

Would you have allowed Bill Gates to be born?

Advances in prenatal genetic testing pose tough questions

COMMENTARY

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Who needs Bill Gates? No, I don't mean who needs a gazillionaire corporate titan, a man whose company, Microsoft, took in billions of dollars last year by controlling nearly all the software used to run nearly every computer on the planet.

No, I mean, literally, who needs him? If you could go back in time and stop the birth of the world's most famous nerd, would you?

You probably answered my question with a "no." Whatever Gates' sins may be, he is the father of a computer revolution that has brought much good to many people throughout the world. Add to that achievement his current generous philanthropic activities supporting some very worthy causes, such as vaccine research and a center for autism research in Seattle, and the case for having Bill with us becomes pretty persuasive.

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But what if I told you it's possible that Gates has a medical condition that accounts, in part, for both his tremendous achievements and for his "nerdiness?" Gates is widely reported to display many personality traits characteristic of a condition known as Asperger's syndrome. Asperger's is a mild version of autism, a more serious condition that renders many children unable to talk, be touched, communicate or socialize. While I certainly do not know if Gates has Asperger's, his difficulties in social settings are nearly as legendary as his genius, so it's possible.

The perils of genetic testing

That said, if you had been Gates' potential mom or dad 50 years ago, what would you have done if you knew about his abilities and flaws before he was born? Would you have wanted a child that would go on to do great things but would have a hyper-nerdy personality? What if the decision about whether to have a child like him also carried a risk that he might be born with far more serious disabilities? Would you have decided to carry the baby to term?

The reason I ask these questions is that there is a good chance we will soon have a genetic test for detecting the risk of autism in an embryo or fetus. The development of such a screening tool raises the possibility that parents might one day have the option of preventing the birth of a child with even a mild case of the disorder.

The thought is very upsetting to many in the autism community, including [Aspies For Freedom](#), an advocacy group for people with Asperger's that is pushing to make June 18 "Autistic Pride Day." In their view, those with autism are no more suffering from a disease than are people who are short or have lighter or darker shades of skin. They want autism treated as merely a difference not a disease. And they are aghast at the thought that anyone would abort a child because they might have any degree of autism.

An advantageous disorder?

In the past decade, there has been an explosion in the number of U.S. children diagnosed with autism. Less well known is that there has been a parallel autism epidemic in other countries, such as Ireland and Britain. Whatever the reasons for the increase in the number of cases, it is highly likely that autism has a genetic component. Scientists and doctors have not yet nailed down what the genetic contribution to autism is, but the fact that males are

far more likely to be affected than females and that autism appears in certain ethnic groups more than others are strong indicators.

Like many genetic diseases, there is a broad range of severity associated with autism. And like some genetic diseases, such as sickle cell trait, there can be, in the right environment, an advantage to having a mild form.

Asperger's is the least disabling form of autism and research is beginning to show that it may also account for the presence of some special capabilities in areas like mathematics, computer science and engineering. But the same genes may also create a person who is socially awkward, easily distracted, very introspective and in many ways withdrawn and solitary.

Gates was born on Oct. 28, 1955. When he arrived in the world the science of human genetics was truly in its infancy. Newborn babies were only tested for a few rare genetic conditions. Fifty years later, the field of human genetics is thriving. Tests have been established for detecting Tay-Sachs disease, Huntington's disease, some forms of breast cancer and Alzheimer's disease, and hundreds of other fatal or disabling conditions.

The drive for more genetic tests continues unabated. Undoubtedly the genes for autism and Asperger's will soon be found. When they are, my question — would you have stopped Bill Gates from existing? — will take on a very real meaning.

Fewer geniuses?

There are many in the autism and Asperger's community, like the newly formed Aspies for Freedom, who worry that the minute a genetic test appears, it will spell the end for a lot of future geniuses, like Gates. Maybe there will be fewer Thomas Jeffersons or Lewis Carrolls — remarkable thinkers who also fit the profile for Asperger's.

As genetic testing moves into the world of mental health, we are going to face some very tough questions. Will medicine suggest that any and every variation from absolute normalcy is pathological? How can we draw lines between disabling diseases such as severe autism and more mild differences such as Asperger's, which may give society some of its greatest achievers? Will parents have complete say over the kind of children they want to bear? And what sorts of messages will doctors and genetic counselors convey when talking about risks, probabilities and choices that involve not life and death but personality and sociability, genius and geekiness?

All I can tell you is that neither medicine nor the general public are at all ready to deal with the emerging genetic knowledge about autism, Asperger's or other aspects of mental health. But the future of our society may well hinge on how we answer these questions.

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