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The Guttmacher Institute provides estimates, covering various years in the last decade, of the proportions of all pregnancies that women report as unintended in many developing and developed countries.^{1,2} More than 40 percent of pregnancies fall into this category in developing countries, and more than 47 percent are unintended in developed countries such as the United States. (That unintended pregnancy is higher in developed than in developing countries seems surprising, given the generally greater access to family planning services in developed countries. It may be that access is only part of the story. Perhaps inadequate sex education, ambiguous parental messages about sex, and a sexualized popular culture encourage unprotected and risky sex in wealthier countries. It may also be that women in countries where the value of high fertility tends to be relatively high are more likely to call any pregnancy “intended” regardless of their reproductive aspiration at the time of conception.) Since many unintended pregnancies end in abortion and some in miscarriage, knowing this proportion is insufficient to estimate impacts on fertility in any population. Guttmacher researchers do further separate out these national data by pregnancy outcome, allowing for an estimate of the proportion of all births that result from unintended pregnancies. Globally, the proportion is surprisingly consistent: 22 percent in developed countries and just over 21 percent in developing ones. More than one in five human births, based on survey results, are the result of a pregnancy that the woman did not want to happen.

Given the challenges and costs associated with helping infertile couples conceive, in addition to an absence of data, the concept of intended pregnancies here necessarily excludes those that would result if women with difficulties conceiving could all overcome these at will. Moreover, I do not explore the reproductive intentions of men. Women’s intentions are logically more important than men’s, since they undergo the actual experience—and most of the risks—of bearing a child. But the relative inattention to male reproductive intentions stems not from any dismissal of their importance, merely a lack of data. (If the data existed, a fascinating question to explore would be the impact on human population growth if all pregnancies were the outcome of the intention of *both* future parents to raise a child to adulthood. It’s conceivable that under these circumstances, fertility would be very low indeed. Demographic and health surveys are now more frequently asking men about their reproductive intentions, so such an inquiry eventually may become possible.)

Subtracting the proportion of births resulting from unintended pregnancies worldwide (more than one in five births, based on survey results) from the current total fertility rate of 2.53 would yield a global total fertility rate of slightly below two births per woman—well below the current replacement fertility rate and comfortably below any replacement rate that could be achieved even if all infants survived to reproductive age. Population would immediately reposition itself for a reversal of growth that probably would occur well before 2050 and would end up below the 9 billion figure so often assumed for that year.

This calculation, too, faces a limitation. Surveys often separate unintended pregnancies into those that are “mistimed”—defined as happening at least two years before a pregnancy was wanted—and “unwanted.” In the latter category, the woman’s intention was to have no more children at all. Mistimed pregnancies pose a dilemma for calculating the demographic impact of pregnancies that are 100 percent intended. Is it possible, after all, that preventing all mistimed pregnancies would actually increase the number of intended pregnancies occurring two or more years later?

The most conservative way to handle this question is simply to consider all mistimed pregnancies to be equivalent to intended pregnancies happening (for the sake of mathematical simplicity) in the same year. This is actually overly conservative, in that avoidance of many mistimed pregnancies would not result in a future intended pregnancy at all. The time might never be right for the woman or couple to want a child, and simply by aging an additional two years or more either or both might become less fecund. No data appear to be available, however, to support any particular assumption about what proportion of avoided mistimed pregnancies would never be followed by an intended one.

We can consider two assumptions: one, that only births from unwanted (or never-wanted) pregnancies should be subtracted from the global total fertility rate; and, two, that some percentage of births from mistimed pregnancies should also be considered as those that would never occur. Somewhat arbitrarily, we might explore the demographic implications of births from intended pregnancies if we assume that 25 percent of mistimed pregnancies would never result in a later intended pregnancy if the mistimed pregnancies were prevented. Since even this scenario seems relatively conservative, we can call the two scenarios "most conservative" (all mistimed pregnancies are equivalent to intended pregnancies) and "less conservative" (75 percent of mistimed pregnancies are equivalent to intended pregnancies). We can then explore the impact of known data on population dynamics in our idealized world in which all births result from a woman's intention to become pregnant, give birth, and raise a child.

While there are data on mistimed versus unwanted pregnancies for many countries, most of these are either in the developing world or Eastern Europe. (Comparable data on the United States from a 2002 US government survey have been incorporated in the database developed for this article.)³ Lacking such data for Western Europe, Oceania, and many countries in Asia, Latin America, and the Caribbean, I assume that the proportion of births from unwanted pregnancies in these regions and countries equals the average of all those for which data are available. China, with a fifth of the world's population and 13 percent of its births, is a unique case. Its one-child population policy and ready access to safe (and, in the past, sometimes forced) abortion obliges me to assume that no births result from unintended pregnancy in the country, though this is unlikely. In any event, the countries in the database produce 83 percent of all the world's annual births, so even a significant difference between birthrates from unwanted pregnancies in the database countries and those not included would not greatly affect the global total.

References

1. Singh, S et al. *Abortion Worldwide: A Decade of Uneven Progress* (Guttmacher Institute, New York, 2009).
2. Singh, S. Personal communication, September 2010.
3. Chandra, A, Martinez, GM, Mosher, WD, Abma, JC & Jones, J. Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. *Vital Health Statistics Series 23(25)* (National Center for Health Statistics, Hyattsville, MD, 2005).

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