

Perspective

The ethical responsibilities and practical challenges of genetic testing's psychological effects

Maria Cadger*

Department of Medical Genetics, Cairo University, Cairo, Egypt.

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DESCRIPTION

Genetic testing and screening have become more common in contemporary medicine, with the great potential to diagnose and prevent genetic illnesses. But these technologies also have significant and varied social consequences that affect people individually, in families, and in society as a whole. One of the primary ethical concerns associated with genetic testing and screening is the potential for discrimination. Genetic information can reveal predispositions to certain diseases, which might lead to discrimination in employment, insurance, and other areas of life. In addition, the ethics of informed consent are important in genetic testing. Individuals must fully understand the potential outcomes and implications of their genetic tests. This includes the possibility of finding new information, such as non-paternity or the identifying of previously unknown relatives. Ensuring that individuals have access to genetic counselling can help them make informed decisions and recognize the wider implications of their test findings.

Privacy is a major problem in genetic testing and screening. Genetic data is uniquely personal and can reveal a lot about an individual's health, ancestry, and predispositions. The potential for misuse of this information is substantial. In particular, discrimination or misuse of identities may result from illegal access to genetic data. Strong data protection measures are necessary to reduce these risks. This includes secure storage and handling of genetic information, as well as clear policies on data sharing and access. Moreover, individuals should have control over their genetic data, with the ability to decide who can access it and for what purposes. The implementation of such measures is important to maintaining public trust in genetic testing and screening programs.

The psychological impact of genetic testing and screening can be significant. For some individuals, learning about a genetic predisposition to a serious disease can cause anxiety, depression, or a sense of fatalism. This is particularly true for conditions that currently have no cure or effective treatment, such as Huntington's

disease or certain types of cancer. Some individuals may experience relief or a sense of empowerment from knowing their genetic risks, as this knowledge can make preventative health care possible and lifestyle changes.

Genetic counselling plays an important role in helping individuals handle with the psychological effects of genetic testing. Counsellors can provide support and guidance, helping individuals understand their results and make informed decisions about their health. The societal implications of genetic testing and screening are expensive and difficult. These technologies have the potential to improve public health by improving early diagnosis and prevention of genetic diseases. For example, newborn screening programs can identify genetic disorders early in life, allowing for timely interventions that can significantly improve health outcomes. There is a risk that these technologies could exacerbate existing health disparities if they are not equally accessible to all segments of the population. Individuals from lower socioeconomic backgrounds or marginalized communities may have less access to genetic testing and the associated healthcare benefits, further expanding the difference in health outcomes.

Furthermore, there are difficult ethical and societal issues created by the use of genetic testing in reproductive decision-making. By identifying genetic problems in fetuses, prenatal genetic screening gives parents the ability to make educated decisions about their pregnancies. Although some families may find this beneficial, it also raises questions about the possibility of eugenics and the pressures imposed by society to either select for particular features or remove the alleged genetic "defects." Education and public knowledge are important for bringing about the social consequences of genetic testing and screening. One of the primary responsibilities of healthcare professionals is to inform people about genetic testing. This involves providing clear and understandable information regarding the testing procedure, possible results, and support resources that are available.

*Corresponding author. Maria Cadger, Email: cadgermaria@gmail.com