The sequencing of the human genome were privacy violations. In our survey, the most frequently mentioned concerns about genetic research, is less well understood. Nevertheless, population research will be necessary to evaluate genetic testing, prevent its misuse, and help to realize its benefits. Members of the public will need to be knowledgeable about the issues at stake in the Human Genome Project and in scientific and medical research in general in order to make well-informed and ethically sound decisions about their participation in genetics research, and the use of new genetic technologies. Since much of the public’s knowledge about genetics will probably continue to come from the media, it is important to understand the factors that influence how media reports are generated.

The Mass Media Are Primary Sources of Health and Science Information for many Americans, including scientists and physicians. Discoveries of new disease-related genes have appeared regularly in the print and broadcast media. In our survey of the public’s perception of the media coverage conducted immediately following the announcement of the near-completion of the sequencing of the human genome in June 2000, over half of the respondents reported some exposure to media coverage of the event.

Despite widespread media coverage, the public may not be well informed about genetic discoveries. Media stories may omit important facts that can lead to misconceptions among the public about the applicability of genetics research. For instance, media reports may neglect to mention that the discovery of major susceptibility genes for common diseases such as breast and prostate cancer probably pertains to only those patients with early onset and a strong family history of the disease in question. Moreover, mass media reports about the discovery of genes for rare diseases may inappropriately extrapolate the results to common diseases or fail to highlight the long lag time between the discovery of a disease-related gene and the development of tests and treatments for the disease.

On the other extreme, media coverage that focuses on the negative aspects of genetic discoveries may lead consumers to fear their application. For example, the media commonly report on the dangers inherent in genetic research such as insurance or employment discrimination, and the possibility of genetic enhancement and “designer babies.” In our survey, the most frequently mentioned concerns about the sequencing of the human genome were privacy violations/discrimination (15.7%) and cloning (13.5%). The concern about cloning is interesting in light of the results of our content analysis of all media coverage immediately following the announcement about the sequencing of the human genome, which revealed the complete absence of any discussion of the subject. Nevertheless, there have been widespread media reports of plans to attempt human cloning, which may have colored the way people interpret news about other genetic discoveries.

Some social scientists have argued that such unbalanced coverage can lead the public to believe that traits, behaviors, and diseases are biologically determined. Others have attempted to refute this claim based on evidence that the media are no more likely to attribute disease to genetic causes now than they were 2 decades ago, despite recent increases in media coverage. The impact of media coverage of genetics on public behaviors, such as willingness to participate in genetic research, is less well understood. Nevertheless, population research will be necessary to evaluate genetic testing, prevent its misuse, and help to realize its benefits.

REFERENCES


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