“Safety” In Childbirth: What Does This Mean? What Is “Safe” Enough?

By Susan Hodges

Often, when examining “safety” with regard to hospital birth versus home birth, the only benchmark considered is survival of the newborn. While this is certainly an important measure of safety, it is only ONE measure of safety. Other outcomes are also vitally important, including survival of the mother and ensuring that both mother and baby emerge from the birth as healthy and whole as possible. By most measures the US, with 99% of births taking place in hospitals, has poor and deteriorating outcomes compared to other developed countries.

Infant mortality, which includes infant deaths up to one year after birth, is often unrelated to place of birth, so this is not a very good measure when looking at the safety of birth in different settings (home, birth center, hospital). Perinatal mortality –fetal death after 20 weeks of gestation plus infant death up to 28 days of age – is far more relevant to this discussion. It is important to be very clear about exactly what measure of mortality is being used when anyone is making claims about “safety” and whether or not place of birth could even be related to mortality.

In fact, when comparing outcomes for home and hospital births, studies consistently show that for planned home births for healthy women attended by a trained care provider, and excluding causes of death that are unrelated to the place of birth (such as genetic defects incompatible with life, for example), home and hospital have similar perinatal mortality rates. So by that standard, planned home births and hospital births are equally safe for babies of healthy mothers. (citation: CPM 2000 study, link to K&BA’s Understanding birth better website?)

While multiple factors also influence perinatal mortality, the quality and thoroughness of prenatal care and specific birth practices can play significant roles in this outcome. Typically, homebirth midwives provide much more intensive prenatal care, with each appointment averaging 40 minutes or more, and include extensive education of clients and families. Also, homebirth midwives are much less likely to use interventions unless absolutely needed, in contrast to hospital births that usually involve a multitude of “routine” and usually unnecessary interventions. These routine interventions disturb the process of labor and often cause complications, leading to more interventions and more complications, harming both the mother and the baby. In other words, in hospitals typical birth practices, most of which are not evidence-based, make birth more dangerous for mothers and babies.

Maternal mortality can be difficult to track, largely due to issues surrounding definitions and to the fact that maternal deaths related to pregnancy and childbirth often happen days, weeks, or even months after the birth. Recent analyses of current data strongly suggest that cesarean section is one of the leading causes of preventable maternal death. Given that fewer than 5% of planned homebirths end in cesarean while the average rate of cesarean for hospital birth is over 30% (as of 2006?), we can safely say that planned homebirth is generally safer for healthy mothers than hospital birth.

Other important components of “safety” include both maternal and infant morbidity – injury or illness associated with the birth. Morbidity for the baby can include everything from bruising or lacerations from operative deliveries (cesarean section, forceps or vacuum extraction), to breathing difficulties due to drugs or pulmonary immaturity, to infection from exposure to hospital germs, and all the complications related to late preterm birth from elective inductions and
cesareans. For the mother morbidity can include fever, infection, drug reactions, surgical incisions from cesarean section, lacerations of the perineum (from tearing or episiotomy – a surgical cut to the perineum), although some medical authorities do not consider surgical incisions for episiotomies morbidity unless they result in other complications. Routine birth practices can also result in breastfeeding difficulties, and when birth is experienced as traumatic by the mother, in the result can be depression, post traumatic stress disorder or psychosis. However, these psychological effects, including breastfeeding problems, are rarely considered as morbidity, even though they can have serious negative effects on the mother and baby.

A recent study indicated that over 40% of women experience some level of morbidity related to childbirth. The \textit{New Mothers Speak Out} (from Childbirth Connection, 2008) report indicates that 25% of respondents reported new health problems in the first two months after birth, and many of those problems continued for six months or more. In addition, 44% of all mothers reported physical or emotional impairment, and about one-third reported that postpartum physical health or emotional health interfered with caring for their babies. Nearly all of the mothers who participated in this survey gave birth in hospitals.

Finally, discussion about safety rarely includes consideration of long term effects or impacts on future pregnancies. Episiotomies and serious tears (often the result of an episiotomy), anesthesia injuries, and cesarean sections can cause long term pain for many women. Cesarean sections are associated with increased risks of secondary infertility, ectopic pregnancy, miscarriage, and still birth – clearly unsafe for the fetuses and babies involved. Multiple cesareans can lead to life-threatening complications in subsequent pregnancies. In addition, mismanagement of shoulder dystocia and malpresentations can result in long-term and sometimes permanent injury of the newborn. Furthermore, recent studies show increasing evidence that the growing phenomenon of scheduled births (either by elective induction or cesarean) is leading to an epidemic of prematurity, including late preterm births, that can cause lifelong cognitive and respiratory disorders. Women who have planned homebirths are rarely transferred to medical care for induction or cesarean section, with rates about one-tenth those of hospital births for healthy “low risk” women.

Ultimately, we are talking about “risks” – for the baby and for the mother. Risks are established in terms of the average likelihood of an adverse event occurring in a population. No one can predict with certainty which specific individuals in a given population will suffer the adverse event. Furthermore, each woman is an individual, and is not necessarily “average”. Many aspects of lifestyle (nutrition, smoking, level of fitness) may affect the likelihood of particular adverse events, but may not have been controlled for in any study. If a woman doesn’t smoke, exercises, and eats a healthy diet, she may be at much lower risk than the average population for any number of possible complications.

In addition, many adverse events are affected by specific birth practices. For one example, if a woman is told to lie on her back during labor and birth (and over 70% are), she is more likely to have slow labor, a baby showing signs of distress, difficulty pushing the baby out, and perineal lacerations from tearing, than if she can be upright and moving around. Induction is another example. If the woman is induced with drugs and rupture of the amniotic sac, she is at greater risk of having the cord prolapse (a life-threatening complication for the baby), of having the baby in a less than optimal position in the birth canal, and of having a premature baby with respiratory problems because the lungs are not quite mature. These complications are much more likely to happen when these birth practices are used than when they are avoided and labor can occur when mother and baby are ready. In homebirths the mothers are free to move and be in any
position during labor and pushing; midwives find that women instinctively move in ways that helps the baby move through the birth canal.

Many people believe that the hospital is “safer” because they are in the medical environment and feel reassured that medical “rescue” is immediately available should it be needed. However, studies have shown that it is almost impossible to give birth in the hospital without interference in the normal process of labor and without hospital practices and routine interventions that actually increase the likelihood of complications. Indeed, research shows that where and with whom a woman gives birth is a significant and independent risk factor in whether she experiences increased rates of medical intervention, in particular an episiotomy or a cesarean section.

In contrast, a planned birth attended by a trained care-provider in an out of hospital setting (home or birth center), means support for the normal process with an absolute minimum of interference. The attendant (midwife) is trained to notice signs of complications developing and can assess the need to transport for medical care well in advance, in the rare cases where it is needed. Serious complications almost never occur without some preceding signs that there is a problem. The scientific studies all show that for planned home births with a trained attendant, perinatal mortality is as good or possibly better than for birth in the hospital, and that there are far fewer interventions and so less morbidity for both mothers and babies. Yet the 99% of women who give birth in hospitals in the US experience high levels of medical intervention that research tells us is unnecessary and can be harmful to both mother and baby.

No one can guarantee that a specific individual will give birth in complete “safety” in any setting. All any woman can do is read the scientific evidence, understand the range of risks associated with the choices available, and decide what she thinks is best for her, her baby, and her family. There are some risks no matter where birth takes place. However, the notion that the hospital is the “safest” place for all women to give birth simply is not supported by any credible scientific evidence.