
By: Foster, Sarah  Keywords: Obstetrics [2]

In 1980 the US National Institutes of Health [3] (NIH) and the National Institute of Child Health and Human Development (NICHD) released a report titled, "National Institutes of Health Consensus Development Conference Statement September 22-24, 1980." The report lists recommendations for birth delivery through cesarean sections, a surgical procedure used to deliver the fetus [4] via the pregnant woman's abdomen. The recommendations arose from the 1980 Consensus Development Conference on Cesarean Childbirth in Bethesda, Maryland. Medical professionals, consumers, and biomedical research scientists attended the conference, and the NIH's taskforce on the subject helped facilitate discussions regarding the safety of cesarean sections. The NIH taskforce concluded that cesarean section rates can be decreased and possibly reversed in addition to improving maternal and fetal outcomes and provided recommendations for future research on cesarean sections.

From 22 September to 24 September 1980, the National Institutes of Health (NIH) hosted a conference at their headquarters in Bethesda, Maryland, to discuss the rising rates of cesarean sections in the US. The NIH and the National Institute of Child Health and Human Development (NICHD) created a taskforce to analyze and present data on the increase of cesarean sections in the US. The NIH and NICHD discussed what factors were causing cesarean delivery to increase. Mortimer G. Rosen, a professor in the Department of Reproductive Biology at Case Western Reserve University in Cleveland, Ohio, and the director of the Department of Obstetrics and Gynecology at the Cleveland Metropolitan General Hospital in Cleveland, Ohio, acted as the chairman of the taskforce. The taskforce was composed of 19 members in fields such as medicine, ethics, law, psychology, sociology, and economics.

The taskforce proposed actions to decrease surgical births via cesarean sections in the US. They drafted reports after the conference, which included possible conclusions, recommendations, and discussion topics, and they aggregated data from many sources to draft the report. A panel of review then conducted an independent review of the material to determine if any biases or apparent inconsistencies existed in the report before the Government Printing Office published the reports. At the conclusion of the conference, the NIH determined that the largest factors impacting the rise in cesarean childbirth were dystocia (obstruction of the vaginal canal), repeat cesarean sections, and breech position, when the fetus [4] is feet first in the womb [5] instead of head first. That conference revised national recommendations for the safest and most effective route for delivery of a fetus [4].

The first section of the report begins with the "Introduction," a statement in which the NIH explains the conference's goal to discuss the increasing rate of cesarean sections in the US.
In the next section titled, "Why and How Have Cesarean Delivery Rates Changed in the United States and Elsewhere, and How Have These Changes Affected Pregnancy Outcome?", the NIH presented a historical overview and epidemiological evidence on cesarean birth and infant mortality rates in the US. In the next section "What Is the Evidence That Cesarean Delivery Improves the Outcome of Various Complications of Pregnancy?", the NIH discusses what situations warrant a cesarean section and offers recommendations on when to perform a cesarean delivery. The NIH then reports how having a cesarean section can affect a woman mentally and medically in "What Are the Medical and Psychological Effects of Cesarean Delivery on the Mother, Infant, and Family?" In the next few sections, the NIH discusses on "What Economic Factors Are Associated with Cesarean Births?" and "What Legal and Ethical Considerations Are Involved in Decisions on Cesarean Delivery?"

In the section Why and How Have Cesarean Delivery Rates Changed in the United States and Elsewhere, and How Have These Changes Affected Pregnancy Outcome of Various Complications of Pregnancy? the NIH says that birth rates in the US declined in the 1960s coinciding with increasing education on fetal health. There was also an improvement in medical techniques, making cesarean sections safer. The NIH found that many pregnancy complications could be avoided by performing cesarean sections. NIH reports that obstetricians, physicians who specialized in pregnancy, labor, and delivery, favored cesarean sections during complicated births rather than more difficult or dangerous techniques such as using obstetrical forceps to remove the fetus from the womb. In the subsection titled "Epidemiologic Data" the NIH shows that from 1970 to 1980 the rate of cesarean section performed in the US tripled as patients began to rely on medical specialists in hospitals to manage childbirth.

In "What Is the Evidence That Cesarean Delivery Improves the Outcome of Various Complications of Pregnancy?" the NIH lists four major reasons for cesarean sections and determines whether or not delivering amidst those complications increases the potential for a cesarean section. The NIH discusses dystocia, which is defined as obstructed labor that occurs when the fetus cannot exit the birth canal because the fetus is too large, in the wrong position, or there is an obstacle to the vaginal canal such as a mass. The report classes dystocia as one of the largest contributing factors to the increase in cesarean sections. The NIH recommends that doctors use other methods, such as patient rest and hydration, as ways of handling dystocia rather than performing a cesarean section.

Next, the NIH examines repeat cesarean sections, which increased due to precautions dating back to the early 1900s. Many physicians followed the recommendation that women shouldn't have a vaginal birth after a cesarean section (called a VBAC). The NIH explains that VBAC was not commonly practiced due to the potential of uterine rupture. Many doctors said that as the uterus was already weak from the previous cesarean delivery that the contractions from a subsequent pregnancy had the potential to rupture the woman's uterus. The NIH found that VBACs did not pose as great of a risk to maternal mortality as originally hypothesized. The NIH reports statistics that show the maternal mortality rate increased rather than decreased due to repeat cesarean sections compared to VBACs.

The NIH lists breech position as another reason physicians performed cesarean sections. Breech position is when the feet of the fetus, and not the head, are in position of the vaginal canal. The NIH notes breech position deliveries indicated higher morbidity and mortality regardless of whether the fetus is delivered vaginally or via a cesarean section. They conclude that in some cases of breech position, an obstetrician should proceed via a vaginal
birth but in other more complicated cases, a cesarean section should be performed. Next, the NIH reports on fetal distress, described as a lack of fetal coping in the womb. The NIH concludes that the evidence did not impact the rate of cesarean sections.

In the next section, "What Are the Medical and Psychological Effects of Cesarean Delivery on the Mother, Infant, and Family?" the NIH discusses factors that can harm the pregnant female or infant. The NIH reports a two to four times higher risk of maternal death during a cesarean section than a vaginal birth. A cesarean section can result in surgical complications or infections, which can lead to death. The NIH notes that maternal deaths from cesarean sections are underreported, and they recommend that more data be collected. The NIH also explains that the use during cesarean section, which is used to help block pain during surgery, can at times cause death. They report that correct dosage and maternal and fetal monitoring during anesthesia can minimize fetal and maternal deaths. The NIH recommends that physicians discuss the potential risks involved in anesthetic use with the women and that during the procedure the woman and the fetus are closely monitored.

Next, the NIH discusses neonatal infant distress syndrome caused by a lack of surfactant in the lungs, which is a substance that helps the lungs expand the air sacs (alveolae). The NIH notes that women who give birth via cesarean section without onset of spontaneous labor put their fetuses at risk for neonatal infant respiratory syndrome because premature cesarean sections do not allow the fetus an opportunity to transition from having fluid-filled lungs in the womb to having air-filled lungs outside of the womb. Treatment for neonatal infant respiratory syndrome includes ventilation surfactant, which is when pulmonary surfactant is inhaled via breathing treatments.

The NIH then discusses the psychological effects that can occur in the woman after a cesarean section. The NIH reports a possible link between negative attitudes from the parents and cesarean sections. Researchers found that few women wanted to have a cesarean section. The results suggested that if women were to experience complications that required a cesarean delivery, the surgery may have psychological impacts as a result. The NIH found that programs that allowed contact between the woman and the fetus as soon as possible after birth showed more positive patient attitudes after recovery as did support from the other parent, the postpartum woman, and infant.

Next, in the section titled, "What Economic Factors Are Associated With Cesarean Births?" the NIH reports on the possible connections between medical costs for the patients, financial incentives for the physicians, and cesarean births. The surgical and hospital costs of a cesarean section are generally greater than that of a vaginal birth. Although, depending on the type of health insurance and the coverage of the patient, a cesarean section may be seen as less of a financial burden. The NIH reports that physicians may also have a financial incentive for performing a cesarean section. Overall the NIH concludes that there may be a larger financial payment from insurance companies to physicians who perform a cesarean section, but due to the length of time and effort a cesarean delivery takes, physicians may decline the financial incentive.

In the section, "What Legal and Ethical Considerations Are Involved in Decisions on Cesarean Delivery?" the NIH discusses how legal and ethical concerns impact a physician’s decision to perform a cesarean section. The NIH found that a physician’s ethical concerns did not cause an increase cesarean rates. The NIH says that there are no ethical ties between the physician and cesarean section but instead between the provider and the patient. The interest of both
the patient and the fetus\textsuperscript{4} takes precedent over the interest of the physician. The NIH reported that malpractice lawsuits are mainly filed when a physician does not perform a cesarean section when the patient felt that a cesarean section was necessary. The NIH found that legal ramifications of not performing a cesarean section when the patient requests is one of the reasons for the rise in cesarean sections. The report noted that many physicians practice defensive medicine, choosing to perform a certain test, treatment, or procedure to avoid a law suit.

In the final section, "Research Needs," the NIH states that all areas addressed in the report needs further research in order to satisfy an intensive investigation on rising cesarean section rates such as the one performed for the Consensus Conference on Cesarean Childbirth in 1980. The NIH identifies areas of specific importance such as efficacy of cesarean birth, physician practice patterns, ethics, and legal concerns. They report different methods such as well-designed medical record-based sources of information, interview surveys, case control studies and randomized clinical trials as necessary methods of research in order to gain comprehensive data to determine the reasons and effectiveness behind performing a cesarean section.

In the section titled "Consensus Development Panel," the NIH introduces the consensus developmental panel, also called the taskforce. The National Institute of Child Health and Human Development created the panel to develop tentative recommendations and conclusions concerning the increasing cesarean rate. The members all came from different disciplines of medicine, psychology, sociology, law, ethics, and public interests. Although this group was chosen to write up the draft report based on their specific knowledge and skills, the NIH determined that a subsequent review of the taskforce?s findings were necessary, so it created the Panel and commissioned its report. This subsequent panel reviewed the analysis, data, and methods used to draw up the draft report, confirming that the data, the conclusions, and the public?s contributions were all accurately and fully incorporated in the report.

During the Consensus Conference on Cesarean Childbirth in 1980 the NIH concluded that the largest factors impacting the rise in cesarean childbirth were dystocia, repeat cesarean sections, and breech position. The NIH recommended that repeat cesarean be replaced by vaginal births unless absolutely necessary. Considering dystocia, the NIH recommended that physicians allow for vaginal birth unless the fetus\textsuperscript{4} is in distress. They endorsed promoting rest, hydration, walking, sedation, and the use of oxytocin as a hormone\textsuperscript{8} that can induce childbirth prior to performing a cesarean. In the case of breech deliveries physicians should promote vaginal births when the fetus\textsuperscript{4} is expected to weight less then eight pounds, the pregnant woman has sufficient pelvic dimensions, the head of the fetus\textsuperscript{4} is not hyperextended, and there is a physician present who has prior experience with vaginal breech delivery. The "National Institutes of Health Consensus Development Conference Statement" facilitated a national discussion about the safety and increased rates of cesarean sections.

Sources

In 1980 the US National Institutes of Health (NIH) and the US National Institute of Child Health and Human Development (NICHD) released a report titled, "National Institutes of Health Consensus Development Conference Statement September 22?24, 1980." The report lists recommendations for birth delivery through cesarean sections, a surgical procedure used to deliver the fetus via the pregnant woman's abdomen. The recommendations arose from the 1980 Consensus Development Conference on Cesarean Childbirth in Bethesda, Maryland. Medical professionals, consumers, and biomedical research scientists attended the conference, and the NIH's taskforce on the subject helped facilitate discussions regarding the safety of cesarean sections. The NIH taskforce concluded that cesarean section rates can be decreased and possibly reversed in addition to improving maternal and fetal outcomes and provided recommendations for future research on cesarean sections.

Subject

Cesarean section | Cesarean section--Complications | Obstetrics | Fetus | NIH Consensus Development Program | Vaginal birth after cesarean | Fetal distress | Fetal monitoring | Oxytocin | Defensive medicine | Pregnancy

Topic

Publications

Publisher

Arizona State University. School of Life Sciences. Center for Biology and Society. Embryo Project Encyclopedia.