent clinical impressions indicate that the majority of these abortions are sought for socio-economic reasons.⁴² Until very recently, nearly all of these abortions have been clandestine, and many have been performed by unskilled and often unscrupulous persons under poor hygienic conditions. In 1965, Gold, et al., reported that nearly 50 percent of all maternal mortality in New York City was due to complications resulting from abortion during some periods, and this figure exceeded 60 percent for Puerto Ricans.⁴³ Similar high

proportions of maternal mortality have been reported elsewhere as the consequence of illicit abortion.⁴⁴

In spite of these risks, however, it appears that one-fifth to one-fourth of all pregnant American women each year define pregnancy as an illness for which they regard the appropriate treatment to be abortion. The "illness" is not just biological but social and economic; and it is not just social, but has a biological basis in fact.

Viewing Pregnancy as Normal

These statistics to some extent reflect the ambivalent attitudes of medical professionals towards pregnancy. Pregnancy is regarded as "normal," yet it is treated in practice as a specialized form of illness. This may be regarded as an example of cognitive dissonance.⁴⁵ If illness is ordinarily viewed as a departure from the usual state of well-being, it is a priori, therefore, not "normal."

The basis for these contradictions lies in the medical professionas failure to recognize the bio-social nature of illness and treatment and the role of the patient in their determination.⁴⁶ Recognition of the patient's role in the identification of illness and the choice of treatment invades the realm of professional exclusivity, with its attendant prestige and status. This dilemma becomes particularly acute when a pregnant woman defines her own pregnancy as an illness for which she considers the appropriate treatment to be abortion.

The dilemma is made obvious in the use of psychiatric consultation prior to legal abortion which is sought for basically socio-economic reasons. Ostensibly, the psychiatrist must ascertain that continuation of the pregnancy is likely to result in self-destructive behavior or permanent damage to the woman's mental health. Such a prognosis is impossible to determine, and as much has been admitted by prominent psychiatrists on both sides of the question.⁴⁷

The "mental health" clause in regard to abortion is, then, a euphemism for "socio-economic reasons." As such, it symbolizes the last vestige of irrational professional exclusivity (whether the professional desires it or not) in the definition of illness and determination of appropriate treatment with regard to unwanted pregnancy.

Since routine psychiatric consultation is widely recognized, even within the profession, as having practically no medical function in the determination of indications for therapeutic abortion, it must be seen as a legitimizing ritual demanded by society in which the woman acknowledges unsanctioned behavior or thinking and expresses contrition in exchange for both expiation of "guilt" and safe treatment of her circumstantially self-defined illness of pregnancy. The ritual of bureaucratic procedure and delay, however, may be more painful, anxiety-provoking and threatening to her mental--as well as physical--health than the abortion itself.

An Alternative View of Pregnancy

The foregoing discussion should allow us to abandon the erroneous assumption that pregnancy is per se a normal and desirable state, and to consider instead a more accurate view that human pregnancy is an episodic, moderately extended chronic condition with a definable morbidity and mortality risk to which females are uniquely though not uniformly susceptible and which:

- is almost entirely preventable through the use of effective contraception, and entirely so through abstinence;
- when not prevented, is the individual result of a set of species specific bio-social adaptations with a changing significance for species survival;
- may be defined as an illness requiring medical supervision through (a) cultural traditions, functional or explicit, (b) circumstantial self-definition of illness or (c) individual illness behavior;
- may be treated by evacuation of the uterine contents;
- may be tolerated, sought, and/or valued for the purpose of reproduction; and
- has an excellent prognosis for complete, spontaneous recovery if managed under careful medical supervision.

Accordingly, the open recognition and legitimation of pregnancy as an illness would be consistent with the individual self-interest of those experiencing pregnancy, good standards of medical practice, and the continued survival of human and other species.

* Edgar Guest once wrote: "A man's most a man when he's fishinâ," leaving one to wonder whatever man might be when he's not fishing, and therefore *less* of a man. The similar notion that "a woman's most a woman when she's reproducinâ" implies the question: What is she for the other "lesser" 65-70 years of her life?

** Based on many studies including the one by Smith on the Cocos-Keeling Islanders (*Population Studies,* Vol. 14, No. 2, 1960, p. 94). Assuming a fertile period from 15 to 44 years, or 360 months, a mean completed fertility of 10 births at age 45 for those marrying at age 16 or younger yields a total pregnancy time of 90 months excluding pregnancies ending in fetal death.

*** Most sources deny that calcium depletion takes place or cite studies with conflicting results (see F. E. Hytten and I. Leitch, *The Physiology of Human Pregnancy*, F. A. Davis Co., Philadelphia, 1963, Ch. 5, p. 129). However, most of these authors or studies refer to well-nourished, middle-class patients in Western industrial countries, without recognizing the extent of calcium depletion that may take place in women with marginal diets. The same is true for other physiological changes.

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