

Humman genome

[Science](#), [Biology](#)



Human Genome The study of genetics has led to many great inventions that have completely changed the face of medicine. However, despite the strides made in medicine through the study of genetics, there are some genetic techniques which are not agreeable to many people. For instances there are a number of societal issues raised concerning the reproductive process such as prenatal genetic testing. Another bone of contention brought about by the adoption of genetic techniques has to do with the use of genetic information by insurers.

Reproductive Issues

Prenatal testing is the medical process that involves carrying out screening and diagnostic tests to identify whether a baby is a risk of being born with birth defects. One of the larger societal issues raised by prenatal genetic testing is its limitations. Although the process makes it possible for one to assess genetic risk and diagnosis, there are tests that fail to show possible genetic mutations. Many of these tests require the families involved to make difficult decisions, something that might be all for nothing if the tests do not have predictive value (Hodge 68). The ethical issue here is the uncertainty related to these tests, some of which are not reliable enough to produce the required results. Another ethical concern is that some of the screening tests may provide false negative or false positive results (de Jong, DonDorp and Die-Smulders 276). This means that an expectant mother who receives the wrong results may not seek for proper medical assistance if it is needed. However, if there is credible reason for conducting prenatal testing, then parents should be allowed to test for disease susceptibility genes. In some families, there could be conditions that are genetic, and this is one of the

reasons why parents should conduct prenatal testing (Hodge 68). If there is no medical history of genetic conditions in the family, or if there is no danger of the baby being born with defects, then there is no need to subject one to lengthy prenatal genetic testing. Too much of this testing could cause unwanted stress to the mother, and may affect the well being of the baby. Basic prenatal checkups are enough to ensure that both the mother and the unborn child are safe.

Fairness in the use of genetic information by insurers

Several insurance companies have attempted to control the pricing of their premiums based on their customers' genetic information. This has presented a huge problem for people seeking insurance cover but may have genetic problems which they found out through genetic testing. Many people who have undergone one form of genetic testing or another normally are subjected to unfair insurance policies, which include both life insurance and private medical insurance (Hudson, Holohan and Collins 2662). It is not uncommon to find patients who have been genetically tested and found to have cancer not being able to acquire life insurance, or even medical insurance to help in their treatment.

Individuals should not be obligated to disclose the results of a genetic test by insurance companies. Furthermore, insurers should not be allowed to use genetic information to determine insurance premiums or to refuse insurance for particular individuals based on genetic medical problems that they may have. Denying one insurance cover is tantamount to discrimination, which is a moral crime since everyone deserves an equal chance to proper medical treatment despite their pre-existing conditions (Hall and Rich 294). Due to

fear of genetic discrimination, many patients who would otherwise benefit from genetic testing opt not to get tested. Insurers should not force their customers to disclose their genetic testing information if they do not feel like disclosing it. If they do disclose it, their conditions should never be used as an excuse to deny them coverage.

Works Cited

de Jong, Antina, Wybo J Dondorp, Christine E M de Die-Smulders, Suzanne G M Frints and Guido M W R de Wert. Non-invasive prenatal testing: ethical issues explored. *European Journal of Human Genetics*, 2010, 18, 272-277

Hall, Mark and Stephen Rich. Laws Restricting Health Insureres' Use of Genetic Information: Impact on Genetic Discrimination. *American Journal of Human Gentic*s, 2000, 66(1): 293-307

Hodge, James G. Ethical Issues Concerning Genetic Testing and Screening In Public Health

American Journal of Medical Genetics, 2004, 125C(1): 66-70

Hudson, Kathy, M. K. Holohan, and Francis S. Collins, Keeping Pace with the Times — The Genetic Information Nondiscrimination Act of 2008. *New England Journal of Medicine*, 2008, 358: 2661-2663