It is worth repeating: "life begins at conception" is a religious, not scientific, concept

It is difficult to get over the shock of the reversal of Roe v. Wade. The decision to allow individual states to restrict access to abortion is wrong, unfair, and inconsistent with our societal values on so many levels that it is difficult to focus on just one. I will share a personal anecdote. One of my patients suffered through many years of fertility treatment and finally achieved a viable intrauterine pregnancy. We celebrated the reassuring visualization of the fetal heartbeat on ultrasound. Unfortunately, not long thereafter, the fetus was found to be anencephalic. We commiserated over the terrible luck. She terminated the pregnancy and moved on to further treatment. Now I imagine: What would have been the scenario if she lived in a state which prohibits abortion? She would be forced to carry the pregnancy to term, even though the child would not survive. She would face months of being in public, facing good-natured questions about the gender of the baby, and "does she have a name picked out yet?" Would she choose instead to isolate herself from the world for the duration of the pregnancy? Would she choose to travel to a state with less medieval laws? The macabre scenario of being forced to gestate against her will and without any sort of logic fills my medical brain with a deep sense of anger and unfairness, especially in view of the obvious observation that only those with a uterus are faced with this shocking societal abridgment of personal choice.

How does society justify this infringement on individual rights? How can individual states be allowed to dictate private behavior? The answer, of course, is that antiabortion groups believe that personal choice does not include the termination of a pregnancy because the pregnancy is a person. A quick Google search of antiabortion groups and organizations reveals a key argument: to these groups, "life" begins at "conception," meaning fertilization (1-3). What is interesting is that faith and religion are not listed as the reason for this belief. Instead, they quote "scientists" who claim that "life begins at conception" is a scientific fact. Why do these groups insist on this pretext of scientific legitimacy? Why not just say that this is a matter of faith? It seems quite obvious that this is done entirely to avoid having to answer why one person's religion is being used to control someone else's behavior.

It must be pointed out that the concept of "life begins at conception" is neither scientific nor a part of any (ancient) traditional religious teaching. The writers of the bible (as well as other religious texts) knew nothing about eggs, sperm, or fertilization. It was only after medical science revealed the basic steps in embryonic development in the mid-20th century that some religious groups seized on the idea that human life must therefore "begin" at fertilization. The idea was made up by religious leaders, who intentionally chose to interpret the events of early development to suit their preconceived ideas and who then started preaching this dictum as fact. As scientists that work in this field, we are in the best position to point out that the concept of life beginning at fertilization is not evidence-based. The American Society for Reproductive Medicine has been very good about putting out talking points on the Dobbs decision (4); however, I would argue that we need to focus specifically on this observation: life does not begin at fertilization (5). The egg is alive; the sperm is alive; and after fertilization, the zygote is alive. Life is continuous. Dichotomous thinking (0% human life for the egg, 100% human life for the zygote) is not scientific. It is religious thinking. Fertilization is not instantaneous, embryonic development is not precise, and individual blastomeres can make separate individuals. Some pregnancies develop normally and others are doomed, either from the start (e.g., if they possess an incorrect chromosomal complement) or later in pregnancy (e.g., if the central nervous system fails to develop). Religious leaders are neither scientists nor clinicians. They do not understand pregnancy and should not make decisions about the pregnancies of others.

We must not stand by while antiabortion groups continue to claim falsely that the dictum, "life begins at conception," is supported by science. As scientists and providers of reproductive health care, we witness, firsthand, the reality of fertilization and early embryonic development. We, who dedicate our lives to helping patients achieve pregnancies and build their families, know that we do *not* create life in the laboratory. We do not witness a human death when an embryo fails to survive cryopreservation. We observe the continuous nature of human life, with fertilization representing only one key step, and know that from a biologic point of view, no new life begins when fertilization is achieved. Let us be clear that "life begins at conception" is a religious, not a scientific, concept.

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