

ETHICS CASE

What Are Risks and Benefits of Not Incorporating Information about Population Growth and Its Impact on Climate Change into Reproductive Care?

Commentary by Benjamin P. Brown, MD, and Julie Chor, MD, MPH

Abstract

Fears about the impact of family planning decisions on the environment are not new. Concerns about population growth have often been conflated with concerns about the increasing demographic influence of specific feared or marginalized groups, leading to subsequent unjust treatment of those targeted populations. In clinical encounters such as this case, in which the patient expresses concerns about having another child in light of the effect of population growth on climate change, it is not appropriate for the clinician to impose environmental protection values on a patient's reproductive decision making, as this risks undermining her autonomy as well as perpetuating injustice. When a patient raises such worries, however, the physician's responsibility is to elicit and try to understand the patient's preferences and then to offer treatment choices that align with those values.

Case

Dr. Stuart is an obstetrician-gynecologist who has gained a positive reputation among her patients for providing nonjudgmental care. She provides obstetric and gynecologic care to a population that is particularly diverse in terms of religious beliefs and cultural norms. Today, her first appointment is with Emily, a healthy, young married woman with two children. For Emily, raising children is an extremely important part of life, and before entering the room, Dr. Stuart reads Emily's appointment was scheduled to discuss a third pregnancy.

Dr. Stuart enters and begins talking with Emily, who states, "I'm having second thoughts about getting pregnant again." "Why is that?" Dr. Stuart asks. Emily responds, "I've been doing a lot of reading recently about the impact of population growth on climate change. I'm concerned about contributing to overpopulation and the risk it poses to my and others' children. I know one baby doesn't make a big difference in the world population," Emily says, "but if everyone has three kids, we'd be in big trouble. We are already. I don't want to add to the problem."

Commentary

Concerns such as Emily's—about the relationship between family planning decisions, climate change, and the well-being of her family and the greater society—are not new. In the past, such concerns have led both researchers and clinicians to advocate for population control [1, 2]. In this paper, we will review some of the history of coercive family planning programs and of movements that have linked environmental and contraceptive concerns. We will then explore the ethical tensions between environmental policy and bedside contraceptive decision making. Finally, we will conclude with some examples of how a clinician can work to clarify patient needs and values in order to ensure ethical contraception counseling.

Historical Overview of Population Control Programs

Concerns about population growth have often been conflated with concerns about the increasing demographic influence of specific feared or marginalized groups, leading to subsequent unjust treatment of those targeted populations [1, 2]. Unfortunately, physicians, acting in accordance with government policies or independently, have been active participants in these harmful programs. One of the most striking domestic examples of this trend is the chilling history of [coercive sterilization](#) of women of color and people with mental illness in the United States. By the mid-1970s, it was estimated that physicians working for the federal government forcibly or surreptitiously sterilized between 100,000 and 150,000 persons annually [3]. Sadly, these unjust practices are not limited to the past. Between 2005 and 2013, 144 female inmates in California prisons were sterilized. Twenty-seven percent of these cases lacked adequate informed consent [4]. Such unethical programs have harmed patients directly and continue to engender distrust of the medical system in some communities [5].

Fears about the detrimental environmental impact of rampant population growth can be traced back to the 1960s and 1970s. Stanford professor Paul R. Ehrlich's well-known book, *The Population Bomb*, published in 1968, extrapolated from high population growth rates to argue that within the coming decades, the world's demand for food would outstrip supply and mass starvation would take hold across the globe [6]. One potential intervention he offered would be a combination of voluntary and heavy-handed means to tamp down fertility. Ehrlich himself went so far as to say in a 2015 interview that "Allowing women to have as many babies as they [want] ... is akin to letting everyone 'throw as much of their garbage into their neighbor's backyard as they want'" [7, 8]. Such attitudes had dangerous implications, especially for the developing world, whose high birth rates raised concerns in the US about national security and access to natural resources, leading policymakers to encourage sterilization and contraceptive use [9]. Perhaps the most infamous example of this trend, China's one-child policy, though no longer in effect, evolved in response to Communist Party leaders' fears about overpopulation and its effect on living standards and the economy [10].

In the ensuing years, however, the population bomb has not proven to be the disaster Ehrlich once feared, thanks to subsequent demographic shifts in the developing world. Indeed, the world population growth rate has decreased steadily since the 1980s [11]. The United Nations and the academic community more broadly now project that population growth will continue to slow over the coming decades [11].

As the case in question here suggests, however, contemporary environmental concerns have now come to overshadow concerns about sheer population size. The more pressing question today is how family size—and the added consumption that a large family implies—might impact global warming. Fertility control is seen by groups such as Population Action International as one aspect of a holistic approach to mitigating the effects of climate change in the short term and slowing the rate of global warming in the long term [12]. Individual patients (such as Emily) might also feel varying levels of personal responsibility for the impact of their families on a changing planet or fear the way global warming might affect the health of their children [13, 14].

Using Ethical Principles to Resolve Tensions between Policy and the Bedside

Although concerns about global trends might inform public policy, at the bedside, we are acting not as administrators of policy but as professionals caring for the patient in front of us. In doing so, our clinical decisions and actions are guided by the four key principles of respect for autonomy, beneficence, nonmaleficence, and justice [13]. While no framework can capture every nuance of a clinical scenario, this four-principle approach proves helpful to tease out the competing interests at play in this case.

Respect for patient autonomy is often upheld as the most important precept [15, 16]—if there is uncertainty about whether a course of action is ethical after balancing the four principles, we frequently defer to the patient's decision or to that of her surrogate. With regard to Dr. Stuart's response to Emily's concerns, respect for her autonomy requires that Dr. Stuart elicit Emily's values about having another pregnancy, including her thoughts about population growth and her responsibility to minimize her family's ecological footprint. While no physician can be an expert on all factors that could affect a patient's decision, physicians should be able to elicit such concerns and seek out additional information or expertise to best support a patient's decision. In this scenario, if Emily needs more information about contraception and the environment to make a choice, Dr. Stuart should be willing to facilitate this research process. If Emily feels strongly that she cannot, in good conscience, have another child at this time because of that person's impact on the environment, that might be reason enough for her to defer childbearing.

With regard to beneficence, Emily herself will not suffer obviously different effects from climate change based on whether she does or does not have another child at this moment, nor will having one additional person in the world appreciably shift the course

of global warming. However, helping Emily explore and resolve the emotional distress that she is experiencing as she considers the potential environmental impact of a subsequent pregnancy and whether it is acceptable to bring a new child into the world at this time is in accordance with the principle of beneficence. Conversely, not acknowledging and addressing Emily's deeply held concern would go against the principle of nonmaleficence.

The principle of justice also bears on this case. Upholding justice means treating patients fairly in spite of differences such as race, religion, sexual orientation, country of origin, or gender. As described above, people of color, the poor, and residents of the developing world historically have suffered most from population control programs mandating sterilization and contraception under the auspices of addressing environmental, social, and economic fears. Especially when such nonbiological concerns bear on a doctor-patient discussion, as they do in any case of contraception counseling, it is important for the physician to be self-reflective. Although Dr. Stuart happily has a reputation as a nonjudgmental clinician, she must still work to ensure that she is treating Emily in a similar fashion to her other patients. Dr. Stuart must be sure not to single out any patient for differential treatment because of race, age, or other demographic factors, given the fraught history of coercive sterilization of women of color and [women with disabilities](#) under the pretense of social or environmental concerns.

Strategies for Responding to Patient Values

To summarize the above analysis, Dr. Stuart should not preemptively impose her personal beliefs on Emily about the impact of population growth on climate change. If Emily raises such concerns, however, Dr. Stuart should strive to address them in a patient-centered manner. This case, therefore, underscores an important aspect of patient counseling: clinicians must be ready to receive and address difficult questions and to respond to patients' values. When patients raise challenging questions or potentially controversial topics, clinicians can benefit from having some approaches they can fall back on. Shared decision making (SDM) and [motivational interviewing](#) (MI) are two such approaches. Both of these counseling methods rely on a balance between providing concrete factual information and eliciting patient preferences to reach a patient-centered conclusion, although in a case such as Emily's, SDM is likely most appropriate [17].

SDM is ideal for helping patients choose between two or more medically appropriate options. In such situations (choosing a contraceptive method, for example), SDM techniques focus on eliciting patient preferences, providing relevant medical information, and facilitating access to the patient's preferred option [17]. In such encounters, the patient might note values that are firmly biomedical (e.g., efficacy of the method) and others that are more social (e.g., impact of family planning decisions on the environment). The clinician's job is to reflect these values back to the patient, help her to

prioritize them, and assist her in choosing a treatment course that meets her top priorities as best as possible. Physicians should recognize, however, that there are times when patient ambivalence makes it impossible to select a single option that aligns perfectly with all of the patient's values.

MI comes originally from the substance abuse literature and is intended for use when there is a clear treatment choice that maximizes health but to which the patient is not currently adherent (e.g., abstaining from cocaine) [17]. It is still a patient-centered approach inasmuch as MI involves eliciting patient preferences and values concerning the decisions in question. Instead of becoming confrontational when the patient resists recommended behavior changes, the clinician taking an MI approach works with the patient to help uncover discrepancies between the patient's values and behavior as a path toward adoption of healthier practices. For example, in working with the cocaine user, a motivational interviewer might uncover the fact that the patient wishes to be present for his daughter's graduation and might encourage the patient to think about how ongoing cocaine use raises the risk that he will not be able to attend that event due to illness or death.

Ultimately, either of these approaches involves eliciting the patient's preferences, which, in Emily's case, might include not only the efficacy and side effects of contraception but also noncontraceptive benefits such as the social value of contraception and, potentially, the environmental impact of a large family. In a case such as Emily's, the physician's responsibility is to elicit and try to understand the patient's preferences and then to offer treatment choices that align with those values. Dr. Stuart should counsel Emily with a shared decision-making approach. It is not appropriate for Dr. Stuart to impose environmental protection values on Emily's reproductive decision making, as this risks undermining her autonomy as well as perpetuating injustice.

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an opportunity to help women engage in subsequent preventive reproductive health care.

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