

INTRODUCTION

The world is ageing fast. Between 2000 and 2050, the proportion of the world's population over 60 years will double from about 11% to 22%. The absolute number of people aged 60 years and over is expected to increase from 605 million to 2 billion over the same period (*World Health Organization, 2012*).

On the other hand, the Central Agency for Public Mobilization and Statistics in Egypt reported that the number of people aged 60 years and over was 6 % of the total population in 2006 which is expected to be 9% by 2015 then 12% by 2030 (*Center for Information and Decision Support, 2008*).

The progressive rise in life expectancy contributes to an increase in the prevalence of chronic illnesses in the elderly population (*Lima et al., 2009*).

Chronic disabling conditions that often accompany aging are associated with increased prevalence of social and psychological disturbances. Hence, factors such as health status, extent of disability, perceptions about illness, available social support and psychological well-being are considered as important in determining the quality of life of elderly (*Joshi et al., 2003*).

A majority of deaths and disability result from progression of preventable chronic diseases for which

human behaviors are major contributing factors. An organized and aggressive agenda in health promotion and disease prevention emerges as an important part of the strategy to both promote health and control costs (*Besdine and Wetle, 2010*).

Health promotion has been defined by the World Health Organization's (WHO) 2005 as "the process of enabling people to increase control over their health and its determinants, and thereby improve their health".

The responsibility for health promotion in health services is shared among individuals, community groups, health professionals, health service institutions and governments (*The Ottawa Charter for Health Promotion, 1986*).

The primary means of health promotion occur through developing healthy public policy that addresses the prerequisites of health such as income, housing, food security, employment, and quality working conditions (*Bunton and Macdonald, 2002*).

The rationale is to delay or prevent functional impairment and subsequent nursing home admissions by primary prevention (eg, immunization and exercise), secondary prevention (eg, detection of untreated problems), and tertiary prevention (eg, reduce the damage caused by symptomatic disease by focusing on mental, physical, and social rehabilitation) (*Verbrugge and Jette, 1994*).

All physicians and patients should consider the potential benefits of screening and treatment vs conservative management (*Takahashi et al., 2004*).

Patients 65 years and older should be counseled on smoking cessation, diets rich in healthy fats, aerobic exercise, and strength training .Other types of preventive care include aspirin therapy; lipid management; and administration of tetanus, pneumococcal, and influenza vaccines. Although cancer is the second leading cause of death in patients 65 years and older, a survival benefit from cancer screening is not seen unless the patient's life expectancy exceeds five years. Therefore, it is best to review life expectancy, functionality, and comorbidities with older patients when making cancer screening recommendations. Other recommended screenings include abdominal aortic aneurysm for men 65 to 75 years of age, breast cancer for women 40 years and older with a life expectancy greater than five years, and colorectal cancer for men and women 50 years and older with a life expectancy greater than five years (*Spalding and Sebesta, 2008*).

There is some evidence that longer life, accompanied by better health, may not cause a significant increase in health care spending (*Miller, 2001*).

In this study we discuss the prevalence of health promotion measures such as smoking cessation, exercise & good nutrition among elderly living in geriatric homes in Cairo.

AIM OF THE WORK

The aim of our study is to determine prevalence of applying health promotion among elderly living in geriatric homes in Cairo.

Chapter (I) : Health Promotion

The progressive rise in life expectancy contributes to an increase in the prevalence of chronic illnesses in the elderly population (*Lima et al., 2009*).

Older adults are disproportionately affected by long-term (chronic) health conditions such as arthritis, diabetes, heart disease, and disabilities that result from injuries such as falls (*National Council on Aging, 2012*).

Consider that:

- 91% of older adults have at least one chronic health condition (*Anderson, 2010*).
- 77% of older adults have at least two chronic health conditions) (*Rabin et al., 2008*).
- One in three adults aged 65 and older falls each year (*Tromp et al., 2001*), of those who fall, 20% to 30% suffer moderate to severe injuries that make it hard for them to get around or live independently, and increase their risk of early death (*Sterling et al., 2001*).

- Among adults age 50 or older, 7.7% reported current depression and 15.7% reported a lifetime diagnosis of depression (*CDC, 2008*).

Other health challenges that are faced today:

- The gap between Indigenous and non Indigenous health status and outcomes.
- Increasing levels of chronic conditions, disability, injury and mental illness.
- The ageing of the population
- Growing inequities in health and other social factors between different population groups between and within countries
- Increasing environmental degradation and climate change with severe health consequences (*Lin et al., 2008*)

These health challenges result in high economic and health care costs and call attention to the critical role that evidence-based health promotion programs play in helping older adults adopt healthy self-management behaviors, increase well-being, and reduce health service utilization. (*National Council on Aging, 2012*).

Health is defined in the WHO constitution as:

“A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity” *(WHO, 1946)*.

Health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities *(WHO, 1986)*.

Health Promotion is the art and science of helping people discover the synergies between their core passions and optimal health, enhancing their motivation to strive for optimal health, and supporting them in changing their lifestyle to move toward a state of optimal health. *(O'Donnell, 2009)*. Optimal health is a dynamic balance of physical, emotional, social, spiritual, and intellectual health. Lifestyle change can be facilitated through a combination of learning experiences that enhance awareness, increase motivation, and build skills and, most important, through the creation of opportunities that open access to environments that make positive health practices the easiest choice *(O'Donnell, 2009)*.

Health problems of the elderly result from poor health promoting behaviors *(Palank, 1991)*.

It is rarely too late to change risky behaviors to promote health: for example, the risk of premature death decreases by 50% if someone gives up smoking at age 50, even people who quit at about age 60 or older live longer than those who continue to smoke (*Doll et al., 2004*).

The World Health Organization emphasizes health promoting behaviors as a key strategy to maintain health status of the elderly and assist them to survive with a good quality of life without depending on any family members or the society (*WHO, 1993*).

Health promotion has an important role in ensuring healthy ageing. Many diseases in later life are preventable and health promotion can even help ensure that older people with chronic conditions and disabilities can remain active and independent, preventing declining health and institutionalization (*Swedish National Institute of Public Health, 2007*).

Healthy ageing is much more than increasing the number of healthy life-years without any activity limitation and disability or disease. It has been succinctly defined as “A lifelong process of optimizing opportunities for improving and preserving health and physical, social and mental wellness, independence, quality of life and enhancing successful life-course transitions” (*Health Canada, 2002*),

to enable older people to take an active part in society and to enjoy an independent and good quality of life (*Swedish National Institute of Public Health, 2007*).

Factors related to health promoting behaviors of the elderly include age, sex, education, economic status, chronic illness, perceived health status, perceived self-efficacy, perceived benefits of practice, perceived barriers to practice and social support from family (*Kim et al., 2000*).

Why health promotion for older people?

- Health is a basic right of (older) people.
- Health is one of the most important predictors of life satisfaction in old age.
- Health is a prerequisite for an independent life in old age.
- Health is vital to maintaining an acceptable quality of life.
- In older individuals and ensuring the continued contributions.
- Of older persons to society.
- Health is a determinant of economic growth and competitiveness (e.g., decreasing early retirement of older workers).

- A healthy population reduces health-care spending and lowers the burden on the health-care system. (*Lis et al., 2008*)

At the level of the individual health promotion efforts should ideally be established early in life and maintained throughout life. Chronic disease, an avoidable outcome intermediate in the pathway to functional decline or death, is unlikely to have a single cause but rather, to be the result of the interactions of multiple factors (*Phelan et al., 2009*). Efforts to prevent such disease require a comprehensive approach that focuses primarily on behavioral modification. A healthy lifestyle can be conceptualized as one that involves avoidance of health-damaging behaviors along with the adoption of a proactive approach to one's health (*Phelan et al., 2009*).

Health Determinants:

According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment, and the person's individual characteristics and behaviors (*WHO, 2011*).

More specifically, key factors that have been found to influence whether people are healthy or unhealthy include:

- Income and social status
- Social support networks

- Education and literacy
- Employment/working conditions
- Social environments
- Physical environments
- Personal health practices and coping skills
- Healthy child development
- Biology and genetics
- Health care services
- Gender
- Culture

(Public Health Agency of Canada, 2011).

The maintenance and promotion of health is achieved through different combination of physical, mental, and social well-being, together sometimes referred to as the “*health triangle*” (***Nutter , 2003***).

Social Determinants of Health

The social determinants of health are the circumstances in which people are born, grow, live, work and age, including the health system that determines the health status of individuals or populations. These circumstances are in turn shaped by a wider set of forces: economics, social policies and politics at global, national and local levels (*WHO, 2011*).

Health policy:

Health policy can be defined as the "decisions, plans, and actions that are undertaken to achieve specific health care goals within a society" (*WHO, 2011*).

According to the World Health Organization, an explicit health policy can achieve several things: it defines a vision for the future; it outlines priorities and the expected roles of different groups; and it builds consensus and informs people. (*WHO, 2011*)

Health Education

The World Health Organization defined Health Education as "consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills which are conducive to individual and community health" (*WHO, 1998*).

Health literacy:

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (*CDC, 2009*).

Improving health literacy is increasingly critical as information, choices, and decisions about health care and public health have become more complex (*CDC, 2009*).

Limited health literacy has been linked to increased health disparities, poor health outcomes, increased use of health care services, and several health care safety issues, including medical and medication errors (*Chao et al., 2009*).

Research studies and data from the 2003 National Assessment of Adult Literacy (NAAL) demonstrate the importance of focusing on older adults and their health literacy challenges. Among adult age groups, those aged 65 and older have the smallest proportion of persons with proficient health literacy skills (*Kutner et al., 2006*).

Patients with limited health literacy are more likely not to use preventive health services such as vaccinations and mammograms, and more likely to improperly read medication dosing instructions and referral paperwork (*Williams et al., 1995*).

Natural history of disease:

Understanding the characteristic natural history of a disease enables physicians to anticipate prognosis and to identify opportunities for prevention and control (*Bhopal, 2002*).

Ideally, prevention occurs before people contract a disease, so preventive programs are often delivered to currently healthy people in the general population therefore to design such a programme we must understand the distribution of the condition in the population and know how to identify future cases. The metaphor of the "iceberg of disease" suggests that for every case that comes to a clinician, there are likely to be many more people with pre-clinical disease in the community, and even more with risk factors for the condition” (*The Association of Faculties of Medicine of Canada, 2008*)

Stages of prevention:

Primary prevention seeks to prevent the onset of specific diseases via risk reduction: by altering behaviors or exposures that can lead to disease, or by enhancing resistance to the effects of exposure to a disease agent. Examples include smoking cessation, vaccination and promotion of physical activity to prevent conditions such

as obesity that can lead to disease (e.g., type 2 diabetes). Primary prevention reduces the incidence of a disease by addressing disease risk factors or by enhancing resistance. Primary prevention generally targets specific causes and risk factors for specific diseases, but may also aim to promote healthy behaviours, improve host resistance, and foster safe environments that reduce the risk of the disease (*The Association of Faculties of Medicine of Canada, 2008*).

Secondary prevention is aimed at treating a disease after its onset, but before it causes serious complications. Secondary prevention includes 1) identifying individuals with established disease, and 2) treating those individuals in a timely way so as to prevent further problems (*U.S. Department of Health and Human Services, 2003*). Examples of screening procedures that lead to the prevention of disease emergence include the Pap smear for detecting early cervical cancer, routine mammography for early breast cancer, sigmoidoscopy for detecting colon cancer, periodic determination of blood pressure and blood cholesterol levels (*Wallace, 2002*).

Tertiary prevention is aimed at treating the late or final stages of a disease so as to minimize the degree of disability caused by that disease and enhance quality of life (*U.S. Department of Health and Human Services, 2003*).