

## Chapter 64

# Security and the Role of New Technologies and Innovation in Medical Ethics

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### ABSTRACT

*Modern medicine has never before experienced such a rapid development of what is observed at the turn of the century. New opportunities bring new challenges that both - medical staff and patients - will have to face. The paper examines the role and safety issues new medical technologies in the light of respect for patients' rights and ethical dilemmas. For a better delineation of the phenomenon, presented the key moments of the origins and development of medical innovation. Based on observations and the current direction of the health sector were presented significant areas where abuse can occur at the level of ethical issues. Discussions have been subjected to actions considered modern medicine, in the light of security and respect for the patients' rights.*

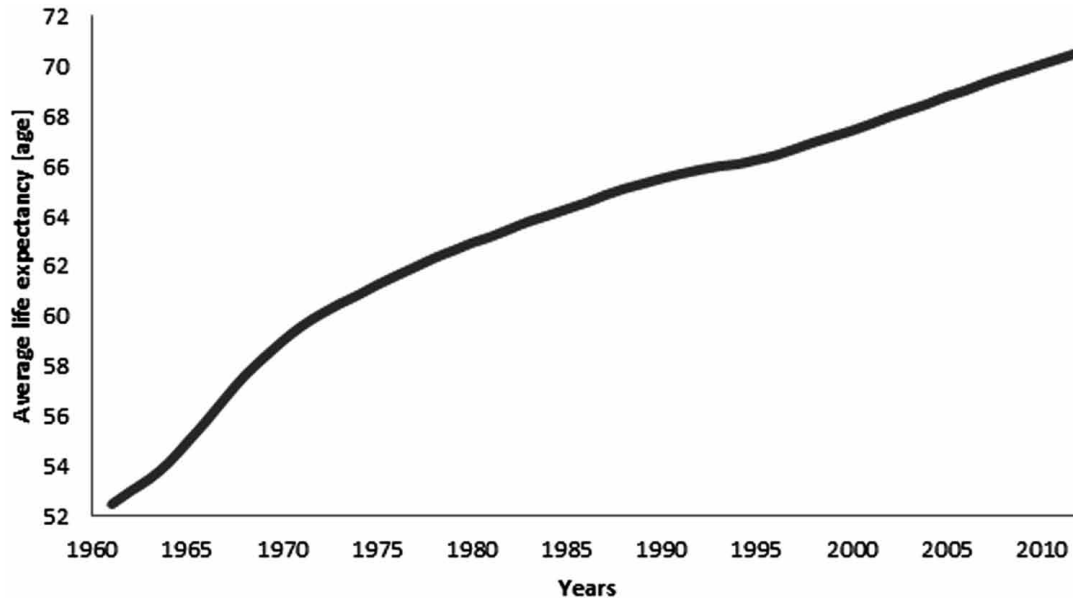
### INTRODUCTION

The level of advancement of medical technology that is given to us to observe at the present time, has never in the history of man did not give so many opportunities to take care of your health. The best reflection of the role of new medical technologies which can be relied upon to validate that in reality it translates to human health is the average life expectancy observed in recent years compared to the length of life of people living even a hundred years ago. According to data from the World Bank, life expectancy has never grown as fast as in the twentieth century, where the average increase was almost 30 years (World Bank Data, 2015).

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*Figure 1. World average life expectancy 1960-2012*

*Source: World Bank Database, 2015*



Moreover, in addition to a significant prolongation of the years of life of a man living in the twentieth century, which we consider as a quantitative variable, there was also a significant change in the quality issues. The indicators suggested by the WHO, the quality of life or the expected years of healthy life years (DALY, QALY) show that the longer we look forward to health allows us to meet our basic social functions previously peeled and pursue goals.

In order to maintain an objective position, it is worth to mention that the erroneous assumption seems to be that the process of extending human life is determined only by the development of new technologies for their subsequent use in the population. Analysis of scientific reports concerning the determinants of health coming from the twentieth century, pointing on the contrary, it is a personal concern for their own health, as reflected in health-oriented lifestyle of the majority is a determining factor in the health of the population and its future forecasting (Lalonde, 1948). A closer look at the model presented by the Canadian Minister of Health, reveals that the health care system - including the level of development and implementation of new medical technologies - plays only an estimated 10% in the whole of the determinants of health.

Worth noticing is the fact that in spite of the role and importance of medical technology for the overall health of the patient as a secondary issue against the fundamental role of personal health decisions taken by the population, the number of moral dilemmas, ethical issues and social movements associated with the possibilities that are offered by modern medicine, seems to be very disproportionate.

The search for answers to explain this phenomenon, why medical technologies arouse so much controversy, must lead multi-perspective to take position. Concern for the health accompanied since the dawn of mankind, considering the safety of life of the individual or the population as an animal instinct. During the development of culture and socialization process of nations and nationalities, different approaches can be seen to favor to innovative medical solutions.

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