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REVIEW

Ageism and its clinical impact in oncogeriatry: state of knowledge and therapeutic leads

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Abstract: Cancer is a major health problem that is widespread in elderly people. Paradoxically, older people suffering from cancer are often excluded from clinical trials and are undertreated when compared to younger patients. One explanation for these observations is age stigma (ie, stereotypes linked to age, and thus ageism). These stigmas can result in deleterious consequences for elderly people's mental and physical health in "normal" aging. What, then, is the impact in a pathological context, such as oncology? Moreover, health care professionals' attitudes can be tainted with ageism, thus leading to undesirable consequences for patients. To counter these stigmas, we can apply some possible interventions emerging from research on normal aging and from social psychology, such as intergenerational contact, activation of positive stereotypes, self-affirmation, and so on; these tools can improve opinions of aging among the elderly people themselves, as well as health care professionals, thus affecting patients' mental and physical health.

Keywords: oncogeriatry, clinical approaches, stigmatization, ageism

Introduction

Cancer is a very common disease; in Europe, 3.45 million new cases of cancer were diagnosed in 2012 and 1.75 million people died from the disease in that same year.[1] A significant proportion of cancer patients are elderly because age is a risk factor for many diseases, including cancer: it is estimated that in 2030, 70% of diagnosed cancers in the United States will affect patients >65 years old.[2] Paradoxically, the psychosocial needs of elderly people with cancer remain unknown.[3] Indeed, even if geriatric oncology programs have been developed (geriatric assessments, individual treatment, prevention, and so on), it is not enough; the perception of aging among health professionals, including physicians, is still negative.[4–6] Moreover, elderly patients are often excluded from clinical trials – between 1996 and 2002, 68% of people included in clinical trials for cancer were aged 30–64 years old, whereas only 8.3% of people were 65–74 years old (this represents, respectively, 3% and 1.3% of incident cancer patients in each age group).[7]

Many reasons are provided to justify the exclusion of elderly individuals from clinical trials, such as avoiding attrition (mortality, relocation, health decompensation), minimizing confounding variables associated with comorbidities, avoiding lengthier study processes, and so on.[8] This observation, and the specific concern for a small subgroup of patients (the youngest patients and/or those who display the best health) has a double clinical consequences: 1) available data cannot be applied generally to all elderly people with cancer given the nature of the physiological changes that occur with more frequent comorbidities, the patients' heterogeneous health statuses, etc;[9] and 2) it is difficult to develop specific guidelines for the treatment of elderly patients.[10] In any guideline elaboration, it seems important to base treatment decisions on biological

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age and not chronological age; we are not equal in terms of aging – physiological, social, and cognitive changes can appear and they are specific to each individual.[11] From this perspective, scales like the Comprehensive Geriatric Assessment or Multidisciplinary Geriatric Assessment can be used to assess the health status and comorbidities of elderly cancer patients.[10] From the same line of thinking, it is essential that elderly cancer patients' cases are discussed and taken on by multidisciplinary teams in order to obtain a global view of the patients' situations. General rules for the oncological treatment have to be frequently adapted. The treatment has to be much more personalized when compared to that of a younger patient population. For instance, the adjustment of some parameters (hemoglobin level, drug selection, the dose, and so on) during chemotherapy can be implemented in order to suit an elderly population.[12] The patient's characteristics play a relatively high role when compared to younger patients, where the treatment is mainly decided based on the tumor's characteristics.[13–15] Alternative local treatments such as radiotherapy can be a first option in elderly patients if a much higher mortality rate related to comorbidities is expected with surgery. The life expectancy can be an argument against the use of some adjuvant therapies. For instance, relapses in chemotherapy in high-risk endocrine-sensitive breast cancer frequently occur after 5 years of follow-up, and second-line endocrine therapy can still allow for several years of disease stabilization in the metastatic setting. Life expectancy and comorbidities also influence the aggressiveness of the treatment of prostate cancer, which is frequently diagnosed in older men as the disease, in general, grows slowly; endocrine therapy can also allow for disease control for some time.

It is important to note that systemic oncological treatments are becoming more and more expensive. Coverage by the national health care system in our country, Belgium, is not only based on the benefits observed according to tumor characteristics and line of therapy, but sometimes also according to patient characteristics (such as performance status), while taking into account eligibility criteria in the registration trial. Currently, age has not been used in our country for reimbursement, but excluding older patients adds the risk that coverage by insurance is declined because of the lack of evidence-based proof of similar benefits in a patient population excluded from the trial.

This discrimination against elderly patients is not limited to research; it is observed in the clinic too. Older patients are undertreated when compared to younger patients. For instance, based on clinical vignettes, Protière et al[16] showed that physicians recommend chemotherapy for breast cancer in 99% of cases among people 55 years old, but only 60.4% among people 76 years old whose clinical situations are the same. Moreover, 71% of physicians justified their decisions based on tumor characteristics, whereas only 14% based it on the patient's age.[16] Similarly, a UK survey showed that the intensity of cancer treatment is influenced by age in 49% of early-stage cases and 51% of advanced-stage cases.[17] In comparison, comorbidities influence only 37% of recommendations in the early stages and 31% in the advanced stages. Another recent study showed that mortality increases with age among women with breast cancer, and the authors suggest that undertreatment can explain this observation.[18] Indeed, young and old patients are not evenly treated; in the case of breast cancer treatment, older patients have a lower probability of receiving standard care.[19]

Yet it should be remembered that "advanced" age alone should not be a contraindication for treatments that can increase a patient's quality of life or significantly extend a patient's survival.[10] Consequently, although it is undeniable that some health changes appear with age (more frequent comorbidities, reduction of immune function, etc), these changes are not a contraindication for receiving treatment; instead, they point to the need to adapt them to elderly people.[12] This is particularly true given the lack of evidence that elderly people are too weak to tolerate chemotherapy, radiotherapy, or surgery; in other words, this is a stereotype.[12,20,21] Concerning radiotherapy, a study of nonagenarians[20] showed that they exhibited good tolerance (89% finished the treatment and had an average of 13 months of survival after radiotherapy). Finally, a study showed that the survival rate following intracranial tumor surgery was not related to the patient's age (in contrast, the histology or performance score, for instance, was associated with survival).[22] Along the same lines as the previously cited examples, it has been observed that elderly people receive fewer conservative and reconstructive procedures such as breast reconstruction; in equivalent clinical situations, future physicians recommended breast reconstruction in 95% of cases for patients under 31 years old, in comparison to only 65% of cases in patients over 59 years old.[22] These data call on health care professionals to ask themselves some questions. How can one explain such different attitudes toward older people if not by stigmatization linked to age (ie, negative stereotypes associated with aging, and thus ageism: "One boob less after age 59…what's the difference?!")?

The concept of ageism was introduced by Butler[23] in 1969 with reference to revulsion toward the elderly, disease

and infirmity, fear of helplessness, uselessness, and death. Consequently, elderly people are often seen as weak, intolerant of change, and cognitively impaired. In other words, the prevailing view of elderly people today is negative, tinted with ageism and youth culture. This view masks the great cultural, social, physiological, and psychological heterogeneity of seniors.[3] A gripping example of such stigmatization is given by a television show where participants have to eliminate "the weakest link" in the chain – that is, the weakest member of the team. Participants who were more than 50 years old were excluded, not because of their poorer potential for the game but because they were older. No such discrimination was found for sex, or the ethnicity or racial category.[24] Evidence of this negative view of aging has been found by different studies.[25] The most widely cited reason for discrimination in Europe is age – more specifically, being over (only) 55 years old (4% in 2012), followed by sex and ethnic origin (3%).[26]

Given the observed discrimination in oncology (clinical trials and treatments), we can wonder what the consequences of such ageism are for patients themselves and for health professionals. In this paper, we aim to describe the negative impact of ageism in geriatric oncology, including data from "normal" aging. Before concluding, we will describe some therapeutic leads for patients and professionals, which could potentially be applied in geriatric oncology to reduce the deleterious effect of ageism.

Self-stereotyping

Having a negative view of elderly people is not without consequences when one becomes older. Before we analyze these consequences for patients in oncology, it would be valuable to observe ageism's impact in a nonpathological context: many studies have demonstrated an injurious effect on older people's physical and mental health. This effect has been shown by two types of studies: 1) longitudinal studies ascertaining the impact of positive or negative perceptions that elderly people have of aging; and 2) empirical studies showing the immediate effects (within a few minutes) on elderly people of the activation (implicit or explicit) of positive or negative stereotypes.

Holding negative stereotypes can have many deleterious effects on one's physical health over the long term. This is the conclusion that has been suggested by many studies with the help of longitudinal follow-up. Indeed, individuals with an initial negative impression of aging tended to have poorer memory capabilities, they described themselves as having worse physical health with age (over a 28-year period), and they developed considerably more cardiovascular issues.[27–29] This negative impact is even demonstrated on mortality rate: with a 23-year follow-up, these authors[30] showed (controlling for objective and subjective health parameters, race, age, and socioeconomic status) that subjects with a negative perception of aging lived an average of 7.5 years less than subjects with a positive perception. One explanation suggests that these effects are linked to their daily attitudes in life: people with a negative view of aging were less likely to engage in good health behaviors (eg, a healthy diet, using seatbelts, engaging in physical exercise, minimizing alcohol or tobacco consumption, etc) over the course of 20 years, during which they were followed up.[31] Conversely, other studies have proven that positive stereotypes of aging have a good impact on recovery; older persons with a severe disability were 44% more likely to fully recover the ability to perform in four daily activities (bathing, dressing, transferring, and walking) when they held positive stereotypes compared with when they held negative stereotypes.[32]

Other studies have analyzed the immediate effect (within a few minutes) of negative stereotype activation (implicit or explicit) on elderly people. According to internalization theory, stereotypes are part of one's identity and are present in all circumstances.[33] Levy et al studied the effect of subliminal exposure to positive or negative words linked to aging. In their experiment, subjects had to fixate on a cross on a computer screen; below or above it, words with negative connotations (eg, "senile", "dependent", etc) or positive connotations (eg, "enlightened", "insightful", etc) for elderly people were flashed for a very short time, preventing the identification or recognition of words (thus, stereotype perception was not conscious). Participants had to indicate, as fast as possible, the position of the flashed word with the help of two buttons (up versus down). This subliminal activation was preceded and followed by various tasks. The results showed that elderly people's exposure to negative stereotyped words impaired their memory capabilities and led to their feeling that their memory was less efficient than in the case of elderly people exposed to positive stereotypes.[27] More surprisingly, the stereotypes triggered an increase in the participants' cardiovascular response to stress, led to a more negative perception of their health, and resulted in a decline in the will to live among the elderly subjects.[34,35] These results are in the same vein as stereotype activation based not on stereotype internalization, but on the stereotype threat paradigm. According to this paradigm, people feel anxiety when they confirm stereotypes about their own group.[36] For instance, when elderly individuals are told that their memory will be

tested, it provokes anxiety because it activates the negative stereotype of "memory decline with advancing age". Indeed, Abrams et al[37] showed that subjects exposed to negative aging stereotypes had decreased intellectual performance (including on memory tasks) when compared to a neutral group. Moreover, they took more time to do the tasks and their level of anxiety was higher.[37]

When we see the negative consequences of ageism in a nonpathological context, we can reasonably ask ourselves whether this impact applies in the specific context of geriatric oncology. Indeed, if the perception that we have of our own age affects our physical and mental health in normal aging, then in a context where health is already affected by a disease, we might suppose that patients will be even more sensitive to the view they have of themselves and of their age. Very few studies of this specific context exist, but their results confirm the negative impact of ageist stereotypes. For example, a recent study of patients of 80 years old and over suffering from a chronic disease (eg, heart disease, arthritis, diabetes, or cancer) showed that these patients more frequently linked their disease's origin to their advanced age rather than to unhealthy behaviors, genetics, etc. The stereotype "to be old is to be ill" has negative consequences: the more patients believe it and the more physical symptoms they perceive, the poorer their health maintenance behaviors and the higher the probability of mortality at a 2-year follow-up.[38] Another recent study of patients' age perception, conducted with elderly people (median age: 63 years) suffering from a chemotherapy-treated cancer, showed that people who felt younger than their chronological age had a tendency to maintain their sense of humor, highlight the importance of family, have positive thoughts, and stay engaged in life; these factors are prognostic of good physical and mental health.[39]

Influence of ageism on health professionals' attitudes and patient–professional relations

The negative consequences of ageism are not limited to elderly people themselves; they also have an impact on the attitudes of those who deal with these people, including health care professionals. This impact, generally subconscious, is explained primarily by the general negative attitudes of society. It may be manifested in "elderspeak" (or "baby talk") communication; this kind of speech is characterized by speaking slower and/or louder, using simplified sentences, etc, when talking to an elderly individual.[40] This attitude is based on the stereotype that elderly people have hearing issues and impaired cognitive functions. Health care professionals are particularly vulnerable to such ageist stereotypes because they are constantly exposed to ill elderly people ("An elderly person is an individual with bad physical and/or mental health"; Adam et al, unpublished data, 2014). Therefore, they are likely to hold negative attitudes toward older people (eg, viewing them as unable to adapt, boring, untidy, etc), including older people in oncology.[41,42]

This negative vision of aging (with pejorative attitudes toward old people) is not without consequences for older people themselves. Indeed, when elderspeak speech is used, elderly people can feel powerless and experience lower self-esteem; the message they receive is, "You have difficulties hearing me and understanding me".[43] An experiment can be described by way of illustration – young and older participants have a map in front of them and they have to listen to someone giving them directions in elderspeak. Their task is very simple: they have to trace the route according to the directions. After that, they have to judge their own communicative skills. The results showed that, when exaggerated prosody was used, the older participants completed fewer maps correctly, made more deviations from the correct route and made negative assessments of their own communicative skills (see experiment 2).[44] Consequently, elderspeak simply reinforces stereotypes (people confirm that they do not clearly understand the instructions they are given); a negative feedback loop is thus created.[43] Another effect of this kind of communication is shown by studies including people with dementia: elderspeak enhances resistance to care (eg, grabbing objects, crying, saying no, pushing away, etc) in comparison to normal adult communication and to silence.[45] There is no direct study on the effect of elderspeak in the context of geriatric oncology. The only study close to this field showed that high use of ageism among professionals, as perceived by patients suffering from breast cancer (probably noticed partly because of elderspeak), was associated with more physical pain, poorer mental health, and decreased general satisfaction with their care.[46] In the same vein, older breast cancer survivors who had negative beliefs about symptom management perceived that their health care providers had negative attitudes, or they reported experiencing difficulties communicating about their symptoms and had a lower quality of life.[47]

This direct influence of the attitudes of health care professionals on the changes in seniors' physical and psychological health is confirmed by studies of normal aging. In one,[48] residents of a nursing home were asked to do a jigsaw puzzle. In the first group, help was provided by, for instance, suggesting where to put pieces ("You can do it like this"); the

second group was only encouraged verbally ("Yes! You're making progress!"); and the third group was given neither help nor encouragement. The results indicated that helping an elderly person contributed to decreased performance and self-confidence in completing this task, and increased the feeling of difficulty associated with it. In other words, good intentions can have deleterious effects; when we want to help an elderly person, we have to be careful not to help him or her too much. Another example shows that negative stereotypes create artificial dependency.[49] In their experiment, Coudin and Alexopoulos[49] included three conditions: by listening to a text, elderly subjects were exposed to positive stereotypes (eg, "Older persons represent a huge market and therefore contribute to the economic growth of our society"), or negative stereotypes (eg, "Aging is characterized by a loss of some important social roles that contribute to the devaluation of older adults"); there was also a control condition with no text to listen to. Then, participants were asked to solve a very complicated puzzle in 10 minutes; they could ask for help by honking a horn. The results showed that exposure to negative stereotypes was associated with more dependent behaviors – the subjects asked for help more frequently than in the positive or neutral conditions. Thus, when negative stereotypes, such as "Elderly people are dependent and need help", are revealed through health care providers' behaviors, it contributes to a decline in the elderly subjects' performance. This has clinical implications: if we want to help a patient, is this help really necessary? Are we not creating an artificial dependency instead of improving his or her abilities? These examples (elderspeak, excessive help, and so on) illustrate that our behavior is not always adapted to the elderly and that the psychosocial needs associated with aging are not always taken into consideration.

Countering the stereotypes: suggestions for intervention

After reviewing the negative consequences of ageism, one obvious fact comes to mind: it is essential to develop therapeutic solutions to counter the negative influence of stereotypes. Fortunately, some therapeutic leads are given in the literature; some of them relate directly to elderly people who are the victims of these stereotypes, whereas others are designed for professionals and other people working with the elderly.

At the patient level

To our knowledge, specific therapeutic indications against ageism in oncogeriatry at the patient level have not yet been explored. However, we can suggest some methods based on internalization theory and the stereotype threat paradigm arising from normal aging studies.

In line with internalization theory, experimental studies have shown the positive effect of subliminal activation (perception without awareness) of positive aging stereotypes on elderly people's physical and psychological health. For instance, participants walk faster, have better cardiovascular measures, and have better memory performance.[27,34,50] If these results seem difficult to apply in a clinical context, we can assume that our everyday vocabulary refers to an image of aging; for instance, using words such as "confused", "incompetent", or "decline" in reference to elderly people triggers negative stereotypes and has a detrimental impact on them (eg, elderspeak). Conversely, words such as "improving", "learned", and "advise" have a positive resonance and thus can have positive effects on communication with elderly people or on their anxiety.

In line with the stereotype threat paradigm, multiple methods emerge from the literature on normal aging and social psychology. Stereotype threat is observed when negative stereotypes are explicitly presented to subjects; their performance deteriorates when compared to when no allusion to stereotypes is made. Some studies of normal aging suggest that intergenerational contact works against the effects of ageism on the elderly. Indeed, an experiment observed that in the face of stereotype threat (eg, explaining that mathematical abilities decline with age just before a mathematical challenge), anxiety is diminished if elderly participants have positive contact with their grandchildren, or when they simply imagine talking with a younger person before this stressful task.[51] Thus, in the specific realm of geriatric oncology, it is possible that imagining talking with a younger person might help reduce elderly people's anxiety before a stressful event (eg, surgery, first chemotherapy, any treatment, etc). Similarly, a study tested the efficacy of intergenerational reminiscence for seniors (ie, evocation of memories of grandchildren); after the intervention, those seniors reported less loneliness and a better quality of life.[52] This technique would also be interesting way to test elderly people with cancer to see if it can enhance their quality of life. For instance, during medical care or preparation before a treatment, you can speak with the patient with the aim of evoking good memories that he or she can have with his/her grandchildren.

Two concepts from social psychology have attracted our attention: "self-affirmation" and "counter-stereotype". These two concepts allow people to avoid a stereotype threat.[53]

To understand the concept of "self-affirmation", it is important to realize that people are motivated to maintain the integrity of their self. Thus, when the self is threatened, they must cope with it; self-affirmation is a form of indirect psychological adaptation. For a person, it refers to focusing on an important aspect of his or her life that is irrelevant to the threat, or engaging in an activity that is disconnected from the threat and that highlights some important value for him or her. Some studies (for a review, see McQueen et al[54]) have shown that stereotype threat can be neutralized by self-affirmation. For instance, when women are told that their math intelligence will be tested, this represents a stereotype threat ("Women are bad at math"), and so their performance is worse than if they were told that the purpose of the study was to get people's impressions of the problem. However, when a self-affirmation paradigm is applied (eg, participants have to write a paragraph on a value that is personally important to them), the stereotype threat disappears; self-affirming women who autoaffirmed performed at the same level as women in the control condition.[55] Moreover, this concept can be used to enhance the acceptance of health messages (in this case, the "threat" is to be in bad health). For instance, Sherman et al[56] selected 60 students – 30 which drank coffee, and 30 of which did not. These students had to read a (fake) scientific article on the probability of developing breast cancer due to drinking coffee. The results showed that when a self-affirmation paradigm was used, the coffee drinkers were more likely to accept the message than were those in the control condition, and they were also more likely to do so than the students who did not drink coffee. The impact of this technique in geriatric oncology should be analyzed; self-affirmation just after the explanation of a treatment such as chemotherapy or radiotherapy could enhance acceptance of this treatment. At another level, it might promote adherence to a specific diet, which is very important in parallel to cancer treatment.[57]

The second concept emanating from social psychology, the "counter-stereotype", consists of intentionally activating ideas or creating mental imagery in opposition to stereotypes (eg, create a mental image of an old man running).[58] This approach is based on the assumption that counter-stereotypes will challenge stereotypes in information processing. In geriatric oncology, a possible counter-stereotype could be that older people have the same probability as younger people of tolerating cancer treatments such as chemo- or radiotherapy. This process has been tested in the area of memory decline: participants (from 21–80 years old) were divided into one of three conditions: 1) the counter-stereotype condition, where they were told that no age-related differences in memory were found; 2) the stereotype condition, in which it was explained that older people have less efficient memories than younger people; and 3) the control condition, in which no information was provided regarding age differences in memory.[59] The results on a memory task showed that all participants in the counter-stereotypes group (younger and older) recalled more words than those in the other conditions, but only in the case of subjects with more education. Subjects with lower education levels recalled fewer words in the stereotype and counter-stereotype conditions than in the control condition. Thus, this study suggested that the counter-stereotype approach is efficient (in some cases) in combating stereotype threat (when the stereotype is applicable to the group in question – in this case, older participants) and stereotype activation (when the stereotype does not apply to the group – in this case, younger participants). Concerning this last point, there are other ways to avoid the use of stereotypes in the general population, and some specific approaches can be suggested for professionals.

At the professional level

Similarly to the patient level, there are no therapeutic instructions to combat ageism specifically in geriatric oncology. We can suggest some group and individual interventions to reduce health professionals' stereotypes of aging and thus improve their communication with patients.

In a group setting, training sessions can be set up for health care professionals to make them fully aware of how stereotypes affect their behavior, and to inform them of the consequences that these behaviors can have on elderly patients. To highlight the importance of such training, one study showed that physicians have developed a more positive attitude toward elderly patients since 2000, whereas nurses' attitudes have become less positive.[41] This difference may be due to more comprehensive education on aging in medicine. Likewise, education and support during practice experience enhance positive attitudes toward elderly patients among medical students.[60] Similarly, another study showed that a gerontology education course given to students in the social services decreased their anxiety about working with older people and reduced their ageism.[61] Moreover, a training program that includes information on the aging process and simulation of the role of older adults resulted in better attitudes toward elderly people and increased knowledge of aging; 4 weeks after the training program, these results were still observed.[62] Regarding communication, the harmful effects of elderspeak can be improved by specific training for nursing staff. One example of communication training, which included information about elderspeak and its negative

effects, as well as practice with effective communication skills, resulted in a significant reduction in elderspeak.[63] A similar reduction was observed in a study carried out in three nursing homes immediately after the intervention, but this effect was also observed 2 months later.[64]

Regarding interventions with individual professionals, we can describe some approaches (such as the patient-level approaches) that are based on studies from social psychology. First, the concept of self-affirmation cited earlier can also be used to battle prejudices; when their self-image has been bolstered through self-affirmation, people express fewer prejudices against other people (eg, people express more positive feedback for a Jewish job candidate after writing about their values).[65] Another means of working against stereotypes is perspective-taking – in other words, describing a situation from someone else's point of view (eg, an elderly man).[66] Perspective-taking leads participants to see an overlap between their self-image and the image of the out-group (in this example, older people), thereby reducing the accessibility and application of stereotypes. Some authors suggest that certain techniques that do not require much effort may also be applicable.[67] More specifically, the authors found that if students are exposed to admirable members of a stigmatized group and disliked members of their own group, it triggers a modification of the social context and thus a shift in the students' attitudes. More specifically, when exposed to a picture of an admired elder (eg, Mother Teresa or Albert Einstein), participants implicitly associate positive words with advanced age more quickly; however, no effect was found for explicit measures.[67]

Blair[58] describes two ways of combating stereotypes: counter-stereotypes, as we saw earlier; and stereotype suppression. Stereotype suppression is based on a very simple principle: subjects must try to control their stereotypes about a group to prevent their judgment from being influenced. This procedure is illustrated in the following experiment:[68] students were shown a photograph of a male skinhead and asked to describe a typical day for him. One group was told that our impressions are often biased by our stereotypes and they had to try to avoid preconceptions. The control group did not receive any specific instructions. The authors found that subjects produced fewer stereotyped descriptions when they were asked to suppress their stereotypes. However, this methodology can provoke a "rebound effect": when subjects are told to suppress their stereotypes, they may reappear later with greater intensity. This was observed in the second part of the experiment; another male skinhead's photograph was shown and subjects were asked to perform the same task, but this time without any instructions for either group. Their reports revealed stronger stereotypes for the group who had to suppress their preconceptions in the first task than for the control group who never had to control their stereotypes. Thus, we must be careful about using this method; more studies must be done before it can be applied in the clinic.

In a practical way

Considering all this literature, applications of these findings in daily life could take several forms, the most obvious being the systematic training of all health care professionals (medical and paramedical) on aging, with a specific awareness regarding our attitudes and the impact of our negative aging view on older patients. This training could be done using theoretical information, as well as using videos and role playing in order to make a stronger bond between theory and clinical practice. It will allow participants to see how stereotypes can be easily integrated into daily care through their vocabulary (evoking negative stereotypes) or acts (for instance, assuming the individual cannot eat or wash him or herself alone). This kind of technique has already been successfully applied among health care professionals (nurses, in particular) in order to diminish "baby speak".[63]

Otherwise, integration of an aging specialized psychologist in an oncogeriatry department can be a useful initiative. For instance, this psychologist could realize a systematic screening of the view of aging that patients possess about themselves. Patients with a clearly negative vision could be followed individually or in group sessions. The content of this intervention can take several forms, for example, by activating positive stereotypes or highlighting important values in these individuals (ie, the self-affirmation technique). These different clinical approaches have not yet been validated in the specific context of oncogeriatry. Additional studies have to be done in order to determine the extent of the positive effects of each technique, but also to identify the most adequate patient profile for each approach. In a more global way, we could question the terminology used during caring of the elderly – being sent to the "geriatric department", being addressed to a "geriatrician", receiving a "senior menu", etc; all of these terms refer to old age and consequently activate associated stereotypes. All of this daily vocabulary can be considered as pointless detail, but the impact of stereotypes should lead us to further questioning. In order to measure the effect of such terminology, additional studies have to be done.

Conclusion

Ageism is constantly present in daily life (in the media, in our attitudes, etc), and it can be subconscious. It influences interactions with elderly people and can have negative consequences

for them.[43,48] Moreover, as we age, our conceptions of aging influence our mental and physical health.[28] In geriatric oncology, the stereotypes of aging that health care professionals and elderly patients themselves have can have many harmful impacts on the patients.[42,45] For instance, in daily practice, the risk of concluding that a patient is too physiologically old for a particular treatment should be kept in mind. Because of stigmas and without a good knowledge of the individual, health professionals risk, for instance, concluding that a confused elderly patient is too cognitively impaired to understand what is going on. Conversely, in a young patient, the same observation will be linked to the stress of the oncological consultation. Therefore, countering ageism needs to be taken seriously into consideration in clinical practice. We have seen some therapeutic approaches for this purpose, but more studies are needed in the specific context of geriatric oncology to clarify the possible positive repercussions and develop methodologies adapted to this field. Nevertheless, in our opinion, some of this advice can be applied very easily in daily care. The first thing to do does not take up any time: being careful with our vocabulary (avoiding elderspeak) and trying to include positive commentary on aging (ie, positive stereotypes). Secondly, we think it is very important for the well-being of the patient to take the time to talk; during the conversation, you can ask about their grandchildren in order to evoke some good memories (ie, intergenerational reminiscence), or about important activities for them (ie, self-affirmation). Eventually, to enhance the knowledge of health care professionals regarding the impact of negative stereotypes, we think that training programs are very effective. In a more preventive way, gerontology education courses for students are very useful for diminishing their anxiety toward aging.

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