

# Personalized medicine and its using for predicting disease

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## Personalized Medicine And Its Using For Predicting Disease

Within the past two centuries, mankind has seen a boom in technological advancements. Starting with the industrial revolution in the twentieth century, the human race stepped into a completely new era and after the advancements in the past century, our lives have become deeply intertwined with machines and technology. Now rather than taking centuries, within years, we are climbing the ladder of scientific development.

We have come a long way since past twenty five years: Internet, mobile phones, as well as massive advancements in biology such as mapping the human genome have taken place in the past three decades. With the rapid advancements in biotechnology and other disciplines of biology, I believe that within the next twenty five years, personalized medicine would become an integral part of our world, making an enormous impact on the healthcare and medicine.

In the model of personalized medicine, each individual is different and medication needs to be tailored according to his bodily requirements rather than using the same medicine for every individual for a particular disease (National Institute of Health). However in order to make the personalized medicine a reality, the ' doctor' should have sufficient information about the patient, generally in the form of his genome. In the 2001, when the Human genome Project was completed, the cost of sequencing the entire genome exceeded 100 million dollars. However with the advancements in biotechnology, the cost have drastically fallen to just ten thousand dollars (National Human Genome Research Institute). Even though this amount is still out of reach of a common man, the decrease in cost is quite dramatic.

With the increased funding in the field of biology, it is expected that the cost would further reduce and eventually it would be within the reach of every person to have his genome sequenced. This would have far-reaching consequences and usher the humans into the new realm of personalized medicine. Hundreds of diseases could be prevented through earlier diagnosis as the data from the genome could indicate potential tendencies in an individual to develop a certain disease (Starr).

The development described above would have a radical impact not only in the general well-being of the humans but it would also have far-reaching consequences on the lifestyle as well as the economy. With the revolution of personalized medicine, there would be a greater requirement of people in the hospitals who have sound knowledge of the genetics and molecular biology and therefore biologists, along with doctors would have a greater role to play in hospitals and clinics (Adams). Moreover, since personalized medicine would be a new form of treatment, it would require new drugs to be synthesized and made available. This would in turn indicate an economic boom since huge number jobs would be created in this sector and the pharmaceutical companies would be spending a larger amount of money to have a head start in this field. It is also expected that the mortality rate would reduce and the general health and wellbeing would be dramatically improved (Duke Personalized Medicine).

At the current stage, it seems as if we have a long way to go before personalized medicine becomes a reality. However the way technological advancements are taking place, it is very likely that we would be benefitting from it after twenty five years.

### Works Cited

Adams, Jill. Pharmacogenomics and Personalized Medicine. 2008. Web. 14 Jan 2013.

Duke Personalized Medicine. What is Personalized Medicine? 1 Oct 2009. Web. 14 Jan 2013.

National Human Genome Research Institute. DNA Sequencing Costs. 26 November 2012. Web. 2013 Jan 14.

National Institute of Health. Personalized Medicine: How the Human Genome Era Will Usher in a Health Care Revolution. 17 March 2012. Web. 14 Jan 2013.

Starr, Barry. Personalized Medicine: A Potential Tool for Predicting Disease? 14 May 2012. Web. 14 Jan 2013.