

## Expert Reviews

# Does an Impending Surplus Await Our Field?

Rocco Rossi, MD<sup>1</sup> 

<sup>1</sup> Department of Obstetrics and Gynecology, University of Cincinnati

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If you are in the field of obstetrics and gynecology, you have most likely come across the United States' birth rate figures. If you have not seen these numbers, there is some bad news if you are vying for deliveries.

Both the total number of births and the birth rate declined in 2020. The total number of births was 4% less than it was in 2019 (3,605,201 v. 3,747,540). This was the lowest number of births in the United States since 1979; yet the United States population in 2020 is 100 million more than it was in 1979.

Additionally, the birth rate (general fertility rate) also dropped 4% from 58.3/1000 to 55.8/1000. This was a record low birth rate for the United States. This rate decline was seen across all races of women as well as all age categories of women. The birth rate among women ages 15–19 was the lowest it has ever been and 75% less than it was in 1991; this is certainly good news. The total fertility rate (TFR) also dropped to 1.64 births per woman, down from 1.71 births per woman in 2019. The TFR has not been at replacement level (2.1 births per woman) since 2007 (Hamilton, Martin, and Osterman 2021).

What does this mean for Obstetrics and Gynecology in the United States? If we are going to have fewer births, do we need to keep training so many physicians in our field? A 2012 study looking at the distribution of obstetricians showed there to be 5.39 physicians for every 10,000 reproductive aged women. The greatest density was in the District of Columbia with 8.99 physicians, and the least density was in Utah at 4.02 physicians (Rayburn et al. 2012). None of these figures include midwives, advanced practice nurses, or family medicine physicians, positions that provide substantial services in and around child birth.

Looking at the state with the lowest density of obstetricians we ask, "how many deliveries can the average obstetrician in Utah expect to perform?" While it is important to note we compared 2020 birth rates to 2010 workforce numbers, the results are still concerning. Assuming birth rates do not change much between states, a sample of 10,000 women in Utah would be expected to birth 558 children in 2020. This would be 138 births per obstetrician. Few obstetricians would consider this an overburdensome workload. The United States birth rate has continuously declined for years. Yet, our field has not decreased the number of physicians or residency spots. In fact, it is the opposite; our field is adding physicians when our patient load has been declining for the past 10 years.

Rayburn et al.' 2012 study argued that there was not a shortage of physicians, but rather a geographic maldistribution of physicians. The same is true in 2021. As for the maldistribution, people have been urbanizing in the United States ever since it was founded. To get physicians to move to more rural areas requires a significant amount of money, but there is no guarantee that this is an adequate driver. The more practical approach would be to further train midwives and family medicine physicians, coupled with the recently expanded telehealth options available. Whether this redistributes our resources in a meaningful way is unknown. However, I would propose it is more likely to succeed at filling the void in "less desirable" areas of the country than the high salary, high signing bonus, and high turnover rate the current system implements to attract obstetrician gynecologists to those areas.

The adult woman population is going to grow over the next 25 years, peaking in the middle of this century. The growth is going to be slow and flat for women of reproductive age, increasing less than 10% over the next 25 years. After the peak, the United States population pyramid will be increasingly top heavy, similar to Europe and Japan, with the largest factor in growth being women over the age of 65 (U.S. Census Bureau 2012).

How have our workforce numbers changed in the face of these demographic challenges? There were 1,110 first year residency spots in 1992 and 1,395 first year spots in 2019 according to NRMP match data (Stonehocker, Muruthi, and Rayburn, n.d.). This is a 25.6% increase over a 27 year period. In 1992 there were 4,065,014 births, almost half a million more than in 2019. Why have we increased our workforce by 25 percent? The most plausible explanation is to fill the explosion in subspecialty fellowship positions which increased substantially during this time. All of the subspecialty programs have increased their numbers, with urogynecology positions increasing the most at 129% between 2005 and 2015. When looking at the population projections discussed above, the increase in urogynecology makes sense due to the significant increase in people over the age of 65 in the upcoming years. Yet this explanation does not hold true for the increasing number of maternal fetal medicine specialists. MFM first year fellowship spots increased more than 50% in the same time period despite an ever decreasing number of births (Wasson and Ashhurst 2015).

All fields of medicine naturally subspecialize. Medical information is growing at a rapid pace, and it is impossible

for physicians to know it all. So, they choose to subspecialize to remain experts in their narrower field.

Obstetrics and gynecology is a shrinking field, and it is time we acknowledge these trends. This means starting to reduce the number of first year spots that we offer in the Match. I would recommend a 1% drop per year for the next decade, at a minimum. I would propose cutting spots with a goal of 1,000 first year residency spots in 2040, then holding that number through the end of the century. This will do our field tremendous good. Not only will we not feel a work shortage, physicians will also graduate with greater exposure to procedures and disease, they will be more prepared to subspecialize and practice independently, tracking during residency can become a reality for more programs, and physicians will have larger practices where they can finally

start closing the wage gap between obstetrics and gynecology as compared to other surgical subspecialties.

The Wall Street Journal recently published several articles detailing China's problem with declining birth rates, and the potential effect it could have on their economy and society. The real issue is not the declining birth rate as much as there is no solution to it; even relaxing birth restrictions has not led to an increase in births. China's birth rate has continued to decline and perhaps the United States' will, too (Qi 2021). Perhaps the declining birth rate is a natural trend in an advancing society (as indicated in John Calhoun's experiments from the 1960s) (Fessenden 2015). The least we can do is not ignore it, and it would be even better if we did a little strategic planning.



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