

has been achieved by cesarean section.<sup>9,10</sup> Vaginal delivery after prior cesarean section shows no sign of becoming established practice, despite widespread demonstration of its efficacy. A long-term solution to the problem of cesarean section is therefore more likely to be achieved by medical rather than surgical treatment of dystocia in first labors. Active management of labor is such an approach, is well proved, and if widely applied, could ultimately provide a solution to this problem.

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*To the Editor:* Finding no difference in perinatal outcome between "selectively" monitored and "universally" monitored patients in labor, Leveno et al. conclude that "not all pregnancies, particularly not those at low risk . . . need continuous electronic fetal monitoring during labor." This conclusion can be challenged. Use of an electronic monitor during labor implies more than simply attaching the mother and the fetus to an electronic babysitter. The information provided by the "gadget" must be constantly assessed and integrated into the management of the patient's labor if the outcome is expected to be improved over the outcome of only casual, intermittent observation. This is true for both patients at high risk and those at low risk. That a nurse's visual inspection of a monitor tracing every 30 minutes is insufficient to produce an improved outcome can be inferred from the authors' Table 5. Six high-risk viable fetuses were given a diagnosis of distress, and cesarean delivery was recommended. In five cases it was performed. Presumably, each fetus was alive at the beginning of the operation, but each was listed as stillborn (i.e., no detectable sign of life) after delivery. One of two conclusions can be drawn: either the authors mistakenly classified an early neonatal death as a stillbirth, or the fetuses were in such distress that they did indeed die between the time that the decision was made to deliver the fetus and the time that delivery was accomplished. If the first conclusion is correct, then the data must be recalculated, and I suspect that there would be a difference in intrapartum death between selectively and universally monitored patients. If the second conclusion is correct, one wonders whether the electronic-monitor record contained information documenting fetal distress but, because of the 30-minute inspection interval, the distress was either not recognized or not observed soon enough to make a difference in the eventual outcome for the fetus. If this is true, the conclusion that the electronic fetal monitoring makes no difference to perinatal outcome would be invalid.

Many of us believe that the value of universal electronic monitoring has yet to be unequivocally established. The present study does little to help clarify this question. What it does demonstrate is that

whether the monitoring is selective or universal, the information needs timely assessment if perinatal outcome is to be improved.

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*To the Editor:* Haynes de Regt et al. reported that patients of private physicians had a significantly higher rate of cesarean section than patients in hospital clinics. The reasons for the difference that they specifically rejected included level of risk, parity, diagnosis, and convenience and financial considerations. Rather, the authors speculated that physicians' concern about professional liability and the malpractice crisis might be responsible for the greater number of cesarean sections in private practice. They also recommended that continuing medical education in new techniques directed toward private physicians might contribute to a reduction in the rate of cesarean section.

Similar research that we conducted several years ago may contradict the two above explanations and may suggest a reexamination of some of the rejected hypotheses.\* In 1984 we reported the results of a three-year study comparing maternal and neonatal outcome in a private setting with outcome in a health maintenance organization (HMO). Among the data we reported was an observation, similar to that of Haynes de Regt et al., that the rate of cesarean section was higher in the private setting than in the HMO setting. This was one of our most interesting findings, since we had controlled for both physician and hospital differences. We analyzed data on nearly 2400 term infants cared for by the same group of physicians and delivered at the same hospital (i.e., the same physicians delivered the infants of HMO patients and those of their own private patients). Thus, differences in the cesarean-section rate could not be attributed to differences in physician training. Moreover, because the period of study was 1979-1981, concerns about liability were not the dramatic problem that they are today and consequently were not likely to affect differentially a physician's behavior among patients.

Our results were as follows: (1) Virtually all measurements of pregnancy outcome in both mother and child were similar and favorable in both environments. There were no significant differences in maternal prenatal or postnatal complications, such as incompetent cervix or endometritis (to name but two), nor were there any significant differences in neonatal outcome (e.g., Apgar scores at one and five minutes). (2) There were, however, significant differences in the type of delivery. Only 13.1 percent of the HMO patients underwent cesarean section, whereas 21.9 percent of the private patients did ( $P < 0.01$ ).

On the basis of our findings, we conclude that neither training nor issues of malpractice must be operating to produce the differences in cesarean-section rates reported by us earlier and reported most recently in the *Journal*. Perhaps Haynes de Regt et al. may want to reconsider some of the explanations that they initially rejected.

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\*Wright CH, Gardin TH, Wright CL. Obstetric care in a health maintenance organization and a private fee-for-service practice: a comparative analysis. *Am J Obstet Gynecol* 1984; 149:848-56.

*To the Editor:* Haynes de Regt et al. purport to show that private physicians at the hospitals that they studied "performed significantly more cesarean deliveries without significantly improving perinatal outcome in most birth-weight categories." The data to justify this conclusion, examined closely, may tell a different story.

Data from Tables 1, 2, and 8 reveal the following. The ward service performed the deliveries of 3192 women whose babies were under 2500 g. In this group there were 574 cesarean deliveries and 269 infant deaths (excluding deaths before labor and anomalies incompatible with life). The cesarean-section rate for this group, then, is 17.9 percent, and the infant death rate is 84.2 per 1000 deliveries. Private physicians performed deliveries in 1829 women