We are IntechOpen, the world’s leading publisher of Open Access books
Built by scientists, for scientists

6,600
Open access books available

177,000
International authors and editors

195M
Downloads

154
Countries delivered to

TOP 1%
Our authors are among the most cited scientists

12.2%
Contributors from top 500 universities

WEB OF SCIENCE™
Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com
Aging and Neuropsychiatric Disease: A General Overview of Prevalence and Trends

Jelena Milić

Abstract

The increasing trend of life-expectancy is becoming a significant demographic, societal and economic challenge. Currently, global number of people above sixty years of age is 900 million, while United Nations expect this number to rise to over 1.4 billion in 2030 and over 2.5 billion by 2050. Concordant to this trend, numerous physiological changes are associated with aging and brain-related ones are associated with neuropsychiatric diseases. The main goal of this chapter is to identify the most important neuropsychiatric diseases to assess in older patients to help to promote health and prevent diseases and complications associated with chronic illness, as these changes are progressive and require important psychological and setting-related social adjustments. Findings identify several health-aspects highly present in elderly: stroke, white matter lesions, dementia rise with age, changes in levels of neurotransmitters and hormones, depression as well as the bereavement following loss of the loved one, and the most common neurodegenerative disease—Alzheimer’s disease and Parkinson’s. In conclusion, studying the aging process should include all developmental, circumstantial, and individual aspects of aging. This offers opportunities to improve the health of elderly by using a wide range of skills and knowledge. Thus, further studies are necessary to elucidate what can be done do to improve the aging process and health of elderly in the future.

Keywords: aging, neuropsychiatric diseases, dementia, Alzheimer’s, Parkinson’s, depression, bereavement

1. Introduction

Aging of the population is a global phenomenon [1], it is accelerating and becoming a significant demographic, societal and economic challenge [2]. Aging is the process of becoming older. Many societies, especially in Western countries, have already attained an older population structure than has ever been seen in the past, and a trend toward this structure is being observed also in low, and middle-income countries [3]. A population where the proportion of older people is increasing
is referred to as a cohort of the older adults or an aging population. The size and proportion of the global population as relates to age over time is also known as 'demographic aging' and 'population aging.' The old-age dependency ratio (OADR) is the standard indicator of population aging used in order to quantify the aging population. It expresses the amount of people aged 65 and over per 100 persons aged 15 to 64. In this way it provides an easy measure of the part of the population that have reached the traditional age of pension in relation to those of working age. In humans, aging represents the accumulation of changes in a human being over time and can encompass physical, psychological, and social changes. There are seven stages of human development. These stages are: infancy, early childhood, middle childhood, adolescence, early adulthood, middle age and old age. Aging is a gradual, continuous process of natural change that begins in early adulthood. During early middle age, many bodily functions begin to gradually decline. Although women live longer on average, they do tend to age slightly faster than men. Women also tend to make more use of cosmetic procedures in an attempt to keep the more visible effects of aging at bay. The actual rate of aging varies by person, depending on genetics, lifestyle choices and environmental factors. As the population ages, countries are slowly raising the age of pension. Therefore, it becomes increasingly relevant that the aging population is healthy. Gerontology studies all aspects of aging. Not only the physical changes, but also the mental, social and societal implications of growing older. This multidisciplinary approach offers a lot of opportunities to improve the health of older adults, using a wide range of skills and knowledge. In this chapter we present the insights in the most common gerontological neuropsychiatric aspects that appear with the ongoing aging process: neurodegenerative process—cognitive decline and epigenetics background, specific female aspect of aging, bereavement and depression, declining sleep quality and effect on quality of life via (ab)normal circadian rhythm (Figure 1).
2. Definition of old age and future perspectives in demographics

There is no specific age at which people are considered old or elderly. Traditionally however, age 65 has been designated as the beginning of old age. There are more than 900 million people worldwide aged 60 and over and this number is projected to grow. The United Nations expect this group to number to be 1.4 billion in 2030 and 2.5 billion by 2050 [4]. Within this group, the subcategory of “very old age people”, aged 80 and over, makes up a sizable portion [5]. Societal aging can affect economic growth, patterns of work and retirement, the way that families function, the ability of governments and communities to provide adequate resources for older adults, and the prevalence of chronic disease and disability. Far-reaching economic and social adjustments will be required in most countries, as well as understanding the impact of this transformation on health and everyday living [6, 7]. Thus, it is noticeable that the aging process represent a social problem. Some of the additional aspects attached to this are: living alone, family violence, loss of a spouse, aging-related cognitive impairments and disabilities, and transport issues. Consequences of social isolation can be dangerous, particularly for individuals already predisposed to health problems. Aging is a universal trait that is observed across the evolutionary spectrum. Determining the causal underlying cellular and molecular processes that deteriorate with age and lead to increased disease susceptibility and frailty is critical if we are to meet the growing healthcare needs of an aging human populations.

3. Overview on some of the aging theories and classifications

A number of theories about aging exist: According to Rate-of-living theory the faster an organism’s metabolism is, the shorter its lifespan will be. Wear and tear theory states, that our bodies (tissue and cells) simply get damaged and wear out by usage. Cross-linking theory postulates, that over time proteins form cross-links that accumulate and slow down the processes in the body and damage cells. Aging is a step-wise process and can be presented in 5 stages of aging: Stage 1—Independence, Stage 2—Interdependence, Stage 3—dependency, Stage 4—Crisis Management, and Stage 5—End of Life. Further, there are 2 different types of aging. Intrinsic aging occurs naturally as we grow older and is largely a product of heredity. Extrinsic aging is based almost entirely on external factors. We can also emphasize that he main characteristics of aging or the most visible one is presented on skin. Skin changes are among the most visible signs of aging. Evidence of increasing age includes wrinkles and sagging skin. However more important changes are connected to cognitive and overall psychological functioning.

4. Aging population and neuropsychiatric diseases

There are a number of physiological changes associated with aging into the elderly years (i.e. 65 and over). These changes are progressive. Because of, and alongside with, these changes come important psychological and social adjustments. Due to the brain morphological changes that come with aging, many elderly people are affected by neuropsychiatric diseases [8, 9]. The shrinking of the overall volume of the brain, a process which starts in humans when they’re in their 30’s, increases around the age of 60. Some areas of the brain, however, shrink more, and faster, than others. The prefrontal cortex, at the front of the frontal lobe, and the hippocampus, in the limbic system, in particular shrink with age; areas of the brain associated with complex
mental activities like learning, planning and Cole et al. [8] memorizing. Moreover, incidence of stroke, white matter lesions, and dementia rise with age, as does level of memory impairment and there are changes in levels of neurotransmitters and hormones. Some amount of brain shrinkage occurs naturally as people age. Other potential causes of brain shrinkage include injury, certain diseases and disorders, infections, and alcohol use. One might wonder what the difference is between normal brain changes with aging and pathological changes with brain diseases. A moderate decline in some cognitive abilities is expected and part of healthy aging. In the case of severe and progressive decline of the cognitive functions is considered dementia. Dementia affects almost all aspects of a patient’s life negatively. In Figure 2 we present the warning signs preceding the diagnosis as well as classification of Dementia.

Even though dementia is the first association many people have in regard to aging, it is in fact depression that is the most common psychiatric disorder, affecting up to 50% of elderly people. The significance of depression is very important to understand. Depression, a type of mood disorder that is, as mentioned, the most prevalent mental health problem among older adults, is associated with distress and suffering. It also can lead to impairments in physical, mental, and social functioning. Further, Alzheimer’s Disease (AD) and Parkinson’s disease (PD) are the most common neurodegenerative disease [4, 10]. Worldwide, the global prevalence of dementia is estimated to be 3.9% in people aged 60+ years, most suffering from AD [11]. Dementia is commonly accompanied by several neuropsychiatric symptoms, like agitation, apathy, delusions, depression, hallucinations and sleep impairment. These symptoms can in some cases cluster into syndromes. Operational criteria are proposed for specific psychotic and mood disturbances associated with dementia which make dementia an even bigger problem for both patients and caregivers. Alzheimer’s disease and related forms of dementia have
neuropsychiatric symptoms as a core feature. Previously, these symptoms were considered part of the late stages of the disease. Currently, these symptoms, like mild cognitive impairment, are known to be present in very early phases of the disease. It is sometimes not easy to tell the difference between dementia and normal aging. However, dementia is a progressive disease that causes cognitive function to break down abnormally, causing cognitive and physical symptoms that worsen over time. On the other hand, normal aging is much more minor, with changes resulting from a natural slowing or decrease in efficiency in the body. Due to aging population, the expectation is, that the number of people suffering from dementia will double every 20 years [11]. Neuropsychiatric diseases already make up 17.4% of Years Lived with Disability (YLPs) and 6.6% of all Disability Adjusted Life Years (DALYs), placing a high economic burden on national economies. These numbers are projected to increase in the future [12]. Moreover, elderly people, especially older women, are particularly vulnerable to the adverse effects of alcohol and, alcohol use disorders in this subgroup, are often overlooked or misdiagnosed [13]. It is expected, that in the coming years, the absolute number of elderlies with problems related to alcohol will rise, further increasing the number of cognitive and physiologically impaired elderly [14–16]. Each of these substantial neuropsychiatric morbidities are often accompanied with behavioral manifestations.

5. How does epigenetics affect aging?

Aging is an inevitable outcome of life, characterized by progressive decline in tissue and organ function and increased risk of mortality. Accumulating evidence links aging to genetic and epigenetic alterations. The end result of epigenetic changes during aging is altered local accessibility to the genetic material, leading to aberrant gene expression, reactivation of transposable elements, and genomic instability. Several lifestyle factors have been identified that might modify epigenetic patterns, such as diet, obesity, physical activity, tobacco smoking, alcohol consumption, environmental pollutants, psychological stress, and working on night shifts. Epigenetics is an emerging factor in development of neurodegenerative diseases. The last decade broadened our knowledge about the etiology of AD and PD [17–20]. It is now widely accepted, that a strong genetic component contributes to the development of AD and PD, with chromosome aberrations and gene mutations playing an important role in these neurodegenerative disorders [20, 21]. One of the factors that facilitated understanding of genetic modifications is epigenetics, and its development [22]. Epigenetics studies the influence of factors external to DNA on the genes, the prefix “epi-” in this case meaning “on top of” or “above”. These factors, like behavior and environment, do not change the sequence of the DNA, but alter the structure of the DNA. This influences how DNA is “read”, effectively turning genes “on” or “off”. These changes can be inherited, as gene expression altered via histone proteins and DNA methylation are known to be passed on to offspring [23]. The influence of epigenetical mechanisms on the etiology of AD and PD have already been suggested by several studies [24–26]. DNA methylation and histone acetylation are also thought to play a role in depression [27], which is an important correlate of neurodegenerative diseases [28]. Despite this evidence, to date, there is not yet a comprehensive assessment on the role of epigenetic mechanisms, such as DNA methylation or histone modifications, in the development of neurological diseases. However, it is known that epigenetic reprogramming reverses most if not all of the age-related epigenetic modifications. Harnessing partial reprogramming seems the most promising therapy to treat aging
6. Aging and neuropsychiatric disorders in women: role of menopause transition and estrogen

The aging process has a dissimilar effect on the different genders. Whereas the male body changes gradually over the years, the female body changes much more abruptly during menopause. In the end, everyone has to deal individually with the effects of aging on their sexual functioning, like erectile dysfunction and vaginal dryness. When it comes to aging, women's levels of the estrogen hormone begin to decline much earlier and much more quickly than men's levels of the testosterone hormone do. This quicker decline in hormone levels is the reason that men seem to age much more slowly than women do. However, women enjoy a longer lifespan, which puts them more at risk of psychoneurological diseases [29]. Hypercoagulable states due to pregnancy and birth control pills pose another neuropsychiatric health risk unique to women [30]. The majority of diagnoses for common neurological diseases are for women, including AD, PD and depression. Among diagnosed women, these diagnoses are more prevalent in women past their menopause [31]. Besides this, a number of neurological diseases, stroke among them, are more damaging to women than to men [32]. Upon reaching menopause, because of the shift in hormonal balance, women suffer the loss of the protective anti-inflammatory benefits of estrogen. Hormone replacement therapy can't adequately counter the state of hypoestrogenia [29]. The many physiological functions of estrogen are mediated by Estrogen Receptors Alpha and Beta (ERβ). ERβ is a recent discovery, but extensively present in the brain and functional in both males and females. It is as of yet unclear, if ERβ can be a basis for new therapeutic approaches that can help treat or prevent neuropsychiatric diseases in females in the menopausal and postmenopausal stages. Data further suggest that estrogen signaling varies depending on age and stage of menopause. Growing older and going through menopause, women become more dependent on alcohol and related problems increase [33]. Because women metabolize alcohol differently from men, they are less resistant to its detrimental effects (Figure 3), and have the tendency to suffer earlier on from diseases and other repercussions of alcohol usage than men [33]. Also, women have more difficulty gaining access to treatment and recovering from alcohol dependence [33].

7. Aging and bereavement: impact on quality of life

Almost all persons experience the loss of a close person during the life span [34–36]. With aging, this might occur once or several different times. Older adults experience grief at a higher rate than younger adults or children. Spousal loss is common in older adults as well as the death of friends, siblings and cousins. Because of ageism, growing older comes with a measure of anxiety. Combined with the various other obstacles of aging, this can make grief a complex affair in older persons. Change and loss are integral to life, but can be very painful. As we use the terms bereavement and grief interchangeably through this chapter, we would like to define that bereavement is the state of being in grief with there being different stages of bereavement. Bereavement in older age can lead to loneliness and an increased likelihood of depression, and it is appalling that older bereaved people aren't being offered the support and access to services that could make a huge difference to their well-being. The sentiments most often occurring within the period of bereavement comprise changed modality of feelings, reoccurring thoughts about the loss, somatic symptoms that sometimes lead to physical illness due to profound sadness that dominates bereavement and Markable change in behavioral patterns in an attempt to escape previously.
created behavioral routines in connection with the loved one or another loss-related entity or circumstances. Bereavement is accompanied by several well recognized feelings. The most noticed feelings in the bereavement period are: shock, desensitization, sorrow, refutation, misery, yearning annoyance, guilt, isolation, melancholy and incapability. Notwithstanding the fact that loss is an upsetting experience, the majority of people who go through it manage to recuperate within the time window of six months to a year [37]. By estimation 10 to 20% of persons suffering bereavement remain captive to remembrance, sorrow, and guilt, slipping into a long period of grief [38, 39]. This is a complicated condition named Prolonged Grief Disorder (PGD) or ‘complicated grief’ [38, 39]. Grief is separate from depression or anxiety. It can seriously hinder day-to-day social interactions and interpersonal relations, negatively influencing everyday life [40]. Evidence shows, that both acute and complicated grief can cause changes in the daily cycle [41], altered mental state [42] and deviations in patterns of nourishment [42] and sleep [43]. Considering the amount of change that can be affected on everyday activities, bereavement can potentially greatly diminish quality of life. Losing a loved one is a very unsettling occurrence, that can set off powerful emotional stress. Under this newly created condition, the hypothalamic-pituitary-adrenocortical (HPA) axis is stimulated and activates the secretion of cortisol into the bloodstream stressor adaptation. Also, cortisol dysregulation triggers the problematic alcohol use leading to dependency [44]. These further effects...
Mechanisms and Management of Senescence

memory loss, mental and physical disability, lower quality of life and increased chance of death [45, 46]. Little research has been done, however, on the influence of PGD on the neuroendocrine system, especially on the pattern of cortisol secretion [47]. The relationship between bereavement and disturbed sleeping patterns has already mentioned [41, 42, 48]. Schwartz et al. have studied the effect of changes in general health on the quality of life (QoL) of people suffering bereavement [49]. Others found, that the degree in which a person managed to maintain a degree of vigor and mental, physical and social reactions while grieving, influenced his sense of self-esteem and fulfillment [49–51]. However, our knowledge regarding the associations of grief and health-related outcomes is limited on a studies with small sample size and a cross-sectional design [41, 52–56]. Likewise, association between grief and complicated grief with QoL and its domains remains unclear and the available evidence examining this hypothesis has yet to be rigorously reviewed in order to help us to understand most influential aspects of the bereavement on the everyday life style.

8. Grief cessation and its determinants

For some bereaved individuals, the adaptation might be complicated, slowed, or halted, leading to incessant grief [57, 58]. This lasting grief impairs daily functioning, sleep, and increased risk of cancer and cardiovascular disease [59, 60]. The severity of grief relates to severity of impairment. Grief can change personality of a person who suffers, both on a temporary or more permanent basis based on various factors including how profound the loss was, internal coping skills, support system, general temperament, stress tolerance, and outlook on life. Therefore, detecting the determinants and predictors of traumatic grief is of crucial importance for identifying bereaved individuals in greatest risk for long-term dysfunction, and guide the development of novel interventions for the disorder [61]. Several factors have been suggested to influence the duration and severity of grief; gender plays an important role in bereavement. After losing a partner, the negative effect on health and general quality of life is greater with men than with women [62]. Members of both sexes show higher mortality rates when bereaved compared to non-bereaved individuals; this relative increase, however, is higher in men suffering bereavement [62]. Prior study suggests this is because men have a weaker support network and worse abilities for coping and self-empowerment than women [63]. Additionally, age is an important factor determining the length of the bereavement period. According to Stroe and Schut, bereaved persons that are younger, encounter more complications after a loss. Namely, including more serious health consequences, grief symptoms, and psychological and physical symptoms [62]. It is probable, that the reason for this difference is that younger grievers experiencing more unexpected and sudden losses, which causes more severe grief. It might be that older grievers develop better coping strategies due to life experience. Moreover, in elderly, emotions tend to be damped down, and it's less common for people to respond excitable to worries [64]. Even though younger grievers may experience more complications in acute phase of grieving, previous studies suggest that they recover more quickly. This might be supported by more access to various types of social support [62]. In conjunction with mentioned findings, series of past studies aimed to understand the grief and determinants and predictors; findings showed that grief was associated with functional impairment, gender [62], coping strategies [65], ethnicity [66], employment [60], spousal bereavement, sleep disturbances [41, 42, 48], high-risk behaviors and increased risk of cancer and cardiovascular disease [59, 60]. Previously published evidence indicated that there is a high chance of development of commodities
and psychiatric models such as: intensive stress, clinically relevant depressive symptoms, episodes of major depression and anxiety related disorders [38]. There are also chances of onset of decreased function of the immune system [67] significantly modified quality of life that decreases in accordance to severity of bereavement [68], as well as suicide tendencies and events and risk of elevated overall mortality incidence [69]. To the best of our knowledge, only few longitudinal studies on this topic had been performed so far, with a short follow-up (up to 24 months). None of the previous studies explored explore the determinants of grief bereavement bereavement related to long-term bereavement and different kind of loss in a normal population cohort with sufficient power [9, 39, 67, 70]. Further studies are necessary in order to make a stronger conclusion.

9. Why is it important to understand the elderly and the aging?

The study of elderly and the aging helps us understand the society in which we live, and it also alerts us to certain processes and problems that we may experience as we grow into old age. The fact that we are all facing the longer life span make us aware that is necessary to plan better for the course of events expected on this prolonged journey. Longer lives must be planned for. Societal aging may affect economic growth and many other issues, including the sustainability of families, the ability of states and communities to provide resources for older citizens, and international relations. Older people are important members of any society and therefore have the right to live in dignity in later life. It includes psychological and health aspects, continuing to participate in society, and ensuring a safe source of income. This also needs to be very well planned for on behalf of states and communities.

10. Cultural distinctions facing elderly in different societies

Many researchers have tried to identify different potential clarification for cross-cultural differences in overview of aging. Previously published evidence focused on socioeconomic predictors has reveal that higher levels of economic development and industrialization are associated with ominous attitudes towards aging and a lower societal status of elderly [71, 72]. Modernization theory, that is commonly in use when elucidating the activity of modernization within different societies. The theory identifies the inner aspects of a country that has been modernized while in the same time hypothesizing that with adequate help and methodology the rest of the countries can be changed in the same way and become more developed. Previous studies suggested [73, 74] that a shift towards industrialized models of mass-production erode the societal status of older adults, depreciate their insights that derived from reach experience, deconstruct the ties between the nuclear and recreational families through urbanization, and refocus the power over the means of production from elderly members of the families to industrial entities [73]. Although intuitively appealing, modernization theory has been criticized as an oversimplification [75]. Eastern/Asian compared to Western cultures is the model that has been most explored and discussed when it comes to detecting of the influence of cultural values and beliefs on aging behavioral pathways (see [76] for a review). The main point of this model comes from the idea that Asian societies are based on Confucian values of filial piety and the practice of ancestor worship which are thought to promote positive views of aging and high esteem for older adults ([77] for a review). On the other hand, the Western societies, were believed to be oriented towards
Mechanisms and Management of Senescence

youngsters and to hold not so positive views about the aging process and the older adults [72]. However, verifiable evidence for the proposed East-West differences is hard to come by. In summary, there is some evidence that both socioeconomic development and cultural values and beliefs may matter for cross-cultural differences in aging attitudes. So far, we know very limited arguments about whether the course of life and the growth—and particularly development in elderly years of life are globally a cultural similar phenomenon or culture-limited. Although the findings are limited in several important aspects one of them is sufficiently explored and that is how the country perceives neuropsychiatric aspects of aging. There are differences in neuropsychiatric aging between different cultures, both in the speed of decline of different functions and the perception of the decline itself [78]. Most research in this area focuses on the USA and parts of Asia, leaving large parts of the globe still underrepresented. Instruments developed in Western countries also lead to misrepresentation or over- or under-diagnosis of mental aging in other settings. A certain cultural awareness thus needs to be present to accurately treat people from different cultures. On the other hand, recognizing the existence of cultural differences also lead to a search for more objective methods that can be used equally for all cultures to determine neuropsychiatric decline. New instruments are being developed to address cross-cultural neuropsychiatry of aging [79], which is especially important for globalized, multi-ethnic societies [80–90].

11. Conclusion

In drawing to a close, this general overview of prevalence and trends of neuropsychiatric disease in aging population indicates that this global phenomenon of aging and increasing neuropsychiatric diseases in aged population is accelerating. The aging of the population is dominantly guided by declines in reproductive potentials of humans resulting in less pregnancies and improvements in healthcare and consequent longevity. This increase in overall life expectancy and the consequent number of elderly people in overall global population presents a significant demographic, societal and economic challenge. Therefore, the present moment is the right time to act towards more research in this area as well as the area of aging in general. The main focus of further aging research should be on the physiological changes associated with aging in the elderly years, since these changes are progressive and they trigger the important psychological and social adjustments. The leading research focus has been for some time given to the brain morphological changes that come with aging, as many elderly people are affected by neuropsychiatric diseases such as stroke, white matter lesions, and dementia, as well as overall changes in levels of neurotransmitters and hormones that are influencing the decrease in overall health and quality of life. As already emphasized, depression is the most common psychiatric disorder, affecting up to 50% of elderly people, and therefore also a highly important research topic in the aging research field. Depression is in old age often accompanied by bereavement that follows the loss of the loved one. As the loss of the loved one (dominantly a partner or sibling) is very common in elderly population. Even though, the relationship between depression and bereavement is complicated and often understudied and misleading to even the most experienced clinicians, the relationships between symptoms and treatment of bereavement and depression were disentangled in Diagnostic and Statistical Manual of Mental Disorders, the 3rd edition, a comprehensive classification of officially recognized psychiatric disorders, published by the American Psychiatric Association, where the mental health professionals have had
introduced the exclusion of bereavement as the prerogative for diagnosis of major depressive disorder. This was introduced in order to protect against bereavement being mistaken for depression, mislabeled as an illness, pathologized, and/or inappropriately treated. However, both depression and bereavement are two psychiatric states that we need to keep a close focus on due to increasing incidence. Furthermore, Alzheimer’s Disease and Parkinson’s disease are the most common neurodegenerative disease in the elderly. Distinctively, women’s levels of the estrogen hormone begin to decline much earlier and much more quickly than men’s levels of the testosterone hormone, and therefore men seem to age much more slowly than women do. However, women enjoy a longer lifespan, which puts them more at risk of psychoneurological diseases. Therefore, when it comes to women the focus of the future aging research should comprise: hypercoagulable states due to pregnancy, Alzheimer’s Disease, Parkinson’s disease and depression, as there are present in both genders. As previously mentioned, among diagnosed women, these diagnoses are more prevalent in women past their menopause [31]. Next, a number of neurological diseases, stroke being one of them, are more damaging to women than to men [32] and therefore future research should focus on exploring the risk factors and potential treatments. Also, due to the fact that women metabolize alcohol differently from men, they are less resistant and have the tendency to suffer earlier on from diseases and other repercussions of alcohol usage than men [33], the studies that are tailor-targeted for diagnostics and treatments of addiction diseases for female gender should be conducted more.

To conclude, the multidisciplinary approach should be considered when studying the aging process. This should include all aspects of aging, by exploring not only the physical changes, but also the mental, social and societal implications of growing older offers a lot of opportunities to improve the health of older adults, using a wide range of skills and knowledge, and future studies and overall research focus should be following the gerontological updates and broaden it to optimal extent.
References


[17] Bertram L, McQueen MB, Mullin K, Blacker D, Tanzi RE. Systematic


Mechanisms and Management of Senescence


[52] Boelen PA, Lancee J. Sleep difficulties are correlated with emotional problems following loss and residual symptoms of effective prolonged grief disorder treatment. Depression Research and Treatment. 2013;2013:739-804


[57] Boelen PA, van den Bout J. Complicated grief and uncomplicated grief are distinguishable constructs. Psychiatry Research. 2008;157(1-3):311-314


[68] Grimby A. Bereavement among elderly people: Grief reactions,
Mechanisms and Management of Senescence


[80] Boelens JJ. Breastfeeding, atopy, and asthma. Lancet. 2003;361(9352):174-175


Aging and Neuropsychiatric Disease: A General Overview of Prevalence and Trends
DOI: http://dx.doi.org/10.5772/intechopen.103102


