Ethical issues of genetic screening book review sample

Science, Genetics



Introduction

The topic relates to the ethical issues of genetic screening as the society is increasingly getting into technical advancements and the project of human genome is approaching the century in an increasing manner. One of the major areas of advancement is research associated with the Human genome mapping project and it is major research collaboration in the overall sequence of entire human genome (Weiss, 2011). The human mapping genome has given rise to various advancements and discoveries within the genetic makeup of humans and with these advancements; various ethical and moral concerns are associated in a wide manner. The ability to screen an individual for specific disease plays a major role in our lives and therefore, genetic screening plays an important role in the study. In this study, the ethical issues and techniques of genetic screening will be studied for further clarifications within the study.

Techniques

There are various techniques of genetic sequencing and without these techniques, the mere gene sequencing will be considered only as a science fiction. The ethical concerns need to be understood while utilizing the technique in our daily lives. The techniques and overall technological advancements has been started with the human genome mapping project and at the same time, it has also been increased a major pace to speed up the overall process of genetic screening (Aldous, 2010). The techniques include polymerase chain reaction, Polymorphism, cloning and the utilization of specific genes markers. One of the major innovations in this field relates

to the invention of PCR and it has advanced the genetic research to the advanced level and enables the copy of genes to be replicated several times with proper speed and ease (Facklmann, 2011). The techniques are also utilized in the mapping and sequencing of human genomes along with the genomes of plant, yeast etc. The concern of ethics and moral issues need to be addressed while utilizing any of these techniques and the consent of human is also important within the specified time.

Pros and Cons

These technological advancement and knowledge have increased the knowledge in current era but the information can also be misused and may have negative consequences. There are various possibilities for these advancements but the moral and ethical issues are attached closely to the matter and there are also many legal concerns which are to be addressed before utilization of genetic screening. For example, the screening of any individual for certain traits have to be identified before the person is hired and many people feel that the genetic screening is based on the elimination and on the base of discrimination. The ethical and moral issues in this case may be true sometimes but they cannot be considered as phenomena (Griffithes, 2006). The certain genetic traits such as height, strength and gender are considered for expression of genetics and this type of discrimination has been considered as the major ethical and moral concern within the study. It is important to realize that the screening is a part of our daily lives and it should be considered as a positive aspect of knowledge and development as a whole. There are also some concerns which parents

consider within the screening process to find the perfect child and may also abort fetus which does not fit their choice and standards (Bylinsky, 2009). The ethical and moral concern lies in the understanding of positive and negative aspects of the genetic screening and the concerns expressed in the above part of study. The genetic screening is useful but the concern is that the utilization of information gained during the screening process and further actions. The access of genetic makeup of people, affect of the genetic make up, effect on daily lives are also the concerns while addressing the topic of study.

Conclusion

It is concluded in the above study that the process of genetic screening is useful and advantageous but it have to be utilized in an ethical manner also, the moral concerns need to be addressed while the genetic screening process. It is important to gain more knowledge in this area of research and the amount of information has to be detailed with the advancement of science. The fatal genetic diseases are increasing widely and for the same reason, the genetic screening is discovered to treat these diseases. In this era, it is necessary to have information so that the disease can be treated with the utilization of various techniques of genetic screening and also, the suitable method can be chosen for better health of people and society (Holtzman, 2012). The genetic screening have given better standards to human cloning and the information derived from genetic screening will transform in to the scientific research o medical treatment of the individuals for the better outlook of society in long terms. The ethical and moral

concerns will be involved with the gene therapy and genetic screening process and they need to be resolved in a considerable manner. The benefits of genetic screening should be taken into consideration to have better advantages for individuals and society.

References

Aldous, Huxley (2010), Brave New World. New York: Harper and Row Publishers, 1932.

Bylinsky, Gene (2009), "Genetics the Money Rush is on." Fortune 30 May 2009: 94-108.

Carey, John, Julia Flynn, and Neil Gross (2007), "The Biotech Century."
Business Week

Facklmann, Kathy (2011), "Beyond the Genome the ethics of DNA testing." Science

News 5, Nov. 2011: 298-299.

Holtzman, Neil (2012), "Editorial: Genetic Screening and Public Health."

American

Griffithes, Anthony, et. Al. (2006), An Introduction to Genetic Analysis. New York.

W. H. Freeman and Company, 2006.

Lapham, E., Chahira Kozma, and Joan Weiss (2011), "Genetic Discrimination:
Perspectives

of Consumers." Science 25 Oct. 2011: 261-264.