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Resumo

O presente artigo de revisão resume a literatura publicada sobre o tema "sexualidade no idoso", tendo por base o contexto médico e social. A pesquisa para elaboração do mesmo foi feita utilizando o PubMed, considerando as publicações dos últimos 20 anos, usando *sexualidade, idoso, velho, actividade sexual, função sexual e envelhecimento* como palavras-chave, seleccionando apenas a literatura relevante para o assunto e objetivo da revisão.

O intuito foi ilustrar o conceito de sexualidade, a função sexual e fatores que podem influenciá-la, procurando de alguma forma ajustar a visão errónea de que a atividade sexual está reservada para os mais jovens.

O envelhecimento não é um processo patológico, mas uma experiência natural. O idoso também ama e necessita de expressar a sua sexualidade livremente, sendo que este tema é marcado por tabus e mitos, que inclui não só sexo *per si*, mas também amor e a afeição compartilhada entre pessoas.

A revisão sugere que tanto homens, como mulheres continuam a ser sexualmente ativos numa fase mais tardia da vida adulta e, embora experienciem alterações físicas normais, este facto não leva inevitavelmente a uma redução na função sexual. Além disso, o estado de saúde (física e mental), uma postura otimista em relação a sexo e a presença de um parceiro estão relacionados com a manutenção de uma vida sexual ativa.

É imperativo compreender o tema “sexualidade no idoso”, uma vez que a esperança média de vida está a aumentar e a população está a tornar-se gradualmente mais velha e, consequentemente, há uma necessidade de desenvolver novas formas de olhar para esta questão.

Palavras-chave: sexualidade, idoso, velho, actividade sexual, função sexual e envelhecimento

Abstract

This review summarizes the published literature regarding the subject of "sexuality in the elderly", based in a medical and social context. It was made a research via PubMed, with a timeline of the last 20 years, using the keywords *sexuality, elderly, old, sexual activity, sexual function and aging*, selecting only literature with relevance for the subject and aim of the review.

The intention was to illustrate the concept of sexuality, sexual function and factors that might influence it, looking for an adjustment of the erroneous view that sexual activity is just for the younger ones.

Aging is not a pathological process, but a natural experience and the elderly also loves and needs to express their sexuality freely. The sexuality, a subject marked by taboos and myths, includes not only sex, but also love and affection shared between people.

The review suggests that men and women continue to be sexually active in later life and, although they experience normal physical modifications, this do not inevitably lead to a reduction in sexual functioning. Also, the state of health (physical and mental), an optimistic stance regarding to sex and the presence of a partner are connected to an active sexual life.

It is imperative to understand the theme of sexuality in the elderly, since the average life expectancy is increasing and the population is becoming gradually more "old" and there is consequently a need to develop new ways of looking at this issue.

Keywords: sexuality, elderly, old, sexual activity, sexual function, aging

I - Introduction

The term “sex” is mainly referred to physical aspects, particularly the act of sexual intercourse, while “sexuality” has a wider meaning, including social and mental aspects [1] defined as “a central aspect of being human throughout life”, “a complex interplay of needs of intimacy, affection, connection, self-pleasure, self-image, and individual’s context related to gender, ethnicity and community”, [2] with influence in our thoughts, feelings, actions and so that, also in our mental and physical health [3].

Aging is the art of experiencing the various stages proposed by time. For many, being old can be synonymous of wisdom and experience, for example, at the African societies the elderly are extremely respected, being seen as those who transfer all the knowledge of his ancestors. On the other hand, in Occidental societies, due to the increased average life expectancy, the elderly are associated with concepts such as: inactivity, disease, dementia, asexuality... Aging is an inductive process of several individual changes, in physical, mental and social part. These changes tend to affect the expression of sexuality, but do not eliminate sexuality itself. In fact, in literature we can find many reviews addressing different issues connected to sexual functioning in elderly people, like the impact of medicines, medical conditions or diseases but, as Blieszner [4] noticed in his review, sexual expression of typical, healthy older people and their sexual health is a relatively neglected topic of research.

In the end, the prevalence of researches about “problems of sexual functioning” leads to an image where older people do not have or don’t want to have an active sexual life [5-6]. Although it is generally believed that sexual desires decrease with age, researchers have identified that sexual desires, thoughts, and actions continue throughout all decades of life. The exchange of affection and a healthy sexual life evoke sentiments of joy, romance, affection, passion and intimacy, whereas despondency and depression often result from an inability to express one’s sexuality. The combination of the ability to enjoy a satisfying sexual

relationship and the ability to express one's sexual desires need do not diminish with age and do continue to have importance in later life. [6-7]

There is no doubt that "Sexuality in the elderly" is an important issue. First of all, life expectancy around the world has risen dramatically in the last four decades, about 11 years for men and 12 years for women, [8] which mean that individuals over the age of 65 years form an increasingly large proportion of our population. Second, active life expectancy is estimated to increase [9], this means a larger number of years of potential sexual activity in later life. Also, nowadays with the stages of retirement and couples having fewer children their adult time is not all spent raising them, so they can have the chance to connect in sexual activity. [10].

And last but not least, sexual activity can contribute to the increment of general well-being and reduction of mental and physical problems connected to aging [10]. Moreover, the decrease of sexual functioning can be a sign of another health condition, as an example Basson [11] concluded in his study that erectile dysfunction in men can be a sign for asymptomatic coronary artery disease.

The aims of this review are, at first, to have an insight about aging process and then underline the non-absence of sexuality in the elderly, understand the meaning of "sexual function", get to know the myths that are inherent to it and how this topic is influenced by so many factors, not forgetting to approach the most common sexual problems in later life.

II - Material and Methods

To prepare this review some considerations were taken. The research was made via PubMed, with a timeline of the last 20 years, using the keywords *sexuality*, *elderly*, *old*, *sexual activity* and *aging*. It was been selected only the articles with interest for the subject and the objective of it. The articles were read carefully and critically, and helped to identify the main categories described further on.

The larger amounts of studies with interest were mainly published in the last 7/8 years, once before that there were few that approach the subject further than the 60s. Most of the recent research starts reporting from 50 year-old people.

The majority of the studies focus on a partnered activity, and, as it will be discussed later, a good number of elderly people live alone, due to a partner loss, which is associated to a cessation of sexual activity [12].

It was possible to notice that there are a lot of studies of small samples about the subject; some only report older people connected to diseases, medical conditions or medicines and were not taken in consideration. In what concerns to healthy ones the information is fewer, what is negative once this population are living longer and also increasing.

It is also important to mention that this review only considers the subject due to heterosexual elderly people, because they represent the majority in population.

III – An insight about aging

Old age is an ineluctable process characterized by a complex set of specific physiological, psychological and social factors of each individual. Thus, some seniors are more aged, others seem younger and there are still those who feel not to be useful. Aging is a normal process in the human being's life, but the progression is not the same or at the same rate for everyone. The human's physiological changes in aging process have cumulative effects and are irreversible for all. The behavior, sexual response and aspects of sexuality in aging may be assigned to the normal physical changes. [13].

i. Aging process' prejudices

In the definition of Butler and Lewis aging is defined as "the prejudices and stereotypes that the elderly are applied based solely on their age ..." [14]

Often older people experience feelings of devaluation produced by the society in which they live, as they have always been seen as those who are dismissing of life. This prejudice turns out to isolate the elderly and deprive them of several things and may contribute to the advancement of the process of aging [13]

The many myths and stereotypes about old age cause them plenty of difficulties. Studies by Ebersole cited by Berger allowed the identification of persistent myths particularly for the older. Falsely most elderly are seen as unhappy, however, the level of life satisfaction of the elderly is high and compares easily to adults. [13]

"Most seniors are senile or sick" is another falsehood identified. Symptoms of a degenerative disease of the nervous system describes the pejorative term of senility that has no particular link with aging. In fact, the older ones are not mentally disturbed and only 4 or 5 % of the elderly aged 65 and over are institutionalized due to neurological conditions. [13]

Bearing in mind the work, the elderly are regarded as not being as productive as the young. In contrast, studies tend to show that older workers have a lower rate of absenteeism, accidents and have fewer yields more constant. [13]

Very often people in this age group are associated with a stubbornness of their lifestyles, are conservative and do not admit a change. It is impossible to deny that people become more stable as they age, however, that does not mean total rejection to adjustment, ie in case of a new situation many are able to adapt. [13]

The most prevalent myth is a need of help for carrying out daily activities, however at least 80 % of the elderly is sufficiently healthy and has autonomy. [13]

Also common is the idea that the old ones are always in solitude, although there is a great number of elderly people who maintain friendships, have a closely connection with their families and have their own social events. [13]

ii. Common modifications with age

The obvious appearance changes and decline of body function that come with age require an adaptation to this new reality. There is a decline in function with the aging process that does not only contain some physical changes, but also some memory commitment and more easy fatigue. Also, the emergence of pathologies contribute to this decrease in function, in fact, many seniors are chronically ill and over a third have a disability that limits their daily activities [15].

Changes occur at the cellular level in organs and systems; this can be interpreted as a gradual reduction in the number of functional cells. The fat increases until age 60 years and body mass generally decreases. With respect to the extracellular fluid, it stays more or less constant, however intracellular regresses, leading to a smaller amount of total organic liquid [15].

Because the physiological changes in the elderly are connected to the chronological age, other health problems become quite variable. Relative to men, in a general point of view, from the age of 40, begins a capillary loss, and in both genders occurs the development of white hair and appearance of wrinkles. There is also a reduction in height of about 4cm at 80 years old, a process that is due to cartilage loss and thinning of the vertebrae and can become further exacerbated by any curvature of the spine, hips and knees that can be present. All these changes are subtle and gradual. Also with the advance of time, sleep becomes shallower, more fragmented, with more interruptions and greater difficulty in falling asleep occurs. [15]

There is a whole set of physical changes with age, both externally and in internal organs. However, it is worth remembering that as the years pass, there are physical limitations that may arise as a result of unhealthy life styles, among which can be emphasize smoking, excessive alcohol consumption, a high fat diet, hypertension, high cholesterol and, more recently, a practice fairly sedentary life. [15]

Regarding to cognitive changes, older people are able to acquire knowledge, develop skills, to remember those who have seized so far and can also communicate in an acceptable language. However, they show increasing difficulty in understanding complex and long messages, in remembering more specific names and elaborate more organized and logical speech. Changes at this level are influenced by the state of health of the person, by genetic factors, physical and social activity. Also important is the lower level of senses in sensory organs that can lead to decay in social interaction and the environment becoming negative for any psychological condition. [15]

From a psychosocial point of view, most of the elderly live with their partner (when he/she exists), but no longer with their children and also most of them prefer to live in their homes than in institutions. In a way, this aspect helps the decline in social contact, being a negative

aspect of the aging process. The loss of function that comes with the retirement also has an important impact. [15]

IV - Sexuality in elderly people

Nearly all the articles published related to this subject are about sexual dysfunctions, mostly erectile dysfunction in men, sexual interest and capacity for intercourse. Though, it is extremely important to look to this topic with different eyes so that it can be possible to understand its importance in later life.

Sexuality can be seen as the exchange of affection, kisses, hugs, companionship, security and sex, and also include touching, fondling, fantasize and the act of masturbating. Actually it is much more than sex, is a set of feelings and attitudes toward the partner, expressed in affection, kissing, hugging, touching, looking, listening and understanding even in silence [2]. It is the energy that motivates the search for intimacy. It should be attributed to the elderly the same dignity and respect, recognizing him as a sexual human being. The aging process does not neutralize old aged people, or change their sexual identity. It is important to know that aging does not necessarily compromise sexuality [15].

Biological, physiological and cultural/social factors are known to influence sexual functioning, a fact that will be discussed later in this review. Before that, it seems relevant to get to know the sexual myths about older people.

i. Fallacies of sexuality in later life

Different from what most people think, elderly people continue to enjoy their sexuality and it is possible to find some studies about the subject.

According to the one done among people in Europe (Sweden, UK, Belgium, Germany, Austria, France, Spain and Italy) aged 40-80 years, using a standardized questionnaire, in a

4,977 men and 5,023 women; 83% of men and 66% of women had sexual intercourse during the year preceding the interview. [16].

Another research made in USA in a sample of 1,216 elderly people (mean age = 77.3), conclude that 30% had sexual activity in the past month and 67% were satisfied with their sexual life.

In today's world there is a stereotypical point of view that an older person requires assistance, is slower in movements and thoughts and never explores or thinks about sex. For most part of the people, sex and sexuality among the old ones basically do not occur and they are seen as human beings that are, or should be, asexual [6] [17]. This idea of the subject comes for some because it turns too difficult to imagine their own parents as sexual creatures, with sexual interests and desires [6].

Myths related to sexual activity in later life are widespread. The general ones include the inexistence of desire, the incapability of making love, the vision of erectile dysfunction as normal with age, the thought that old people have no longer attraction or are attractive to anyone and that they are too fragile to attempt coitus. Pfeiffer summarized is point of view to reduce these sexual myths when he wrote: "...successful aging persons are those who have made a decision to stay in training physically, socially, emotionally and intellectually. We have every reason to believe that staying in training sexually will help to improve the quality of life in later years". [18]

Not less important is the thought that the elderly people who would like to have an active sexual life may be seen in a disapproving light and even called as "that horny old woman" or "that dirty old man". This misrepresentation discourages old population to fulfill their sexual needs. Actually, elderly themselves are afraid to voice their feelings once they don't want to be seen as depraved or lecherous, so they interiorize those myths [9]. There is a necessity to open-mind society and turn it into a more tolerant environmental for the old ones.

ii. Factors that influence sexual function in later life

First of all, it is imperative to understand the meaning of sexual function. A full definition must consider not only objective but also subjective aspects (like activity satisfaction). Moreover, the relationship context such as the absence or presence of a partner and the partner's characteristics are important to understand the meaning of this term. A definition was proposed by John DeLamater, after realizing that literature had a lack of a complete characterization of the designation and often favors biologic factors over others: "Sexual functioning refers to one's ability to engage in sexual expression and sexual relationships that are rewarding, and the state of one's physical, mental, and social well-being in relation to his or her sexuality." [19]

Research indicates that both genders remain sexually active into their 80s, although men report greater incidence and frequency of sexual activity, including sexual intercourse, than women. The difference increases with age due to differential loss of partners and differences in health. [20]

The human being has been viewed in the last decades as a biopsychosocial creature. Indeed, health and well-being are best understood in terms of a combination of biological, psychological and social factors rather than purely in biological terms. It has to be always present the fact that these factors rarely operate in isolation from one another [21].

Once sexuality and well-being are intimately connected, it is obvious that all these factors play an essential role in sexual life. [10].

1. Biological

Considering the research from National Social Life, Health and Aging Project [NSHAP] (n = 3005 men and women, 57-85 years old), Bancroft [22] stated that there is a decrease in frequency of sexual activity with age and he suggested that this was due to time related

factors combined with medical conditions. On the other hand, Lindau et al, based on the same data declared that the decline of sexual activity was more strongly related to health problems than to increasing age [23].

a. Time-related factors

The sexual response cycle is composed by excitement (also known as arousal), plateau, orgasm and resolution, and all of the stages are affected with the aging process.

The first stage is connected to different types of physical or mental stimuli. The second one, plateau, is characterized by an increased circulation and heart rate in both genders and is considered as the continuance and amplification of stimulation. The muscular contractions in the lower pelvic muscles characterized the orgasm that is followed by the resolution that allows the muscles to relax, blood pressure to drop and the body to slow down from its excited state [24].

In the aging process, both genders suffer normal changes that directly affect their sexuality.

Dividing those alterations by gender, we can observe the following table (Table 1):

Table 1 - Normal sexual changes with age

Normal sexual changes with age	Men	Women
	Decline in the four periods: excitement, plateau, orgasm and resolution	
	Penile stimulation requires more time to obtain and sustain an erection	Reduction of vaginal lubrication
	Plateau phase turns longer	Excitement and plateau periods become longer
	Orgasms are weaker and occur with	Decrease of orgasmic contraction in

shorter intervals [25]	intensity and number.
Resolution happens to be with quickly penile detumescence	Decrease of resolution length
Decrease of testosterone levels [26]	Decrease of estrogen levels
Decline of semen volume [26]	Decrease of muscle tone and elasticity
Period between erections becomes longer [25]	Decline of vaginal width and length; Thinness of vaginal mucosa; Diminish of clitoris size [27] and loss of vulvar tissue

The four stages of sexual response cycle suffer a decline in both genders. In what concerns to masculine aging, plateau stage becomes longer and this can turn into a positive thing once there is a better control in ejaculation; orgasm becomes weaker, with a reduction of contractions of bulbocavernosi and ischial muscles, and with shorter intervals, meaning they need a longer period of time to regroup after orgasm before they can achieve another one. Resolution is characterized by a quick penile detumescence [25].

With aging process, penile stimulation requires more time to obtain and sustain an erection to engage in coitus and the period between erections becomes longer [25].

Comparing to men's youth, there is a reduction of semen volume and testosterone levels that is much more gradual than the decline of estrogens in women [26]. It is expected a prevalence of testosterone deficiency of 20% in men between 60 and 69 and up to 50% in those that are more than 80 years old [28]. It is reported in Bancroft study that there is a reduction in sexual desire and an increase in erectile problems related to the decrease of testosterone and so that also a decline in sexual activity. [22]

Aging also has an explicit impact on female sexuality. The increased time to get vaginal lubrication for coitus, the urogenital tissues atrophy and decreased clitoral size is connected to the decline of estrogens (that diminish blood flow) and leads to a longer period required for excitement and plateau. This dryness and atrophy can cause consequences as aches in the vulva and vagina. There are a lot of women that experience dyspareunia that can be due not only to atrophy, but also can have a psychogenic cause [27]. The decrease of muscle tone and elasticity, mainly the pubococcygeal muscle, is connected to the decrease of orgasmic contraction in intensity and duration, although the orgasm phase is the one that is least affected by aging. Some women experience pain with orgasm later in life due to orgasmic contractions becoming less coordinated with the body. Also, there is a decline in the length of the resolution. Postmenopausal women with sexual activity can benefit with the use of lubricants and Kegel exercises (pelvic muscle exercises) [29].

Menopause signifies the eternal end of menstruation and reproduction. It not only involves physiological changes, but also psychological. A loss of estrogens occurs and some studies have been made about the impact of this change in sexual life. Bancroft reported that there are no evidences that this alteration affects women sexual desire and that the impact depends on the meaning women attribute to it and to the normal physical changes that occur. [22] Other research conclude that some women found sex more desirable after menopause, maybe due to the fact that being pregnant is no longer a concern, while others had a negative perspective about sex after losing the reproductive capacity [30]. The fact is that some discomfort may come with organic modifications and that can lead to the decrease in frequency of intercourse but desire, for both men and women, remains stable throughout life, sex does not diminish as one ages, as much as it evolves [31].

Not less important to notice is that normal physical changes can negatively influence one's self-image. There are people, the majority women, that with the modification of their appearance, like skin tone or coloring hair, start feeling less attractive, undermining their sexual desire [32].

b. Medical factors

b1. Physical state

According to the conclusion of the study made by Lindau and Gavrilova in two populations of United States, men and women in later life that report excellent or good health are more likely to still being sexual active than those who have poor health. [33]

It is true that co-morbidities are not only present in elderly people, but they do conduce to major impact in sexual function in this stage of life. The older population is more susceptible to many disabling medical conditions; a number of medical conditions are associated with poor sexual health and functioning. One study found that health disorders encountered in older age, like heart disease, stroke, cancer or arthritis, have a superior impact on sexual functioning than the normative process of aging. [31]

A person's general illness can be manifested by fatigue, weakness, pain and/or psychological disturbances, and that can affect sexual activity in a negative way. Also surgery can influence the anatomic function or self-esteem (for example mastectomy or limb amputation). So, in these cases it is important that the physician associated with health care providers address the special needs of the patients. [24]

There are a lot of researches made about the impact of chronic conditions and illness on sexual activity. The one made by the American Association of Retired Persons (AARP) [cit. in DeLamater et al [19]] about people 45 and older, concluded that 33% of both men and women had a diagnose of high blood pressure, 31% of women and 19% of men had arthritis,

15.6% of men with swollen prostate, 12% of women and 14% of men with diabetes. Still, less than 16% of men and 6% of women said that their condition affects their sexual life.

It was also reported in literature that, in what concerns to women, diabetes is associated to a decline of sexual activity due to decreased vaginal secretion that leads to dyspareunia; and arthritis because it makes some positions uncomfortable. In men diabetes was related to pain during the intercourse and erectile problems once this disease decreased blood flow; hypertension was associated to lack of pleasure [33]. Also Genazzani et al confirmed that lower levels of testosterone than the expected were connected to chronic diseases such as metabolic syndrome, cardiovascular problems and type 2 diabetes, and as it was referred previously, low levels of testosterone can cause lack of desire and augment of erectile dysfunction. [34] Erectile dysfunction is for men the most prominent change in sexual function with age, but age is not the only reason. As it was said, it may increase in correlation with the development of illnesses across the life period [31].

Breast cancer and postsurgical implications, such as pain, scarring and lymphedema, can interfere with patient's ability and desire for sexual activities. [24] The same occurs when men get the diagnosis of prostate cancer and start concerning about impotency. Also, although it is not common, during a prostatectomy can occur a damage of the nerves that can lead to an erectile dysfunction. [35]

Neurological causes of sexual dysfunction can include spinal cord injury and Parkinson's disease. [35]

Not less important is the urinary incontinence, a common problem in later life that can have a negative effect on sexual desire and activity. The necessity to urinate in an inconvenient moment and the bed wetting conduces to avoidance of sexual activities. [35]

It is not possible to say that the medical state is a major influence to sexual activity, although literature suggests that an improvement in health may lead to an increase in sexual activity in later life. [35]

b2. Mental state

It is impossible to deny the role of the mind in sexual functioning. It is reported in literature that anxiety is directly connected to sexual problems in both genders, manifested by reduced sexual interest. Among females it is also reported less pleasure and an increased anorgasmia. Stress seems to be the major cause for anxiety and depression that guides to a decline in sexual functioning among the old ones. However, sometimes it becomes difficult to know if depression symptoms come with sexual dysfunction or are the reason for it. [36] According to Bancroft, anxiety produces peripheral effects that interfere with sexual response and cognitive processes, which typically help in response to sexual stimulation. The sexual reaction is then inhibited to prevent anxiety and this, in turn, develops a failed sexual response. In older men, anxiety impairs sexual response (ejaculation) due to the difficulty of achieving an erection. With regards to women, this feeling is most associated with the fear of dyspareunia. [22]

According to Brody and his colleagues, men that have low score at least in one of these three: self-assessment mental health, anxiety or depression, declared quite a few sexual problems. In what concerns to women, reduced self-ratings of mental health were intimately connected to difficulties in their sexual life. [37]

Depressive symptoms may be perceptible in every human being at every stage of life, but the probability of an elderly suffer from this pathology is higher, since they have numerous limitations and losses leading to feelings of self-disapproval. The two biggest complaints of men after retirement are related to depression and erectile dysfunction. Depression in old age is associated with a loss of self-esteem, resulting from the inability of the elderly to meet

needs or impulses or to defend itself against threats to its security. Psychosocial factors such as loss of social support, occurrence of physical illness of spouse or widow may be the cause of depression in the elderly. Also important not to forget that the elderly do not rarely has one or more chronic diseases, which are often related to depressive manifestations, such as cerebrovascular disease, rheumatoid arthritis, etc.. Often wrongly the decline of libido is associated to aging itself, but in fact, in most cases, impotence is caused by a psychological disorder, in the absence of organic pathology. Consequently, the depression can cause decreased libido, while loss of sexual activity can lead to depression. [38]

Widower's syndrome is present in some men, and it consists in difficulties to achieve an erection because of their feeling of guilt when they pursuit a sexual activity after the death of their spouse. [17]

At last, it is important to mention in elderly people is frequent the occurrence of cognitive decline. This fact when related to dementia disorders will affect sexual behavior that can lead sometimes to relationship difficulties or, in some cases, to a disinhibition. [17]

b3. Medicines

With aging comes co-morbidities and treatment. Deacon et al specify that there were plenty of pathological factors that could change sexual function causing sexual dysfunctions, such as cardiovascular disease, diabetes mellitus, dementia, arthritis and surgery [17]. In AARP study [cit. in DeLamater et al [19], it was possible to notice that in this stage of life, the most taken drugs are for blood pressure first, then to lower cholesterol and after that, the pain killers. In both women and men the rates of application of those medicines comprehensively increase with age. [40]

It is stated that antihypertensives, antidepressants and anxiolytic can have a negative effect in libido and erectile function, not forgetting those which interfere with the autonomic nervous

system. [17] It is also possible to find in literature a study published declaring that antidepressants, antihistamines, antihypertensives and antipsychotics can be associated to erectile dysfunction in men, although the mechanism is unknown. [39]

In addition, DeLamater and Sill conclude in their research based on AARP data from 1999 that in what concerns to women the use of cardiovascular medication, antihypertensives, anticoagulants and anticholesterolemic had a negative impact on their sexual desire; among men, antihypertensives and anticoagulants were the mainly pointed as the ones that cause lack on it. [41]

2. Psychological

Biological factors are very important, but not less important are also the psychological ones. Destructive psychological effects in elderly people can be caused by the common asexual stereotype and it can lead to an altered self-concept, anguish and re-prioritization of components of close relationships, affecting also their sexual functioning. It is declared in literature that the understanding of modifications in sexual function due to age related processes tightly affect the amount of distress around these changes. Societal prescriptions of appropriateness of sexuality in later life stages have also been found as important. [6]

The value of sexuality in the context of identity differs depending if the person is a woman or a man, therefore the distress about how one is perceived sexually influence both genders in different ways. [6] Under Vares research, older women experience the asexual theory as if it takes from them their womanliness and also identity, turning them powerless. With all their normal corporal changes with age, such as loss of productiveness and appearance transformations, they lose self-concept. [42]

Comparatively, when men experience sexual dysfunctions, their masculine identity may be injured hence harming self-esteem. Those uninformed about normal changes with age may

experiment apprehension in what concerns to sexual performance. This worry about erectile dysfunction may become a self-fulfilling prediction. [17]

In accordance with Gott and Hinchliff in their study about barriers to sexual functioning, the old people who face aging process as normal have less distress relatively to dysfunction. As well, women who picture menopause as an expected event with age, actually enjoy sex more since they are not concerned about the risk of pregnancy [6]. The acceptance of bodily changes as a consequence of aging seems to make easy for both genders the coping.

Still, is important to notice that there are numerous descriptions of sexuality, and this fact has been ignored for too many years. The typical definition among today's culture is focused in coitus and youth and the truth is that the asexual stereotype of the old ones has a narrow definition of sexuality that does not take the grander extent of the subject.

It is very important that old people have a positive outlook about sex to get greater sexual life. In 2003, 44 people between 50 and 92 years old were inquired about the importance of sex when regarding quality of life. The results showed that the 44 participants were equally divided in 3 groups: not important, moderately important and very important. The people from the group that pointed sex as very important acknowledged that for them sexual activity is not only the intercourse, but a way to show affection, to give and receive love and pleasure. Health problems were pointed as the reason by the majority who affirmed that sex was not essential. [6] In another research from the AARP, it is possible to conclude that sex was more important for the quality of life for men than women. Analyzing their research it was possible to find a correlation between a positive outlook about sex and sex desire. In both genders, those who affirm that sex is important reported greater desire. Motivation can be the key to a better sexual activity, once it can compensate a diminished psychological desire due for example to the levels of testosterone. [41]

Another point to focus is the misinformation about sex in later life. Old people commonly ceased their sexual activity because they think they shouldn't do it if they had major health events (like stroke or heart attack). [10]

3. Social/ cultural/ religious factors

The human being doesn't live in bubble, is known to interact and so that is integrated in a social context. The first thing to focus is the existence or not of a partner. It is important to notice that having a partner in later life causes a huge influence in sexual activity, once its presence or absence may affect desire. In fact, a partnering relationship offers emotional and social sustain and consequential greater activity. [4]

A study among Americans between 57 and 85 years old showed that the rates of sexual activity were higher in men than women, although when due to men and women with partners, these differences were smaller. The dissimilarity about sexual activity between both genders can be explained by the fact that in a couple women use to be younger than men and they also have more longevity, which leads to a shortage of men in later life. [23]

Blieszner declared in literature that there is an increase of elderly people that have a relationship but live in separated residences in Scandinavian countries and also conclude that this allows closeness and autonomy at the same time. [4]

Lauhman et al stated that relationship satisfaction and sexual satisfaction are intimately related; in fact higher relationship satisfaction was associated to less reports of lack of desire, interest, pleasure and women's anorgasmia [36]. Also Byers declared that sexual satisfaction and relationship satisfaction modify together, apposite to the idea that they affect each other, like changes in sexual satisfaction affects relationship satisfaction or vice-versa. Furthermore, there are changes in communication that can lead to modifications in sexual and relationship satisfaction. [43] Modifications in partner's characteristics, physical or mental,

can as well influence their sexual life and relationship, for example sexual dysfunction in one or both genders can cause difficulties in a couple's sex life, but this is not a synonym of cessation, depending on the cause they can find a solution or alternative ways to express their sexuality. [23]

Additionally, as the relationship becomes longer, the frequency of sexual activity can decrease, once it becomes a habituation, but this doesn't mean a decline in sexual function [44].

In a cultural point of view, it is obvious that the old ones had experienced a huge change in their lives, and this also means a great modification of the way that sexuality is viewed. Several of the seniors of today lived in the 60s and 70s in their middle-aged (the known era of sexuality liberation), and they took with them to their later years the thoughts they had interiorized before. Luckily, the way society sees the theme is slowly changing. [45]

Actually, it is possible to affirm that the inhibition in what concerns to women's sexuality has been modified and the information to both genders has increased in a large proportion. The use of contraceptives also allowed women to experience a better and larger sexual life and also let men to take more pleasure in their sexual relationship. [46]

Also the media has a role in this subject once the cultural and society vision about sexuality in elderly people is reflected in it, and manipulates how the old ones perceived themselves. This leads to a necessity to increase education and information among this professionals that produce portraits among society about the topic. [17]

In Vares research he concludes that till recent times, old people as sexualized being was a taboo to exhibit and all this due to the asexual idea; aging and sex were antonyms. In the 90s a new picture was introduced, the called 'Sexy Oldie'. This was shown in performance improving medicines ads such as Viagra, and the demand of this medication could show that old people still have and want to have an active sexual life. In addition, there is a reference to

a movie exhibition to an old group of people where a sex scene involving an old woman was showed, from the film “The mother”. This group described it as ‘unwatchable’, mostly the women; and this is evidence that, even with recent changes in the way sexuality in later life is displayed, the time where young female bodies were the only ones perceived as attractive lasted too long. Furthermore, men are seen differently from women in what concerns to sexuality and this can be concluded by the amount of scenes in the media where is possible to observe relationships between old men and young women when comparing to those where older women are involved with younger men. [42] The new point of view that older people are still sexual beings is not well integrated into people’s minds about sexuality and this is justified by the fact that the idea of asexuality inherent to aging has long been embedded in typical culture. The evidence of those socially ideas are not only obvious in media representations, also normative transformations in social life as people get old conduce to classic understanding of sexuality and aging.

Alterovits and Mendelsohn made a research about how certain social realities inherent to aging could represent barriers for having an active sexual life. In fact, that is a shrink in what concerns to the chance to create relationships, which can be a result from retirement, less capacity of movement and death of friends. The great news is that in today’s world the older ones are starting using Internet to beat social barriers with the objective of building new relationships. This instrument called internet gives the chance for the elderly to come across with new romantic relationships once allows them to access social networks. However, it is evident it will not be sudden the transformation from the conventional image of older adult sexuality to modern realities. [47]

Integrated in social factors are also the decline in marriage rates and the increase in divorce ones. Over the past years, that is a tendency of changing the relationships structures and as a

result the community, including the older ones, now have less firm values about premarital sex, although it is not prevalent enough to modify the asexual thought among elderly people.[19]

In elderly people is very common that religious philosophies and concepts, taught in childhood, impact their way of looking to the subject “sexuality”. As it was mentioned before, there is a well-known stereotype of asexuality of the older and this causes negative reactions in society such as repugnance, embarrassment and shame among older people. [6] This idea of non sexual being may have its origin in evolution and disengagement theories. The first one sees sex as way to procreate; so people in a non fertile period are not sexual beings. Numerous religious doctrines are based in these conventional evolutionary ideas and sex not for procreation is labeled as a sin- hence, reinforcing asexual stereotype. Once religion is integral to how many people understand the world, it will influence how population interprets the subject. [31] In some cases, subconscious religious models may have an effect on sexual expression in a relationship due to guilty feeling. This is a reason why a physician always should ask individual’s religion beliefs once this can be the cause of the problem, in this case maybe physiological/cultural/religious blockage, and also he has to include this item in the treatment of a dysfunction with kindness to those religious principles. [46] About the disengagement theory of aging, it says that with aging comes a reciprocal withdrawal or disengagement, conducting to a decreased interaction between old persons and others of the social context where they belong. Once they become passive in society this obviously will have the consequence of asexuality. [31] As a result, owed to the greater authority of theories that cultivate asexual idea of elderly people, asexual stereotypes remain.

iii. Main dysfunctions in later life

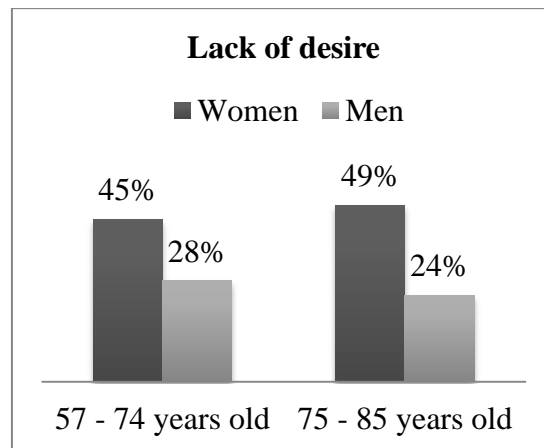
As already stated, the subject "Sexuality in the elderly" appears in the literature with more emphasis with regard the dysfunctions that emerge at this stage of life, contributing to the idea that the elderly, with time, becomes asexual and which therefore does not have sexual activity. So it seems appropriate to address this part of the theme.

Dysfunction is often defined as obstacles or impairments to genital activity that leads to orgasm. The most common dysfunctions can be concentrated on the changes in desire, difficulties in arousal or in achieving orgasm, or even linked to pain during intercourse. [5]

1. Changes in desire

Motivation for sexual activity and satisfaction are considered to be guided by desire. There are some divergences across studies about the association between reported sexual desire and age. Some found that it decreases only in women aged more than 60 [33], others say that lack of desire is less prominent in women [20]. Evidently, there is not always a lack of desire in both genders with age, and it may signify that other factors can influence it, for example the existence or not of a partner, health status, stress.

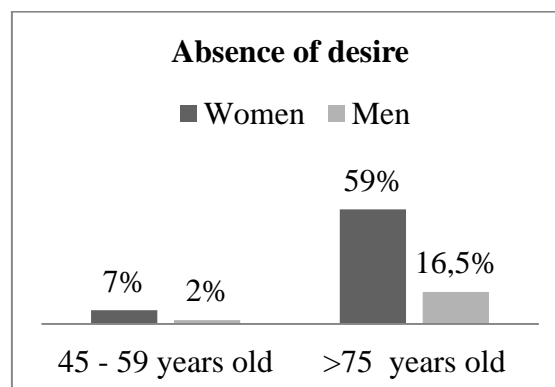
Laumann et al analyzed the NSHAP data and conclude that regarding to women, in a sample from 57 to 85 years old, 45% of those between 57 and 74 years old and 49% between 75 and 85 reported less significance concerning to sex. Among men, 28% of those from 57 to 74 years old and 24% aged between 75 and 85 reported lack of interest than in the previous year [36]. (Graphic 1)



Graphic 1 - Changes in desire – women vs. men

On the other hand, DeLamater examined the AARP data and stated when talking about women, the proportion that affirmed not having sexual desire at all get higher from 7% to 59%, from those aged between 45 and 59 to those over 75. Concerning to men, absence of sexual desire increases 2%, from those between 45 and 59, to 16.5% for the ones over the age of 75 (Graphic 2).

The author explains the differences between the two data's by saying that NSHAP study was made based on interviews (higher) and the AARP on questionnaire (lower) [12].



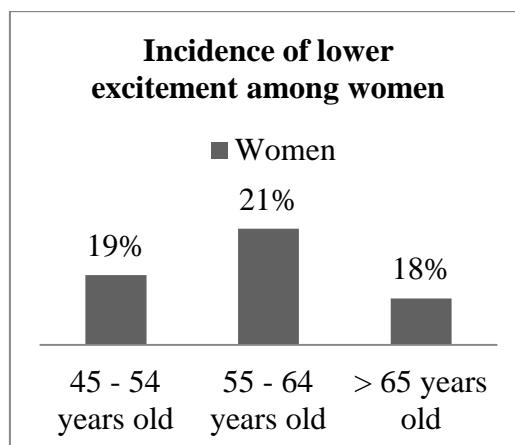
Graphic 2 – Incidence of absence of desire

A study made by Heyes et al, based only in questionnaires for women, in some Europe countries (France, Germany, Italy and United Kingdom) found a increase in lack of desire from 11% for those aged 20 to 29 to 53% of those between 60 and 70 years old [48].

2. Dysfunction in excitement

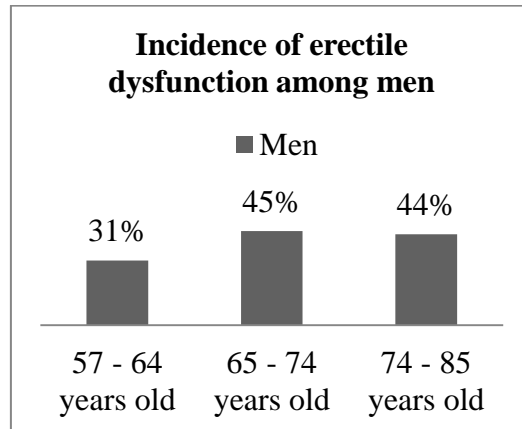
As it was previously said, excitement phase is the first stage of the human sexual response cycle. It occurs as the result of physical or mental erotic stimuli and is when the body prepares for sexual intercourse. [24]

A study about the incidence of low excitement among women, based on a sample of 2000, showed 19% of those aged 45 to 54, 21% for those between 55 and 64 years old and 18% among the ones over 65 (Graphic 3). In what concerns to the main factor, less vaginal lubrication was the chose one, which showed an increase in incidence from 17% to 27%, comparing younger women (less than 55 years old) to older ones. [20]



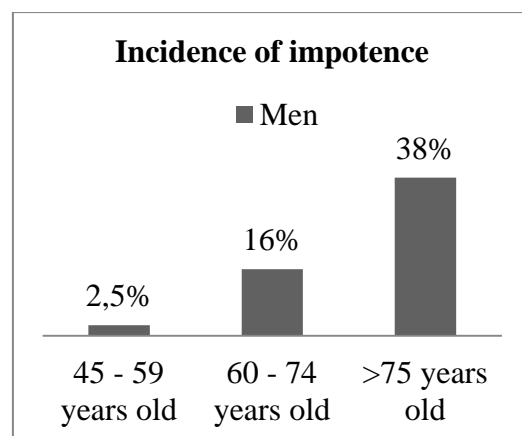
Graphic 3 - Incidence of lower excitement among women

Regarding men, it is commonly known that erectile dysfunction is the most frequent disorder. Laumann et al analyzed the NSHAP data and conclude that in a sample from 57 to 85 years old, 31% of those between 57 and 64, 45% between 65 and 74 and 44% between 75 and 85 years old reported erectile dysfunctions in the previous year (Graphic 4). [36]



Graphic 4 - Incidence of erectile dysfunction among men

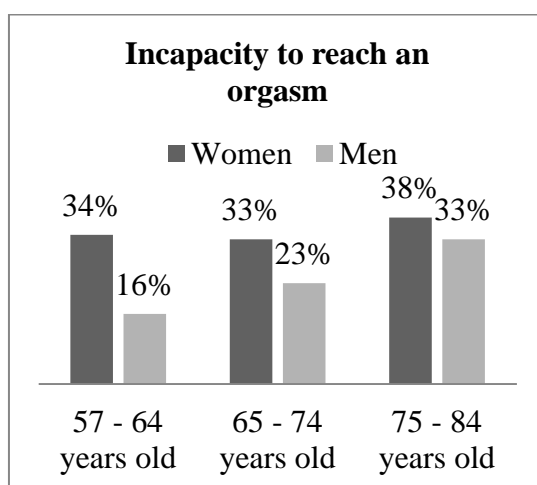
Also regarding to this theme, DeLamater examined the AARP data based in questionnaires about impotence and the capacity to have and keep an erection necessary for sexual activity, and declared that the incidence increases from 2.5%, from those between 45 and 59, to 16% for the ones aged from 60 to 74, to 38% for those over 75 years old (Graphic 5). [12]



Graphic 5 - Incidence of impotence among men

3. Orgasm dysfunctions

Later in life some problems in achieving an orgasm can occur. Based on the NSHAP data, regarding to the incapacity to reach an orgasm in women, in a sample from 57 to 85 years old, showed a frequency of 34% of those aged 57 to 64, 33% for those between 65 and 74 years old and 38% between 75 and 85 years old. About the same topic in men, under identical conditions of women's study, the incidence was 16% of those aged 57 to 64, 23% for those between 65 and 74 years old and 33% between 75 and 85 years old (Graphic 6). [36]



Graphic 6 - Incapacity to reach an orgasm – women vs. men

Based on the AARP data, when talking about the frequency of achieve an orgasm when having sex, in the last 6 months, the proportion of women that said “never” was 4% of those aged 45 to 49, 13% for those between 50 and 59 years old, 5% between 60 and 69 and 7% among those aged over 70. Concerning to men, the percentage saying “never” varied from 0% to 5% [12]

4. Sexual Pain

When the topic is “sexual pain”, in literature it can be found in the NSHAP data that the prevalence did not differ with age for both genders. For 12% to 19% of women experienced pain in the preceding year and less than 4% of men too. [36]

In the AARP data, 94% of men declared never having pain. Pain during or after the intercourse is more frequent in women, even though, 83% of the women reported almost never or never feel it. [12].

V – Conclusion

Aging is a process that no living being can escape, including humans; although the progression is not equal or at the same rate for everyone. Over time, the society has helped the older adult to have a self-perception of itself as useless due to retirement and absence of a productive function. These impregnated concepts do not allow the aging process to take place in a more healthy way, often leading to repression of expression of love and sexuality.

Time passes and with it comes a thousand, not only physical but also psychological, changes. The association between aging and the appearance of these limitations is inevitable and should in no way lead to forgetfulness of respect for the elderly as a human being. The youth may have go up in smoke, but during the course of life knowledge and wisdom were acquired and are gains that can put the older adult in a more active part in society.

It is imperative to identify and confront all the myths and prejudices in relation to the subject "Sexuality in the elderly" and acquire realistic and non-judgmental information. It is true that age may be accompanied by wear in the affective relationship, plus a number of physical limitations, not only in a general level, but also sexual or even pathological, that often cause difficulties, not forgetting the psychological barriers that interfere with sexual activity. Nevertheless while there is life there is also the possibility of having an enjoyable and pleasurable sexual life.

The analysis of the current literature on sexuality and aging revealed the existence of a heavy emphasis on the biologic aspects of sexuality in later life and a predominance of work reflecting a medical perspective, this helped to the supposition that sexual function declines as people get old. Though, as it was showed, some aspects decline, but others get better, and some vary by gender. As it was mentioned before, sexual desire is not always affected with senescence, so it is consistent to presume that if elderly are physically capable of a sexual activity

that more will take part in the activity. It is also possible by this to see that asexuality does not make sense when there are no barriers to sexual expression that can be found.

This review allowed noticing that those who reach old age with emotional disposition and maintain an active sex life live better; affection can be seen as therapy against isolation, abandonment and depression, serious problems faced by the elderly.

Since aging is an inevitable thing, is important to know how to age well, reacting positively to the process and see it as natural, and this depends on each and every one, mirrored in attitudes and values. It is very important to live the present and plan the future, understanding that everyone, hopefully, will arrive at old age. As it was said, life expectancy is increasing, but the fact is that is not only important to live more years, but essentially live them as good as we can. As once Henri-Frédéric Amiel said “To know how to grow old is the master-work of wisdom and one of the most difficult chapters in the great art of living”.

Sexuality is much more than sex, is a set of feelings and attitudes expressed in much kind of ways and it can change over time in frequency, but that doesn't signify an absence of it with quality. Regarding older adults, sexual stereotypes based on social suppositions about the aging process are obsolete, although they persist once this kind of thoughts, which are so ingrained in culture, take a long time to modify.

Recent studies focus on the magnitude of social context in what concerns to sexual functioning, for example the existence or not of a spouse. It was showed that men give more importance to sex, mostly at older ages. The less importance gave by women may be related to their loss of a sexual partner.

Also, it was possible to found that cultural and religious factors can repress sexuality in the elderly making them experience feelings of guilt and disgust of themselves and their thoughts. What is meant by dysfunction, may, in the context of age, not actually be. The present barriers may in many cases lead to cessation of sexual activity, but in others can show a way to sexual

suitable alternatives, which means that the incidence of dysfunction do not directly correspond to frustration and dissatisfaction.

Factors that influence sexuality in later life should be known by themselves, but must be seen in combination once they not often operate in isolation from one another.

It is easy to understand that a change in the way the older adult is seen and how their sexuality is viewed is required. Even with the generality of findings in the literature, it is possible to conclude that there are significant individual differences regarding sexual experiences and practices in the elderly, protrude changes in the normal course of the age, general health, therapy applied to pathologies, psychological change, not forgetting the sociocultural aspects. But despite all these facts, elderly still give importance to sexual expression, having the capacity to enjoy a fulfilling sexual relationship and the aptitude to express sexual desires.

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