

## Obstetrical Procedures: A Critical Examination of Their Effect on Pregnant Women and Their Unborn and Newborn Children

**Author:** Verny, Thomas R, MD, D Psych, FRCP (C)

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**Abstract:** None available.

**Full Text:** Headnote ABSTRACT: Medical and social attitudes and practices as they pertain to pregnant women and their unborn and newborn children are examined applying the scientific, the sociological, the psychosomatic and the pre- and peri-natal psychology perspectives. The case is made that hi-tech tests and obstetrical procedures adversely affect the pregnant woman and her baby. Medical interventions tend to be dehumanizing, disempowering and sometimes harmful. It is therefore incumbent upon us to apply these interventions only to a small number of medically high-risk pregnancies and not routinely to every pregnant woman. INTRODUCTION I would like to examine medical, institutional and social attitudes and practices towards pregnant mothers and their unborn and newborn babies from four vantage points. These vantage points are briefly explained below. The Scientific Perspective Many hi-tech tests, procedures and routines used in obstetrics have no proven efficacy and are really more in the nature of rituals than medical interventions. What is held to be scientific is often just the ritualization of an unproven belief. The Sociological Perspective At a time when society is increasingly subscribing to democratic values and the equal treatment of all people we find that obstetrical and neonatal interventions often run counter to this ideology. The Psychosomatic-Medicine Perspective The concept of psychosomatic medicine, that is, of the reciprocal relationship between mind and body and body and mind, is a basic premise of modern medicine. Yet in spite of the fact that this concept is taught at virtually all universities that offer courses in medicine, these teachings seem to have had little effect on obstetrical and neo-natal practices. The Pre- and Peri-Natal Psychology Perspective For those of us who are familiar with the theory, research and clinical applications of pre- and peri-natal psychology, it is particularly disturbing to see the continuation of practices and attitudes in our society, that not only fail to recognize the basic emotional needs of pregnant mothers but also tend to dehumanize, disempower and otherwise frequently adversely affect their psychological and physical wellbeing. Further, those who utilize these medical inventions do not know or do not want to know what the psychological effects of these procedures are on the unborn and newborn child. HI-TECH TESTING DURING PREGNANCY AND LABOR The Scientific Perspective If we look at pre-natal care, we observe the widespread use in the West and the almost obligatory use in North America of gyne-gadgetry, ie, ultrasound, amniocentesis, chorionic villi sampling, fetal heart monitoring, etc. In many states in the United States obstetricians are required by law to use ultrasound and amniocentesis in every pregnancy, whether medically indicated or not. You can rest assured that had the obstetricians not lobbied the governments in favor of such laws they would not have been enacted. Meanwhile, the great majority of these procedures are undertaken on well babies to ascertain the expected date of birth and the sex of the baby. Whereas the latter is of no importance except in some rare genetic diseases, the former can be accurately established clinically without ultrasound. A review of three of these procedures-amniocentesis, ultrasound, and electronic fetal monitoring-is noted below. Amniocentesis. Scientists at the Mayo clinic report that amniocentesis stands a 15 percent chance of being technically unsatisfactory. The sample of amniotic fluid may be inadequate, the culture may fail to grow, or the laboratory analysis may be wrong.<sup>1</sup> In one study, 22 percent of specimens were blood-tinged to grossly bloody.<sup>2</sup> Major complications of amniocentesis include pneumothorax, gangrene of a fetal limb, and sudden fetal death.<sup>3-5</sup> A British study sponsored by the Medical Council of Britain concludes that amniocentesis increases the risk of fetal loss and neonatal and obstetrical complications by 1 to 1.5 percent and by the same amount for certain types of major infant problems. It reports a fetal death rate of 2.6 percent in the

amniocentesis group and 1.1 percent among the controls. These investigators also found that amniocentesis significantly increases rates of maternal antepartum hemorrhage and neonatal respiratory distress, and slightly increases major neonatal orthopedic deformities such as hip malformation.<sup>6</sup> A Danish study shows that compared with pregnant women who do not undergo amniocentesis, those who do are 2.3 times more likely to spontaneously abort their babies.<sup>7</sup> A new statistic places this miscarriage rate in perspective. Researchers at Boston's Brigham and Women's Hospital, after studying 87,584 pregnancies, report that an elevated AFP level in conjunction with a normal ultrasound scan (routinely performed in conjunction with amniocentesis) implies a less than 0.1 percent chance (or 0.2 out of 200 fetuses) that the baby will have one of the four most common birth defects.<sup>8</sup> In light of finding that amniocentesis itself carries, at the lower range, a 0.5 percent chance of terminating a pregnancy, the authors conclude that "many . . . women may choose not to have amniocentesis when informed that the risk of pregnancy loss may be substantially greater (by a factor of five) than the likelihood of finding an anomaly." Further, because amniocentesis is performed routinely together with ultrasound visualization of the baby, the combined risks of the two techniques and not just the hazards of each separately should be considered.

Ultrasound. In the spring of 1984, the National Institute of Health's consensus panel released its long-awaited report on the use of ultrasound. The panel noted that ultrasound was not essential in any condition and discouraged its use "solely to satisfy the family's desire to know the fetal sex, to view the fetus, or to obtain a picture of the fetus."<sup>9</sup> Animal and laboratory studies have shown that ultrasound may cause chromosome damage, breakdown of DNA, and a variety of changes in circulation, liver cells, brain enzymes, EEG tracings, nerve reflexes, and emotional reactivity.<sup>10-11</sup> Researchers at the University of South Florida studied children exposed to ultrasound in utero. Although they found no solid indications of subtle or late-occurring harm, their advice to pregnant women was to reject ultrasound as a diagnostic procedure. Dr. Charles Stark, who conducted the study, stated that he would personally not consider using ultrasound at anytime during pregnancy.<sup>12</sup>

Electronic fetal monitoring. Does electronic fetal monitoring (EFM) accomplish what its supporters claim? Does it prevent cerebral palsy and brain damage? Does it correctly identify fetal distress? Does it, in the final analysis, reduce fetal and maternal morbidity and mortality? A study at the Denver General Hospital compared high-risk women in labour who were monitored with EFM with an equal number of high-risk women on whom EFM was not used. There were no differences in neonatal deaths, Apgar scores, or cord blood gases between the two groups. However the monitored group's caesarean section rate was more than double that of the auscultated group, and the monitored group had a three-times higher rate of postpartum infections.<sup>13</sup> Researchers at the National Center of Health Sciences Research (U.S.) who reviewed over 600 studies on fetal monitoring concluded that there was no scientific evidence that continuous EFM prevents brain damage or otherwise improves infant health except in very small babies.<sup>14</sup> Internal monitoring is an invasive technique that carries bacteria into the uterus. Because the likelihood of infection increases as time passes, the procedure commits the hospital staff to deliver the baby, ready or not, within 12 to 16 hours. This in turn leads to an increased number of induced labors and caesarean sections. It is not surprising then that EFM's have led to an increase in caesarean sections whenever they have been used. This very brief overview of the use of standard obstetrical tests during pregnancy shows, I think conclusively, that they fail dismally when subjected to rigorous and objective scientific analysis to demonstrate that they achieve an improvement in outcome. To put it simply and directly: these tests' risks outweigh their measurable scientific benefits. I want to make it very clear these tests both singly and jointly increase the mortality and morbidity of both the pregnant mothers and their unborn babies. On the basis of this evidence alone, obstetricians should be more discriminating than they are at present in the application of these tests.

The Sociological Perspective If we study these tests from a psycho-social point of view we find even more reasons to drastically limit their use. I am much indebted to Dr. Robbie Davis-Floyd for the observation that "the demise of the midwife and the rise of male-attended, mechanically manipulated birth followed close on the heels of the wide cultural acceptance of the metaphor of the female body as a defective machine—a metaphor which eventually formed the philosophical function of modern

obstetrics. Obstetrics was thus challenged from its beginnings to develop tools and technologies for the manipulation and improvement of the inherently defective and therefore anomalous and dangerous process of birth."15 It follows that only by a radical shift away from viewing all bodies and body parts as machines and the female reproductive system as an especially poorly designed machine can we hope to decrease unnecessary and harmful medical interventions during pregnancy and even more so during the birth process, which I shall discuss shortly.

**The Psychosomatic-Medicine Perspective** From the vantage point of psychosomatic medicine any of the medical procedures mentioned here create discomfort and physical pain accompanied by increased stress and anxiety. Even women thoroughly brainwashed or "prepared" for electronic monitors (and some high-risk women are plugged into both an external and internal fetal monitor) become uncomfortable, worried and progressively more anxious as labour drags on and they are not allowed to move about. What an insane way to have a child: strapped down to a bed, belts over the mother's stomach, connected through wires to a machine that emits weird sounds and draws graphs-with everyone paying attention to it and not to her. I cannot think of a better method for making a pregnant woman feel unimportant and vulnerable. As her anxiety increases, her body will try to delay labour rather than facilitate it; this will provoke medical interventions and may culminate in a caesarean section. Then staff members will congratulate each other on having saved another baby that would have been lost before the advent of space technology. And the mother will be duly grateful to her doctors and more than willing to repeat the experience next time she is pregnant. This is how a dysfunctional system perpetuates itself.

**The Pre- and Peri-Natal Psychology Perspective** Finally, if we consider these procedures from the pre- and peri-natal psychology perspective, we need to ask ourselves: What is their effect on the mental and emotional life of the unborn child? Twenty years ago very few people would have dared to ask this question. Today not only is it acceptable in scientific circles to ask this question but we also have some very scientifically sound and proven answers to it.16.17-18.19 To mention but a few findings which are relevant to our topic: -the auditory system functions by six months after conception -brain life begins between the fifth and sixth month of intrauterine life -REM sleep is detectable after six months past conception -memory engrams are laid down after the sixth month -perinates experience pain If one were to summarize all the research published during the last twenty years on this subject, one could state conservatively and without exaggeration that the unborn child from the sixth month of intrauterine life is a sensing, feeling, aware and remembering human being. I will grant that scientists who are familiar with the research may differ on the interpretation of the data. However, no one will dispute the fact that babies are a lot more mentally and emotionally developed beings than they were thought to be just a few years ago. Given the findings of this research, let us for a moment consider the case of a child whose mother receives both external and internal fetal heart monitoring. Up to the time the mother is laid out flat on her back, the baby is comforted by the unique rhythm of her movements. Suddenly, all movement ceases. Dramatic changes in its routine elicit anxiety in the baby. Next a needle is jabbed under his scalp, and the baby experiences pain. Then perhaps more needles are inserted, sometimes one every half-hour. How can the baby be expected to push forward with his head when any such movement causes more pain? What a torture to inflict on a human being. How could this process fail to leave psychological scars? Of course, doctors who neglect the feelings and sensitivities of the unborn child will not concern themselves with this question. They will also not appreciate the counterproductive nature of these procedures.20 To conclude this segment of my presentation, I think the evidence overwhelmingly shows that the most widely used diagnostic procedures in obstetrics-amniocentesis, fetal ultrasound and fetal heart monitoring-are not the "safe, highly reliable and extremely accurate procedures" they were touted to be just a few years ago. In fact all these techniques may cause psychological as well as physical damage to both the pregnant mother and her unborn child.

**PERI-NATAL OBSTETRICAL PROCEDURES** In a similar vein, I would like to examine medical interventions and procedures during birth. In 1970 the national caesarean-section rate was around 4 percent. By 1986 it had jumped to 24.1 percent, according to the most recent statistics available from the National Bureau of Vital Statistics, Washington, D.C. This dramatic increase in the number of caesareans performed in

the United States has produced no subsequent improvement in infant or maternal mortality rates.<sup>21</sup> There are hospitals in the U.S. where caesarean rates approach 50 percent. Such sad statistics can only occur because the doctors have successfully convinced themselves and their patients that this is a desirable state of affairs, and their opinions as experts have been accepted by society with little question. On a recent trip to Brazil I was told that in their "best" private hospitals the caesarean-section (C-section) rate was 90 percent; the 10 percent normal births were accidental due to the fact that the doctor was not present.<sup>22</sup> Some obstetricians do everything they can to prevent natural childbirth. Their major strategy is to perform a C-section well before the due date. As a result 90 percent of the children are born at least one week premature. I don't have to tell you about the detrimental effects on babies of prematurity, or of having their natural rhythms interfered with. You are also well aware of the harmful effects of unnecessary major surgery on the pregnant mother, the effects of anaesthetics or analgesics on the mother and baby and the interference with post-natal bonding that almost always accompanies a C-section. Why is it that we do not apply our psychosomatic and psychodynamic insights to improving the lot of women giving birth all over the world? Though I have not visited Russia the picture transmitted to me by friends and colleagues is that birth there is a joyless and lonely event.<sup>23</sup> There are 30 maternity hospitals in Moscow that contain an average of 225 beds. They are laid out like industrial plants. The hospitals are generally described as cold and dreary. Nurses and doctors are not particularly caring or efficient. A cultural attitude that has not changed in centuries keeps mothers and newborns isolated in hospitals with no visitors. Even fathers are excluded until several days after the delivery. The idea of a father assisting at the delivery is almost unheard of even in metropolitan centers such as Moscow. A Chinese baby enters the world kicking and screaming just like anywhere else. But within minutes, a nurse or midwife pulls its arms and legs straight, rolls the baby in a thick blanket, ties the bundle with a piece of rope and cinches it tight. For a Chinese, it is the first taste of freedom lost. The baby now can move only its eyes. Crying usually stops because even breathing is difficult. "I saw them unwrap one," a United Nations health specialist in Beijing said. "The baby took a deep breath." Chinese undoubtedly love their children, but their approach to childrearing stresses discipline and obedience. From the first moments of life, a Chinese is taught to conform. Babies sleep only on their backs. Thumbsucking and security blankets are prohibited. Crawling, the main way infants explore their environment, is discouraged. Toilet training starts at one month and is usually completed at one year. Left-handedness is banned. Soothers are also taboo. In public when Zhang Zhuangzhi's 21-month-old son sucks on his beloved pacifier, complete strangers walk up to him and "pull it out," said Mrs. Zhang, an architect. Nor do Chinese approve of other comfort habits. At nap time at Three Mile Village Nursery, a state-run daycare in Beijing, teachers sit beside toddlers who persist in hugging their stuffed animals or chewing on their quilt. "We watch them the whole nap," said Xie Shuling, vice-principal, with a benign smile. "We tell them, Look at the other children. They don't need anything to go to sleep. Why can't you be like them?" At another nursery, teachers confiscate nursing bottles and cuddly toys that one-year-olds have brought from home. "These are bad habits. We just tell them we lost it," said Renate Shuling, who heads the ministry of health's nursery.<sup>24</sup> After a visit to China, T. Brazelton said: "Chinese people are afraid of softening up their children for a world that isn't very soft. Unfortunately, they miss the point. Children need inner strength." In defense of Brazil, Russia, and China we can at least say that they have not had the benefit of the psychological knowledge which we in North America and the West have had for many years in abundance. However, what excuse can be offered to explain the following quote from the New York Times: The doctrine of natural childbirth, which once called for no medical intervention whatsoever in normal labour and delivery, is increasingly being bent to accommodate the advances in understanding and controlling pain. With improvements in the administration of anesthesia, the recognition that low doses can control pain, and better understanding of how drugs and pain affect the fetus, more and more women are delivering babies using breathing and relaxation exercises to control pain in natural childbirth, even as they are hooked up to monitors and receiving medicines to limit pain. "Natural childbirth is alive and well," said Dr. Maurice L. Druzin, director of obstetrics at New York Hospital-Cornell Medical Center, "but it has

become a marriage of biology and technology." Although there are no reliable statistics on the use of painkillers and monitoring in delivery, doctors and other experts around the country agree that the definition of natural childbirth is changing to include any birth in which the mother is awake and delivers vaginally. For example, when Patricia Lerner of Manhattan went into labour last year, fetal monitors were attached to her abdomen and internally to her daughter's scalp to chart the baby's heartbeats and the pressure of contraction. A regional anesthesia administered in the fluid surrounding the spinal cord, an epidural block, numbed Mrs. Lerner below the waist. Doctors adjusted the anesthesia so that it wore off just in time for her to push her daughter, Andrea, out. For Mrs. Lerner, director of speech pathology and audiology at Goldwater Memorial Hospital on Roosevelt Island, it was "natural childbirth in its fullest sense."<sup>26</sup> This reminds me of George Orwell's book 1984 in which the ministry of war was called the ministry of peace and everything was turned into its opposite to sound better. These obstetricians who speak of natural childbirth and use every medical intervention available to them are wolves in sheep's clothing or, to use another metaphor, they are selling the same old rotten wine in new bottles. To call medicated childbirth natural childbirth is scientifically, logically and morally wrong. To disregard the proven detrimental effects of anesthetics and analgesics on the bonding process and on neonates is equally irresponsible. As I was preparing this paper I became troubled by the realization that there is not a single procedure in obstetrics that does not cause more problems than it resolves if used routinely instead of when truly indicated in a small percentage of cases. Take, for example, the horizontal position, the so-called lithotomy position, that doctors in the West have instituted for childbirth for three hundred years. In the lithotomy position, the woman lies on her back on a narrow delivery table with her feet in stirrups and her buttocks at the table's edge. Use of the lithotomy position tends to make pushing the baby out more difficult and injurious than necessary, as this position 1) focuses most of the woman's body weight squarely on her tailbone, forcing it forward and thereby narrowing the pelvic outlet, which both increases the length of labour and makes delivery more difficult; 2) compresses major blood vessels, interfering with circulation and decreasing blood pressure, which in turn lowers oxygen supply to the fetus; 3) increases the need for episiotomy (and the likelihood of tears) because of the disproportionate tension on the pelvic floor and stretching of the perineal tissue; 4) because the baby's passage through the birth canal must work against gravity, forceps extraction is more frequently required and physical injuries to the baby are more numerous.<sup>26</sup> Contrast these findings with a recent study of 427 British women who used a birth cushion that enabled them to squat comfortably during delivery. Women who used the cushion had fewer forceps deliveries and shorter second-stage labor than did a comparable group of women who delivered in the traditional semi-reclining position.<sup>27</sup> We could go on and discuss the uses and abuses of episiotomies, forceps assisted deliveries, routine intravenous fluid feeding and induction of labour by pitocin. All these procedures hinder rather than assist the birth process.

**SUMMARY**

Some of the most widely used diagnostic tests in obstetrics such as amniocentesis, ultrasound and electronic fetal monitoring, while beneficial in selected cases, carry with them an increased risk of morbidity and mortality if applied routinely to normal pregnancies. The same may be said of every procedure used during labor, from the routine of placing women in the lithotomy position to the unjustifiably high rate of caesarean sections. All of these medical interventions adversely affect the psychological state of the pregnant mother and her unborn child which in turn leads to physiological changes that are detrimental to the physical health of both. Thus a negative self-perpetuating cycle is initiated that will require ever-increasing medical interventions to ensure the delivery of a live baby though by no means a well baby. In this way the normal and natural process of pregnancy and labor becomes gradually subverted into a medical emergency operation. It is time we reversed this process. It is time for doctors to become once again accoucheurs, i.e., doctors who attend women in childbirth, who attend and facilitate and catch the baby instead of controlling, invading and otherwise interfering with the beauty and the mystery of human birth, thus permanently scarring the minds of millions of human beings generation after generation.

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AuthorAffiliation Thomas R. Verny, M.D., D. Psych, F.R.C.P. (C) AuthorAffiliation Thomas R. Verny, M.D. is a psychiatrist in private practice in Toronto, Canada, and co-author (with John Kelly) of The Secret Life of the Unborn Child. He is the former president of PPPANA and the founding editor of the Pre- and Perinatal Psychology Journal Address correspondence to the author at 36 Madison Avenue, Toronto, Ontario, Canada, M5R 2S1.

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