

# Technology and value case study example

[Science](#), [Genetics](#)



Genetic testing for children is a task that should be applied according to needs. In their article, Ross and Moon are focused on how to test genes, in which cases, and are trying to find out whether it will be correct in ethical and personal aspects. The article consists of the following parts: Introduction, Ethics Overview, Testing High-Risk Children, Identification of Career Status, and Conclusions.

In the opinion of Ross and Moon, recent success in gene discoveries brought many problems to life including those that are related to ethical standards. In any case, the authors do not give specific conclusion whether testing is necessary or not. They just measure risks, either physiological or psychological. And as an evidence the authors provide the statement that the parents should realize the differences between high-risk testing and low-risk testing. If they just want to make sure if gene code is correct, they may apply testing. However, every issue is measured individually, and test or not test is up to parents.

The situation is that a couple of Alex and Mary have two children. Their son was showed to a doctor and a kid was reported as sick with Cooler's anemia. This disease affects the ability of the red blood cells to transport oxygen. This situation made Alex thinking about testing of Jane, his daughter to help her to lead a high quality life in future and maybe to prevent baby-born with corrupted genes. Alex was also intended to encourage his brother to make such genetic tests as he was going to marry soon. Mary was against such testing as she suggests that knowing this will not be useful, and even may lead to discomfort feeling, since knowing the gene corruption for sure. So is it right to test or not?

According to utilitarian approach, any issue and any deed should be proved rationally, like Alex suggested about testing. So, according to this approach, genetic testing should be based on the benefits and evaluating risks. For example, in this situation the benefits are to know the possibility to get sick in future, if wrong number of genes is found; to prevent baby-born if not necessary to transfer bad genes; to apply preventive measures. The risks are mainly psychological and ethical, including stress for Jane, confidentiality, lack of interest from the part of a kid, a fear also.

According to Kant's imperative, every issue or deed should be proved with respect to the moral obligations. The dignity and the well-being of the future generations are the most important, and genetic testing seems like "the end of humanity". This is related to situation, and this approach is related to Mary's irrational opinion, as he suggests that not knowing is better than knowing and making use of this.

And if Jane is tested, what is the use? Yes, she will know for sure if she is able to produce healthy children, and even if needed, to prevent baby-born of a child with Cooley's anemia? Of course, even if there is use in preventing of birth of a sick child, we have no moral obligation to do this, and have no right. The nature is different, and those who follow the rules survive, and others pass away from this world. Many people live with genetic diseases, although they are tested. There is no concrete opportunity to fulfill the requirements of people who are being tested or parents who test. However, testing is good only in some cases, and in situation with Jane it is not really good to be applied. Although her brother happened to be tested and diagnosed about Cooley's anemia, there is no obligation to test Jane also as

risks are high, especially psychologically. The child may feel fear of disease and this will seriously affect her self-esteem, making mind expect negative, even if has not happened and not likely to happen. Therefore, there is not much use in testing Jane, although the doctor recommends this. Of course, the doctor knows much about testing, and he suggests running the test. But parents are obliged to take care about their children, irrespectively of their health. If it will come to decision about children, it is up to Jane to decide whether prevent birth of a child with Cooley's anemia or not. And even if it comes to testing of Jane, it is up to her to decide too, possibly in future, when she grows up.

So, in my opinion, Jane should not be tested right now, like her dad suggests. The reason is she is not in high-risk group for this disease. For example, if she tested, who will be responsible for confidentiality in this case? If the testing data are stored good, so none will steal, but every data base may be corrupted, and none will take particular responsibility for revealing these data to public. Confidentiality is the major problem in this case, as these issues are related also to family issues, relationships between generations, care, etc.

The conclusion is simple – there is no need to test Jane, but parents should be ready to inform her later that she has some risk to have Cooley's anemia, so that Jane can avoid development of this disease. Jane should be informed about her risks and be ready to accept her fate to live with this disease.

However, it is more likely that Jane will never get sick with this disease, so maybe even better not inform Jane at all. Yes, the parents care about their children, but giving extra care is not the right solution. Everything that is

extra is not good. Some parents care much about children, and so they cannot even figure out what is bad or good, due to their love and care. I think that in this case Jane will never be a victim of circumstances, and will not be tested, according to Kantian approach. According to his mom's will, Jane will grow up and be informed later. Now there is no need in this, and Jane will get to know this info later.

In some cases, parents may insist on genetic testing, but it may be not so good for children, due to many significant reasons. In the given case, we also observe not only this kind of problem, but also the difference in female and male perceptions of reality. For example, the father thinks that there is a need in such testing, but the mother denies and tells that it is better not to test Jane as she has the right to choose what to do and what to know. In any case, there is a possibility to test and know, but no use to do this in the very early age when children are weak, either physically or mentally.

The perspectives of the modern researches in the genetic field are many, although these researches are not allowed to be applied to practice in many countries. Some closed countries do not allow providing even genetic testing only for religious or other points of view. In any case, these issues are of so much importance that we should take care not only about perspectives, but about the use. Those who are interested to provide this type of researches should know that persons who are being tested should be emotionally stable individuals and have good will for being tested.

We all live in the society where knowledge often dominates above the other values. We were born in the age where even hardware is of much importance, and machines will soon function better than people. Those who

are born in the period of new changes should realize that genetic test should be provided only when urgent need. Being worried about the possibility to get sick and even suspect diseases in children who have low chances to inherit the genetic disease is useless. It is much better to invest in new researches in this field and take care about the quality of curing genetic diseases, as preventing of these diseases is not possible nowadays. Knowing the possibility of inheriting and wrong genes is not that important.

## **Works Cited**

Ross, Lainie & Moon, Margaret. Ethical Issues in Genetic Testing of Children.