Chapter 6
The Contribution of Technologies to Promote Healthy Aging and Prevent Frailty in Elderly People

Cristina Albuquerque
University of Coimbra, Portugal

ABSTRACT

In this chapter, the author discusses the contribution of technological achievements and ICT applications to prevent or reverse frailty in elderly people and to promote active and healthy aging. After a theoretical and political reflection about the issues associated to a new paradigm of aging in current societies, the author underlines the potentialities of technology as a complementary mechanism to achieve alternative and innovative responses as well as integrated and multidimensional policies and actions.

INTRODUCTION

The increase in life expectancy is unequivocally one of the most objective indicators of the social, scientific and technological development achieved in modern Western societies. The increment of medical knowledge coupled with an appreciable investment in the fields of technical support for diagnosis and social care-systems for elderly population have enabled, especially since the second half of the 20th century, not only to prolong life, but also to do so in conditions of greater dignity and quality. Nevertheless, despite these achievements, it is also undeniable that the expressiveness
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of the current “double aging” phenomenon, currently with particular incidence in the Japanese and European contexts, also advocates a necessary multidimensional adaptation in living contexts and in current public policies. The main concerns are, in fact, related with how to protect and monitor dependent individuals, how to support family members and caregivers, and how to assure comprehensive ways to guarantee healthy and meaningful aging increasing social participation and preparing people across their lives to a better adaptation to retirement.

According to European data projections, by 2050, almost 140 million people will be older than 65 in Europe and will represent 16.7% of the World’s total population (He, Goodkind, Kowal, 2016). In the same way the number of people aged 80 years old, and above, is projected to increase enormously in Europe, from 22 million in 2008 to 61 million in 2060 (European Economy 2, 2009), growing also, consequently, the risks of dependency or disability. The protection and care for elderly people are thus considered two of the most relevant social, political and health concerns in current societies. It is imperative to find processes to support their active, healthy and continued social and economic participation for as long as possible (Iyer & Eastman, 2006). For this purpose innovative, and integrated measures (social, economic, cultural and technological) are essential.

Indeed innumerable challenges, directly or indirectly associated with aging, are emerging in contemporary societies, particularly in terms of the labor market readjustment, the sustainability of health systems and social protection, the urban planning and the family organization. For example in what concerns the articulation between working time, leisure time and family time (especially when there are situations of elderly dependency to be considered). In the same way it is essential the adaptation of social institutions and their models of functioning, taking into account the changing profiles and expectations of the current and future elderly people and families. The concern with the situation of elderly dependency, for instance, has shown the growing need for long-term care provided by the family networks and community supports. To this extent dependency forces also the restructuring of the social, political and economic responses to the problem in order to assure quality of life and social inclusion for older people (Mollenkopf & Walker, 2007; Noll, 2007). Some of these challenges, and the answers that they necessarily imply, have even been addressed by various socio-political sectors as a difficult commitment to legitimize and manage in societies facing major issues of financial sustainability and global economic competitiveness.

So, new answers and innovative processes must be conceived. To that end, as it is argued along the chapter, support technology and ICT can play an important role if they are integrated in a multidimensional and complex action strategy towards
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