Ethical Issues in Medical Biotechnology

The extraordinary revolution in biotechnology has created new possibilities for curing disease and manipulating our genetic heritage. It is easy to see how biotechnology can be used for medicinal purposes. Knowledge of the genetic makeup of our species, the genetic basis of heritable diseases, and the invention of technology to manipulate and fix mutant genes provides methods to treat the disease ¹. But it has also created numerous ethical problems that need close philosophical attention. In another words, since biotechnology involves modifying living things for human purposes, there is great potential for ethical concerns. The recent advances in biotechnology present both benefits and risks. They have revolutionized the process of drug manufacture, diagnosis and treatment and the production of animal models for human diseases. There is a tremendous potential for creating new drugs and treatment. This technology raises important ethical issues in the social structures including families, preventive medicine, employment, health insurance *etc.* We must interact with the general public, to educate them, and prepare them better for the impact of biotechnology. The scientific and medical communities and the public, in general, have to use these powerful tools responsibly, for the maximum benefit of mankind ².

References

- 1. Kuszler PC. Biotechnology entrepreneurship and ethics: principles, paradigms, and products. Med Law 2006;25(3): 491-502.
- 2. Persson A. Research ethics and the development of medical biotechnology. Xenotrans plantation 2006;13(6):511-513.

Shahin Akhondzadeh, Ph.D., FBPharmacolS Editor in Chief

