Utilitarianism, and the Genetic Welfare of Future Generations: A Reply to Salvi

Eubios Journal of Asian and International Bioethics 7 (2):38-39 (1997)

by James J. Hughes PhD

Dr. Salvi's essay begins a discussion that is of clear importance to public policy analysts who believe in utilitarian logic, and I am that kind of analyst. He identifies one of the central problems with the application of utilitarian calculus: it is impossible to estimate the infinite consequences of every action. His application of this conundrum to the case of germ-line therapy doesn't really add anything new to the problem, so let us consider it in a non-genetic context.

If I meet a starving man, and I have an apple, the immediate utilitarian calculus is that there will more happiness all around if I give the man my apple. Yet, a more thorough utilitarian calculus would have us consider whether I might meet a more desperate man later, or whether I should sell the apple, invest the money, and give him two apples tomorrow. Also, my charity may encourage sloth and dependency, keeping him and others in poverty. On the other hand, it may be that each act of charity adds imperceptibly to a better world, with kinder, gentler people, and that this starving man may go on to help humanity (or be the Savior Himself), and thus I should give the apple.

The imponderability of these macro-social and long-term consequences (setting aside questions of chaotic causality) means that any utilitarian must quickly take a leap of faith, and articulate her rules of thumb. John Stuart Mill, for instance, articulated a set of liberal democratic rules of thumb, such as "The free interplay of ideas will generally lead Mankind to greater truth and happiness." Without frank acknowledgment of these rules of thumb, a utilitarian calculus of future consequences is impossible.

Dr. Salvi proposes three factors in the utility of therapeutic germ-line modification: the utility of the cure to the patient, the utility of the cure to the patient's descendents who inherit the disease, and the disutility (harm) of the modification to all descendents who have been changed without their consent. Dr. Salvi suggests that the disease will be less likely to be inherited than the modification, and therefore that the potential disutility of violated "autonomy" will be greater than the utility of cured disease. I believe this conclusion to be flawed for many reasons.

As Dr. Salvi notes, few utilitarians would agree that it violates the interests of future persons to change their genetic structure before their birth. This is even more ludicrous if the change is for a good cause (if not for the individual, for her relatives) and causes no stigma, pain, disease, disfigurement or other harm to the future persons. Future genetic therapies will undoubtedly offer some difficult trade-offs, such as infertility for improved immune system function, or increased intelligence for social stigma and persecution. These are the kinds of trade-offs that have always parents made for their children however. Should we bring another Jewish baby into an anti-Semitic world? Shouldn't I adopt, since I will only saddle my children with my fat, ugly genes? If anything, the procreative choices provided by germ-line therapy will be happier and more salutary than those we currently face.

A second problem with Dr. Salvi's calculus is that he is concerned with only protecting the theoretical autonomy of future generations, but not with the quite real autonomy of their parents. One rule of thumb should be: "We'll all be happier if the State has to prove powerful interests before it violates the rights to bodily autonomy and procreative liberty by forbidding a genetic therapy." I believe that there are potentially good reasons for preventing parents from violating the future biological interests of their children, but the violation of their grand-children's interests in inheriting genetic disease is not such a case. If a large religious sect wanted to genetically engineer constant pain, so that their children would not forget the Lord, or eliminate the capacity to read, so that they would not become apostates, then I would support intervention.

The overwhelming majority of therapies, choices and enhancements will only harm social interests in so far assome of the public has an irrational prejudice against the new, and a belief in sacrosanct naturalness of the genetic dice throw. In other words, the danger to "human dignity" from genetic choices is as substantial as the danger to "the sanctity of marriage" from allowing homosexual unions - obvious to some, but not to me.

Dr. Salvi also includes no technological advance in his model, and rejects the proposal of Derek Parfit that utilitarians employ an "ethical discount rate" (EDR), since germ-line modifications will be passed in perpeuity. The EDR is precisely the right model for germ-line therapy however, because there will be technological progress. The "sunk capital" of a genetic inheritance will be of declining importance over the next decades, as the vectors of somatic and genetic modification become more sophisticated. While we should use animal and computer models to assure ourselves of the safety and efficacy of genetic therapies, there will undoubtedly be unintended consequences of some therapies, just as there are with any technology or social policy. As with the unanticipated consequences of technology and social policy, we need to have some faith that we will be bright enough to recognize and correct these problems. Without that faith, no innovation can be justified.

Finally, Dr. Salvi does not address what makes a utilitarian analysis of genetic therapy truly unique: unlike any other innovation, genetic therapy offers the possibility of increasing the human capacity for utility altogether. Genetic therapy can put off aging, illness, pain and death. Genetic therapy may expand our intelligence, sensitivity, sensory range and capacity for joy.

In the end, the utilitarian calculators of genetic therapy would do well to reflect again on Mills' liberal democratic rules of thumb: utility will generally be maximized when people are free to make choices, with good information, good instruments of collective action (democracy), and relative equality. My rule of thumb is that if we give future generations genetic choices, they will generally choose health, happiness, intelligence, and longevity, for themselves and their descendants. I can't really see the down-side to that.