



Faculté de Psychologie et des Sciences de l'Éducation

**CONSÉQUENCES DE LA DOUBLE
STIGMATISATION POUR DES
PATIENTS AGÉS SOUFFRANT D'UN
CANCER**

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INTRODUCTION GENERALE

INTRODUCTION GÉNÉRALE

1. Contexte démographique et sociétal

Nous sommes actuellement dans une société « vieillissante » où le taux de personnes considérées comme âgées ne cesse d'augmenter au sein de la population mondiale. Deux raisons majeures peuvent être avancées pour expliquer ce phénomène : d'une part, la baisse de la fertilité et d'autre part, l'augmentation de l'espérance de vie découlant notamment de l'amélioration des soins de santé (Kinsella & He, 2009). Si c'est dans les pays en développement que cet accroissement du nombre de personnes âgées est le plus rapide (Kinsella & He, 2009), c'est l'Europe qui constitue actuellement « le plus vieux » continent du monde. La proportion de personnes âgées y est effectivement très importante : au 1^{er} janvier 2014, nous notons une proportion de 18.5 % de personnes âgées de plus de 65 ans comparativement à 15.6 % de jeunes âgés de 0 à 14 ans ; avec un âge médian dans la population européenne qui n'a eu de cesse d'augmenter depuis 2001 pour atteindre 42.2 ans en 2014 (Eurostat, 2015, voir Figure 1).

En Belgique plus spécifiquement, l'IWEPS (Institut Wallon de l'évaluation de la prospective et de la statistique) a calculé un indice de vieillissement en faisant le rapport entre la population des plus de 60 ans et celle des moins de 20 ans¹. Par cet indice, nous observons également que les personnes âgées constituent une part importante de la population : en 2015, il est de 106.4 pour l'entièreté de la Belgique, et plus spécifiquement de 100.8 pour la Wallonie et de 117.4 pour la Flandre (IWEPS, 2015). En comparaison, il était respectivement de 89.2, 86.5 et 89.8 en 1996.

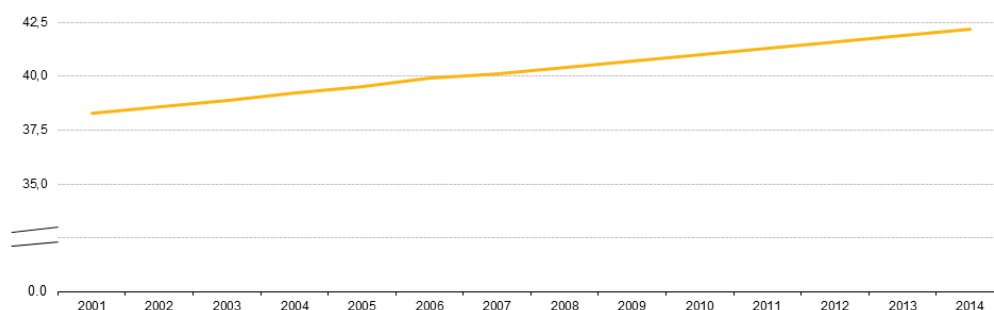


Figure 1. Age médian dans la population européenne de 2001 à 2014. Source : Eurostat.

http://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing/fr

¹ Autrement dit, si la proportion de personnes âgées de plus de 60 ans et de personnes jeunes de moins de 20 ans est équivalente, cet indice sera égal à 100. Si nous comptons plus de personnes âgées, il sera supérieur à 100 et inversement, si nous comptons plus de personnes jeunes, il sera inférieur à 100.

Cette réalité du nombre grandissant de personnes âgées et très âgées nécessite une attention sociétale particulière étant donné que l'âge constitue un facteur de risque pour un grand nombre de maladies, dont le cancer (Hurria et al., 2012). Ainsi, on estime qu'en 2030, 70 % des cancers diagnostiqués aux Etats-Unis toucheront des sujets de plus de 65 ans (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009). Si nous regardons ce qu'il en est en Belgique, et plus particulièrement en Wallonie, nous pouvons émettre un constat similaire. Ainsi, en 2013, 62 % des cancers chez la femme et 72 % des cancers chez l'homme concernaient des personnes de plus de 60 ans (Tellier et al., 2013). Sachant que le cancer amène de nombreux problèmes psychosociaux (Reich, 2008; Stark & House, 2000; Zabora, Brintzenhofesoc, Curbow, Hooker, & Piantadosi, 2001), un tel constat nous amène à nous interroger spécifiquement sur les conséquences du cancer chez les personnes âgées.

2. Cancer, conséquences psychologiques et personne âgée

De manière générale, l'annonce du diagnostic de cancer et le décours de la maladie induisent de nombreux changements chez les patients : changements de l'image du corps, de l'estime de soi, du rôle social, du style de vie, etc. (Pasquini & Biondi, 2007). De telles modifications peuvent être source de stress et de bouleversements émotionnels. Ainsi, il n'est pas étonnant de constater qu'en moyenne 35 % des patients rapportent de la détresse au cours de leur maladie (Zabora et al., 2001). Il n'est par exemple pas rare qu'ils énoncent de la peur face au futur : incertitude concernant l'avenir, inquiétude d'un nouveau cancer ou d'une récurrence et appréhension de ne plus être là pour ses proches (Lebel, Rosberger, Edgar, & Devins, 2007). Ces éléments peuvent refléter la présence d'anxiété chez les patients. Toutefois, il s'avère essentiel de rappeler que toute anxiété n'est pas pathologique. Elle ne doit être considérée comme telle que si elle entrave le fonctionnement habituel des personnes et se manifeste par des symptômes particulièrement marqués et disproportionnés (Stark & House, 2000). Outre ces éléments anxieux, certaines personnes souffrant d'un cancer développent une symptomatologie dépressive, la prévalence d'un épisode dépressif majeur en oncologie allant de 20 à 50 % selon les études (Pasquini & Biondi, 2007). Toutes ces conséquences psychologiques liées au vécu oncologique ont de nombreuses répercussions chez les patients : une moindre qualité de vie, une baisse de la compliance au traitement, un allongement de la durée d'hospitalisation, une augmentation de la

mortalité (Reich, 2008) ou encore des difficultés physiques, telles que de la fatigue ou une tension musculaire (Stark & House, 2000).

Chez les personnes âgées plus spécifiquement, la prévalence de ces différents symptômes (dépression et anxiété) varie d'une étude à l'autre, suggérant une baisse ou au contraire une hausse par rapport aux personnes jeunes (Cohen, 2014). Ainsi, plusieurs études rapportent une moindre prévalence de ces symptômes, suggérant donc que les patients plus âgés s'ajustent mieux aux différents changements provoqués par la maladie (Baider et al., 2003; Kornblith et al., 2007). Un tel constat n'est pas étonnant dans la mesure où il a pu être montré que les stratégies pour faire face à la maladie étaient différentes entre les personnes jeunes et les personnes plus âgées: les plus jeunes sont concentrés sur la vie après la maladie, sur tout ce qu'ils pourront réaliser dans le futur, tandis que les plus âgés veulent vivre malgré la maladie et préfèrent donc s'accommoder et changer leur mode de vie (Gagliese et al., 2009). Toutefois, d'autres études ont au contraire montré que les personnes âgées avaient un taux plus élevé de dépression comparativement aux plus jeunes (Goldzweig et al., 2009). Ces résultats contradictoires peuvent être expliqués de plusieurs manières. Par exemple, par l'âge des patients qui varie fortement d'une étude à l'autre : pour cette raison, une étude récente a comparé trois groupes d'âge (60-69, 70-79, 80 et plus) et mis en évidence que les symptômes d'anxiété et de dépression étaient les moins fréquents chez les personnes entre 70 et 79 ans, mais particulièrement élevés chez les personnes âgées de plus de 80 ans (Cohen, 2014). Une autre explication peut venir du fait que les personnes âgées ne rapportent pas leur détresse de manière explicite, mais font plutôt référence à des symptômes moins spécifiques, tels qu'une grande fatigue, une insomnie ou encore une perte d'appétit (Birrer & Vemuri, 2004).

Ces spécificités liées à l'avancée en âge nécessitent donc de mettre au point des thérapies spécifiques. Or, peu d'études se sont centrées sur les interventions spécifiques aux personnes âgées en oncologie. Parmi les (trop) rares articles existant sur le sujet, Gagnon et collaborateurs ont récemment montré l'efficacité d'une intervention cognitive-existentielle (Gagnon et al., 2014).

Comme le nom l'indique, cette intervention est basée sur l'approche cognitivo-comportementale dont le but est de remplacer les comportements et pensées qui ont une influence négative sur l'humeur par d'autres pensées ou comportements plus adaptés qui auront une influence positive

sur le bien-être et la qualité de vie (Cochrane, 2014). Elle repose également sur l'approche humaniste existentielle, dont l'objectif est de développer une perspective plus globale de soi et plus large de ses difficultés, et ce, en vue de les transcender (Cochrane, 2014). Plus concrètement, le programme était constitué de 12 ateliers : les 3 premiers impliquaient des techniques cognitivo-comportementales promouvant l'utilisation de stratégies d'adaptation comportementale (ex : relaxation, activation comportementale) et émotionnelle (ex : apprentissage de la restructuration cognitive) ; les 3 suivants exploraient davantage les stratégies émotionnelles sur base d'interventions empiriquement validées (ex : la restructuration cognitive dans le cadre de l'analyse de la relation du patient avec son entourage, en partant notamment de ressentiments passés) ; enfin les six derniers ateliers abordaient spécifiquement la dimension existentielle (ex : permettre au patient de trouver dans ses souvenirs des moments magnifiques vécus qui l'ont fait se sentir vivant). Les séances se déroulaient soit individuellement (1h), soit en groupe (2h) et étaient comparées à un groupe de participants recevant des soins classiques. Immédiatement après l'intervention, les deux groupes expérimentaux présentaient une amélioration significativement plus importante du bien-être psychologique et existentiel en comparaison au groupe contrôle. Par contre, 3 mois après la fin de l'intervention, les bénéfices des ateliers ne se marquaient plus que pour les participants ayant reçu les séances individuelles.

D'autres auteurs « se risquent » tout au plus à donner des recommandations de pistes thérapeutiques. Par exemple, Baider et Balducci (2011) suggèrent trois pistes pour les patients âgés en oncologie: (1) la réminiscence, consistant à se souvenir d'événements de vie antérieurs (le but étant de récupérer des événements et des sentiments positifs à travers le processus de souvenirs en vue de renforcer le sentiment d'utilité des personnes ainsi que leur valeur en tant qu'être à part entière) ; (2) les récits de patients, faisant référence aux histoires à raconter par rapport à l'expérience de vie vécue en tant que personne souffrant d'une maladie longue et sérieuse (but : faciliter l'adaptation, le sens donné à cet événement de vie et la cohérence) ; et (3) l'examen de vie, dont l'objectif est de développer le concept de soi, perçu ici comme nos idées concernant qui nous sommes, qui nous avons été et qui nous serons ; cette technique s'articule autour du travail sur des questions telles que « quel genre de vie les patients avaient ? », « quels sont leurs satisfactions et leurs regrets ? », « de quelle manière les événements importants de leur vie ont-ils affecté leur vie ? », etc.). A notre connaissance, ces techniques n'ont toutefois pas été étayées par des études empiriques portant sur des personnes âgées souffrant d'un cancer.

Une des raisons expliquant ce manque de validation de pistes thérapeutiques chez les personnes âgées dans le domaine de l'oncologie peu notamment s'expliquer par le

fait que peu d'entre eux formulent une demande d'aide psychologique : dans une étude récente, il a été observé que 37 % des patients âgés cancéreux sont en détresse psychologique, mais seuls 12 % d'entre eux expriment leur désir d'une aide psychologique (Dubruille et al., 2015). Ce type de résultat est concordant avec des données plus générales, montrant que les personnes âgées sont sous-représentées en thérapie (Chaplin, Farquharson, Clapp, & Crawford, 2015). Plusieurs raisons semblent pouvoir expliquer ce constat : (1) l'inefficacité supposée des thérapies avec l'avancée en âge ; (2) la croyance que l'anxiété et la dépression sont normales en vieillissant ; (3) les difficultés de transport (Wuthrich & Frei, 2015). Si le dernier élément se passe d'explications supplémentaires, nous détaillerons davantage les deux premiers. Tout d'abord, il n'est donc pas rare que les personnes âgées pensent que les thérapies sont inefficaces avec l'avancée en âge (Wuthrich & Frei, 2015). Pour cette raison, une action d'éducation aux soins psychiques serait nécessaire pour favoriser l'accès aux traitements des patients âgés (Dauchy et al., 2012). Nous pouvons d'ailleurs noter que, de manière générale plus les personnes ont un niveau d'éducation élevé, plus elle privilégie un traitement psychologique à un traitement médicamenteux pour vaincre l'anxiété, et ce, quel que soit leur âge (Mohlman, 2012). Ensuite, la faible expression du souhait d'une aide psychologique pourrait s'expliquer par le sentiment que la détresse ou les problèmes cognitifs sont « normaux » avec l'avancée en âge ou le cancer (Dubruille et al., 2015). Autrement dit, les patients ne verraient pas leur dépression ou leur anxiété comme un problème, une maladie à part entière, mais simplement une conséquence normale et inévitable de leur âge (« une personne âgée est une personne déprimée ») ou de leur cancer (« il est normal d'être déprimé avec une telle pathologie »). A ce propos, il a d'ailleurs pu être montré dans une étude que 50 % des participants disaient trouver normal d'être anxieux ou déprimé avec l'avancée en âge (dans le vieillissement non pathologique) (Wuthrich & Frei, 2015). Cette dernière explication fait référence d'une part au concept d'âgisme, que nous allons développer ci-dessous, et d'autre part à la stigmatisation liée au cancer, que nous développerons dans un second temps.

3. *Agisme*

3.1. *Explication et contextualisation*

Selon Butler (Butler, 1969), l'âgisme reflète une révulsion pour la vieillesse, la maladie, et le handicap ; une peur de l'impuissance, de l'inutilité et de la mort. Ce dernier point constitue d'ailleurs l'élément central de la théorie de la gestion de la terreur (Greenberg, Schimel, & Martens, 2002), théorie particulièrement étudiée pour expliquer ce phénomène d'âgisme (pour une synthèse, voir Boudjemadi, 2009). Par cette théorie, les auteurs expliquent que nous avons tendance à nous distancier de tout ce qui peut nous rappeler notre propre mortalité. Ainsi, nous éviterions de côtoyer les personnes âgées car elles nous rappelleraient que la mort est inévitable, que notre corps n'est pas invulnérable et que les barrières que nous dressons afin de gérer notre anxiété de la mort sont transitoires (Martens, Goldenberg, & Greenberg, 2005).

Afin de mieux comprendre ce concept de l'âgisme, il importe de savoir qu'il regroupe les trois composantes des attitudes classiquement identifiées en psychologie sociale (Solem, Larsen, & Iversen, 2009) : la composante cognitive, la composante comportementale et la composante affective. La partie cognitive de l'âgisme fait référence à tous les stéréotypes que l'on peut avoir à l'égard des personnes âgées. Cela comporte donc à la fois un versant positif, associant le vieillissement à la sagesse et l'expérience, mais également un versant négatif, représentant la personne âgée comme une personne malade et dépendante (Masse & Meire, 2012). Ainsi, nous aurions une tendance générale à évaluer la personne âgée comme chaleureuse, mais incompétente (Cuddy, Norton, & Fiske, 2005). La composante comportementale correspond aux comportements de discrimination. Ceux-ci sont présents quotidiennement que ce soit dans nos relations interpersonnelles, dans le milieu du travail, en matière d'accès au logement, etc. (Masse & Meire, 2012). Nous aborderons en détail ces comportements dans le milieu de l'oncologie, comme par exemple, le fait que les personnes âgées sont fréquemment exclues des essais cliniques (Murthy, Krumholz, & Gross, 2004). Pour finir, la composante affective renvoie aux préjugés. Tout comme les stéréotypes, ceux-ci peuvent être positifs (admiration) ou négatifs (pitié, dégoût). Ainsi, le fait de considérer une personne comme chaleureuse amènerait à une certaine admiration tandis que la voir comme incompétente conduirait à de la pitié (Cuddy et al., 2005).

Sur base de ces éléments, il apparaît clairement qu'une ambivalence existe par rapport au vieillissement (Nelson, 2002). Plus précisément, deux représentations de la vieillesse, positive et négative, ont toujours coexisté dans des proportions variables que ce soit entre les époques, ou entre les cultures d'une même époque. Dans nos sociétés industrielles contemporaines, la balance penche nettement en faveur de la perception négative (Nelson, 2002), et ce déséquilibre ne fait que s'accroître ! Pour preuve, une analyse récente des textes américains (articles de presse, romans, etc. numérisés dans des bases de données informatiques) couvrant la période de 1810 à 2010 montre que si en 1810 les principaux qualificatifs associés au vieillissement étaient majoritairement positifs, la tendance s'inverse dès 1880. Plus encore, elle ne fait qu'augmenter avec le temps de sorte qu'en 2010 nous sommes face à une vision extrêmement négative du vieillissement (Ng, Allore, Trentalange, Monin, & Levy, 2015). Plusieurs éléments peuvent expliquer ce phénomène : (1) dans nos sociétés industrielles actuelles, un « vieux » est un inactif et donc une charge économique (« tous ces retraités et si peu de jeunes en emploi pour financer ces retraites ! ») ; (2) on constate une médicalisation progressive du vieillissement avec l'apparition dans les textes de termes comme « dépendance », « grabatisation », « démence », etc. associant la personne âgée à une personne malade et institutionnalisée ; (3) le développement des nouvelles technologies, créant de nouveaux emplois pour lesquels les personnes âgées n'ont pas été formées et pour lesquels elles sont exclues du marché du travail, nous amenant à les voir comme « incompetentes » ; (4) l'urbanisation, qui a amené les jeunes à quitter le nid familial et donc à creuser l'écart entre les générations ; (5) l'éducation publique obligatoire, supprimant le rôle de transmission et de savoir autrefois détenu par les grands-parents et actuellement détenu par l'école (Branco & Williamson, 1982; North & Fiske, 2015).

Cette vision négative du vieillissement se retrouve objectivée par l'Eurobaromètre de 2015 (TNS Opinion & Social, 2015) qui rapporte que le motif de discrimination le plus fréquemment cité par les personnes interrogées (5 %) est l'âge et plus précisément avoir plus de 55 ans, suivi par le genre (4 %). La même constatation avait pu être notée dans les statistiques de 2012 et 2009. Dans la lignée de ce résultat, Nosek et collaborateurs (Nosek, Banaji, & Greenwald, 2002) ont montré que des participants américains âgés de 8 à 71 ans exprimaient plus d'attitudes négatives envers les

personnes âgées qu'à l'égard d'autres grandes catégories de groupes stigmatisés comme les afro-américains ou les homosexuels. Nous noterons également que la perception que l'on a des personnes âgées varie en fonction de la structure de la population du pays : au plus le pays comporte une grande proportion de personnes âgées, au plus les images véhiculées dans la société à propos du vieillissement seront négatives (Lockenhoff et al., 2009). Néanmoins, il semblerait qu'une plus grande proportion de personnes âgées à l'intérieur du pays est également liée au sentiment que la sagesse grandit avec l'avancée en âge (Lockenhoff et al., 2009). A cet égard, il semble utile de rappeler que l'Europe contient la plus grande proportion de personnes âgées, comparativement aux autres continents (Eurostat, 2015).

Abordant la question du critère de l'âge comme premier motif de discrimination, il convient de préciser que l'âgisme se distingue d'autres sources de discrimination, telles que le racisme ou le sexisme, et ce, par deux spécificités. Premièrement, il est fréquemment socialement accepté. En effet, mettre en avant des stéréotypes sur les personnes âgées est souvent jugé comme drôle et l'on se permet des réflexions que nous n'oserions jamais faire en société à l'égard d'autres groupes de personnes (Nelson, 2002). Comme illustration, une étude au Canada a montré que 66.7 % des messages dans les cartes d'anniversaire véhiculaient une image négative du vieillissement (Ellis & Morrison, 2005). Sous couvert d'un message humoristique, tel que « comme tu arrives à la cinquantaine de nouvelles portes s'ouvrent à toi : centre gériatrique et clinique de chirurgie esthétique », ces messages sont bien représentatifs de la tendance actuelle négative vis-à-vis de l'avancée en âge. Deuxièmement, une autre spécificité de l'âgisme est que nous finirons tous, dans le meilleur cas, par en être victime (Nelson, 2005). Vous conviendrez en effet que les personnes changeant de couleur de peau ou de sexe sont relativement rares. Par contre, un jeune qui devient âgé est (et heureusement !) très courant. Ainsi, tous les stéréotypes que l'on a pu avoir vont nous concerner. Ils deviennent dès lors des « auto-stéréotypes ». Ce phénomène fait référence à la théorie de l'internalisation des stéréotypes (« stereotype embodiment ») (Levy, 2009) : cette théorie nous explique que le vieillissement est, en partie, un concept social. En effet, nous internalisons les stéréotypes liés à l'âge tout au long de notre vie : dès lors, une fois que nous devenons âgés, ces stéréotypes nous concernent et peuvent donc avoir des répercussions à plusieurs niveaux (psychologiques, comportemental et physiologique), et ce, de manière inconsciente.

3.2. Conséquences

En rapport avec la théorie de l'internalisation des stéréotypes, de nombreuses études ont pu démontrer que l'image que l'on a du vieillissement en étant jeune détermine en partie notre santé 20 ans plus tard. Par exemple, dans une série d'études longitudinales abordant les conséquences des représentations du vieillissement chez des sujets vieillissants (ne souffrant d'aucune pathologie), l'équipe de Levy (voir Levy, 2009 pour une synthèse) a montré que les individus ayant une vision initiale négative du vieillissement sont et se déclarent être en moins bonne santé physique dans les années qui suivent (jusqu'à 28 ans après), développent plus de problèmes cardiovasculaires, présentent un déclin mnésique plus marqué, et ont une espérance de vie moindre (environ 7,5 années en moins), comparativement à des individus du même âge ayant une perception davantage positive du vieillissement. Ces divergences entre les personnes pourraient être liées à leurs comportements quotidiens : les individus avec une vision négative du vieillissement ont tendance à moins s'engager dans des comportements de santé préventifs tels que faire du sport, manger sainement, arrêter de fumer, etc. (Levy & Myers, 2004).

En dehors de ces influences des stéréotypes sur les personnes âgées elles-mêmes, les stéréotypes négatifs liés à l'âge influencent également les attitudes de leurs interlocuteurs, et ce, de façon souvent non consciente. L'impact de l'âgisme peut ainsi notamment être observé au travers des attitudes de l'« elderspeak » (autrement dit, le « parler petit vieux »). Ce type de langage correspond au fait de parler plus lentement et/ou plus fort, d'utiliser des phrases plus simples, un ton condescendant, etc., lorsque nous sommes confrontés à une personne présentant tous les traits physiques d'un individu (très) âgé. De telles attitudes, observables dès l'âge de 2-3 ans (Kwong See & Nicoladis, 2009), partent du présupposé que les personnes âgées ont des problèmes auditifs et un fonctionnement cognitif altéré. Comme l'explique le « Communication Predicament of Ageing model » (Ryan, Giles, Bartolucci, & Henwood, 1986- voir Figure 2), ces attitudes verbales ne sont pas sans conséquence pour la personne âgée : elles limitent leurs opportunités de communication et renforcent les comportements stéréotypés liés à l'âge, ce qui engendre une diminution de l'estime qu'elles ont d'elles-mêmes ainsi qu'une perte d'interactions sociales. Ces deux éléments génèrent inévitablement des changements chez les personnes âgées elles-mêmes, notamment une

communication moins efficiente. Elles pourront par exemple donner à leur interlocuteur une réponse inappropriée, ce qui aura pour effet de renforcer et de pérenniser les stéréotypes âgistes de ce dernier.

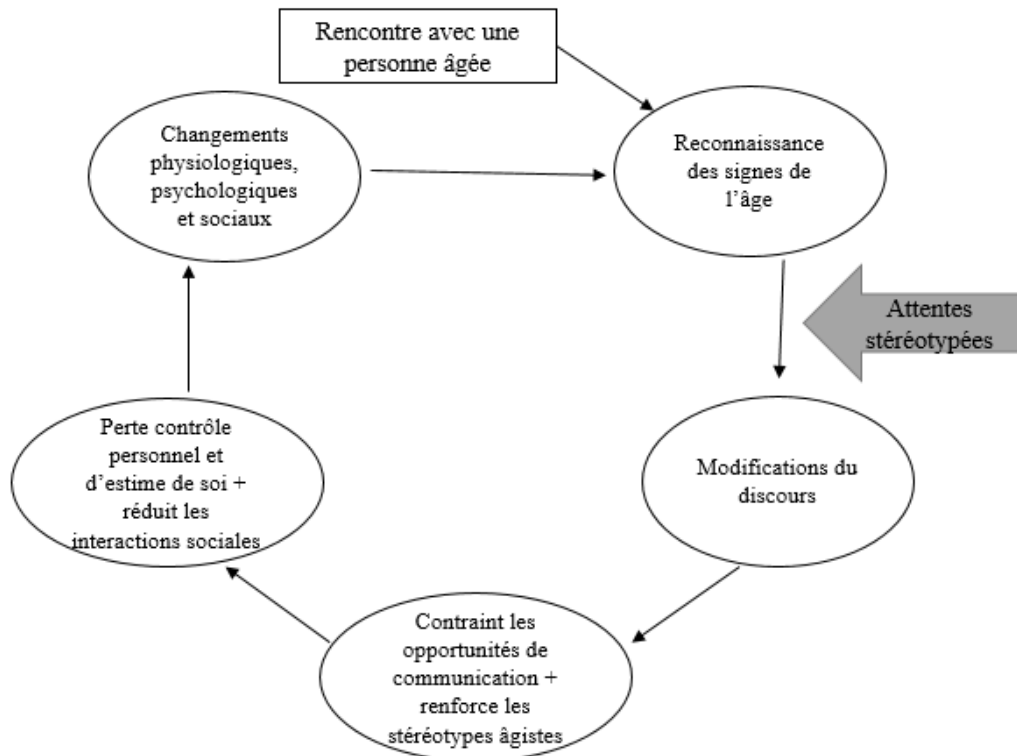


Figure 2. Communication Predicament of Ageing model. Source : Ryan, E., Giles, H., Bartolucci, G., & Henwood, K. (1986). Psycholinguistic and social psychological

Un tel cercle vicieux, aux conséquences importantes pour les personnes âgées, ne se limite pas au schéma communicationnel. Ainsi, sur base d'attentes stéréotypées liées à l'âge, bon nombre d'interlocuteurs des personnes âgées ont par exemple tendance à adopter des comportements d'aides excessifs à leur égard. Or le fait d'aider une personne âgée, voire de faire les choses à sa place, contribuerait à une baisse de ses performances, à une moindre confiance dans ses capacités à réaliser une tâche ainsi qu'à une plus grande difficulté attribuée à cette tâche (Avorn & Langer, 1982). En d'autres termes, l'excès d'aide participe à la grabatisation de nos aînés, ce qui est d'autant plus dommageable que cela conduit à un cercle vicieux renforçant les stéréotypes négatifs liés à l'âge : comme je considère les personnes âgées comme dépendantes, je les aide de manière excessive ce qui a pour effet de diminuer leur confiance en elles (elles se sentent moins capables) ; comme elles sont moins confiantes, elles demandent de l'aide, ces demandes d'aide étant alors considérées

comme des « preuves » que les personnes âgées sont des personnes dépendantes! Il s'avère donc primordial d'être vigilant à l'aide apportée d'autant qu'il est établi que favoriser l'indépendance des personnes âgées (notamment dans le cadre institutionnel) et leur laisser des responsabilités leur permet d'avoir un meilleur bien-être physique et psychologique et diminue le taux de mortalité (Mallers, Claver, & Lares, 2014; Rodin & Langer, 1977).

Si l'âgisme, bien présent dans nos sociétés industrielles, a des conséquences négatives déjà dans un contexte non pathologique, nous pouvons raisonnablement nous demander si cet impact est majoré dans un contexte pathologique tel que celui de l'oncologie. L'influence de la vision que les patients cancéreux ont eux-mêmes du vieillissement a été très peu abordée (notion d'impact de leurs propres stéréotypes âgistes). Une étude a montré qu'associer la cause d'une maladie telle que le cancer à un âge avancé a des conséquences négatives, comme le fait de percevoir davantage de symptômes physiques, entreprendre moins de comportements pour maintenir sa santé et avoir une plus grande probabilité de mortalité dans les deux ans de suivi (Stewart, Chipperfield, Perry, & Weiner, 2012). De tels résultats, bien que devant encore être confirmés par des études complémentaires, vont dans le sens des recherches longitudinales de Levy (mentionnées précédemment) démontrant l'effet délétère qu'a le fait d'avoir une vision négative du vieillissement sur la santé physique chez des sujets vieillissants dans le contexte du vieillissement non pathologique. Les conséquences des stéréotypes âgistes demandent également une attention particulière au niveau des professionnels de la santé. En effet, cette tranche de la population est particulièrement vulnérable aux stéréotypes âgistes étant donné qu'elle est constamment en contact avec des personnes âgées en souffrance : pour la majorité des professionnels, vieillissement est synonyme de maladie, détresse ou dépendance (Gaymard, 2006). Aussi, nous pouvons remarquer de nombreux comportements discriminatoires à l'égard des personnes âgées en oncologie (bien que le lien entre la vision du vieillissement et ces comportements n'ait pas été clairement établi). Même si nous développerons plus en détail ces différents points dans un article de synthèse (Schroyen, Adam, Jerusalem, & Missotten, 2015), nous pouvons d'ores et déjà en donner quelques exemples. Tout d'abord, alors que la majorité des cancers concernent la personne âgée (Smith et al., 2009), les patients âgés cancéreux restent souvent exclus des essais cliniques. Ainsi,

entre 1996 et 2002, 68 % des patients inclus dans les essais cliniques contre le cancer avaient entre 30 et 64 ans alors que seulement 8.3 % des patients avaient entre 65 et 74 ans (Murthy et al., 2004). En outre, les patients âgés cancéreux bénéficient de moins de procédures conservatrices (ex : reconstructions mammaires) (Madan, Aliabadi-Wahle, & Beech, 2001; Madan, Cooper, Gratzner, & Beech, 2006) et sont sous-traités (Ayanian et al., 2003) comparativement à des patients plus jeunes. Ces données interpellent d'autant plus que la notion d'âge « avancé » ne devrait pas être une contre-indication pour des traitements susceptibles d'améliorer la qualité de vie du patient ou de prolonger significativement sa survie (Hurria et al., 2012). Ceci est d'autant plus vrai qu'il est maintenant bien établi que considérer qu'une personne âgée est nécessairement « trop frêle » pour tolérer chimiothérapie, radiothérapie ou chirurgie est une idée infondée, c.à.d. stéréotypée (Durdax & Bauer, 2008). Même s'il est indéniable que certains changements se produisent avec l'âge, tel qu'une sensibilité accrue à la cytotoxicité, à la myélotoxicité, une présence de comorbidités plus fréquente, etc., ces modifications ne constituent en aucun cas une contre-indication absolue aux traitements, mais témoignent plutôt d'une nécessité de les adapter à la personne âgée (Balducci, 2006). Sans même rentrer dans ces considérations médicales, l'effet des stéréotypes liés à l'âge a déjà des répercussions au niveau de l'annonce du diagnostic : 24 % des diagnostics de cancer ne sont pas annoncés aux personnes âgées (Kawakami et al., 2001). Les raisons invoquées sont diverses : manque de compréhension du patient, peur de décourager le patient, mais également souhait de la famille. Et pourtant, une revue de la littérature a montré que les personnes âgées souhaitaient bel et bien être informées de leur diagnostic et des traitements possibles (Chouliara, Kearney, Stott, Molassiotis, & Miller, 2004).

4. Stigmas liés à la maladie²

Il est également important de noter que dans le domaine de l'oncologie, un autre phénomène de stigmatisation peut également toucher les patients, à savoir les stéréotypes liés à la pathologie. De manière générale, l'état de santé des personnes (sida, épilepsie, diabète...) amène des stigmas, contribuant ainsi au fardeau social,

² Une partie de ce point est tiré d'un article de synthèse que nous avons rédigé auparavant: Schroyen, S., Adam, S., Jerusalem, G., & Missotten, P. (2014). *Geriatr Psychol Neuropsychiatr Vieil*, 12, 131-8. <http://hdl.handle.net/2268/166347>

psychologique et physique d'une maladie (Weiss, Ramakrishna, & Somma, 2006). Certains auteurs vont même jusqu'à suggérer que, dans le cas des personnes âgées, nous pouvons parler à tort de l'âgisme quand en réalité ce sont des biais liés à la santé qui amènent des comportements discriminants (James & Haley, 1995). Globalement, les stigmas caractérisent l'impact social d'une maladie, ils contribuent donc au fardeau d'une pathologie et peuvent influencer l'efficacité d'un traitement (Weiss et al., 2006). Les conséquences de tels stigmas sont nombreuses et peuvent se manifester tant sur la santé mentale des patients que sur la santé physique (Hatzenbuehler, Phelan, & Link, 2013). Plus particulièrement, nous pouvons parler de stigmas liés au cancer lorsque la maladie est associée à une déviation de la norme ou avec une qualité indésirable (Fujisawa & Hagiwara, 2015). La présence ou non de stigmas va donc être influencée par divers éléments : si le cancer est facile à dissimuler, si la personne relie automatiquement le cancer avec l'image de la mort ou se sent responsable de la maladie, si la personne pense que le cancer est contagieux... (Fujisawa & Hagiwara, 2015).

La vision que l'on a du cancer (sa signification, ses causes, ses conséquences, etc.) est fortement enracinée dans un espace temporel et spatial particulier. Ainsi, les pays européens sont vus comme plus « ouverts » sur la problématique du cancer comparativement aux pays asiatiques (Cho et al., 2012). En conséquence, la manière dont les patients, les médecins et la famille vont aborder la maladie ne sera pas la même. Par exemple, des données suggèrent que les médecins américains laissent leurs patients âgés atteints d'un cancer assumer seuls la responsabilité de leur propre santé, mettant en avant l'autonomie de la personne, tandis que les médecins français vont avoir tendance à davantage orienter leurs patients (Eisinger, Geller, Burke, & Holtzman, 1999). Quelle que soit la manière d'accompagner le patient, le cancer véhicule encore beaucoup d'images négatives et ce, malgré l'augmentation du taux de survie. Le cancer est une maladie effrayante, nous renvoyant l'image de notre propre vulnérabilité et de nos limites physiques. Les médias contribuent à ces images négatives en accentuant la peur associée au cancer, le représentant comme inévitable, exagérant les statistiques, utilisant des métaphores en référence à la guerre, aux batailles, etc. (Clarke & Everest, 2006). Chez les personnes âgées, le sentiment de vulnérabilité, qui est déjà plus marqué dans cette population, ne peut qu'être augmenté par le cancer. De même, l'association inévitable du cancer et de la mort ainsi que l'image d'un traitement pire que la maladie

sont des croyances particulièrement prégnantes chez eux (Miller, 1999). De telles pensées peuvent engendrer de l'isolement social, une diminution du niveau de bien-être émotionnel et une mauvaise santé (Cho et al., 2012). Par exemple, une étude a montré que le cancer colorectal est associé à beaucoup de stéréotypes (les patients sont ainsi vus comme responsables de leur maladie, incontinents, présentant des problèmes de défécation, etc.) et amène des symptômes dépressifs (Phelan et al., 2011). Il a également pu être montré que les stigmas liés au cancer ont une influence sur les comportements de soins, notamment au niveau de l'adhérence à un traitement mais également une moindre propension à faire appel à un médecin (Fujisawa & Hagiwara, 2015). Toutefois, ce type de stigmatisation n'a, à notre connaissance, jamais été abordé spécifiquement chez des patients âgés. Par contre, il a été démontré que le risque de suicide est plus important chez les patients âgés souffrant d'un cancer comparativement à d'autres types de maladies, comme par exemple les problèmes cardiaques ou les troubles psychiatriques (Miller, Mogun, Azrael, Hempstead, & Solomon, 2008). Dès lors, il est probable que l'impact des stéréotypes liés au cancer soit présent en oncogériatrie et joue un rôle dans cette constatation.

Si le cancer est, de manière globale, déjà connoté négativement, certains cancers véhiculent une image péjorative particulièrement marquée. C'est le cas par exemple du cancer du poumon (Lebel & Devins, 2008). En effet, afin de lutter contre le cancer, des informations de prévention préconisant un changement de style de vie sont apparues ces dernières années. Une des conséquences non désirée mais engendrée par ces campagnes est que certains cancers sont vus comme auto-infligés (« c'est la responsabilité du patient ! »). C'est effectivement le cas du cancer du poumon, cancer associé au fumeur qui, dans le contexte politique actuel de lutte contre le tabagisme, est perçu comme un paria. Les stéréotypes associés au tabagisme sont, par exemple, que fumer est considéré par beaucoup comme un choix et non comme une addiction, que le fumeur est perçu comme un égoïste ne pensant pas à la santé de l'autre (tabagisme passif), etc. Ces patients se sentent particulièrement stigmatisés et cela peut avoir des répercussions importantes sur leurs relations sociales et familiales. Ils ont souvent un sentiment de honte et de culpabilité, sont plus susceptibles de se voir comme responsables de la maladie et ont donc un moins bon ajustement psychologique à cette nouvelle situation. Ainsi, une étude (Cataldo, Jahan, & Pongquan, 2011) suggère que plus la stigmatisation liée au cancer est importante chez des patients atteints du cancer

des poumons (patients de tout âge ; fumeurs ou non-fumeurs), plus leur niveau de dépression est élevé et leur qualité de vie faible. La prise en compte de ce type de stigmatisation, peu abordée en gériatrie et encore moins en oncogériatrie, est cruciale, d'autant plus que des études ont montré que l'augmentation du bien-être subjectif chez des patients cancéreux augmentait leur espérance de vie de même que leur qualité de vie (Kung et al., 2006).

Ces stigmas liés à la pathologie sont également présents chez les professionnels de la santé (Hamann et al., 2014). Ainsi, les infirmières en oncologie seraient nombreuses à penser que les patients sont en partie responsables de leurs maladies (Wang, Zhan, Zhang, & Xia, 2015). De plus, comparativement à la population générale, les professionnels de la santé montrent une plus grande distanciation dans leurs attitudes envers les patients atteints d'un cancer (Taillandier-Schmitt & Michinov, 2015). La peur et le manque d'espoir envers le cancer ont également été montrés chez plusieurs professionnels de la santé, quelle que soit leur profession ou expérience clinique (Kearney, Miller, Paul, Smith, & Rice, 2003). Une bonne communication entre patients et professionnels de la santé semble donc un point essentiel à travailler. Dans cette lignée, une étude récente a pu mettre en évidence qu'une bonne communication entre les deux parties était associée à un moindre niveau de stigmatisation ressenti (Shen, Hamann, Thomas, & Ostroff, 2015). Ceci nous suggère que la formation des professionnels de la santé (infirmiers, médecins, assistants sociaux, etc.) est une piste thérapeutique possible afin de contrer les stéréotypes et ainsi diminuer les expériences de stigmatisation des patients en oncogériatrie et par ce biais améliorer leur qualité de vie. D'autres pistes, issues de la psychologie du vieillissement ou de la psychologie sociale, seront développées au cours d'un article de synthèse (Schroyen et al., 2015).

Au-delà de l'expérience d'une stigmatisation liée à la maladie, d'autres aspects de la personne peuvent être source de stigmatisation (Weiss et al., 2006). Par exemple, comme nous l'avons vu précédemment, l'âge de la personne est une source fréquente de stigmas. Une telle considération nous amène donc à envisager la notion de « double stigmatisation » chez les personnes âgées atteintes d'un cancer (stigmatisation liée à l'âge et à la pathologie). Ainsi, nous seulement les patients âgés peuvent être victimes de la même expérience de stigmatisation que peuvent ressentir tout patient atteint d'un cancer, mais sont également discriminées sur base de leur âge. C'est sur ce double

phénomène que s'axera cette thèse. Nous explorerons cette thématique à travers cinq articles et nous finirons en discutant les différents résultats obtenus et en proposant des pistes pour les recherches futures.

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OBJECTIFS DU TRAVAIL

OBJECTIFS

Ce travail de thèse se présente sous la forme de cinq articles scientifiques (un article de synthèse et quatre articles empiriques), chacun poursuivant un objectif précis.

Ainsi, le **premier** objectif était à visée théorique : afin de mieux comprendre la stigmatisation en oncologie à l'égard des personnes âgées, il nous paraissait opportun de réaliser un état des lieux de la littérature dans le champ. Partant du constat d'une discrimination à l'égard des personnes âgées en oncologie (aussi bien au niveau de la recherche que des traitements), les stéréotypes âgistes sont une des pistes d'explications possibles (Hurria et al., 2012; Murthy, Krumholz, & Gross, 2004). Dans cette perspective, nous avons souhaité faire le point sur les conséquences de l'âgisme, tant sur la santé physique et mentale des sujets vieillissants que sur les attitudes (comportementales et communicationnelles) que leurs interlocuteurs ont à leur égard. En ce sens, nous ne nous sommes pas cantonnés au domaine de l'oncologie, mais avons enrichi la réflexion sur base des données issues du vieillissement « normal » (Levy, 2009). Avant de conclure, nous avons cherché à identifier des pistes thérapeutiques susceptibles de contrer ces phénomènes de stigmatisation à la fois chez les patients et chez les professionnels. Cet état de l'art a conduit à la rédaction du premier article.

Ensuite, nous avons cherché à étudier l'influence de la vision de l'âge d'une part sur les attitudes des professionnels et d'autre part sur la santé physique et mentale des patients âgés. Dans un premier temps, nous avons souhaité nous focaliser sur les interlocuteurs privilégiés des patients lors de leur suivi médical, c'est-à-dire les professionnels de la santé. De cette manière, cela nous permettait d'avoir une vue globale du contexte dans lequel les patients sont immergés. Dans un second temps, nous avons centré nos objectifs sur les patients eux-mêmes, dans le but d'examiner non seulement sur leur vision de l'âge, mais également celle qu'ils avaient du cancer. Ceci nous a amenés à formuler des objectifs en lien avec la notion de double stigmatisation (Schroyen, Adam, Jérusalem, & Missotten, 2014).

Tenant compte de ces éléments, le **second** objectif a donc été d'analyser les conséquences de l'âgisme des professionnels de la santé, en l'occurrence des infirmiers(ères) en oncologie (n = 76), sur leur propension à proposer des traitements. Le rôle des infirmiers(ères) est en effet déterminant auprès des patients, tant au niveau

de l'information sur les traitements que du support émotionnel qu'ils(elles) fournissent aux patients. Ce second objectif, exploré au cours d'un second article, se déclinait en deux points. Au moyen de vignettes cliniques, nous avons tout d'abord évalué si l'encouragement à un traitement (immunothérapie, chimiothérapie ou reconstruction mammaire) était dépendant de l'âge du patient (35, 55 ou 75 ans). Sur base d'études précédentes réalisées auprès de médecins (Madan, Cooper, Gratzer, & Beech, 2006; Protière, Viens, Rousseau, & Moatti, 2010), nous avons émis l'hypothèse que l'encouragement serait plus faible pour les patients plus âgés, et ce, à situation clinique égale. Par la suite, nous avons mis en lien cet encouragement avec la vision de l'âge de ces professionnels (évaluée au moyen d'un questionnaire et d'une tâche de fluence). Nous nous attendions à ce qu'une attitude plus négative envers les patients âgés soit liée à une vision plus négative de l'âge.

Désireux d'approfondir la question des attitudes des professionnels à l'égard des personnes âgées, nous avons ensuite souhaité nous intéresser plus spécifiquement à leur manière de communiquer avec des patients âgés. Ainsi, le **troisième** objectif a été d'explorer l'influence de l'âgisme sur la communication entre les médecins (et futurs médecins) et les patients. Pour ce faire, nous avons demandé aux participants d'enregistrer un podcast au cours duquel ils devaient expliquer un traitement par hormonothérapie à deux patientes, l'une de 40 ans et l'autre de 70 ans. Sur base de la littérature non spécifique à l'oncologie (Caporael, 1981; Ryan & Butler, 1996), nous avons émis deux hypothèses : (1) d'une part, nous nous attendions à observer davantage de caractéristiques d'elderspeak (ex : débit moins rapide, plus de répétitions, etc.) quand les médecins expliquent un traitement à une patiente âgée (70 ans), en comparaison à une patiente plus jeune (40 ans); (2) d'autre part, nous postulions que ces caractéristiques seraient d'autant plus présentes pour les participants ayant une vision négative de l'âge. Les résultats sont décrits au cours d'un troisième article.

Après nous être intéressés à l'âgisme au sein des professionnels de la santé, nous avons souhaité focaliser notre attention sur les patients eux-mêmes. Le **quatrième** objectif a donc été de déterminer si la perception que les personnes âgées avaient de leur âge et du cancer était associée à leur santé physique et mentale. Dans cette perspective, nous avons fait remplir divers questionnaires à des patient(e)s âgé(e)s de plus de 65 ans (n = 101) chez qui un diagnostic de cancer avait été posé récemment

(sein, poumon, gynécologique ou hématologique). Sur base des données de la littérature dans le vieillissement normal ou dans l'oncologie de manière générale (Cataldo, Jahan, & Pongquan, 2011; Levy, 2009), nous nous attendions à ce que les patient(e)s ayant le plus de stéréotypes négatifs concernant leur propre vieillissement et leur cancer décrivent davantage leur santé physique et mentale comme problématique. Nous cherchions également à savoir si ces deux types de stigmatisation étaient indépendants l'un de l'autre ou, au contraire, s'ils étaient reliés (par exemple, si une vision négative du cancer entraîne automatiquement une perception négative de l'âge). Ce point nous a semblé particulièrement important dans une perspective thérapeutique : l'amélioration d'un type de stigmatisation est-il lié à l'amélioration de l'autre ou faut-il travailler indépendamment sur ces deux types de stigmatisation ? C'est ce que nous analysons lors du quatrième article.

Le **cinquième** et dernier objectif de cette thèse a été d'explorer ces deux mêmes types de stigmatisation (âge et cancer) au cours de l'évolution de la maladie. En effet, l'étude précédente a été réalisée de manière transversale : les paramètres de santé, de perception du vieillissement et de vision du cancer étaient observés au même moment. Dès lors, nous voulions déterminer le lien entre ces différents paramètres au décours de la pathologie. Plus précisément, nous voulions examiner si une perception négative de son propre vieillissement et de la vision du cancer (au départ de la maladie et au cours du temps) sont prédictives d'une moins bonne évolution de santé globale, physique et mentale. Pour ce faire, nous avons suivi longitudinalement les patients de la précédente étude en leur proposant à nouveau les mêmes questionnaires 3, 6 et 12 mois après la première rencontre. Les résultats de nos analyses sont décrits dans le cinquième article.

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**ARTICLE 1- Ageism and its clinical impact in oncogeriatry:
state of knowledge and therapeutic leads³**

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³ Un autre article de synthèse a été rédigé en français, abordant en plus les stéréotypes liés à la pathologie et leurs conséquences. Pour plus d'informations, voir Schroyen, S., Adam, S., Jerusalem, G., & Missotten, P. (2014). *Geriatr Psychol Neuropsychiatr Vieil*, 12, 131-8.
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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 undertreated compared to younger patients. One explanation of these observations is the age stigma (i.e., 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 and thus have 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, etc.; these tools can improve opinions of aging for elderly people themselves and for health care professionals, and thus affect patients' mental and physical health.

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 (Ferlay et al., 2013). A significant proportion of cancer patients are elderly because age is a risk factor for many diseases, including this one: it is estimated that in 2030, 70% of diagnosed cancers in the United States will affect patients more than 65 years old (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009). Paradoxically, the psychosocial needs of elderly people with cancer remain unknown (Surbone, Kagawa-Singer, Terret, & Baider, 2007). Indeed, even if geriatric oncology programs have been developed (geriatric assessments, individual treatment, prevention...), it's not enough: the vision of aging among health professionals, including physicians, is still negative (Extermann, 2010; Gunderson, Tomkowiak, Menachemi, & Brooks, 2005; Sheikh et al., 2013). Moreover, elderly patients are often excluded from clinical trials: between 1996 and 2002, 68% of people included in clinical trials against cancer were aged 30 to 64 years old, whereas only 8.3% of people were 65 to 74 years old (it represents respectively 3% and 1.3% of incident cancer patients in each age group) (Murthy, Krumholz, & Gross, 2004). Many reasons are evoked to justify exclusion of elderly from clinical trials, such as avoiding attrition (mortality, relocation, health decompensation), minimizing confounding variables associated with comorbidities, avoiding lengthier study process... (Knechel, 2013). This observation and the specific concern for a small subgroup of patients (the youngest and those with the best functioning) has a double clinical consequence: (1) available data cannot be applied generally to all elderly people with cancer given the nature of the physiological changes with more frequent comorbidities, their heterogeneous health status, etc. (Townsend, Selby, & Siu, 2005) ; and (2) it is difficult to develop specific guidelines for treatment of elderly patients (Hurria et al., 2012). In any guideline elaboration, it seems important to base treatment decisions on biological age and not chronological age: we are not equal in front of aging, physiological, social, cognitive changes can appear and are specific to each individual (Penson, Daniels, & Lynch, 2004). In this aim, scales like comprehensive geriatric assessment (CGA) or multidisciplinary geriatric assessment (MGA) can be used to assess health status, comorbidities... of elderly cancer patients (Hurria et al., 2012). In the same line of ideas, it's essential that elderly cancer patients' cases are discussed and taken in charge by multidisciplinary teams in order to have a global view

of their situations. General rules for the oncological treatment have to be frequently adapted. The treatment has to be much more personalized compared to a younger patient population. For instance, adjustment of some parameters (hemoglobin level, drug selection, the dose...) during chemotherapy can be implemented in order to fit with the elderly population (Balducci, 2006). The patient's characteristics play a much higher relative role compared to younger patients where the treatment is mainly decided based on the tumor characteristics (Albrand & Terret, 2008; Pallis et al., 2014; Shelke & Mohile, 2011). Alternative local treatments such as radiotherapy can be a first option in elderly patients if a much higher mortality rate related to co-morbidities is expected with surgery. 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 occurs after 5 years of follow-up and second-line endocrine therapy can still allow several years of disease stabilization in the metastatic setting. Life expectancy and co-morbidities also influences the aggressiveness of the treatment of prostate cancer, frequently diagnosed in old men as disease in general grows slowly and endocrine therapy can also allow disease control for some time.

Eventually, it's important to note that systemic oncological treatments are more and more expensive. Coverage by the national health care system in our country, Belgium, is not only based on the benefit observed according to tumor characteristics and line of therapy but sometimes also according to patient characteristics such as performance status taking into account eligibility criteria in the registration trial. Currently, age has not been used in our country for reimbursement but excluding older patients add the risk that coverage by insurance is declined because of the lack of evidence –based proof of similar benefit 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 compared to younger patients: for instance, based on clinical vignettes, Protière et al. (2010) show that physicians recommend chemotherapy against breast cancer in 99% of cases for people of 55 years old but only 60.4% for people 76 years old whose clinical situation are the same. Moreover, 71% of them justify their decisions on tumor characteristic whereas only 14% base it on patients' age. Similarly, a UK survey shows that the intensity of cancer treatment is influenced by age in 49% of early-stage cases and 51% of advanced-stage

cases (Department of Health Pharmaceutical Oncology Initiative, 2012). In comparison, comorbidities influence only 37% of recommendations in early stages and 31% in advanced stages. Another recent study shows that mortality increases with age among women with breast cancer and authors suggest that undertreatment can explain this observation (Van de Water et al., 2012). Indeed, young and old patients are not evenly treated: in case of breast cancer treatment, older patients have lower probability to receive standard care (Markopoulos & Van de Water, 2012).

Yet it should be remembered that “advanced” age alone should not be a contraindication for treatments that can increase quality of life or significantly extend a patient’s survival (Hurria et al., 2012). 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 (Balducci, 2006). This is particularly true given the lack of evidence for considering elderly people to be too weak to tolerate chemotherapy, radiotherapy or surgery, in other words, this is a stereotype (Balducci, 2006; Rogne et al., 2009; Thompson et al., 2012). Concerning radiotherapy, a study with nonagenarians shows a good tolerance (89% finish the treatment and have an average of 13 months of survival after radiotherapy) (Thompson et al., 2012). Finally, a study shows that the survival rate after an intracranial tumor surgery was not related to the age (in contrast, histology or performance score for instance is associated with survival). 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 (Madan, Aliabadi-Wahle, & Beech, 2001). These data call on health care professionals to ask themselves some questions. How can one explain such different attitudes towards older people if not by stigmatization linked to age (i.e., 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 R. Butler (1969) with reference to revulsion towards the elderly, disease and infirmity, and 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 (Surbone et al., 2007). A gripping example of such stigmatization is given by a TV 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 gender, ethnicity or racial category (Levitt, 2004). Evidence of this negative vision of aging has been found by different studies (Bugental & Hehman, 2007). The most widely cited reason for discrimination in Europe is age, more specifically, being over (only!) 55 years old (4% in 2012), followed by gender and ethnic origin (3%) (TNS Opinion & Social, 2012)

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 vision 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 non-pathological 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 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.

Having negative stereotypes can have many deleterious effects on physical health on the long term. This is the conclusion 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, described themselves as having worse physical health with age (over a 28-year period) and developed considerably more cardiovascular issues (Levy, 1996; Levy, Slade, & Kasl, 2002; Levy, Zonderman, Slade, & Ferrucci, 2009). This negative impact is even demonstrated on mortality rate: with a 23-year follow-up, these authors 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 fewer than subjects with a positive perception (Levy, Slade, Kunkel, & Kasl, 2002). One explanation suggests that these effects are linked to their daily attitudes in life: people with a negative vision of aging were less likely to engage in good health behaviors (e.g., healthy diet, using seatbelts, doing physical exercise, minimizing alcohol or tobacco consumption, etc.) over the 20 years during which they were followed up (Levy & Myers, 2004). 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 in four daily activities (bathing, dressing, transferring and walking) when they had positive stereotypes than when they had negative stereotypes (Levy, Slade, Murphy, & Gill, 2012).

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 the identity and are present in all circumstances (Levy, 2009). Levy et al. studied the effect of *subliminal exposure* to positive or negative words linked to aging. In their experiment, subjects had to fixate a cross on a computer screen; below or above it, words with negative connotations (e.g., “senile,” “dependent,” etc.) or positive connotations (e.g., “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 vs. 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 (Levy, 1996). More surprisingly, the stereotypes triggered an increase in the cardiovascular response

to stress, a more negative perception of their health, and a decline in the will to live in the elderly subjects (Levy, Hausdorff, Hencke, & Wei, 2000; Levy, Ashman, & Dror, 2000). 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 (Steele & Aronson, 1995). For instance, when elderly 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. (2006) showed that subjects exposed to negative aging stereotypes had decreased intellectual performance (including memory tasks) compared to a neutral group. Moreover, they took more time to do the tasks and their level of anxiety was higher.

When we see the negative consequences of ageism in a non-pathological context, we can reasonably ask ourselves if 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 (e.g., 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 two-year follow-up (Stewart, Chipperfield, Perry, & Weiner, 2012). 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 (Lim et al., 2013).

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 unconscious, is explained primarily by the general negative attitude 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 (Caporael, 1981). 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 have negative attitudes toward older people (e.g., viewing them as unable to adapt, boring, untidy, etc.), including older people in oncology (Kearney, Miller, Paul, & Smith, 2000; Liu, While, Norman, & Ye, 2012).

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” (Ryan & Butler, 1996). 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 (Kemper & Harden, 1999, experiment 2). Consequently, elderspeak simply reinforces stereotypes (people confirm that they do not clearly understand the instructions they are given); a negative feedback loop is created (Ryan & Butler, 1996). Another effect of this kind of communication is shown by studies including people with dementia: elderspeak enhances resistance to care (e.g., grabbing objects, crying, saying no, pushing away, etc.) in comparison to

normal adult communication and to silence (Williams, Herman, Gajewski, & Wilson, 2009). 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 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 (Mandelblatt et al., 2003). 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 reported difficulties communicating about symptoms had a lower quality of life (Yeom & Heidrich, 2009).

This direct influence of the attitudes of health care professionals on changes in seniors' physical and psychological health is confirmed by studies of normal aging. In one, residents of a nursing home were asked to do a jigsaw puzzle (Avorn & Langer, 1982). 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 (Coudin & Alexopoulos, 2010). In their experiment, Coudin and Alexopoulos included three conditions: by listening to a text, elderly subjects were exposed to positive stereotypes (e.g., "Older persons represent a huge market and therefore contribute to the economic growth of our society"), or negative stereotypes (e.g., "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...) illustrate that our behavior is not always adapted to elderly and that the psychosocial needs associated with aging are not always taken into consideration.

Countering the stereotypes: Suggestions for intervention

After reviewing these 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.

a) At the patient level

To our knowledge, specific therapeutic indications against ageism in oncogeriatrics 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 (Hausdorff, Levy, & Wei, 1999; Levy, 1996; Levy et al., 2000) 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 (e.g., elderspeak). Conversely, words such as "improving," "learned," "advise" have a positive resonance and so 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

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 (e.g., 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 simply imagine talking with a younger person before this stressful task (Abrams et al., 2008). 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 (e.g., surgery, first chemotherapy, any treatment, etc.). Similarly, a study tested the efficacy of *intergenerational reminiscence* for seniors (i.e., evocation of memories of grandchildren); after the intervention, those seniors reported less loneliness and a better quality of life (Gaggioli et al., 2013). This technique would also be interesting 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 in the aim of evoking good memories he can have with his 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 (Sherman & Cohen, 2006). 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 & Klein, 2006) 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 (e.g., participants have to write a paragraph on a value that is personally important to them), the stereotype threat disappears: self-affirming women auto-affirmed perform at the same level as women in the control

condition (Martens, Johns, Greenberg, & Schimel, 2006). 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. (2000) selected 60 students, 30 who drank coffee, and 30 who 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 in the control condition, and more likely than the students who did not drink coffee. The impact of this technique in geriatric oncology should be analyzed: self-affirmation just after 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 (Blanc-Bisson, Fonck, Rainfray, Soubeyran, & Bourdel-Marchasson, 2008).

The second concept emanating from social psychology, “*counter-stereotype*”, consists of intentionally activating ideas or creating mental imagery in opposition to stereotypes (e.g., create a mental image of an old man running) (Blair, 2002). 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 to 80 years old) were divided into three conditions: (1) counter-stereotype condition, where there were told that no age-related differences in memory were found; (2) stereotype condition, in which it was explained that older people have less efficient memories than younger people; and (3) control condition, in which no information was provided regarding age differences in memory (Andreoletti & Lachman, 2004). 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 of struggling against stereotypes in the general population, and some specific approaches can be suggested for professionals.

b) 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 stereotypes affecting their behavior and the consequences they can have for elderly patients. To highlight the importance of such training, one study showed that physicians have developed a more positive attitude towards elderly patients since 2000, whereas nurses' attitude has become less positive (Liu et al., 2012). This difference may be due to more comprehensive education on aging in medicine. Likewise, education and support during practice experience enhance positive attitudes towards elderly patients among medical students (Koh, 2012). Similarly, another study showed that a gerontology education course given to students in social services decreased their anxiety about working with older people and reduced their ageism (Boswell, 2012). Moreover, a training program including information on the aging process and simulation of the role of older adults resulted in better attitudes towards elderly people and increased knowledge of aging. Four weeks after the training program, these results were still observed (Yu & Chen, 2012). Regarding communication, the harmful effect of elderspeak can be improved by specific training for nursing staff. One example of communication training, including information about elderspeak and its negative effects, as well as practice with effective communication skills, resulted in a significant reduction in elderspeak (Williams, Kemper, & Hummert, 2003). A similar reduction was observed in a study carried out in three nursing homes, immediately after the intervention but also two months later (Williams, 2006).

Regarding interventions with individual professionals, we can describe some approaches based, like the patient-level approaches, on studies from social psychology. First, the concept of *self-affirmation* cited above can also be used to battle prejudices:

when their self-image has been bolstered through self-affirmation, people express fewer prejudices against other people (e.g., people express more positive feedback for a Jewish job candidate after writing about their values) (Fein & Spencer, 1997). Another means of working against stereotypes is *perspective-taking*: in other words, describing a situation from someone else's point of view (e.g., an elderly man) (Galinsky & Moskowitz, 2000). Perspective-taking leads participants to see an overlap between their self-image and the image of the out-group (in this example, older people) and thereby reduce the accessibility and application of stereotypes. Some authors suggest that certain techniques that do not require much effort may also be applicable (Dasgupta & Greenwald, 2001). More specifically, they 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 their attitudes. More specifically, when exposed to a picture of an admired elder (e.g., Mother Teresa or Albert Einstein), participants implicitly associate positive words with advanced age more quickly; however, no effect was found for explicit measures.

Blair describes two ways of combating stereotypes: *counter-stereotypes*, as we saw above, and *stereotype suppression* (Blair, 2002). 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: students were shown a photograph of a male skinhead and asked to describe a typical day for him (Macrae, Bodenhausen, Milne, & Jetten, 1994). 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 less 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 had 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.

c) In a practical way

Considering all this literature, applications of these leads in daily life could take several forms. The most obvious being the systematic training of all healthcare professionals (medical and paramedical) on aging, with a specific awareness regarding our attitudes and the impact of our negative aging vision on older patients. The training could be done using theoretical information as well as using videos and role plays in order to make a stronger bond between theory and clinical practice. It will allow participants to see how stereotypes can easily integrate daily care through vocabulary (evoking negative stereotypes) or acts (for instance, assuming the individual cannot eat or wash himself alone). This kind of technique has already been successfully applied on healthcare professionals (nurses in particular) in order to diminish “baby speak”(Williams et al., 2003).

Otherwise, integration of an aging specialized psychologist in oncogeriatry department can be a useful initiative. For instance, this psychologist could realize a systematic screening of the vision 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 (i.e. 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 positive effects of each technique, but also to identify the most adequate patients' 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”...: all these terms refer to old age and consequently activate the associated stereotypes. All this daily vocabulary can be considered as a pointless detail but the impact of stereotypes should lead us to a 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 can be unconscious. It influences interactions with elderly people and can have negative consequences for them (Avorn & Langer, 1982; Ryan & Butler, 1996). Moreover, as we age, our conceptions of aging influence our mental and physical health (Levy, Slade, & Kasl, 2002). In geriatric oncology, the stereotypes of aging that health care professionals and elderly patients themselves have can have many harmful impacts on the patients (Kearney et al., 2000; Williams et al., 2009). 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 has to be an ongoing struggle 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 these advice can be applied very easily in daily care. The first thing to do doesn't take any time: being careful to our vocabulary (avoiding elderspeak) and trying to include positive commentary on aging (= positive stereotypes). Secondly, we think it's very important for the well-being of the patient to take the time to talk and within conversation you can ask about their grandchildren in order to evoke some good memories (= intergenerational reminiscence) or about important activities for them (= self-affirmation). Eventually, for enhancing knowledge of healthcare professionals about impact of negative stereotypes, we think training programs are very effective. In a more preventive way, gerontology education course to students are very useful to diminish their anxiety towards aging.

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ARTICLE 2 - Ageism and caring attitudes among nurses in oncology

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Abstract

Background: Although the incidence of cancer increases with age, elderly patients are often excluded from clinical trials. In addition, elderly patients are frequently undertreated in comparison to younger patients. One explanation for these observations is age stigma (i.e., ageism). In this context, this study has two objectives: (1) to replicate the results of previous studies that reported differential support of medical treatment depending on the patient's age in a different health-care provider population (nurses rather than physicians); and (2) to determine whether support for expensive immunotherapy, adjuvant chemotherapy or breast reconstruction is linked to ageism among nurses.

Method: The participants were 76 nurses who specialized in oncology. They received four clinical vignettes: one vignette about an immunotherapy with a high societal cost (age of patient: 40 vs. 70 years), and three vignettes about adjuvant chemotherapy and breast reconstruction (age of patient: 35, 55 or 75 years – age was the only difference). A questionnaire and a fluency task were used to assess the participants' vision of aging.

Results: Our analyses show that support for immunotherapy, breast reconstruction and chemotherapy is lower for older patients than for younger patients. Moreover, nurses' vision of aging influences support for breast reconstruction: nurses with a negative view of age discriminated more between a 75-year-old patient and a 35-year-old patient (less encouragement for the older patient).

Conclusion: These results highlight the need for nurses and other health-care providers to receive specific training about ageism and its consequences

Introduction

The negative vision of aging that is conveyed within modern societies can lead to ageism, causing individuals to see elderly people as weak, cognitively impaired, etc. (Butler, 1969). This negative vision is apparent in recent surveys that revealed that the most cited motive for discrimination in Europe is age, specifically, being more than 55 years old (TNS Opinion & Social, 2012). This discrimination can have important consequences for elderly people. Longitudinal studies have shown that individuals with an initial negative vision of aging (in comparison to those with a positive vision) tend to have poorer memory capabilities (Levy, 1996); describe themselves as having worse physical health with age (Levy, Slade, & Kasl, 2002); develop considerably more cardiovascular disease (Levy, Zonderman, Slade, & Ferrucci, 2009); and have a reduced probability of survival (Levy, Slade, Kunkel, & Kasl, 2002).

The negative consequences of ageism are not limited to elderly people themselves; ageism also impacts the attitudes of those who interact with elderly people, from the age of three (Kwong See & Nicoladis, 2010). More specifically, the interlocutors of elderly people tend to develop pseudo-positive attitudes (also called “benevolent ageism”) such as “elderspeak,” which refers to the belief that elderly people have hearing and/or comprehension problems, so we have to speak louder, slower, and in a patronizing way (as “baby talk”). This kind of communication can negatively impact elderly people from a psychological (reduced self-esteem and feeling of powerlessness) and verbal point of view (Ryan & Butler, 1996). While no study has investigated the effect of “elderspeak” in the context of geriatric oncology, one study showed that when elderly patients suffering from breast cancer perceived a high level of ageism among professionals (probably noticed in part because of “elderspeak”), they experienced more physical pain, poorer mental health, and decreased general satisfaction with their care (Mandelblatt et al., 2003). In the same vein, older breast cancer survivors with negative beliefs about symptom management perceived that health-care providers had negative attitudes towards them, reported experiencing difficulties communicating about their symptoms and had a lower quality of life (Yeom & Heidrich, 2009).

The consequences of ageist stereotypes among health-care professionals is especially important, as these individuals seem particularly vulnerable to these stereotypes. Health-care professionals are constantly exposed to ill and vulnerable older patients and are thus more likely to have negative and/or pseudo-positive attitudes (Gaymard, 2006). Several studies have confirmed this observation in the specific context of oncology (Kearney, Miller, Paul, & Smith, 2000), at both the research and clinical levels. Although the majority of patients suffering from cancer are over 65 years old (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009), older patients are often excluded from clinical trials; only 32% of clinical trials include participants aged more than 65 (Murthy, Krumholz, & Gross, 2004) and are generally undertreated. For instance, physicians recommend adjuvant chemotherapy for breast cancer in 99% of cases in 55-year-old patients compared to only 60.4% of cases in 76-year-old patients (Protière, Viens, Rousseau, & Moatti, 2010). These differences are surprising given that “advanced” age alone should not be an exclusion criterion for treatments that can increase quality of life (Hurria et al., 2012). Rather, these treatments should be adapted for elderly people (Balducci, 2006). Moreover, no evidence indicates that elderly people are too weak to tolerate chemotherapy (Balducci, 2006), radiotherapy (A. Thompson et al., 2012) or surgery (Rogne et al., 2009). Such observations are not limited to the curative setting but are also observed for reconstructive interventions: in identical clinical situations, physicians in training recommended breast reconstruction in 95% of cases for patients under 31 years of age but in only 65% of cases in patients over 59 years of age (Madan, Aliabadi-Wahle, & Beech, 2001).

Although the relation between these results and the vision of aging has not been directly evaluated, we can legitimately hypothesize that decisions related to a patient’s age may be partially explained by nursing and medical staff’s negative representation (and stigmatization) of aging. In this context, the present study has two objectives:

1. To evaluate the caring attitudes of nurses according to the patient’s age. Based on previous studies that focused on physicians (Madan et al., 2001; Protière et al., 2010), we postulate that older patients will receive less support for oncological treatment than younger patients. Testing nurses rather than physicians seemed us interesting given the increasingly important role of oncological nurses in patient care coordination, information and support (Colussi et al., 2001).

2. To analyze whether support for treatments is statistically linked to ageism among nurses, which is the primary feature of this study. We expect that negative attitudes towards older patients will be associated with a more negative vision of aging.

Method

Participants. The participants were 76 nurses who specialized in oncology and worked in different units at the CHU Sart Tilman Liège University Hospital in Belgium. In this sample, 88.1% of the participants were women, which is a representative gender breakdown for nurses in Belgium (88.2% in 2010) (Belgian Federal Government, 2013). The median age was 32.5 years, with a range from 22 to 63 years old (see Table 1). The participants stated they had regular contact with patients older than 65 years in their practice (they assessed the proportion as 56.6%) but recognized that the proportion of their training that was related to aging was low (evaluated as 15%). The participants were all recruited during a local continuing education courses in oncology in September 2014; the experimenter explained that we wanted to assess the experience of elderly people suffering from cancer and determine what factors influenced this experience.

Table 1

Mean (SE) characteristics of participants

<i>Sociodemographic data</i>	Nurses (n = 76)
Gender (% women)	88
Age (mean ± SD)	34.88 ± 11.15
Subjective age (mean ± SD)	29.13 ± 9.82
Proportion of patients over 65 years old (mean ± SD)	56.6 ± 14.8
Proportion of patients over 65 years old (mean ± SD)	15.04 ± 14.9
<i>Vision of aging</i>	
Valence 5 words (mean ± SD) (min., max.)	-1.23 ± 1.32 (-3.08, 2.56)
FSA-R (14–70) (mean ± SD) (min., max.)	27.83 ± 4.27 (18, 39)

Materials and procedure. This study was approved by the ethics committees of the Liège University Teaching Hospital and the Psychology Faculty at the University of Liège. First, the health-care professionals received four written clinical vignettes, which were written in collaboration with the oncologist in charge of the department (see Appendix 1 for more details). The first vignette was about a new immunotherapy with a high societal cost and addressed the question of whether a high economic cost

for society might restrict treatment for older patients. For half of the nurses (random distribution), the patient was 40 years old (clinical case A1, $N = 39$), and for the other half of the nurses, the patient was 70 years old (clinical case A2, $N = 37$). The other three clinical cases (vignettes B, C, D) were about 35-, 55- and 75-year-old patients suffering from breast cancer with a good indication for chemotherapy based on tumor characteristics. All participants received these three cases successively in a randomized order. For each vignette, the nurses were asked if they would support the patient in undergoing immunotherapy, chemotherapy and breast reconstruction on a Likert-type scale from 1 (*no support*) to 7 (*support*). The major interest of these vignettes is to compare nurses' caring attitudes for older patients and for younger patients. We are not interested in the competencies of nurses to prescribe a specific treatment (which is not their role). We are focused on a possible change in caring attitudes (measured by differences in the degree of support) according to patients' age. As mentioned above, the attitudes of nurses towards older patients are of major interest given their important role in patient care coordination, information and support (Colussi et al., 2001).

Then, the nurses were asked to complete two different scales (a fluency task and a more explicit measure of ageism) to assess their vision of aging. The fluency task, which is more intuitive measure of ageism, consisted of asking each nurse to write the first five words that came into their mind when they thought about an elderly person. This measure has been used and validated in Levy's studies (Levy, Slade, Murphy, & Gill, 2012). Afterwards, the valence of each word produced was tested with 10 external evaluators (M age = 36.1 years) on a scale from -5 (*extremely negative*) to 5 (*extremely positive*). For example, the word "odor" could receive a valence of -5 while the word "experience" could receive a mean valence of $+4$. This approach enabled us to calculate a total score by adding the valences of each word; a high score indicates a positive vision of aging. The more explicit measure of ageism was performed by using the French version of the *Fraboni Scale of Ageism – Revised* (FSA-R) (Boudjemad & Gana, 2009), which contains 14 items about ageism that are measured with a Likert-type scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). A high score indicates a high level of ageism.

Data analysis. Concerning the clinical vignettes, one-factor ANOVA was used to analyze the effect of the age of patients (40 vs. 70 years) on new immunotherapy support. For chemotherapy and breast reconstruction support, ANOVA with repeated measures was used (each nurses gave his opinion for the same three clinical situations). Given that sphericity was not respected for breast reconstruction (Test de Mauchly, $W = .621, p < .001$) or for chemotherapy ($W = .633, p < .001$), the Greenhouse-Geisser correction was applied. To analyze the effect of the vision of age on differences in support, we began by correlating the participants' level of support and their scores on the FSA-R and the fluency task. Secondly, concerning immunotherapy for a 70-year-old, we divided our sample into two groups: one group that encouraged patients to receive immunotherapy significantly less [support ≤ 3 ($M - 1$ SD), $N = 8$] and one group that provided more support [support ≥ 6 ($M + 1$ SD), $N = 11$]. The results were rounded to the higher or lower unit ($4.53 - 1.84 = 2.69$: rounded to 3). We then performed a one-way ANOVA. The procedure used to analyze the effect of the vision of age on differences in support for chemotherapy and breast reconstruction was different given that all healthcare professionals received vignettes about clinical cases for a patient of 35, 55 and 75 years of age; for each nurse, we calculated a score for the difference between the support they offered to a 75-year-old patient and the support they offered to a 35-year-old. For instance, if a nurse had a support score of 6 for a 35-year-old patient but of only 4 for a 75-year-old patient, the difference score is $(4 - 6) = -2$. Then, for chemotherapy support, we selected: (1) the most similar attitudes towards patients 35 and 75 years old: *Group+*, difference ≥ 0 ($M - 1$ SD, $N = 29$); and (2) the most negative attitudes towards a 75-year-old patient vs. a 35-year-old: *Group-*, difference ≤ -3 ($M - 1$ SD, $N = 21$). The same procedure was used for breast reconstruction support (*Group+*, $N = 25$, difference ≥ 0 , vs. *Group-*, $N = 44$, difference ≤ -4). Then, we performed a one-factor ANOVA. Eventually, we analyzed the influence of nurses' age and experience by using correlations with aging vision and support for treatment. The homogeneity of variances was examined using Levene's test and was always respected (all $p > .08$). However, normality was tested using the Shapiro-Wilk test, and the results were not always satisfying. As a consequence, all of our results were verified by using non-parametric tests, and no changes were observed

Results

What vision do nurses have of aging? Concerning the more explicit measure of ageism, the FSA-R, the mean score was 27.83 (SD = 4.27). For comparison, in the article that validated the French version of this scale (Boudjemad & Gana, 2009), the mean score was 31.06 (SD = 2.16; N = 284). These two means are significantly different ($p < .001$), suggesting that our sample has less ageism. However, it is necessary to note that the populations of these two samples differ; while we only tested nurses in oncology, Boudjemad and Gana tested the general population and 52% of their sample was constituted by students (M age = 30.35 years old).

In the fluency task, a total of 372 words were produced. To illustrate the nurses' vision of aging, we created a word cloud (see Figure 1). The cloud was created using the website <http://www.wordle.net/create>. For greater readability, we included only the 100 most frequently used words. The size of each word correlates with its frequency (i.e., the more often a word was cited, the bigger is the word appears). The color of each word represents its valence.



Most negative words	Most positive words
Dependency (27.6 %)	Family (9.2 %)
Loss of autonomy (23.4 %)	Life experience (6.6 %)
Loneliness (19.7 %)	Wisdom (6.6 %)
Fatigue (15.8 %)	Experience (6.6 %)
Disease (13.1 %)	Autonomy (3.9 %)

Figure 1. Cloud of words. Red = negative words (−1 to −5), green = positive words (+1 to +5) and blue = neutral words (−1 to +1). Top 5 most cited negative and positive words (percentage of nurses who cited this word).

As shown by the word cloud, the words cited when nurses think about elderly people are negative in 74% of cases. The three most cited words are “dependency,” “loss of autonomy,” and “loneliness” (produced 21, 18, and 15 times, respectively), which are all negative. In comparison, as shown in Figure 1, “family” is the most frequent positive word and was cited only 7 times. We observed a correlation between nurses’ age and the mean valence of their words; the older nurses produced more positive words ($r = .28$, $p = .01$). However, no correlation was observed with years of experience ($p = .27$). In addition, no correlations were observed with these variables in the FSA-R (all $p > .25$)

Do nurses’ attitudes differ according to patient age? For the first two vignettes (immunotherapy), the results clearly showed that support for immunotherapy

is higher when the patient is younger [$F(1, 74) = 13.92, p < .001, \eta^2 = .156$] (see Figure 2). Support for a 70-year-old patient correlated with the nurses' age and years of experience; the more a nurse supported immunotherapy, the older she was ($r = .4, p = .01$) and the more experience she had ($r = .42, p = .01$).

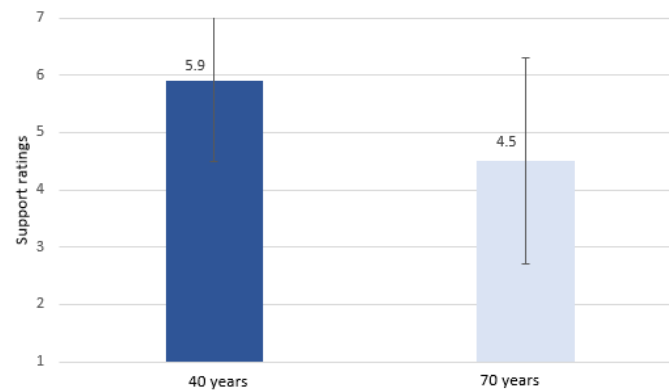


Figure 2. Immunotherapy support ratings for patients 40 or 70 years old.

Concerning vignettes B, C, and D (chemotherapy and breast reconstruction, see Figure 3), ANOVA with repeated measures of patients' age were used. The order of the vignettes was counterbalanced, but no effect of order was observed on encouragement for chemotherapy or reconstruction (all $p > .11$). The results revealed a significant effect of patients' age on support for chemotherapy [$F(1.463, 106.8) = 56.18, p < .001, \eta^2 = .435$] and breast reconstruction [$F(1.451, 105.9) = 66.217, p < .001, \eta^2 = .476$]. Planned comparisons revealed less support for chemotherapy [$F(1, 73) = 8.61, p < .005$] and breast reconstruction [$F(1, 73) = 26.41, p < .001$] for patients as young as 55 in comparison to a 35-year-old patient. This decline in support is even more marked for a 75-year-old patient in comparison to a 55-year-old [$F(1, 73) = 62.03, p < .001$ and $F(1, 73) = 54.69, p < .001$, respectively]. Similar to the observation made for immunotherapy, the smaller the difference between support for chemotherapy for a 75-year-old patient and support for chemotherapy for a 35-year-old, the older the nurses (r

= .27, $p = .02$) and the more experience they have ($r = .23$, $p = .04$). However, for breast reconstruction, no such correlation was observed (all $p > .59$).

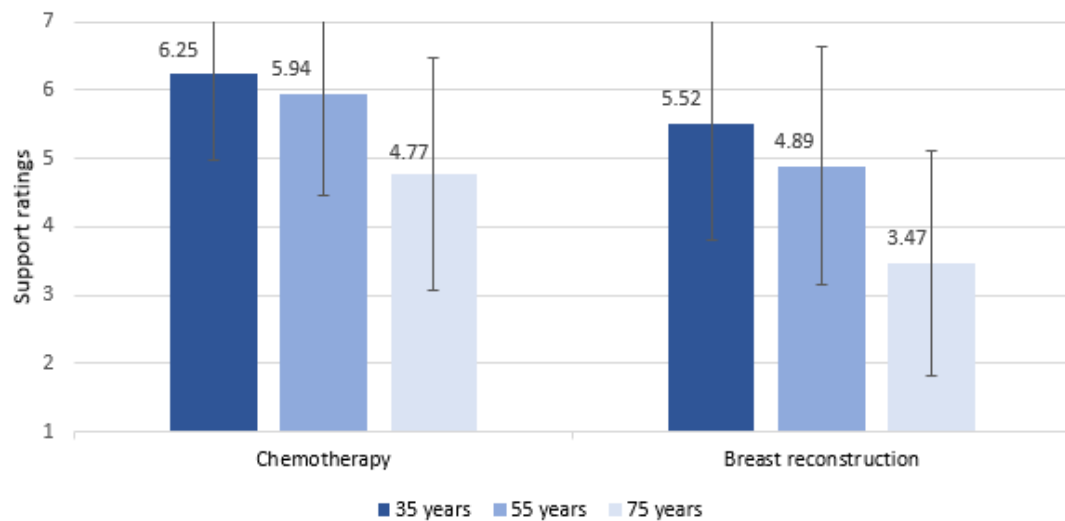


Figure 3. Chemotherapy and breast reconstruction support ratings for patients 35, 55 and 75 years old.

Is the nurses' vision of aging linked to their differential support for treatment according to patient age? First, we correlated nurses' support with their scores on the FSA-R and the fluency task. No significant correlations were observed (in both cases, $r = .08$, $p = .64$). We then enhanced the contrast between nurses by creating two groups: one group that encouraged patients to receive immunotherapy significantly less and one group that provided more support. Based on a one-way ANOVA, we did not observe an influence of the vision of aging, as measured using the FSA-R [$F(1, 35) = .248$, $p = .622$, $\eta^2 = .007$] or the fluency task [$F(1, 35) = 1.331$, $p = .256$, $\eta^2 = .037$] (see Table 2).

Table 2

Mean (SD) scores for ageism among groups offering less or more support for older patients concerning immunotherapy, chemotherapy or breast reconstruction.

Treatment	Group	5 words	<i>p</i>	FSA-R	<i>p</i>
Immunotherapy	More support (N = 11)	-1.5 (1.5)	.256	29.1 (4.1)	.622
	Less support (N = 8)	-1.6 (1.07)		28.56 (5.23)	
Chemotherapy	Group+ (N = 29)	-1 (1.23)	.21	27.53 (4.34)	.79
	Group- (N = 21)	-1.48 (1.34)		27.24 (3.25)	
Breast reconstruction	Group+ (N = 25)	-1.21 (1.2)	.94	25.86 (3.92)	.003
	Group- (N = 44)	-1.24 (1.49)		28.69 (4.19)	

Concerning the relationship between nurses' support for chemotherapy or breast reconstruction (Vignettes B, C, and D) and their ageism, we observed no significant correlations (all $p > .11$). To increase the statistical power, we selected two groups of nurses: one group with similar attitudes towards patients 35 and 75 years old (*Group+*) and one group with more negative attitudes toward a 75-year-old patient vs. a 35-year-old (*Group-*). In our analysis of these two different groups, a one-factor ANOVA for chemotherapy support (*Group+* vs. *Group-*) revealed no significant difference in the FSA-R score [$F(1, 48) = .07, p = .79, \eta^2 = .003$] or fluency task index [$F(1, 48) = 1.58, p = .21, \eta^2 = .038$]. For breast reconstruction support, no difference in the fluency task index [$F(1, 67) = .005, p = .94, \eta^2 = .028$] was observed. However, a highly significant difference in the FSA-R score was observed, with *Group-* exhibiting more ageism than *Group+* [$F(1, 66) = 9.2, p = .003, \eta^2 = .161$]. This finding suggests that if nurses have a negative vision of aging, they are less likely to support a 75-year-old patient than a 35-year-old patient in undergoing breast reconstruction.

Discussion

An increasing number of cancer patients are elderly. Paradoxically, older patients are often excluded from clinical trials. This difference can be partly explained by the negative vision of aging that prevails in our society (i.e., ageism). This vision has many negative consequences for elderly people themselves (e.g., physical and

mental health) and for their interlocutors, whose attitudes, although sometimes characterized by positive intentions, can be overprotective. In health care, the vision appears to be particularly negative, leading us to wonder about the consequences of this vision in clinical practice. Some studies (Madan et al., 2001; Protière et al., 2010) reported discrimination against elderly people in the context of chemotherapy and breast reconstruction recommendations. This kind of result suggests that one's vision of aging influences these recommendations; however, this theory has not been tested.

Our results show a global effect of age discrimination on support for reconstructive and curative treatments, with less support for older patients than for younger patients. The effect of ageism starts at a young age: even for 55-year-old patients! These results are similar to those observed in previous studies with physicians (Madan et al., 2001; Protière et al., 2010) and confirmed our first hypothesis. A very important observation made in this study is that a nurse's view of aging influences her support for breast reconstruction, the more negative the nurses' vision of aging, the less likely they are to support breast reconstruction for an elderly patient. To our knowledge, this is the first time that a link between vision of aging and health-care attitudes has been established. It seems likely that this link between aging view and care attitudes can be observed among other healthcare professionals, but this theory should be verified by additional studies. Indeed, some factors such as presence in the field or study level can have important influences. A recent study demonstrated that a negative vision of aging is associated with reduced compassionate attitudes (Bergman & Bodner, 2015). More specifically, participants with a high level of ageism express greater emotional distance and reduced belief in their ability to assist frail older patients. Such behavior is a form of dehumanization of care (N. Thompson & Thompson, 2001). However, in our study, this link was only observed for breast reconstruction and not for immunotherapy or chemotherapy recommendations, although in general, all treatments are less encouraged in older patients. One explanation may be that, when we have a negative view of aging, esthetic considerations are judged to be irrelevant for older patients. Nevertheless, regardless of a care provider's vision of aging, differences in treatment recommendations for older patients exist; this kind of observation highlights the necessity to assess elders based not on their chronological age but on their functional age (Hurria et al., 2012). Moreover, it is interesting to note that nurses' age appears to

influence their support of immunotherapy and chemotherapy; the older the nurses are, the more likely they are to support treatment. This tendency was observed in previous studies: old participants have less negative attitudes towards elderly people than young participants, when attitudes are measured explicitly (Engström & Fagerberg, 2011; Nosek, Banaji, & Greenwald, 2002). Nevertheless, it is important to note that another study found contradictory results, with more ageism among middle-aged (40-67 years old) participants (Bodner, Bergman, & Cohen-Fridel, 2012). Moreover, we must be cautious about our results given that we do not have an equitable distribution of ages within our sample (46% of nurses were between 22 and 30 years old). This link deserves a thorough examination in future studies. Although these results establish a clearer link between nurses' vision of aging and their care attitudes towards older patients, we should be careful in view of some limitations of this study. First, the link between the vision of aging and care attitudes was shown only with the FSA-R and not by the fluency task. Second, our sample was quite small: replication of these results with a larger cohort will be interesting. Eventually, it would be interesting to link these results with the Terror Management Theory. Indeed, nurses working in oncology are faced with their own mortality daily and would thus be more likely to harbor ageism (Greenberg, Schimel, & Martens, 2002; Martens, Greenberg, Schimel, & Landau, 2004). In this way, it will be useful to compare oncology nurses and nurses in other wards, who are less frequently confronted with mortality.

Considering the existence of a link between care attitudes and vision of aging, many practical questions are raised. These results reveal the need for health-care providers to receive training about the consequences of ageism in the clinical practice of oncology. In particular, nurses and not only physicians play a critical role in patient care. Nurses often have a privileged relationship with the patient and can have a major impact on his or her final decision about undergoing the treatment proposed by the physician (Colussi et al., 2001). Such considerations are highlighted Levy et al.'s study which demonstrated that the activation of negative stereotypes has an impact on the will to live; in other words, a negative attitude towards older patients can have consequences for their acceptance of a treatment (Levy, Ashman, & Dror, 2000). Nurses' own stereotypes about aging can have important consequences for their support of treatment. Moreover, as previously described, one study showed that the high level of ageism

among professionals that was perceived by elderly patients was associated with more physical pain, poorer mental health, and decreased general satisfaction with their care (Mandelblatt et al., 2003). To combat this ageism, training programs have been shown to induce better attitudes towards older patients (Yu & Chen, 2012) and improved communication (Williams, Kemper, & Hummert, 2003). Health-care providers need to be better informed about the risk of age-related discrimination so that they can provide the most appropriate patient care.

Conclusion

In conclusion, in this study, nurses engaged in discriminatory behaviors towards older patients: in the same clinical situation, they less frequently encouraged a 70-year-old patient than a 40-year-old patient to undergo an expensive new immunotherapy. Similarly, older patients were less likely to be encouraged to ask for a breast reconstruction or to receive adjuvant chemotherapy treatment. This effect was seen even for a 55-year-old patient in comparison to a 35 years old patient. While recommendations to engage in systemic treatments (immunotherapy and chemotherapy) are not influenced by nurses' vision of aging, reconstructive interventions, such as breast reconstruction are less encouraged when nurses have a more negative vision of aging.

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Appendix

Clinical cases A1 and A2

A new immunotherapy for lung cancer allows us to treat metastatic lung cancer more efficiently. A clinical study has shown that the likelihood of being alive in 5 years is enhanced by 10% thanks to this treatment. Treatment tolerance is generally good. However, it lasts for one year and has a societal cost of 20,000 euros.

I support my 40-year-old (A1)/70-year-old (A2) patient in undergoing this treatment.

No support 1 2 3 4 5 6 7 Support

Clinical cases B/C/D

A patient aged 35 (B)/ 55 (C)/ 75 (D) years old in excellent general condition has breast cancer treated by mastectomy, 3 cm in size, 4 lymph nodes invaded, strongly expressing estrogen and progesterone receptors, HER 2-negative, proliferation marker Ki-67 very high (expressed by 80% of tumor cells). She lives at home with her husband and is totally independent. She seems uncertain about whether to ask for breast reconstruction.

To what extent do you think chemotherapy is adequate?

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

How much would you support her in asking for a breast reconstruction?

No support 1 2 3 4 5 6 7 Support

ARTICLE 3 - Communication of healthcare professionals: is there ageism?

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Abstract

Background: Elderspeak is often used when talking to older individuals and is characterized by a slower and/or louder speech, a patronizing tone, etc. A part of the reason of such communication can be found in the actual context of ageism and so stigmatization linked to the age. However, the link between view of aging and elderspeak has never been studied.

Method: Participants were 20 physicians and 20 medical students. They had to record a podcast to explain an endocrine therapy to two fictional patients with breast cancer who differed only by their age (40 vs 70 years old). The speech characteristics (debit, number of words, etc.) of participants were analyzed and their view of aging was measured by two questionnaires.

Results: When participants explained the treatment to the older patient, they talked slower, used shorter utterances, fewer words and more repetitions. They also evoked fewer side effects such as sexual issues and skin dryness. Moreover, the reduction of length of utterances and of debit was observed for older patient when participants have a positive view of aging but for both patients (40- and 70-years old) when they have a negative view of aging.

Conclusion: Physicians and medical students used elderspeak when they explained a treatment to older patients. Participants with a more negative view of aging also unconsciously talked slower and made shorter utterances to a 40 year-old patient because they perceive her older than her chronological age, given that she suffered from cancer, a disease associated with old age.

Introduction

In daily life, communication with older individuals is often characterized by a slower and/or louder speech, simplified sentences and a patronizing tone. This kind of speech, called “elderspeak” (which is similar to “baby talk”) (Balsis & Carpenter, 2006; Caporael, 1981), is not without consequences for the elderly people, as it may make them feel powerless, and can lower their self-esteem (Ryan & Butler, 1996). In some ways, the message they receive is “you have difficulties hearing me and understanding me”. An experiment by Kemper and Harden (Kemper & Harden, 1999, experiment 2) illustrated some of the consequences of elderspeak. In this experiment, younger and older adults had a map in front of them and listened to someone who was giving them directions. They had to trace a route on 16 maps according to different instructions, after which they assessed their own communicative skills. The results showed that when elderspeak was used (i.e., pauses before and after key map directions, slow speech rate with prolongation of vowels), the older participants completed fewer maps correctly, made more deviations from the correct route and negatively assessed their own communicative skills. Thus, this experiment showed that elderspeak can reinforce stereotypes: when it is used, people make more errors, thus confirming that they do not clearly understand the instructions, which reinforces the interlocutor’s stereotypes (“an elderly is an individual with few communicative skills”). In this way, a negative feedback loop is created (Ryan & Butler, 1996). Another effect of elderspeak was shown in studies including people with dementia: such communication patterns increase resistance to care (e.g., object grabbing, crying, refusal, pushing away), in comparison to normal adult communication and silence (Williams, Herman, Gajewski, & Wilson, 2009). Although such results were observed in the context of dementia, the impacts of elderspeak on the acceptance of treatments have not been studied in other pathological realms such as oncology.

Besides these negative consequences, a few studies also found that speech accommodations associated with elderspeak may also have some positive effects, including better recall of information and increased communication effectiveness (e.g., a larger quantity of information can be provided in task instructions) in comparison to typical speech (Gould, Saum, & Belter, 2002; Kemper, Vandeputte, Rice, Cheung, & Gubarchuk, 1995). In order to benefit from elderspeak without its negative effects, Kemper and Harden (1999) validated a specific version of elderspeak that excludes

patronizing tone and focusses on the use of semantic elaboration (i.e., use of repetitions and expansions in order to add further information) and reduction of syntactical complexity (i.e., use of simpler, straightforward sentences). At the opposite, high pitch, short utterances and slow speaking rate do not benefit older adults in terms of their performance and/or may lead them to negatively assess their communicative abilities. This distinction between negative and positive effects of elderspeak was also observed in patients with Alzheimer's disease (Small, Gutman, Makela, & Hillhouse, 2003).

In this context, one major question remains: why is elderspeak being used if its consequences and efficacy are questionable? In reference to the Communication Predicament of Aging Model, such speech adjustments may derive from stereotypical views of older adults, who are seen as less competent communicators than younger persons (Ryan, Giles, Bartolucci, & Henwood, 1986). These stereotypes would explain why individuals tend to keep their conversation with older adults easy to understand, to the point where over-accommodation becomes evident and disturbing for the older interlocutor. Elderspeak is notably explained by the ageism observed in the actual social context: the most widely cited reason for discrimination in Europe is age and, more specifically, being over (only!) 55 years old (5% of respondents said they personally felt discriminated in 2015) (TNS Opinion & Social, 2015). Moreover, old people are particularly stigmatized on the basis of age (Butler, 1969), i.e. their interlocutors have a tendency to generalize to all older people what is only valid for a minority (Nelson, 2002). For example, louder tones are often used with all the elderly, whereas only one third of people over 65 years old have hearing issues (World Health Organization, 2015). Healthcare professionals are particularly vulnerable to ageist stereotypes since they are constantly exposed to ill elderly people ("An elderly person is an individual with bad physical and/or mental health") (Gaymard, 2006). Therefore, they are more likely to adopt negative stereotypes and attitudes toward older people (e.g., they might consider that old people are unable to adapt, boring, untidy), including older patients in oncology (Kearney, Miller, Paul, & Smith, 2000; Liu, While, Norman, & Ye, 2012). Indeed, older patients with cancer are often discriminated: most clinical trials (68%) do not include participants aged more than 65 years old (Murthy, Krumholz, & Gross, 2004). In addition, older oncology patients are generally undertreated. For instance, physicians recommend adjuvant chemotherapy for breast cancer in 99% of cases in 55-year-old patients, compared to only 60% in 76-year-old patients (Protière, Viens,

Rousseau, & Moatti, 2010). These differences are surprising given that “advanced” age alone should not be an exclusion criterion for treatments likely to improve quality of life (Hurria et al., 2012). Moreover, there is no evidence that elderly people are too weak to tolerate chemotherapy (Balducci, 2006), radiotherapy (Thompson et al., 2012) or surgery (Rogne et al., 2009). Rather, there is a need to adapt these therapeutic approaches to the elderly people (Balducci, 2006). Such observations are not limited to the curative measures but also extend to reconstructive interventions: in identical clinical situations, physicians in training recommend a breast reconstruction in 95% of cases for patients under 31 years old but only in 65% of patients over 59 (Madan, Aliabadi-Wahle, & Beech, 2001). Moreover, older patients with cancer express more dissatisfaction with healthcare providers’ communication and express the need for more comprehensible information from doctors and nurses (Romito, Corvasce, Montanaro, & Mattioli, 2011). Another study has shown that physicians provide less biomedical information and express less feelings with older patients (Siminoff, Graham, & Gordon, 2006). Such attitudes have prejudicial effects on the elderly who experience more anxiety, depression, and weaker psychological adjustments (Thorne, Bultz, Baile, & Team, 2005).

Even though these studies demonstrate discriminative attitudes toward older patients, they do not clearly establish the link with ageism among healthcare professionals in oncology. To our knowledge, only one recent study has shown that nurses are less supportive of breast reconstruction in older patients if they have a negative view of aging (Schroyen, Missotten, Jerusalem, Gilles, & Adam, 2015). This negative view of aging among healthcare professionals may be perceived by patients and have negative consequences: older patients report more physical pain, poorer mental health and decreased general satisfaction with their care (Mandelblatt et al., 2003). Similarly, when older breast cancer survivors perceive negative attitudes toward them from their healthcare providers, they report more negative beliefs about symptom management, experience more difficulties in communicating their symptoms and have a lower quality of life (Yeom & Heidrich, 2009).

Considering all the above observations, we can legitimately hypothesize that the way healthcare professionals talk to older people is linked to their view of aging: the more they adopt negative stereotypes, the more they might think that elderspeak is

useful (Ryan & Butler, 1996). However, to our knowledge, this link has never been clearly demonstrated. In this context, the present study has two objectives:

1. To analyze if healthcare professionals present more characteristics of elderspeak (positive as much as negative ones) when they explain a treatment to older patients, in comparison to younger ones.
2. To observe if characteristics of elderspeak (positive or negative) are more frequent in professionals who have a negative view of aging.

Method

Participants. Participants comprised 20 physicians and 20 medical students. The group of physicians included nine general practitioners and eleven specialists in different disciplines (e.g., geriatric, cardiology, gastroenterology, etc.). Medical students were in the 4th, 5th or 6th grade, or in assistantship. They were included if they had realized at the least one internship involving contacts with older patients.

Materials and procedures. This study was approved by the Ethic committee of the Psychology Faculty at University of Liège. First of all, we explained to participants that our aim was to test the efficiency of a new medium of communication of medical information. This new communication mode was a podcast that enabled patients to listen to medical explanations from their home. The participants received two clinical vignettes, written in collaboration with the oncologist in charge of the department, where it was explained that a patient had received a breast cancer diagnosis. The only significant difference between the two clinical cases was that the patient was either 40 or 70 years old. We also varied the formulation of the vignette and the size of the tumor (see Annex 1 for more details). These versions were counterbalanced and no differences were observed according to the version (order, formulation and size tumor). The participant's task was to explain an endocrine therapy and its potential side effects. In order to put all participants on an equal footing, the treatment's main side effects were listed at the end of the vignette. They had 10 minutes to prepare their explanations for these two vignettes, at the end of which the experimenter sat next to them and registered the podcast. They had unlimited time and were free to give as much information as they wanted. Records (mp3 files) were then entirely transcribed by the experimenter to facilitate the analyses (see below, linguistic analyses); a second researcher independently verified the transcripts. After recording the two podcasts,

participants completed anamnestic information. They were also asked one question assessing their conception of “old age”: “according to you, at what age do we stop being young?”. They also completed two scales to assess their view of aging, namely the French version of the Fraboni Scale of Ageism –Revised (FSA-R) (Boudjemad & Gana, 2009) and the “Aging Semantic Differential” (ASD) (Intrieri, Von Eye, & Kelly, 1995), translated into French (Boudjemadi, 2009). The FSA-R contains 14 items expressing prejudices related to ageing (e.g., “*Many old people just live in the past*”). For each statements, participants respond using a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The ASD consists of 26 pairs of opposite adjectives associated with stereotypes on older people (for instance “*older adults are....1 = “independent” and 7 = “dependent*”). Subjects are instructed to rate their agreement with these sentences on a scale ranging from 1 to 7. For these two scales, we used a total score where higher results represented more negative views of aging. Finally, participants completed the French scale of social desirability questionnaire (DS36) (Tournois & Kop, 2000), containing 36 items with a Likert-type scale ranging from 1 (*absolutely false*) to 5 (*absolutely true*). Two scores were calculated: one of self-deception (for instance, “*I’m always optimistic*”) and one representing deception of others (for instance, “*Sometimes, I distort the truth*”). High scores in this scale meant, respectively, a high tendency to lie to oneself in good faith (self-deception) or to consciously lie to others (deception of others).

Linguistic analyses. Speech characteristics were assessed with different measures inspired by those of Kemper et al. (Kemper et al., 1995). Verbal fluency was quantified with several variables, using the “Web-based L2” software (Lu, 2010): number of words and utterances, mean length of utterances (MLU; i.e., the number of words per utterance), and speaking rate in words per minute; i.e., the debit). The “Web-based L2” software was also used to evaluate grammatical complexity, through the extraction of the mean number of clauses per utterance (MCU; a clause being defined by the smallest grammatical unit that can express a complete proposition (Kroeger, 2005)). Semantic content was analyzed with two measures: (1) lexical diversity, assessed by token ratios of the number of different words and the total number of words with the help of the “Calculis” software (Calculis, 2013) and (2) by the number of repetitions of the same idea, which were manually calculated (e.g., repetition of the necessity to take a pill per day). Vocal characteristics, extracted with the PRAAT

software (Boersma & Weenink, 2013), included the highest pitch, the lowest pitch and the pitch range (i.e., difference between the highest and the lowest pitch). The mean pitch was also assessed on the totality of the record. In addition, the total duration of the record was also encoded for analyses.

The way participants described each possible side effects (i.e., 6 side effects explained in clinical vignettes: hot flashes, joint pain, sexuality issues, skin dryness, hyperplasia and thromboembolic diseases) was also analyzed. For this purpose, we created two categories: (1) when participants directly approached the topic (e.g., “you may feel hot flashes”); and (2) when participants did not mention the symptom or minimized it (e.g., “some hot flashes...you certainly experience them during the menopause. However, we live with that and they generally disappear very easily”). The analysis was conducted independently by two judges. If a discrepancy was observed, a third judge made the final decision. Moreover, for each participant, we created a total score for the number of side effects (range: 0-6) evoked when speaking to the young and older patient. A side effect was counted only when it belonged to the first category (i.e. participants directly approached the side effect). Lastly, we computed the alternative solutions and the potential support resources evoked by each participant (e.g., possibility of pain relief, asking the patient if he has any questions, etc.) and combined these two parameters in a total score.

Statistical analyses. Descriptive analyses were used to characterize the sample. Paired *t*-tests were used to compare speech characteristics in relation to patient’s age (40 vs 70 years old). In accordance with methods of Kemper and Harden (1999), we distinguished: (1) characteristics seen as positive, i.e. that may improve the performance of the elderly (MCU and repetition) and (2) characteristics seen as negative, i.e. that may decrease their performance (MLU, debit and pitch). The remaining characteristics (i.e., number of words and utterances, lexical diversity, total duration) were considered as general. Paired *t*-test were also used to compare the descriptions of the side effects (number of evoked side effects) and the number of proposed solutions. McNemar tests were conducted for dichotomous measures (presence vs. absence of communication of each side effect for the 40- and a 70-year-old patient). The differences of healthcare professionals’ communication that could be related to their view of aging were firstly assessed with correlation analyses. Then, each measure characterizing the view of aging was dichotomized at the mean, creating groups with more positive and negative views

of aging (29.3 for the FSA-R and 103.17 for the ASD). On this basis, we performed ANOVAs with repeated measures but only for the variables that statistically differed between the older and younger patient (except the dichotomous ones). Characteristics of participants linked to aging view were included as covariates. Given that sphericity was not respected, the Greenhouse-Geisser correction was applied. For the description of each side effect (dichotomous measures), we performed a Chi-square test. In this perspective, we created two categories for each side effect: (1) participants had the same behavior for a 40- or a 70-year-old patient (i.e., they mentioned the symptom to both patients or avoided it for both); and (2) participants had a distinct behavior depending on the patient's age: they mentioned the symptom to the 40-year-old patient but not to the 70-year-old (it happened only once that a participant communicated a symptom to the 70 year-old patient - skin dryness - but not to the 40-year-old).

Results

Characteristics of participants. The mean age of participants was 37.4 years (see table 1). Physicians had an average of 23 years of experience and individuals over 65 years represented a significant proportion (45%) of their patients. Participants thought that individuals stopped being young at 47 years old.

Table 1.

Characteristics of participants.

<i>Sociodemographic data</i>	
Gender (n women) (% women)	21 (52.5)
Age (mean \pm SD) (min., max.)	37.4 \pm 16.8 (22, 69)
Years of experience of physicians (mean \pm SD) (min., max.)	23 \pm 12.1 (2, 39)
Proportion of patients over 65 years old (mean \pm SD) (min., max.)	44.7 \pm 24.2 (5, 100)
<i>Social desirability</i>	
Self-deception (18-126) (mean \pm SD) (min., max.)	75.5 \pm 15.8 (45, 111)
Deception of others (18-126) (mean \pm SD) (min., max.)	78.2 \pm 11.7 (57, 107)
<i>Conception of "old age"</i>	
Age when people stop being young (mean \pm SD) (min., max.)	46.8 \pm 16.6 (25, 80)
<i>View of aging</i>	
FSA-R (14 – 70) (mean \pm SD) (min., max.)	29.3 \pm 6.6 (16, 44)
ASD (26 – 182) (mean \pm SD) (min., max.)	103.2 \pm 14.2 (57, 131)

We compare the FSA-R and ASD scores of our participants to those obtained in a previous French study conducted in the general population (respectively, $M = 31.06$ and 103.63 , $SD = 2.16$ and 18.17 , $n = 284$ and 120) (Boudjemadi, 2009): according to the FSA-R test, our participants had a more positive view of aging ($p < .001$) than that reported in the Boudjemadi's study, but according to the ASD test, their view of aging (ASD test) was similar to that of the general population ($p = .87$). FSA-R scores of our participants were also similar to those reported for other healthcare professionals (nurses in oncology; $M = 27.83$, $SD = 4.27$, $n = 76$, $p = .15$) (Schroyen et al., 2015). When view of aging was analyzed in relation to conception of old age, we observed a correlation between the age at which participants thought that people stopped being young and the ASD test: younger ages for the end of youth were associated with a more negative view of aging ($r = -.4$, $p < .01$). However, no correlation was observed with the FSA-R ($r = -.14$, $p = .42$).

Were speech characteristics and side effects' descriptions different when participants talked to an old vs a young patient? About general characteristics, the number of words was smaller when participants talked to the older patient, but the number of utterances, lexical diversity and duration of the explanation showed no differences between the old and the young patient (see table 2). Concerning positive characteristics, even if we did not observe any difference concerning grammatical complexity (MCU), we counted more repetitions for the older patients. By contrast, we observed a reduction of the debit and shorter MLU when participants talked to the older patient in comparison to the younger one, two characteristics which are associated with negative consequences on patients. Nonetheless, the pitch were similar for the two patients.

Table 2.

Characteristics of speech directed to a 40- or 70-year-old patient.

<i>Characteristics</i>	<i>Mean (SD) for a 40- year-old patient</i>	<i>Mean (SD) for a 70- year-old patient</i>	<i>t (p)</i>
<i>General characteristics</i>			
Number of words	369.6 (161.2)	344.55 (161.96)	-2.04 (.048)*
Number of utterances	12 (5.31)	12.65 (5.53)	1.23 (.23)
Total duration	130.37 (46.37)	124.6 (53.13)	-1.36 (.18)
Lexical diversity	0.58 (0.08)	0.59 (0.08)	.57 (.57)
<i>Positive characteristics</i>			
MCU	2.1 (0.45)	2.33 (2.41)	.78 (.44)
Repetitions	1.4 (1.37)	2.07 (1.87)	3.13 (.003)**
<i>Negative characteristics</i>			
MLU	32.47 (10.81)	27.64 (7.15)	-3.17 (.003)**
Debit	165.44 (26.81)	159.71 (26.58)	-2.30 (.027)*
Highest pitch (Hz)	462.12 (56.71)	461.29 (56.71)	-.10 (.91)
Lowest pitch (Hz)	72.99 (8.63)	72.06 (4.96)	-.94 (.35)
Pitch range (Hz)	389.12 (58.06)	389.23 (58.06)	.01 (.99)
Mean pitch (Hz)	164.32 (43.99)	165.97 (44.96)	1.90 (.065)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. MLU, mean length of utterance; MCU, mean number of clauses per utterance.

Concerning the description of side effects (see table 3), the number of proposed solutions had a tendency to be smaller for the older patients and the number of total evoked side effects was smaller when participants talked to an older patient compared to a younger one. More specifically, we observed two significant differences directed to the old and young patients: when they talked to the older patient, participants tended to avoid the subject of sexuality and the symptom of skin dryness, or were more likely to minimize the consequences, in comparison to the younger patient. The description of other symptoms did not significantly differ between the 40- and 70-year-old patients.

Table 3. Classification of side effects' description for the 40- and 70-year-old patient.

	Mean (SD) for a 40-year-old patient		Mean (SD) for a 70-year-old patient		<i>t</i> (<i>p</i>)
Number of evoked side effects	4.37 (1.48)		3.62 (1.81)		3.6 (.001)***
Number of solutions proposed	1.77 (1.29)		1.47 (1.22)		1.9 (.057)
	n (%) for a 40-year-old patient		n (%) for a 70-year-old patient		<i>p</i>
	<i>Approached the symptom</i>	<i>Did not mention or minimized the symptom</i>	<i>Approached the symptom</i>	<i>Did not mention or minimized the symptom</i>	
Hot flashes	35 (87.5)	5 (12.5)	28 (70)	12 (30)	.065
Joint pains	35 (87.5)	5 (12.5)	34 (85)	6 (15)	1
Sexuality issues	35 (87.5)	5 (12.5)	21 (52.5)	19 (47.5)	<.001***
Skin dryness	31 (77.5)	9 (22.5)	24 (60)	16 (40)	.039*
Hyperplasia	26 (65)	14 (35)	23 (57.5)	17 (42.5)	.22
Thromboembolic diseases	16 (40)	24 (60)	16 (40)	24 (60)	1

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Were differences of speech characteristics between the old and young patients linked to participants' view of aging? Participants' age, years of experience, proportion of older patients and self-deception scores were not linked to their view of aging (*all* $r < .2$, $p > .2$). However, a correlation between the gender and the FSA-R ($r = .29$, $p = .02$) and between the deception of others and the ASD ($r = -.35$, $p = .03$) was found, indicating respectively, that men had a more negative view of aging than women, and that a high tendency to lie to others was linked to a positive view of aging. In consequence, the gender and the deception of others were included as covariates for analyses of the link between elderspeak and view of aging.

No matter the measure related to the view of aging, analyses showed no link between ageism and number of words, repetitions, evoked side effects, solutions and

description of side effects (all $p > .23$). However, an interaction between the participant's view of aging and patient's age was observed for MLU when it was measured with the ASD [$F(1, 36) = 4.35, p = .044, \eta^2 = .11$] but not with the FSA-R [$F(1, 36) = 1.98, p = .17, \eta^2 = .052$]. For the debit, the interaction was significant when the view of aging was measured with the FSA-R [$F(1, 36) = 8.14, p = .007, \eta^2 = .18$] but not when it was measured with the ASD [$F(1, 36) = 1.91, p = .18, \eta^2 = .05$]. Planned comparisons showed that the MLU and debit were the same for both patients when participants had a negative view of aging (all $p > .21$). However, participants with a more positive view of aging presented longer MLUs and faster debits for the younger patient, in comparison to the older patient [respectively, $F(1, 32) = 15.67, p < .001$ and $F(1, 32) = 9.65, p < .01$] (see Figure 1 and 2). We also noted that, for older patients, the MLU and debit were not associated with participants' view of aging ($p > .28$), but MLU was shorter and debit was slower for younger patients when participants had a negative view of aging (in comparison to those with a more positive view) [respectively, $F(1, 32) = 6.84, p = .01$ and $F(1, 32) = 8.55, p < .01$].

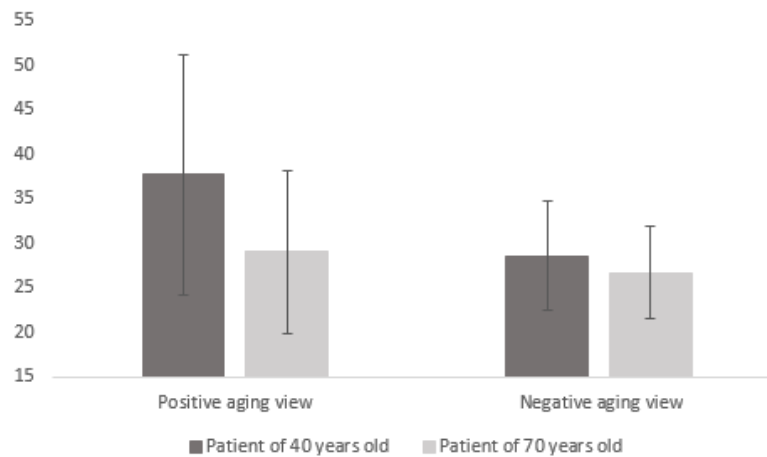


Figure 1. Score of MLU in relation to patients' age and participants' view of aging (ASD test).

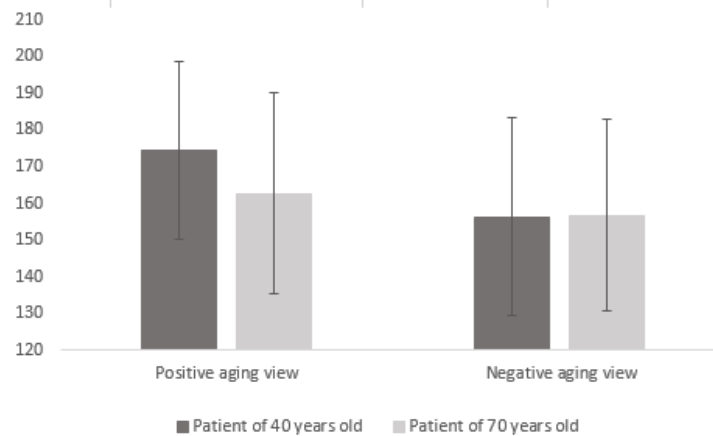


Figure 2. Debit in relation to patients' age and participants' view of aging (FSA-R test).

Discussion

“Elderspeak” is often used when talking to older adults. This kind of speech is characterized, for example, by simplified sentences, more repetitions, a lower speech rate, a louder voice and a patronizing tone (Caporalet, 1981). It is associated with many negative consequences for older people, as it may decrease their self-esteem or confidence in their own skills (Ryan, Bourhis, & Knops, 1991). In this context, it seems particularly important to assess the frequency and features of this kind of speech among healthcare professionals, given their regular interactions with elderly people. In this study, 20 physicians and 20 medical students were asked to record a podcast in order to explain a treatment to a 40- and to a 70-year-old patient. The two main aims were: (1) to analyze if more characteristics of elderspeak (positive as much as negative ones) were observed when participants had to explain a treatment to older patients, in comparison to younger ones; (2) to observe if participants with a more negative view of aging used more characteristics of elderspeak (positive or negative) than participants with a more positive one.

In relation to the first objective, we found four differences in speech characteristics: participants used fewer words, shorter utterances, talked slower and made more repetitions with an older patient, in comparison with the younger patient. These results are similar to those found in previous studies conducted in the general

population (Kemper, Ferrell, Harden, Billington, & Finter-Urczyk, 1998; Kemper et al., 1995). However, in contrast to these studies, we did not find any difference in the number of utterances, grammatical complexity, lexical diversity and the pitch, which remained the same regardless of the patient's age. Some of these differences related to the patient's age, such as repetitions, may benefit older adults without sounding patronizing, and are thus being seen as a positive characteristics of elderspeak (Kemper and Harden 1999). However, shorter MLU and slower debit may lead older individuals to negatively assess their own communicative competences and impair their comprehension (Kemper & Harden, 1999). However, as us, one study did not find any differences on the pitch (Kemper et al., 1995). When podcasts' contents were analyzed, we observed that participants less frequently evoked possible side effects (or minimized their consequences), especially those related to the reduction of libido and skin dryness. This minimization of effects on libido (or the avoidance of the topic) is not really surprising. Indeed, in the collective imagination, sexual activity stops when people reach old age (Bondil, 2008). Even people with a positive opinion about sexuality among elderly are still feeling discomfort when this topic is addressed (Mahieu, Van Elssen, & Gastmans, 2011). Also, our results showed that healthcare professionals had a tendency to evoke fewer solutions to side effects. Even though few studies had analyzed the content of communications between healthcare professionals and patients, their results are in line with ours. Indeed, it had been shown that physicians in oncology provide less biomedical information to older patients (Siminoff et al., 2006). These observations are problematic given that 95.5% of older patients would like to know all the possible side effects of their treatments (Jenkins, Fallowfield, & Saul, 2001). Moreover, if a side effect is not explained or minimized, patients may be afraid that it will not be treated. Such assumption is supported by the fact that the elderly are globally less treated than younger patients, in terms of breast reconstruction or chemotherapy (Madan et al., 2001; Protière et al., 2010).

In order to achieve the second objective, we have analyzed the association between clinicians' communication and their view of aging. We hypothesized that more characteristics of elderspeak would be observed in communications directed to the older patient, especially among participants with a more negative view of aging. However, we obtained somewhat mixed results. Indeed, participants with a more positive view of aging made shorter utterances and talked slower to a 70-year-old patient in comparison

to the 40-year-old patient. By contrast, we observed that participants with a negative view of aging also made shorter utterances and talked slower to the 70-year-old patients, but these characteristics were also present when addressing the 40-year-old patients. This result, which can be surprising at first sight, can be explained in different ways. In participants with a more positive view of aging, it seems that the communication with a 40-year-old patient can be qualified as “normal” and might be considered as the standard of comparison. However, characteristics of elderspeak were also present for the older patient in this group. In view of our hypothesis, such results have to be nuanced and contextualized. Indeed, negative age stereotypes are omnipresent and actually outnumber positive age stereotypes in our society. Consequently, a “more positive” view of aging is still associated with some negative feelings or beliefs about aging and should be regarded as a “less negative” view of aging (Cuddy, Norton, & Fiske, 2005). Thus, in our study, the expression “more positive view of aging” makes reference to participants with a less negative view of aging, in comparison with a second group. In this second group (more negative view of aging), participants used elderspeak for the 70- as well as for the 40-year-old patient. This result may indicate that participants using elderspeak with the 40-year-old patient unconsciously see this patient as older than her chronological age, given her disease (i.e., a cancer), which is associated with old age. Indeed, age is a well-recognized risk factor for cancer (Hurria et al., 2012): it is estimated that, in 2030, 70% of diagnosed cancers in the United States will affect people over 65 years old (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009). In other words, middle-aged patients in whom a tumor is discovered may suddenly “become older” in the eyes of clinicians with a more negative view of aging, which leads them to unconsciously adapt their speech.

Two arguments support our interpretation. The first one is derived from our data, showing that participants with a more negative view of aging consider that youth ends earlier, compared to participants with a more positive view of aging. More precisely, the group with a more positive view of aging (according to the ASD test) thought that youth ended at 51.6 years old ($SD = 20.55$), whereas the group with a more negative view of aging reported that it ended at 43.5 years old ($SD = 12.68$), which is very close to the age of our younger patient. The second aspect is derived from results of a short experience conducted in our laboratory (blinded for review). In a sample taken from the general population ($n = 80$, M age = 24.36, $SD = 11.78$), we asked participants to assess

the age of a woman on the basis of her face. The woman was 36 years old; in half of the participants, only the face was presented. For the other half, the same face was described as representing a woman who had just received a cancer diagnosis. Our results showed that the same face was judged as older if it was associated with an individual suffering from cancer, in comparison to the group with no description (respectively, $M = 33.78$, $SD = 4.14$, and $M = 31.28$, $SD = 4.48$; $F(1, 79) = 6.78$, $p = .01$). To sum up, these elements seem to indicate that patients (and even young or middle-aged adults) suffering from cancer are perceived as older, and that physicians with a more negative view of aging may already apply characteristics of elderspeak with this patient. However, further studies are necessary to confirm the main results of the present study and our interpretations. For instance, it would be interesting to add another clinical case to the two that were tested, such as a 20-year-old patient. In this case, communication should not include elderspeak characteristics, regardless of participants' view of aging. Moreover, other clinical cases could be included, such as 40- or 70-year-old patients suffering from influenza, a pathology that is less associated with aging. In this context, an ageist communication would be expected for professionals with a more negative view of aging who speak to the 70-year-old patient suffering from influenza, but not with the 40-year-old individual. These issues are essential, as we know that a poor communication can have deleterious consequences for health outcomes (Greene & Adelman, 2003). Moreover, we could analyze if older people are more likely to accept a treatment when it is explained without adaptations related to age, or with positive characteristics of elderspeak, in comparison to explanations with negative elderspeak characteristics. Ultimately, intervention aimed at healthcare professionals may be necessary to improve their communication strategies with patients, especially since some studies have already demonstrated the impact of these strategies (Williams, 2006).

Finally, some limitations of the present study need to be mentioned. First of all, the sample was quite small and heterogeneous (physicians with different specialties, medical students). It would be interesting to reproduce this study with a group comprising only oncologists, as they are more accustomed to explain endocrine therapy to patients of all ages and, therefore, may be more spontaneous in their explanations. Moreover, it may be unnecessary to give a list of possible side effects: in this way, explanations would be more varied, allowing for a deeper analysis of symptoms'

description. Also, the communication medium chosen in this study was quite unusual for our participants. Some of them reported some difficulties in putting themselves in the scenario. Moreover, the age was only evoked by writing in the clinical cases, which is different from the usual clinical context, in which the patient is present, and his age characteristics can be seen. It is likely that this kind of podcast communication underestimated the elderspeak. We could expect that elderspeak would be more pronounced in face-to-face situations. Future studies, using role-playing with actors simulating patients, could conduct to stronger results.

Conclusion

In conclusion, physicians and medical students adapt their speech when they explain a treatment to older patients. In comparison to their communication approach with a 40-year-old patient, participants used fewer words and shorter utterances, spoke slower, and made more repetitions with a 70-year-old patient. Moreover, some side effects were less frequently mentioned or their consequences were minimized when explanations were directed to the 70-year-old patient. Some of these adjustments can be linked to how the clinician perceived aging: clinicians with a more positive view of aging view limited elderspeak to their communications with the 70-year-old patient. However, clinicians with a more negative view of aging, used elderspeak for both (40- and 70- year-old) patients.

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Appendix.

Clinical Case A1/A2. Ms Martine Dubuisson, aged 40/70-year-old (02/03/1974 or 26/07/1944) suffers from breast cancer: T1b (1 cm of diameter), without ganglionic infiltration, proliferation marker KI67 low (< 5%), HER2 negative, expressing estrogen and progesterone receptors (100% of cells, largest intensity). She actually lives with her husband and has two children. The multidisciplinary commission has decided a treatment by hormonotherapy with Tamoxifène 20 mg, 1 pill per day. She knows her diagnosis but the treatment and its effects have to be explained.

Clinical Case B1/B2. Ms Dominique Dubois is 40/70 years old (02/03/1974 or 26/07/1944). She lives at home with her husband and has two children. A few months ago, a suspicious mass has been detected during a preventive check-up. Biological results revealed a breast cancer T2 (3 cm of diameter) without ganglionic infiltration, proliferation marker KI67 low (< 5%), HER2 negative, expressing estrogen and progesterone receptors (100% of cells, largest intensity). This diagnosis has been explained to her. She will be treated by hormonotherapy with tamoxifène 20 mg, 1 pill per day: this treatment (modalities and effects) has to be explained to her.

Hormonotherapy. Main side effects of Tamoxifène: hot flashes, articular pain essentially on the start, reduction of libido, skin and vaginal mucus dryness, endometrial hyperplasia with risk factors in the development of a polyp or even a malignant degeneration justifying a regular gynecological follow-up, thromboembolic disease on very rare occasions. Other elements to know: daily intake, with or without lunch; total duration of 5 years; reduction of relative risk of relapse is 50 %.

**ARTICLE 4 - The link between self-perceptions of aging,
cancer view and physical and mental health of older people
with cancer.**

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Abstract

Objectives: Older people may suffer from stigmas linked to cancer and aging. Although some studies suggested that a negative view of cancer may increase the level of depression, such an association has never been studied in the elderly population. Similarly, even though it is established that a negative self-perception of aging has deleterious consequences on mental and physical health in normal aging, the influence in pathological contexts, such as oncology, has not been studied. The main aim of this study is thus to analyze the effect of these two stigmas on the health of elderly oncology patients.

Materials and Methods: 101 patients suffering from a cancer (breast, gynecological, lung or hematological) were seen as soon as possible after their diagnosis. Their self-perception of age, cancer view and health (physical and mental) were assessed.

Results: Multiple regressions showed that patients with a more negative self-perception of aging and/or more negative cancer view reported poorer global health. We also observed that negative self-perception of aging was associated with worse physical and mental health, whereas negative cancer views were only linked to worse mental health. No interaction was observed between these two stigmas, suggesting that their action is independent.

Conclusion: Older oncology patients face double stigmatization, due to negative self-perception of aging and cancer, and these stigmas have impacts on global and mental health. Self-perception of aging is also linked to physical health. These two forms of stigmatization are discussed in view of the development of specific therapeutic approaches.

Introduction

Cancer is a major health problem that is widespread in elderly people: it is estimated that in 2030, 70% of cancers in the United States will affect patients older than 65 years (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009). Although the treatments, survival rates and management of adverse effects have improved, this pathology is still associated with very negative ideas (Clarke & Everest, 2006). A very recent study shows that healthy people of all ages recognize that many patients survive and can have a normal life thanks to medical advances, but they are deeply afraid of the disease and associate it with ideas of death and trauma (Robb, Simon, Miles, & Wardle, 2014). These negative perceptions need to be taken into account, as they can have deleterious effects on cancer patients. For example, a study showed that cancer survivors who have more negative attitudes towards cancer (i.e., thinking that recovery is impossible, holding stereotyped views of themselves and having experienced discrimination) are 2.5 times more likely to be depressed than patients having more positive attitudes (Cho et al., 2013). In lung cancer specifically, there are strong associations between stigma, depression and quality of life: patients with more cancer stigma, whether they are smokers or not, were more depressed and report a lower quality of life than those who felt less stigmatized (Cataldo, Jahan, & Pongquan, 2011). Moreover, an association between more lung cancer stigmas and more important symptoms was found (Cataldo & Brodsky, 2013).

These studies suggest that older people suffering with cancer might be negatively affected by cancer stigmas. Moreover, they might also experience negative attitudes, stereotypes and feelings that can be related to ageism (Butler, 1969). Indeed, in our modern societies, the view of aging is mainly negative; the elderly are seen as weak, intolerant to changes, cognitively impaired, etc. (Nelson, 2005). A gripping illustration of ageism's magnitude is that the most widely cited reason for discrimination in Europe is age and, more specifically, being over 55 years old (5% in 2015) (Social, 2015). An analysis of American texts written between 1810 and 2010 showed that these age stereotypes became more and more negative over time (Ng, Allore, Trentalange, Monin, & Levy, 2015).

If the actual social context is ageist, negative perceptions of aging may even be reinforced in health professionals, as they are constantly exposed to ill, dependent and vulnerable older patients, a work context that can influence their caring attitudes

(Gaymard, 2006). In particular, age discrimination has been demonstrated in research and clinical settings in the field of oncology: elderly are often excluded from clinical trials (Hurria et al., 2012), have less breast reconstruction (Madan, Cooper, Gratzer, & Beech, 2006) and are under-treated in comparison to younger patients (Peake, Thompson, Lowe, Pearson, & Participating, 2003). In a recent study, we have shown that the likelihood to support a breast reconstruction in a 75-year-old patient is linked to the healthcare professional's view of aging: the worse is their view of aging, the less they will support breast reconstruction (S. Schroyen, Missotten, Jerusalem, Gilles, & Adam, 2015). Such pejorative attitudes were also identified by elderly people themselves: some patients said that they experienced mistreatment or neglect due to their age (Thomé, Esbensen, Dykes, & Hallberg, 2004). These negative attitudes have important consequences for patients: indeed, when old patients suffering from breast cancer perceived a high level of ageism among professionals, they encountered more physical pain, had poorer mental health, and lower general satisfaction with the care they received (Mandelblatt et al., 2003). In the same vein, older breast cancer survivors with more negative beliefs about symptom management perceived that health-care providers had negative attitudes towards them; they also reported experiencing difficulties when communicating their symptoms and had a lower quality of life (Yeom & Heidrich, 2009).

Although health-care professionals' attitudes towards older people and their consequences on older patients in oncology have been approached by some (but rare) studies, to our knowledge, none of them have considered the impact of patients' attitudes towards their own aging. Nevertheless, in one a study involving patients older than 80 years (Stewart, Chipperfield, Perry, & Weiner, 2012), participants were questioned about the cause of their chronic illness (i.e., heart disease, cancer, diabetes, etc.). They had to rate their agreement with causal attributions including "genetics", "unhealthy behaviors", "bad advice of a doctor", "bad luck" and "old age". Results showed that the more participants attributed their chronic illness to old age, the more they perceived physical symptoms and neglected health maintenance behaviors. Attributions of chronic illness to old age were also associated with a higher probability of mortality at a two-year follow-up. Thus, this study was the first to evoke the notion of self-perception of aging amongst patients ("I think diseases are normal with aging").

This lack of research focusing on the self-perception of aging in older patients is in sharp contrast with the amount of studies conducted in the general population. These studies have demonstrated negative consequences of ageism on older people's physical and mental health. Indeed, according to the theory of the stereotype embodiment, stereotypes internalized throughout life may have deleterious effects on physical and mental health when one becomes older (i.e. the target of these stereotypes) (Levy, 2009). For example, many longitudinal studies have shown that individuals with an initial negative vision of aging (in comparison to those with a more positive one) tend to have worse physical health with age and even a reduced probability of survival (Levy, Slade, & Kasl, 2002; Levy, Slade, Kunkel, & Kasl, 2002; Levy, Zonderman, Slade, & Ferrucci, 2009, 2012). This relationship between ageism and accelerated decline of physical and mental health is notably explained by the fact that people with a negative view of aging were less likely to engage in healthy behaviors (e.g., healthy diet, using seatbelts, doing physical exercise, etc.) (Levy & Myers, 2004). Another explanation could be that ageism influences the will-to-live. Indeed, two experimental studies (Levy, Ashman, & Dror, 2000; Marques, Lima, Abrams, & Swift, 2014) showed that older participants primed with negative aging stereotypes tended to refuse life-prolonging interventions more often compared to participants primed with positive aging stereotypes. In sum, having a negative view of aging or being exposed to negative aging stereotypes leads people to care less about their own health ("What's the point?"), which in turn increases their risk of developing diseases and reduces their life expectancy. Regarding the importance of such negative effects of ageism on aged people, we can reasonably ask ourselves what this impact applies in a pathological context as oncology; with the assumption that it would be worse!

To sum up, patients in oncology may suffer from two kinds of stigmas: cancer stigma and ageism. To our knowledge, no study has analyzed the impact of self-perception of aging in the specific realm of oncology. Moreover, none study has analyzed the cancer vision of older patients specifically, or the impact of these two kinds of stigmas together. Consequently, the objective of this study is to determine to what extent self-perceptions related to aging and cancer are associated with health (physical and mental) outcomes in patients with cancer. We expect that a negative self-perception of aging will be associated to a worse physical and mental health (Chachamovich, Fleck, Laidlaw, & Power, 2008; Levy, Slade, & Kasl, 2002). In the

same way, a negative view of cancer would be associated with a poorer mental and physical status (Cataldo & Brodsky, 2013; Cataldo et al., 2011; Cho et al., 2013; Weiss, Ramakrishna, & Somma, 2006; Yeom & Heidrich, 2009). Ultimately, we aim to clarify whether there is a “double stigmatization” or “a simple stigmatization”; in other words, an effect of age stigmatization in addition to the effect of cancer stigmatization or, in the opposite one form of stigmatization interrelated to the other (for example, a negative vision of cancer generates a negative self-perception of aging). This question is especially important in a therapeutic approach: an improvement of one stigma can it be linked to an improvement of the other or do we have to work on these two kinds of stigmas independently?

Method

Participants. 141 candidates were identified thanks to a collaboration between the Department of Medical Oncology of the CHU Sart Tilman Liège University Hospital (Belgium) and the Psychology of Aging Unit of the University of Liège. To be eligible, patients had to be older than 65 years, have a sufficient knowledge of French, suffer from a cancer (breast, lung, gynecological or hematological cancer), not to have a formal diagnosis of dementia and have a treatment planned (i.e. surgery, chemotherapy or radiotherapy). We included all stages of cancer, from the time of initial diagnosis to relapse; these parameters were controlled in the analyses. Of the 141 patients, 27 (19.1%) refused to participate⁴ and 13 (9.2%) were dropped due to missing data (as soon as there was one missing item in the whole protocol, the patient was excluded). Analyses were thus conducted on 101 patients (M age = 73.29; SD = 6.21) suffering from a breast (n = 47; 0 man), gynecological (n = 25; 0 man), lung (n = 24; 15 men) or hematological cancer (n = 5; 2 men). A member of the research team (a data manager, a master and a PhD Student in Psychology) saw them as soon as possible after the diagnosis (in average, 34.7 days after diagnosis) during a period of hospitalization. None of them had received radiotherapy, 45 had surgery and had been seen on average 10.5 days after it and 6 had received chemotherapy, which had begun in average 43 days before the testing. No differences on aging and cancer stigmas were observed between patients who have begun a treatment and those who had not (all p > .237).

⁴ The repartition in terms of age, gender and kind of cancer for the group of excluded patients was similar to the group of patients included in the study.

Written informed consent was obtained from the patients. This study was approved by the local Ethics Committees (University Teaching Hospital of Liège, Faculty of Psychology of the University of Liège).

Measures.

- *Demographics and medical information.* Data were collected on age, sex, educational level and civil status. Medical information (e.g., kind and stage of cancer, number of comorbidities...) were obtained through medical records.
- *Cognitive level,* assessed with the French version of the *Mini Mental State Examination* (MMSE) (Kalafat, Hugonot-Diener, & Poitrenaud, 2003), measuring the orientation, learning, attention, memory, language and constructive praxis.
- *Self-perception of aging,* measured by the *Attitudes to Aging Questionnaire* (AAQ) (Laidlaw, Power, Schmidt, & Group, 2007), translated and validated in French (Marquet et al., 2016). This scale was specifically developed to flexibly and comprehensively assess attitudes toward the aging process as a personal experience from the perspective of older adults. For the 24 items of the scale ($\alpha = .78$, e.g. “I see old age mainly as a time of loss”), participants responded on a five-point Likert-type scale ranging from 1 (*strongly disagree/not at all true*) to 5 (*strongly agree/extremely true*). Even if this scale can be divided into three subscales, in the present study we only used the total score (range: 24- 120): a high score reflects more positive self-perception of aging.
- *Cancer view,* assessed by the *Social Impact Scale* (SIS) (Fife & Wright, 2000), translated in French. This scale measures the individual’s perception of being stigmatized. Some items were slightly modified in order to adapt them to the elderly: two items related to the work place were rephrased in order to refer to “useful activities (voluntary work, baby-sitting...)” rather than paid activities. This scale comprises 24 items ($\alpha = .87$, e.g. “Some people act as though I am less competent than usual”) answered using a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). As for the AAQ, even if this scale can be divided in four subscales, we only used the total score (range: 24- 96). Originally, a high score indicates a high feeling of being stigmatized. However, in order to simplify the reading of results, the score has been reversed:

a high score indicates a lower level of stigma, similarly to the scale of self-perception of aging.

- *European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 (EORTC QLQ-C30)*. This 30-items instrument measured the quality of life of elderly suffering from cancer (Aaronson et al., 1993). In agreement with Giesinger et al. (Giesinger et al., 2016), we excluded one item measuring financial difficulties and two items measuring the global quality of life. On this basis, a summary score of global health was calculated ($\alpha = .9$). It includes 5 functioning scales (physical, role, emotional, cognitive and social functioning), three symptomatology scales (nausea and vomiting/fatigue/pain) as well as with 5 separate items (dyspnoea, insomnia, appetite loss, constipation, diarrhoea). All scores are transformed into a 0-100 scale. A higher score indicates a better health. Moreover, for conceptual matters, we have distinguished physical and mental health (as distinguished by Gundy et al., 2012). For physical health ($\alpha = .89$), we have included the following parameters: (1) the physical and role functioning scales; (2) symptoms scales and single separate items. For mental health ($\alpha = .78$), we have included the emotional, social and cognitive functioning scales.

Data analyses. Data analyses were performed using SPSS. At first, descriptive analyses were used to report sample characteristics as well as physical and mental health parameters of participants. Then, separate multiple regressions were conducted for global, physical and mental health. We included the centered measure “self-perception of aging” and “cancer view” as well as a two-way interaction term “Self-perception of aging x Cancer view” to explore if the effects were additive or dependent on each other. Age, gender, educational and cognitive level, comorbidities and characteristics of cancer (kind, stage and site) were used as covariates. For all analyses, statistical significance was fixed at $p < .05$.

Results

Sample characteristics. Patients’ characteristics are presented in Table 1. Their mean age was 73.29 years old and 83.2% were women. The most common cancer was breast cancer and for the majority of patients, it was an initial cancer (87.13%) with no metastases (80.2%).

Table 1

Characteristics of participants (n = 101)

Characteristics		n (%)	Mean \pm SD
Chronological age			73.29 \pm 6.21
Gender	Male	17 (16.8)	
	Female	84 (83.2)	
Level study	Less than Graduate	84 (83.17)	
	Graduate or University	17 (16.83)	
Primary cancer site	Breast	47 (46.53)	
	Gynecology	25 (24.75)	
	Lung	24 (23.76)	
	Hematology	5 (4.95)	
Cancer staging	Non-metastatic	81 (80.2)	
	Metastatic	20 (19.8)	
Kind of cancer	Initial cancer	88 (87.13)	
	Recurrence or progressive	13 (12.87)	
Charlson Comorbidity Index			2.12 \pm 1.76
Cognitive functioning			27.61 \pm 1.92

Preliminary analyses. As no standards exist, self-perception of aging and cancer view of our patients (see Table 2) were compared to results obtained in previous studies. Concerning self-perception of aging, results were compared to a study conducted in the general population of older individuals ($n = 238$) (Marquet et al., in press). The two samples were equivalent in age ($M age = 73.83$, $SD = 8.66$; $p = .56$) and for self-perception of aging ($M = 85.67$, $SD = 11.44$; $p = .6$). Concerning cancer view, a previous study has been conducted in the general population ($n = 76$) (Fife & Wright, 2000). Our patients were older ($M age = 52.4$, $SD = 14.3$; $p < .001$) and have less cancer stigmas ($M = 75.5$, $SD = 6.97$; $p < .001$).

Using correlation analyses, we observed an association between self-perception of aging and cancer view ($r = .367, p < .001$). We tested for potential multicollinearity through the variance inflation factor in each regression model: its values ranged from 1.04 to 1.5, which indicates that the predictors do not have strong linear relationships between them and can therefore be integrated in the same regression analyses (Hair, Anderson, Tatham, & Black, 1995).

Table 2

Mean \pm SD and range of studied parameters

<i>Parameters</i>	<i>Mean \pm SD</i>	<i>Range</i>
Self-perception of aging (24-120)	84.88 \pm 13.23	45-114
Cancer view (24-96)	81.53 \pm 10.67	53 - 97
Global health (0-100)	77.1 \pm 16.17	24.23 – 100
Physical health (0-100)	76.01 \pm 17.5	19 - 100
Mental health(0-100)	80.72 \pm 18.57	19.44 - 100

Multiple regressions. Table 3 shows the association between self-perceptions of aging, cancer view and a global score of health. The self-perception of aging and the cancer view emerged as significant independent predictors. In other words, patients with a negative self-perception of aging and/or negative cancer had a poorer health (compared to those with a positive view). The total model, including all control variables, explained 37.2% of the variance for global health.

Table 3

Summary of regression analyses

	Global health		Physical health		Mental health	
	b	SE	b	SE	b	SE
Self-perception of aging	.356**	.117	.336*	.173	.406**	.131
Cancer view	.37*	.151	.283	.172	.682***	.169
Self-perception of aging x Cancer view	-.008	.009	-.006	.011	-.013	.011
R^2	.372		.306		.403	

Note. * $p \leq .05$. ** $p < .01$.

When we consider separately the physical and the mental health, we can note that patients with a negative self-perception of aging reported more issues related to

physical and mental health. In comparison, a negative cancer view was associated with more mental difficulties but we did not observe any effect related to physical health. Finally, the interaction between self-perception of aging and view of cancer was not significant: these two stigmas seem independent on each other.

Discussion

Cancer particularly affects the elderly population: in 2030, it is estimated that 70% of cancers in the United States will affect patients older than 65 years (Smith et al., 2009). This type of pathology conveys a lot of negative ideas, as it is associated with death and traumas (Robb et al., 2014). Such negative views have negative consequences on patients: more stigmas have been linked to increased prevalence of depression (Cho et al., 2013). However, these consequences have never been specifically studied in the older population. Besides cancer stigmas, older patients may also experience negative attitudes due to the negative social context of aging. Even if the impacts of self-perception of aging have never been studied in the specific context of oncology, many studies conducted in the general population have demonstrated that a negative self-perception of aging has negative effects on physical and mental health parameters (Levy, 2009). In this context, the aim of our study was to analyze how the cancer and self-perception of aging stigmas are linked with mental and physical health in the specific context of oncology.

As demonstrated in our results, self-perception of aging and cancer view are significantly linked to global health. In other words, patients with a negative self-perception of aging and/or a negative cancer view report more health issues. At our knowledge, our study is the first to assess and describe such an effect in the context of aging with a physical health condition. Above all, we can note that self-perception of aging is linked to both mental and physical health (see Figure 1, paths a1 and a2) in oncology patients. These results are in accordance with those found among cross-sectional studies in non-pathological aging (Chachamovich et al., 2008; Levy, Slade, & Kasl, 2002). In contrast, specific cancer stigmas seem to be only related to mental health (Figure 1, path b). This link between cancer stigmas and mental health has already been observed in the general population (Cataldo et al., 2011; Cho et al., 2013; Yeom & Heidrich, 2009). However, even if a previous study had found an association between

cancer stigmas and physical health (Cataldo & Brodsky, 2013), this relation was not observed in our study.

Furthermore, three elements in our analyses suggest that even if they are correlated (Figure 1, path c), cancer view and self-perception of aging are two independent concepts, acting separately on physical and mental health. Firstly, we observed a specific effect of self-perception of aging on physical health. Secondly, the interaction between self-perception of aging and cancer view was not significant, which indicates that these two stigmas are not interdependent. At last, if cancer had an impact on self-perception of aging, the elderly with cancer would have a worse self-perception of aging than healthy individuals. However, we observed that our patients had a self-perception of aging that was similar to that of another study conducted in the general older population (Marquet et al., in press). Such observations bring the issue of double stigmatization.

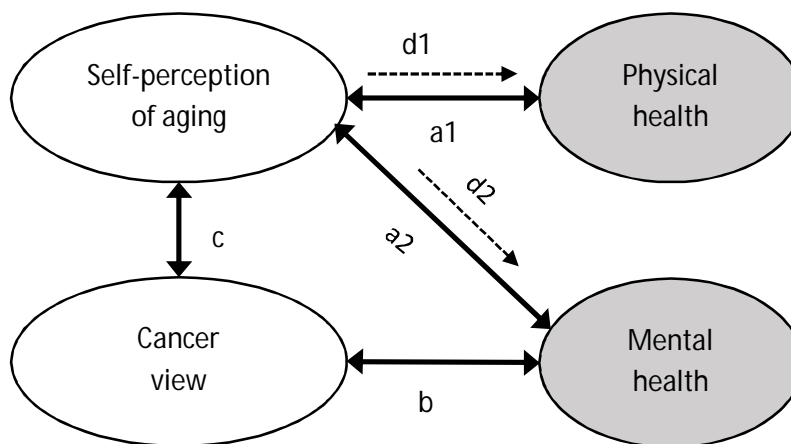


Figure 1. Illustration of the effect of self-perception of aging and cancer view on mental and physical health.

Even if our results confirm the existence of a strong relationship between self-perception of aging (or cancer vision) and health of older patients with cancer, the cross-sectional nature of our design forces us to stay prudent concerning the direction of this link: is an individual's negative initial self-perception of aging (or cancer) contributing to the increase of his health issues? Or is it because he perceives his health more negatively that he develops a more negative self-perception of aging (or cancer)? Only a longitudinal follow-up of these patients would allow to answer this question. Nevertheless, some studies carried out in the general population suggest that self-perception of aging may predict the evolution of physical and mental health of the

elderly (Figure 1, path d1 and d2). For example, long-term follow-up studies outlined the negative impact of initial negative self-perception of aging on physical and mental health (Levy, Slade, & Kasl, 2002; Levy, Slade, Kunkel, et al., 2002; Levy et al., 2009, 2012). Another argument in favor of the effect of self-perception of aging on patients' health can be found in a recent experimental study using subliminal activation (perception without awareness) of positive stereotypes about aging (for instance "spry") (Levy, Pilver, Chung, & Slade, 2014). The intervention consisted in 4 sessions (one/week). Results show a positive impact of subliminal activation on: (1) general view of aging, (2) self-perception of aging, and (3) physical functioning. In this study, the temporality of the intervention's effects is especially noteworthy. Indeed, the subliminal activation of positive stereotypes first produced a positive impact on age stereotypes (a positive effect being noticed at the end of the intervention); a week later, positive self-perceptions of aging were strengthened; finally physical function appeared improved three weeks later. Such results suggest that the increase in physical function can be observed following an improvement of the aging view and self-perception of aging.

Other studies will be necessary to confirm the direction of the association between perception of aging and physical function, and to clarify how health status and stigmatization are linked to aging and cancer. Nevertheless, if we confirm that cancer view and self-perception of aging influence negatively the mental and physical health of the elderly, then self-perception of aging and cancer view could be viewed as potential markers of frailty in older people. These two dimensions related to stigmatization could therefore predict the evolution of physical and mental health of patients with cancer, and maybe even mortality (as reported in a longitudinal study with aged normal people (Levy, Slade, Kunkel, et al., 2002)).

Future clinical studies are thus needed to test interventions aimed at the reduction of negativism associated with self-perception of aging and cancer. On the basis of the present study, it seems that the reduction of one kind of stereotypes would not necessarily lead to the reduction of the other; it may be necessary to perform two interventions, one dedicated to self-perception of aging, and the other to the view of cancer. To our knowledge, no previous study addressed cancer view. However, some promising clinical approaches have been tested in the specific context of self-perception

of aging or for other kinds of discrimination (e.g., sexism (Sarah Schroyen, Adam, Jerusalem, & Missotten, 2015)). These approaches could be adapted to patient populations. For example, psycho-education (i.e., teaching individuals about the mechanisms of stereotypes) may decrease the effects of stereotypes associated to gender (“women are bad in math”) (Johns, Schmader, & Martens, 2005). Other clinical approaches can include subliminal activation of positive stereotypes about aging (see (Levy et al., 2014)) or the technique of self-affirmation (i.e. focusing on an important aspect of the patient’s life, or engaging in an activity that highlights some important values for him or her) (Sherman & Cohen, 2006).

Conclusion and perspectives

In this article, we have found that negative self-perception of aging and cancer view are both linked to a worse global and mental health. Moreover, a negative self-perception of aging is associated with more physical issues. Nevertheless, our study presents several limitations and its results should be interpreted with some caution, particularly concerning the direction of this link. Also, it would be interesting to have a larger sample in order to make comparisons between different types of cancer. Indeed, previous studies suggested that patients with lung cancer suffered from more stigma than those with other cancer types (Cataldo et al., 2011). Finally, we included gender as a control variable, but our high proportion of women (82.3%) does not allow us to make any conclusion about it. Still, as gender can also be a factor of stigmatization (sexism) which might impact health, it would be interesting to see if women suffer more from those stigma than men (Molix, 2014).

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**Article 5 - Longitudinal impact of a negative self-perception
of aging and cancer view in oncology.**

In preparation.

Abstract

Objectives: Identifying risk factors for the development or the evolution of a disease can be really helpful for medical decisions. In elderly people with cancer, researches are mainly focused on biological factors. In this study, we hypothesize that a negative self-perception of patients concerning their own aging (SPA) and a negative cancer view could be linked to a negative evolution of physical and mental health.

Materials and Methods: 101 patients suffering from cancer (breast, gynecological, lung or hematological) were followed during one year, with four evaluation times (at the baseline, after 3, 6 and 12 months). Their SPA, cancer view and health (physical and mental) were assessed at each evaluation.

Results: By mixed linear models, we showed that a negative SPA and/or cancer view at the baseline are predictors of a negative evolution of physical and mental health. Moreover, when we take into account the evolution of SPA and cancer view over time, these two stigmas still predict the evolution of mental health. In comparison, only the negative evolution of SPA (but not cancer view) is linked to a negative evolution of physical health.

Conclusion: Initial measures of the SPA and cancer view could be predictors of a negative physical and mental health evolution for the patient. Such results lead us to see SPA and cancer view as markers of frailty in older people with cancer.

Introduction

In the health field, anticipating or identifying population at risk to develop a pathology or to evolve more negatively during a disease is a major issue for medical effectiveness and can support clinicians' decision making (Inouye et al., 1998; Lee et al., 2003). For instance, in oncology, studies in general population suggest that women, patients who deny or disengage from their disease, or who have less social support are more likely to be in distress (Akechi et al., 1998; Walker, Zona, & Fisher, 2006). For older people, the research has mainly concentrated on biological factors such as comorbidities or physiologic parameters and so advice to conduct a comprehensive geriatric assessment (Caillet et al., 2014; Hurria et al., 2005). Even if these parameters are of great importance, it can be interesting to also develop psychological risks factors for mental and physical health in the elderly population specifically. Effectively, older individuals are especially at risk to develop a cancer (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009).

In this regard, the self-perception of aging (SPA) could be a useful parameter to take into account. Indeed, some results of research in the context of non-pathological aging show that the SPA of older patients could be an important predictor of their health evolution and even their longevity. More precisely, several longitudinal studies in normal aging have demonstrated negative consequences of negative SPA on physical and mental health (Levy, 2003). For example, a study has followed 385 individuals (from 22 to 77 years old) during 38 years and observed a decline in memory performance of 30.2% greater for participants with more negative age stereotypes (Levy, Zonderman, Slade, & Ferrucci, 2011). Another one has followed 433 participants aged from 50 years old and older during an 18-year period. Results have shown that participants with a more negative SPA report a worse functional health over the follow-up in comparison to those with a more positive SPA (Levy, Slade, & Kasl, 2002). When the health is measured in a more objective way by existence of cardiovascular events (as angina attacks, congestive heart failures, strokes, etc.), similar results are observed. Over a period of 38 years on 440 participants (aged from 18 to 49 years old at the baseline), individuals with more negative age stereotypes are less likely to experience a cardiovascular event later on: 25% of participants in the negative age stereotypes group had experienced a cardiovascular event in comparison to 13% in the positive age stereotypes group (Levy, Zonderman, Slade, & Ferrucci, 2009). Even

more, SPA can also have an effect on longevity: after 23 years of follow-up, a study had shown that older individuals (aged 50 and older) with an initial more negative SPA, lived 7.5 years fewer than those with a more positive SPA (Levy, Slade, Kunkel, & Kasl, 2002).

Such relationship between ageism and accelerated decline of physical and mental health is notably explained by the fact that people with a negative SPA were less likely to engage in healthy behaviors (Levy & Myers, 2004). Moreover, when individuals have been exposed to negative aging stereotypes, they had a lower will-to-live (Levy, Ashman, & Dror, 2000; Marques, Lima, Abrams, & Swift, 2014). In regard to all these negative consequences of SPA in a non-pathological context, we can reasonably ask ourselves if this impact applies in the specific context of oncology. Moreover, suffering from a disease such as cancer can lead elderly to feel discriminative behaviors linked to their disease (Clarke & Everest, 2006; Fujisawa & Hagiwara, 2015). As ageist stereotypes, those linked to cancer are not without consequences for the patient. Indeed, patients who suffered from cancer stigmas are more likely to be depressed and to report a lower quality of life than those who felt less stigmatized (Cataldo, Jahan, & Pongquan, 2011; Cho et al., 2013). However, these studies on cancer stigma are: (1) cross-sectional and so do not analyze the effects of such stigmas on the evolution of the disease, and (2) do not approach the elderly population specifically.

Considering these two kind of stigmas together (ageism and cancer stigmas), in a recent study (Schroyen, Marquet, Jerusalem, Dardenne, Van den Akker, Buntinx, Adam, & Missotten, submitted), we assess their impact on 101 aged patients suffering from cancer. We confirm that a negative SPA and/or cancer view is linked to a more negative global health. More precisely, SPA is linked to physical and mental health whereas cancer view is only linked with mental health. Nevertheless, the question of the effect of these stigmas on the evolution of the health still remains unanswered. In this current study, we have followed these patients during one year in order to see if a double stigmatization, so a negative SPA and cancer view (at the baseline and over time), is linked to a worse evolution of physical and mental health and so can be considered as markers of frailty.

Method

Participants. 101 patients (M age = 73.5; SD = 6.2) have participated to the study thanks to a collaboration between the department of medical oncology of the CHU Sart-Tilman Liège University Hospital (Belgium) and the psychology of aging unit of the

University of Liège. To be eligible, patients had to have more than 65 years old, to have a sufficient knowledge of French, to suffer from a cancer (breast, lung, gynecologic or hematologic cancer) without comorbid diagnosis of dementia and to have a treatment planned (i.e. surgery, chemotherapy, radiotherapy or hormonotherapy). We included all stages of cancer as well as patients with backgrounds of cancer or relapse (these parameters will be controlled in the analyses). For more details on the recruitment and characteristics of these patients, see Schroyen et al. (submitted). These patients have been seen four times: at the baseline (T0, n = 101), after 3 months (T3, n = 75), 6 months (T6, n = 64) and 12 months (T12, n = 58). The decline in the number of patients after a one-year follow-up is explained by refusals (n = 22), impossibility to reach the patient (n = 4) or deaths (n = 17). Patients who have refused the follow up or who are impossible to reach are identical at the baseline to patients who finished the study for aging and cancer view as well as health parameters (all $p > .11$). At the baseline, all patients have been seen in the hospital. For the follow up, when it was possible, patients have also been seen at the hospital. For non-hospitalized patients or those who do not have a planned appointment at the time of the follow-up, patients have been seen at their home or the testing was done by phone.

Materials.

Demographics and medical information. Data were collected on age, sex, educational level and civil status at the baseline. Medical information (e.g. kind and stage of cancer, number of comorbidities...) were obtained through medical records at the baseline, and additional information (treatment or death) were obtained during all the follow up.

Cognitive level, assessed only at the baseline with the French version of the *Mini Mental State Examination* (MMSE) (Kalafat, Hugonot-Diener, & Poitrenaud, 2003). It measures the orientation, learning, attention, memory, language and constructive praxis.

SPA, measured by the *Attitudes to Aging Questionnaire* (AAQ) (Laidlaw, Power, Schmidt, & Group, 2007), translated and validated in French (Marquet et al., in press). This was measured at each time of the testing (T0, T3, T6 and T12). This scale was specifically developed to flexibly and comprehensively assess attitudes toward the aging process as a personal experience from the perspective of older adults. For the 24 items of the scale ($\alpha = .78$), participants responded on a five-point Likert-type scale

ranging from 1 (*strongly disagree/not at all true*) to 5 (*strongly agree/extremely true*). This scale can be divided into three subscales: Psychosocial loss (“I see old age mainly as a time of loss”), Physical change (“My health is better than I expected for my age”) and Psychological growth (“As people get older they are better able to cope with life”). In the present study, we only used the total score (range: 24- 120). A high total score reflects more positive SPA.

Cancer view, assessed by the *Social Impact Scale* (SIS) (Fife & Wright, 2000) translated in French. This scale was also administered at each time of the testing (T0, T3, T6 and T12). It measures the individual’s perception of being stigmatized. Some items were slightly modified in order to adapt them to the elderly: two items related to the work place (“My employer/co-worker have discriminated against me”, “My job security has been affected by my illness”) were rephrased in order to refer to “useful activities (voluntary work, baby-sitting...)” rather than paid activities. This scale comprises 24 items ($\alpha = .87$) answered using a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). It can be divided in four subscales: Social rejection (“Some people act as though I am less competent than usual”), Financial Insecurity (“I have experienced financial hardship that has affected how I feel about myself”), Internalized shame (“I feel others think I am to blame for my illness”) and Social isolation (“I feel set apart from others who are well”) but we used the total score (range: 24- 96). Originally, a high score indicates a high feeling of being stigmatized. However, in order to simplify the reading of results, the score has been reversed: a high score indicates a lower level of stigma, similarly to the scale of SPA. Yet, a high score means a positive view of cancer.

European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 (EORTC QLQ-C30). This 30-items instrument is multidimensional (Aaronson et al., 1993) and was administrated the four times (T0, T3, T6 and T12). In agreement with Giesinger et al. (2016), we excluded one item measuring financial difficulties and two items measuring the quality of life. On this basis, a summary score of global health was calculated ($\alpha = .9$). The questionnaire includes 5 functioning scales: (1) physical (5 items, for instance “Do you have any trouble taking a long walk?”), (2) role (2 items, for instance “Were you limited in doing either your work or other daily activities?”), (3) emotional (4 items, for instance “Did you feel tense?”), (4) cognitive (2 subjective items, for instance “Have you had

difficulty remembering things?") and (5) social (2 items, for instance "Has your physical condition or medical treatment interfered with your social activities?"). It also measures symptomatology with three scales (Nausea and vomiting/Fatigue/Pain) as well as with 6 separate items (Dyspnoea, Insomnia, Appetite Loss, Constipation, Diarrhoea and Financial Difficulties). All scores are transformed into a 0-100 scale. A higher score indicates a better health. Moreover, for conceptual matters, we have distinguished physical and mental health as we have done it for the cross-sectional study (Schroyen et al., submitted). For physical health ($\alpha = .89$), we have included the following parameters: (1) the physical and role functioning scales; (2) symptoms scales and single items. For mental health ($\alpha = .78$), we have included the emotional, social and cognitive functioning scale.

Data analyses. First of all, characteristics of our sample were described at the two extremes times of evaluation, at the baseline and after one year, for participants who completed entirely the follow up. Differences between the baseline and T12 on SPA, cancer view and health (global, mental and physical) were tested with a paired *t* test. We also compare patients' characteristics at the baseline between patients who are still alive and those who are deceased during the follow up by a *t* test (for continuous variables) or Chi square test (for categorical variables). Secondly, to examine our hypothesis that SPA and cancer view at the baseline influence the evolution of health (global, physical and mental), we used linear mixed models with the software R (Locascio & Atri, 2011). This approach can handle missing data and so allow us to include participants who did not finish the follow-up. Both the intercept and the slope were fitted as random effects, allowing them to vary between individuals. We take the score of SPA and cancer view at the baseline and take into account the individual evolution (all along the year) of health of each participant. As control variables, we included age, gender, educational and cognitive level, comorbidities, the kind and stage of cancer and cancer site, the death during the follow up and the presence of any treatment (surgery, radiotherapy, chemotherapy, hormonotherapy or other kind of therapy). We do not adjust the health scores of participants at baseline because it could induce a spurious statistical association between explicative factors and change in health score in observational studies (Glymour, Weuve, Berkman, Kawachi, & Robins, 2005). Using a backward-elimination strategy, we reduced covariates to those significant at .05 and by this way, we present the best fit model. To finish, we verify

that this association is still present over time, in taking into account the evolution of SPA and cancer view on the evolution on health. For this purpose, we used again linear mixed models but this time we take into account the relation between the evolution of SPA and cancer view (not only the baseline score but the four measures) of each participant and their evolution of health, with the same covariates as the previous analysis. Again, we reduced covariates to those significant at .05 by a backward-elimination strategy and present the best fit model.

Results

Sample characteristics. Patients' characteristics are presented in Table 1. As we can see, there is a large majority of women, breast cancer, initial diagnosis and non-metastatic cancer. In comparison to the baseline, after one year, their SPA, their cancer view and their physical, mental and global health are the same (all $p > .11$). Concerning deceased patients, the majority suffered from their first lung cancer and there is has much men than women. When we compared their parameters at the baseline to patients who finished the follow up, deceased patients have a more negative SPA, a more negative cancer view and a worse global and physical health. However, they are similar on mental health.

Table 1

Descriptive characteristics of the sample

Characteristics		Patients who finish the follow-up (n = 58)*	Deceased patients at the baseline (n = 17)	Baseline comparison between deceased/alive patients $t(p)$ or $\chi^2(p)$
Women		54 (93.1%)	8 (47%)	15.78 (<.001)
Age		71.77 (5.53)	74.47 (6.61)	-1.66 (.1)
Primary cancer site	Breast	31 (53.4%)	3 (17.65 %)	18.96 (<.001)
	Gynecology	16 (27.6%)	2 (11.76 %)	
	Lung	8 (13.8%)	10 (58.83 %)	
	Hematology	3 (5.2%)	2 (11.76 %)	
Cancer staging	Non-metastatic	53 (91.4%)	8 (47.06 %)	17 (<.001)
	Metastatic	5 (8.6%)	9 (52.94 %)	
Kind of cancer	Initial cancer	48 (82.76%)	16 (94.1 %)	1.67 (.2)
	Recurrence or progressive	10 (17.24%)	1 (5.9 %)	

Charlson Comorbidity Index		1.79 (1.33)	3.23 (2.54)	-3.16 (.002)
Cognitive functioning		27.84 (1.96)	27.07 (1.81)	1.94 (.06)
Global health	Baseline	79.68 (15.97)	66.13 (20.29)	2.89 (.005)
	After one	80.36 (14.2)		
Mental health	Baseline	82.35 (17.7)	75.11 (23.04)	1.38 (.17)
	After one	83.24 (18.5)		
Physical health	^{year} Baseline	78.89 (17.46)	63.5 (21.28)	3.04 (.003)
	After one	79.5 (15.04)		
SPA	^{year} Baseline	87.52 (12.79)	77.88 (14.41)	2.65 (.01)
	After one	84.4 (14.26)		
Cancer view	^{year} Baseline	83.31 (9.55)	76.82 (12.32)	2.3 (.02)
	After one	84.5 (12.04)		

Note. * the entire sample at the baseline was constituted by 101 patients. For more information concerning the entire sample at the baseline see Schroyen et al. (submitted).

Mixed linear models. We observe a significant effect of the score at the baseline of SPA and cancer view on evolution of global health after backward elimination (see table 2): a more negative SPA and/or cancer view is related with a worse evolution of health, all covariates included. In other words, the SPA and/or cancer view that patients possess at the beginning of the disease seem to significantly predict the evolution of health during one year. Moreover, we note that having a chemotherapy treatment, a metastatic cancer and to be a woman is more predictive to a worse evolution of global health. Concerning physical health after backward elimination, a negative SPA and cancer view at baseline are predictors of a worse evolution of physical difficulties, all covariates included. Again, having a chemotherapy treatment, and to be a woman is more predictive to a worse evolution of physical health. Moreover, negative physical outcomes are associated with hematologic cancer (in comparison to breast cancer), recurrent cancer and more comorbidities. For mental health, we observe also a significant effect of a negative SPA and cancer view at baseline on a worse mental health evolution. More issues of mental health are also related on a chemotherapy treatment and breast cancer (in comparison to gynecologic cancer).

Table 2

The best fit model after backward elimination for SPA and cancer view baseline scores

Characteristics	Global Health				Physical health				Mental health			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
SPA (baseline)	.38	.099	3.808	<.001	.37	.1	3.587	<.001	.53	.11	4.887	<.001
Cancer view (baseline)	.359	.13	2.735	<.001	.3	.14	2.204	.03	.49	.14	3.463	<.001
Carcinoma staging ^a	-7.37	3.34	-2.21	.03	-	-	-	-	-	-	-	-
Chemotherapy ^b	-7.31	1.57	-4.66	<.001	-7.49	1.74	-4.33	<.0001	-7.6	2.04	-3.718	<.001
Gender ^c	8.13	3.74	2.17	.03	13.08	5.05	2.591	.01	-	-	-	-
Cancer site ^d												
Lung (vs breast)	-	-	-	-	-6.63	4.35	-1.525	.13	5	3.45	1.451	.15
Gynecologic (vs breast)	-	-	-	-	-4.54	3.16	-1.439	.15	-10.09	3.33	-3.03	.003
Hematologic (vs breast)	-	-	-	-	-17.68	6.3	-2.806	.006	.41	6.3	0.06	.95
Kind of cancer ^e	-	-	-	-	7.7	3.81	2.023	.046	-	-	-	-
Comorbidities	-	-	-	-	-1.69	.082	-4.33	<.001	-	-	-	-

Note. ^a0 = non metastatic, 1 = metastatic; ^b0 = no treatment, 1 = treatment; ^c0=woman, 1=men; ^d0=breast cancer, 1= lung, gynecologic or hematologic; ^e0 = initial cancer, 1 = recurrent cancer

As depicted in table 3, when we take into account the evolution of SPA and cancer view over time in relation to the evolution of global health, these two stigma parameters are still predictors of a worse evolution of health (as well as metastatic cancer and chemotherapy treatment). In the opposite, for physical health, cancer view is no longer a significant predictor: a worse evolution is explained by a negative SPA, metastatic cancer and chemotherapy treatment. Finally, for mental health, both a negative SPA and cancer view are significant predictors of a more negative evolution. More mental issues are also reported for metastatic cancer, chemotherapy treatment and lung and gynecologic cancer (in comparison to breast cancer).

Table 3

The best fit model after backward elimination for the evolution of SPA and cancer view

Characteristics	Global Health				Physical health				Mental health			
	Coeff.	SE	t	p	Coeff.	SE	t	p	Coeff.	SE	t	p
SPA	.41	.07	5.92	<.001	.4	.07	5.46	<.001	.53	.07	6.785	<.001
Cancer view	.17	.07	2.318	.02	-	-	-	-	.53	.09	5.98	<.001
Carcinoma staging ^a	-6.86	3.08	-2.23	.03	-7.78	3.44	-2.263	.02	-8.89	3.68	-2.41	.02
Chemotherapy ^b	-6.4	1.54	-4.142	<.001	-6.89	1.7	-4.05	<.0001	-5.73	1.91	-3.005	.003
Cancer site ^c Lung (vs breast)	-	-	-	-	-	-	-	-	8.31	3.66	2.274	.03
Gynecologic (vs breast)	-	-	-	-	-	-	-	-	-7.39	3.03	-2.44	.02
Hematologic (vs breast)	-	-	-	-	-	-	-	-	7	5.71	1.227	.22

Note. ^a0 = non metastatic, 1 = metastatic; ^b0 = no treatment, 1 = treatment; ^c0=breast cancer, 1= lung, gynecologic or hematologic

Discussion

Both cancer and aging can lead to stigmatization. Yet, these stigmas have been linked to more issues in mental and physical health (Cataldo & Brodsky, 2013; Levy, 2003). Therefore, they could be considered as markers of frailty for elderly suffering from cancer. However, their influence on the evolution of health in oncology had not been studied yet. So, the aim of this longitudinal study is to analyze the link between SPA, cancer view and progression of health. By this way, we refine the results of our previous cross-sectional study (Schroyen et al., submitted). This one have shown that patients with a more negative SPA and/or cancer view reported poorer global health. More precisely, we observed that negative SPA was associated with worse physical and mental health, whereas negative cancer views were only linked to worse mental health.

In the present study, our results show that the SPA and/or the view of cancer measured at the baseline are predictors of a negative evolution of global health. In others words, it suggests that measures of the SPA and cancer view at the beginning of the disease could be predictors of a negative health evolution for the patient.

More accurately, results show that a negative SPA and/or cancer view at baseline is related to a negative evolution of physical and mental health. These results are in accordance with the literature. Indeed, concerning cancer view, our data are in line with previous cross-sectional studies in general population (Cataldo & Brodsky, 2013; Cataldo et al., 2011; Cho et al., 2013; Yeom & Heidrich, 2009). Moreover, about self-perception of aging, similar findings have been found with long term follow-up among “normal” aged people (Levy, Slade, & Kasl, 2002; Levy et al., 2009, 2011). However, we have to point out that in these follow-up studies an initial negative SPA is predictive of a negative evolution of health over long-time periods from 18 to 38 years. In comparison, in our study, the follow-up is far shorter. However, the significant result after only a one-year long follow-up shows that the negative effects of SPA are observable at short term and not only over large period of time.

Furthermore, we analyzed the relation between the evolution of SPA and cancer view over time with the evolution of physical and mental health. Concerning physical health, the relation between a negative SPA and physical difficulties remains significant. These results had already been observed in a previous study, where SPA over time significantly predicts functional health over 18 years (Levy, Slade, & Kasl, 2002). By contrast, the evolution of cancer view is not anymore in relation with the

evolution of physical health. About the evolution of mental health, the link with both SPA and/or cancer view is persistent over the year.

Such results lead us to think that the SPA and cancer view could be seen as markers of frailty in elderly people suffering from cancer. Indeed, they are probably associated to several components of physical and mental health and so are good predictors of a negative evolution of aging in a global way. For instance, concerning SPA, studies suggest that people with a negative SPA were less likely to engage in healthy behaviors (e.g., healthy diet, using seatbelts, doing physical exercise, etc.) (Levy & Myers, 2004). Moreover, the exposition to negative aging stereotypes could influence the will-to-live (Levy et al., 2000; Marques et al., 2014). Such matters can have consequences on adherence to anticancer treatment or medical advices (such diet plan). Furthermore, some studies suggest that cognitive impairment could be a powerful prognostic factor of mortality for older patients with cancer (Dubruille et al., 2015; Klepin et al., 2013; Robb, Boulware, Overcash, & Extermann, 2010). However, by longitudinal and experimental studies, Levy suggests that cognitive impairment is predicted by the perception that people have of aging (Levy, 2003). Such results lead to the hypothesis that the SPA could be considered as a more global marker of frailty than cognition. However, some specific studies should be realized to confirm it.

Nevertheless, the question of causality between SPA, cancer view and health still remains. By our results, we cannot know if a negative health participate to a negative SPA and cancer view or, on the contrary, if a negative SPA and cancer view lead to a negative health. Indeed, even if at our knowledge it was never studied in oncology, a study observed that the attitudes towards aging of women with multiple sclerosis was influenced by functional limitation (Harrison, Blozis, & Stuijbergen, 2008). In the other way, longitudinal studies in non-pathological aging (described previously) showed that self-perception of aging may predict the evolution of physical and mental health of the elderly (Levy, Slade, & Kasl, 2002; Levy, Slade, Kunkel, et al., 2002; Levy et al., 2009, 2011). Therefore, making the hypothesis of a bi directional link between SPA/cancer view and health seem plausible.

In order to confirm the results of our follow-up study, more studies with a larger sample are necessary in oncology and a longer follow-up can be very interesting. For example, we could think that the SPA and cancer view could be predictors of mortality. Our data show that the SPA and cancer view are more negative at the baseline for patients who would deceased over one year. However, we have to be cautious on this

point: the number of our patients (in particular deceased patients; $n = 17$) is too small to realize survival statistics as Kaplan-Meier survival analyses or Cox proportional hazards. A larger population and a longer follow-up (for instance two years) seem necessary to observe more precisely this link between SPA, cancer view and mortality. Nevertheless, we can note that other studies had already analyzed this link (but not in the specific context of oncology) and observed that individuals with more negative SPA lived 7.5 years fewer than those with positive SPA (Levy, Slade, Kunkel, et al., 2002) or attribution of chronic illnesses to old age enhances the probability of mortality (Stewart, Chipperfield, Perry, & Weiner, 2012).

Moreover, our analyses are based on subjective physical and mental health. For future studies, it will be interesting to see the effects of SPA and cancer view on objective parameters of health (for instance mortality, cancer recurrence, biological parameters...). Finally, it would be very informative to measure the SPA before the apparition of the cancer by conducting epidemiologic studies. We could hypothesize that those with a more negative SPA would be more likely to develop such pathology. Indeed, this kind of results had already been observed for cardiovascular events (Levy et al., 2009). Moreover, individuals with more negative SPA are less likely to engage themselves in healthy behaviors (Levy & Myers, 2004). Therefore, a greater likelihood of these people to develop pathology such cancer would not be surprising.

Conclusion

Our results show that a negative SPA and/or cancer view at the beginning of the disease is predictive of more reported difficulties of physical and mental health during a one-year follow up. This kind of result suggests that the SPA and the cancer view are important risk factors for the evolution of health in oncology and should be taken into consideration in clinical practice

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DISCUSSION GENERALE

DISCUSSION

Le présent travail s'inscrit dans le contexte du vieillissement de la population et plus particulièrement du vieillissement compliqué par le diagnostic d'un cancer. Il se base sur le constat qu'il existe, encore à l'heure actuelle, de nombreux comportements discriminatoires à l'égard des personnes âgées souffrant d'un cancer. En vue de les expliquer, certains auteurs avancent le phénomène de stigmatisation liée à l'âge (c.à.d. nos stéréotypes négatifs associés à l'âge, et donc l'âgisme) (Penson, Daniels, & Lynch, 2004). Outre ce phénomène, les personnes âgées en oncologie doivent également faire face à la stigmatisation liée au cancer.

L'objectif de ce travail de thèse était donc de s'intéresser à cette stigmatisation liée à l'âge et au cancer en l'abordant tant au niveau des personnes soignées (les personnes âgées) que des personnes qui s'occupent de leurs soins (les professionnels de la santé). Dans cette perspective, nous avons tout d'abord rédigé un article de synthèse sur le sujet (article 1). Tenant compte des éléments dégagés lors de sa rédaction, nous avons exploré l'âgisme auprès des professionnels de la santé (articles 2 et 3), mais également auprès des patients âgés souffrant d'un cancer (articles 4 et 5). Nous allons donc tout d'abord reprendre les principaux éléments se dégageant de nos articles en approfondissant la discussion de certains résultats. Par après, nous développerons les pistes thérapeutiques qui nous semblent importantes à privilégier. Nous aborderons ensuite les limites de nos études et les perspectives qu'elles offrent, avant de terminer par une conclusion générale.

Article théorique : âgisme en oncologie (article 1)

Au regard de la littérature, nous avons tout d'abord pu constater que l'âgisme était présent quotidiennement, et ce de manière importante. Il s'avère d'ailleurs que l'âge est considéré comme le facteur de discrimination le plus important en Europe & (TNS Opinion & Social, 2015). Aussi, en focalisant notre attention sur un contexte pathologique tel que celui du cancer, il n'est guère surprenant de constater que des comportements discriminatoires aient pu être mis en évidence à l'égard des personnes

âgées tant en recherche (faible représentativité dans les essais thérapeutiques) qu'en clinique (moindre proposition de traitements curatifs ou esthétiques) (Hurria et al., 2012). Si certains auteurs avancent le phénomène de stigmatisation comme explication possible de tels comportements, il est étonnant de constater qu'à notre connaissance aucune étude n'a jusqu'à présent testé empiriquement le lien entre la vision de l'âge des professionnels de la santé et leurs attitudes de soins. Cette constatation est à la base de la réflexion de notre première étude sur le personnel soignant (article 2). Elle nous paraît d'autant plus nécessaire que les stéréotypes âgistes des professionnels de la santé peuvent avoir des conséquences délétères sur les patients : par exemple, le risque de conclure à tort (sur l'unique base des stéréotypes âgistes) qu'un patient est trop âgé pour un traitement doit sans cesse être gardé à l'esprit (Kearney, Miller, Paul, & Smith, 2000; Williams, Herman, Gajewski, & Wilson, 2009). Poursuivant notre réflexion, nous avons vu que l'impact de l'âgisme sur les attitudes des professionnels de santé pouvait notamment se manifester par des changements communicationnels tels que l'elderspeak (c'est-à-dire le « parler petit vieux »). Toutefois, à notre connaissance, il n'existe pas d'étude ayant analysé ces modifications de discours à l'égard des personnes âgées dans le domaine spécifique de l'oncologie. C'est cette observation qui nous a amenés à mettre sur pied notre seconde étude (article 3).

Outre cette focalisation sur les interlocuteurs des personnes âgées, il nous paraissait important de se centrer également sur les personnes âgées elles-mêmes. En consultant la littérature dans le vieillissement non pathologique, il est apparu clairement que la perception que les personnes âgées ont de leur propre vieillissement influence leur santé mentale et physique (Levy, Slade, & Kasl, 2002). Toutefois, si nous pouvions imaginer que la situation devrait être pire dans un contexte tel que celui de l'oncologie, nous avons dû constater que l'impact de la vision de l'âge sur la santé physique et mentale de tels patients était méconnu. Par ailleurs, à cette vision de l'âge vient s'ajouter la stigmatisation liée à la pathologie car le cancer véhicule, aujourd'hui encore, beaucoup d'images négatives (Clarke & Everest, 2006). Bien que non abordée dans cette synthèse de la littérature, cette constatation nous amène à envisager la notion de double stigmatisation (liée à l'âge et à la pathologie) chez les personnes âgées souffrant d'un cancer (pour plus d'informations voir notre autre article de synthèse (Schroyen,

Adam, Jérusalem, & Missotten, 2014)). Suite à cette observation, la nécessité d'une étude transversale (article 4) et longitudinale (article 5) envisageant cette double stigmatisation ainsi que son impact sur la santé physique et mentale des patients âgés traités en oncologie était alors évidente.

Tenant compte de l'impact important des stéréotypes sur les personnes âgées et sur les attitudes de leurs interlocuteurs, nous avons terminé cet article théorique par la question des pistes thérapeutiques susceptibles de contrer les effets de ces stéréotypes. Si plusieurs approches ont été avancées (activation de stéréotypes positifs, affirmation de soi, contre-stéréotypes, réminiscence intergénérationnelle, etc.), nous profiterons de cette discussion générale pour affiner notre point de vue et ainsi fournir des recommandations en termes de perspectives cliniques.

L'âgisme chez les professionnels de la santé (articles 2-3)

Au cours du premier article empirique, nous avons demandé à des infirmiers(-ères) en oncologie (n=76) dans quelle mesure ils (elles) encourageraient (sur une échelle de 1 à 7) un patient à suivre un traitement (immunothérapie ou chimiothérapie) ou à demander une reconstruction mammaire. Ce questionnaire a été formulé sur base de fiches cliniques, où le seul paramètre qui les différenciait était l'âge du patient (35-55-75 ans pour la chimiothérapie et la reconstruction mammaire, 40 ou 70 ans pour l'immunothérapie). Sur base de ce matériel, nous avons pu montrer un effet global de discrimination liée à l'âge concernant tant les traitements esthétiques que curatifs : ainsi, une patiente de 75 ans ou même de 55 ans, sera moins encouragée à demander une reconstruction mammaire ou à suivre un traitement par chimiothérapie comparativement à une patiente de 35 ans. Similairement, une patiente de 70 ans sera moins encouragée à suivre une immunothérapie qu'une patiente de 40 ans. Ces résultats confortent ceux obtenus dans des études précédentes effectuées auprès de médecins (Madan, Aliabadi-Wahle, & Beech, 2001; Protière, Viens, Rousseau, & Moatti, 2010). Nous avons également observé que plus les infirmiers(-ères) ont une vision négative de l'âge, moins ils (elles) sont enclin(e)s à encourager une reconstruction mammaire à une personne de 75 ans. A notre connaissance, c'est la première fois qu'une étude établissait un lien clair entre vision de l'âge et attitudes de soins des professionnels. Il convient toutefois de noter que ce lien ne concernait que la reconstruction mammaire, et non les

traitements de type curatif. Ce résultat peut être dû au fait que, quand nous avons une vision négative de l'âge, les considérations esthétiques sont vues comme hors propos chez les personnes âgées (« un sein en moins à 75 ans... et alors ? »). En comparaison, un lien automatique semble être fait entre traitement curatif et avancée en âge : il sera ainsi moins encouragé chez les personnes âgées, quelle que soit la vision de l'âge du soignant. Un tel résultat nous rappelle que les stéréotypes âgistes sont omniprésents dans notre société et que, lorsque l'on parle de « vision positive » du vieillissement cela se réfère davantage à une vision « moins négative » (Cuddy, Norton, & Fiske, 2005). Cette constatation met en évidence l'importance de (re)souligner que les décisions médicales prises sur la seule base de l'âge chronologique du patient sont empreintes de nos stéréotypes. La prise en compte de leur âge fonctionnel est donc un meilleur indicateur décisionnel (Hurria et al., 2012).

Lors de la deuxième étude empirique, nous avons pu analyser plus spécifiquement le lien entre l'explication d'un traitement prescrit en oncologie et l'âgisme : des médecins (n = 20) et étudiants en médecine (n = 20) devaient enregistrer des podcasts où ils expliquaient un traitement par hormonothérapie soit à une patiente jeune (40 ans), soit à une patiente âgée (70 ans). Les deux patientes possédaient le même profil clinique, seul leur âge les différençait. Tout d'abord, nous avons pu observer que les participants parlaient différemment avec une patiente plus jeune, comparativement à une patiente plus âgée. En effet, leur discours contenait des caractéristiques de l'elderspeak (autrement dit, le « parler petit vieux ») lorsqu'ils s'adressaient à une personne âgée. Concrètement, les médecins et étudiants en médecine utilisaient moins de mots, faisaient des énoncés plus courts, parlaient plus lentement et se répétaient plus fréquemment quand ils s'adressaient à la patiente plus âgée (le nombre de phrases, la complexité grammaticale, la diversité lexicale et l'intonation ne différaient par contre pas selon l'âge de la patiente). Jamais testés dans un contexte oncologique, de tels changements avaient déjà pu être observés dans des études réalisées auprès de la population générale (Kemper, Ferrell, Harden, Billington, & Finter-Urczyk, 1998; Kemper, Vandeputte, Rice, Cheung, & Gubarchuk, 1995). Selon Kemper et Harden (1999), certaines caractéristiques de l'elderspeak telles que la répétition ont des effets positifs, améliorant la communication. A l'inverse, parler plus lentement et faire des

énoncés plus courts amènerait les personnes âgées à juger négativement leurs compétences de communication et n'améliorerait en rien leur compréhension. En nous attardant plus spécifiquement sur le contenu du discours, nous avons remarqué que lorsque les participants s'adressaient à la patiente plus âgée, ils évoquaient moins fréquemment ou minimisaient les conséquences des différents effets secondaires possibles. Plus précisément, ils évoquaient moins la possibilité de difficultés sexuelles et de sécheresse de la peau. De plus, ils abordaient moins les solutions alternatives possibles (autrement dit, la possibilité de prendre un autre médicament afin de contrer l'un ou l'autre effet secondaire).

Afin d'illustrer au mieux cette différence de contenu envers les patients jeunes et âgés, nous reportons ici deux extraits de podcasts où les participants abordent l'explication des effets secondaires.

Participant 1 :

Explication concernant la patiente de 40 ans :

« Vous aurez des débuts de bouffées de chaleur, un petit peu de douleurs articulaires et, ce qui peut être plus embêtant pour vous, c'est un petit peu une diminution du désir. Il faudra qu'on en parle, si jamais ça arrive on a des moyens d'essayer de contrer un petit peu. »

Explication concernant la patiente de 70 ans :

« Ça peut donner quelques bouffées de chaleur. Bon, vous avez certainement vécu ça au moment de la ménopause, et bien les bouffées de chaleur ça peut un peu revenir. Mais bon, on vit avec ça et en général ça passe quand même assez facilement. On peut avoir un peu mal aux articulations mais bon ça aussi à votre âge je pense que vous avez déjà un peu mal aux articulations donc ce sera un peu noyé. Et donc, dans votre cas, on aura pas énormément de choses en plus que les deux choses que vous avez déjà un peu liées à l'âge, c'est pas vraiment un problème ».

Participant 2 :

Explication concernant la patiente de 40 ans :

« Alors les principaux effets secondaires qu'il faut quand même vous signaler parce que la vie n'est pas un long fleuve tranquille Mme D., c'est un peu comme à la ménopause : bouffées de chaleur, quelques douleurs dans les articulations et puis bon pour Mr D. ça va pas être la fête parce que la sécheresse de la peau et la sécheresse des muqueuses ça va pas favoriser le rapprochement. Mais bon, y'a moyen d'y remédier par des méthodes locales et d'autre part on peut espérer aussi la réduction progressive de ces effets indésirables avec le temps. »

Explication concernant la patiente de 70 ans :

« Bon rien n'étant parfait ce traitement comporte bien sur des effets indésirables comme vous avez sans doute déjà ressenti lors de la ménopause : y'a des bouffées de chaleur, y'a quelques douleurs articulaires et bon y'a également des p'tits effets indésirables à type diminution de la libido, de sécheresse de la peau et des muqueuses... bon c'est pas dramatique pour autant hein. »

Ensuite, nous avons pu faire un lien entre ces changements communicationnels et la vision de l'âge des participants : avec une vision positive de l'âge, les médecins (et étudiants en médecine) diminuent la longueur de leurs phrases et leur débit lorsqu'ils s'adressent à la patiente de 70 ans. Un tel résultat nous amène à resituer le contexte sociétal et, comme dans l'étude précédente, à préciser qu'une vision « positive » de l'âge est en réalité une vision « moins négative » (Cuddy et al., 2005). En comparaison, les participants avec une vision (encore plus) négative de l'âge vont faire des phrases plus courtes et parler plus lentement avec la patiente de 70 ans, mais également avec la patiente de 40 ans. Ceci nous conduit à penser que les participants associent le cancer avec l'avancée en âge de manière excessive : une patiente d'âge moyen, à qui l'on découvre une tumeur, peut ainsi être considérée comme âgée à leurs yeux étant donné que le cancer est particulièrement répandu avec l'avancée en âge (Smith, Smith, Hurria, Hortobagyi, & Buchholz, 2009). Ceci a pour conséquence qu'ils adaptent déjà leurs discours. Cette hypothèse est appuyée par le fait que plus les médecins (et étudiants) ont une vision négative de l'âge, plus ils pensent que l'on arrête d'être jeune tôt. Afin d'explorer encore un peu plus cette hypothèse, nous avons présenté un visage neutre à 80 participants : si le visage n'était accompagné d'aucune description, il était jugé comme plus jeune que si l'on précisait que la personne venait de recevoir un diagnostic de cancer. D'autres études sont néanmoins nécessaires afin d'explorer davantage cette hypothèse.

Ces deux études nous montrent donc que les attitudes des professionnels de la santé diffèrent selon l'âge des patients, et ce bien que ces professionnels aient été confrontés à des cas dont l'âge constitue le seul paramètre modulé ! Par ailleurs, leur vision de l'âge, que ce soit celle des infirmiers en oncologie ou des médecins (et futurs médecins), n'est pas sans conséquence sur ces attitudes différentes (plus péjoratives) notées à l'égard des patients âgés. En ce qui concerne les infirmiers, ces résultats ne

sont guère étonnants quand on sait qu'une revue de la littérature, dont le but était de faire le point sur le comportement des membres du personnel soignant depuis les années 2000, a suggéré que les attitudes des infirmiers face aux personnes âgées sont de moins en moins positives (Liu, While, Norman, & Ye, 2012). En comparaison, une tendance inverse était observée pour les médecins, dont l'attitude se serait améliorée au fil des années (Liu et al., 2012). Toutefois, la majorité des études incluses dans cette revue de la littérature ont été réalisées aux USA ou en Asie. Etant donné nos résultats, il aurait été intéressant d'avoir une idée de l'évolution des attitudes des médecins à l'égard des personnes âgées en Europe. Cela pose en effet beaucoup de questions au niveau clinique, rappelant la nécessité de réfléchir aux pistes d'interventions possibles et à leur modalité de mise en place. En effet, il nous paraîtrait opportun d'amener à une prise de conscience de l'impact de nos attitudes en tant que professionnels de soins. Dans cette perspective, il s'avère nécessaire de repenser les pratiques cliniques non pas selon ce que l'on pense savoir du vieillissement (donc de nos stéréotypes) mais sur base d'une connaissance approfondie de l'avancée en âge et de ses conséquences. Il a d'ailleurs pu être montré qu'un des facteurs les plus déterminants d'une bonne attitude à l'égard des personnes âgées est une bonne connaissance du processus du vieillissement (Liu et al., 2012). Nous approfondirons ce point lors de la partie de notre discussion centrée sur les perspectives thérapeutiques.

La double stigmatisation chez les patients âgés souffrant d'un cancer (articles 4-5)

Afin d'analyser la notion de « double stigmatisation » (stigmatisation liée à l'âge et au cancer) et son impact sur la santé tant physique que mentale de patients âgés, nous avons testé 101 patients de plus de 65 ans souffrant d'un cancer du sein, gynécologique, du poumon ou hématologique et nous les avons suivis pendant un an, avec en tout quatre moments d'évaluation : à la baseline, après 3, 6 et 12 mois.

Tout d'abord, nous avons analysé les données obtenues peu de temps après leur diagnostic (baseline). Ces données ont été obtenues par des questionnaires auto-évaluatifs remplis au cours d'un entretien individuel avec chaque patient. Ainsi, nous avons pu observer un lien significatif entre la perception que les personnes âgées ont de leur propre vieillissement, leur vision du cancer et leur santé. Tout d'abord, au plus ils ont une perception négative de leur avancée en âge et/ou du cancer, au plus ils

reporteront des problèmes de santé globale. Plus spécifiquement, une perception négative de l'âge est en lien avec davantage de problèmes de santé mentale et physique. Ces résultats vont dans le sens des études précédentes concernant le vieillissement « non pathologique » : une perception négative de l'âge a un effet délétère sur la santé physique et mentale (Chachamovich, Fleck, Laidlaw, & Power, 2008; Levy et al., 2002). En comparaison, une vision négative du cancer est en lien avec une santé mentale plus défavorable. Ce type de résultat avait déjà pu être mis en évidence parmi la population générale (Cataldo, Jahan, & Pongquan, 2011; Cho et al., 2013; Yeom & Heidrich, 2009). Nous n'avons par contre pas observé de relation entre la vision du cancer et la santé physique. Une seule étude, à notre connaissance, avait pu trouver une association entre les deux (Cataldo & Brodsky, 2013). Plus précisément, au cours de cette étude, les résultats montrent que les patients avec plus de stigmas liés au cancer du poumon rapportent des symptômes d'une plus grande sévérité. Nous ne retrouvons donc pas ce lien ici. Enfin, nos résultats ont montré que la vision du cancer et la perception de l'âge sont deux concepts qui agissent séparément sur la santé des personnes âgées (ils ne sont donc pas dépendants l'un de l'autre). Ceci nous suggère que la réduction d'un type de stigmatisation n'entraînera pas la réduction automatique de l'autre (par exemple, si la perception que j'ai de mon âge s'améliore, ce n'est pas pour autant que j'aurai une meilleure vision de ma maladie). De ce fait, si l'on met au point des approches thérapeutiques afin de contrer les stéréotypes, il sera certainement nécessaire de travailler sur les deux types de stigmatisation.

Cette première observation étant faite, la deuxième analyse s'est portée sur les données du suivi longitudinal des patients. Par ces analyses, nous avons observé qu'une perception initiale négative des patients à propos de leur âge et/ou une vision négative du cancer sont des prédicteurs d'une évolution de santé physique et mentale plus défavorable. Si l'on prend en compte l'évolution de la perception de l'âge et de la vision du cancer au cours du temps, ces deux stigmas restent prédicteurs d'une évolution négative de la santé mentale. En comparaison, uniquement la perception de l'âge est toujours liée à la santé physique. Ces résultats nous suggèrent donc que la perception que les personnes ont de leur propre vieillissement et leur vision du cancer peuvent constituer des marqueurs de fragilité des personnes âgées. En effet, ils semblent liés à

de nombreux paramètres de santé physique et mentale, et de ce fait seraient de bons prédicteurs de l'évolution du vieillissement. Rappelons d'ailleurs que les personnes âgées avec une perception négative de leur vieillissement sont moins enclines à s'engager dans des comportements de santé préventifs pour la santé (Levy & Myers, 2004). De plus, l'exposition à des stéréotypes négatifs liés à l'âge peut influencer la volonté de vivre (Levy, Ashman, & Dror, 2000; Marques, Lima, Abrams, & Swift, 2014). Nous pouvons donc aisément penser qu'une perception plus négative de l'âge amènerait à plus de probabilité de refus d'un traitement oncologique ou à une moindre compliance aux conseils médicaux. Toutefois, la question de la causalité reste en suspens : est-ce qu'une mauvaise santé amène une perception négative de l'âge et une vision négative du cancer ou est-ce une perception négative de l'âge et/ou du cancer qui entraîne une mauvaise santé ? Les résultats de la littérature vont dans les deux sens. Effectivement, une attitude plus négative de l'âge semble être influencée par les limites fonctionnelles (Harrison, Blozis, & Stuifbergen, 2008). A l'inverse, des suivis longitudinaux ont mis en évidence d'une perception négative de son âge influence des paramètres de santé mentale et physique (Levy, 2003). Autrement dit, faire l'hypothèse d'un lien bi-directionnel entre stigmatisation (liée à l'âge ou au cancer) et santé semble plausible.

Perspectives thérapeutiques

Comme nous avons pu le constater tout au long de ce travail, être atteint d'un cancer en étant âgé est source de stéréotypes, de préjugés et de discriminations tant par rapport à l'âge qu'à la pathologie. Ce constat se manifeste autant auprès des professionnels de la santé que des patients eux-mêmes. Aussi il convient de réfléchir aux pistes thérapeutiques à privilégier en gardant en tête que les deux types de stigmatisation semblent agir indépendamment l'une de l'autre : agir sur l'une ne va donc pas forcément permettre une amélioration de la seconde. Au cours de notre article de synthèse, nous avons cité et développé diverses pistes thérapeutiques possibles. Tenant compte des résultats de nos études, nous allons maintenant approfondir les points qui nous paraîtraient opportuns à privilégier. Nous appuierons autant que possible nos choix sur des éléments théoriques.

En nous axant tout d’abord sur les professionnels de santé, rappelons qu’ils semblent particulièrement sensibles aux stéréotypes âgistes étant donné que leur profession les met sans cesse face à des personnes âgées malades et vulnérables (Gaymard, 2006). A ce propos, le nuage de mots (voir Figure 1) produit par les infirmiers(-ères) lors de notre première étude est assez démonstratif. Pour rappel, on leur avait demandé les 5 premiers mots qui leur venaient à l’esprit quand ils (elles) pensaient à une personne âgée. La valence de chaque mot, en référence à une personne âgée, avait ensuite été évaluée par 10 évaluateurs externes sur une échelle de -5 (très négatif) à +5 (très positif). Sur cette base, nous avons créé un nuage de mots où la valence est représentée par les couleurs et la taille de chaque mot représente sa fréquence (plus il a été fréquemment cité, plus il est grand).



Mots les plus négatifs	Mots les plus positifs
Dépendance (27.6%)	Famille (9.2%)
Perte d'autonomie (23.4%)	Expérience de vie (6.6%)
Solitude (19.7%)	Sagesse (6.6%)
Fatigue (15.8%)	Expérience (6.6%)
Maladie (13.1%)	Autonomie (3.9%)

Figure 1. Nuage de mots. Rouge = mots négatifs (-1 à -5), vert = mots positifs (+1 à +5) et bleu = mots neutres (-1 à +1). Top 5 des mots les plus négatifs et les plus positifs (pourcentages des infirmiers(ères) ayant cité ce mot).

Une telle constatation est inquiétante lorsque l'on sait que tous les professionnels de la santé sont en contact régulier avec des personnes âgées (excepté ceux issus de certaines spécialités comme la pédiatrie). En effet, si seule une minorité opte pour des spécialités telles que la gériatrie, une très grande majorité est confrontée, de manière quotidienne, à des personnes âgées. C'est d'autant plus le cas pour les professionnels travaillant dans un domaine tel que l'oncologie, le cancer étant une pathologie plus fréquente avec l'avancée en âge (Hurria et al., 2012; Smith et al., 2009). Et pourtant, les professionnels de la santé restent peu formés à l'accompagnement des personnes âgées (Bernard, McAuley, Belzer, & Neal, 2003; Krain, Fitzgerald, Halter, & Williams, 2007; Comité de gériatrie du RUIS de l'UDeM, 2011). Par exemple, à Montréal, une étude a montré que le pourcentage d'heures de formation obligatoire consacré au vieillissement par rapport au nombre total d'heures de formation est en moyenne de 4% pour les divers professionnels de la santé (infirmiers, ergothérapeutes, pharmaciens, kinésithérapeute...) (Comité de gériatrie du RUIS de l'UDeM, 2011). Chez les médecins plus précisément, cette même étude indique que le pourcentage de leur formation consacrée aux personnes âgées est en moyenne de 10%. De plus, le contenu de ces formations est fortement axé sur le versant pathologique (pathologie, dépendance, etc.) et non sur les potentialités des personnes âgées. Si nous ne contredisons aucunement la nécessité d'une connaissance optimale des pathologies, la centration (quasi unique) sur les éléments négatifs associés au vieillissement peut, selon nous, participer à alimenter une vision négative du vieillissement. Ce renforcement risque d'être d'autant plus marqué que les étudiants en stage sont baignés dans des contextes de soins les exposant aux personnes âgées malades, fragiles, etc. Ainsi, une telle focalisation sur le vieillissement pathologique nous semble pouvoir constituer un élément explicateur de la stigmatisation marquée des professionnels à l'égard des personnes âgées. D'ailleurs, des enquêtes réalisées par le service de Psychologie de la Sénescence avec des questions de stigmatisation portant sur l'estimation en pourcentages des personnes de plus de 65 ans (ou 80 ans) qui vivent en institution, souffrent de dépression, etc. ont montré que les professionnels de soins (et futurs professionnels) tendent davantage que la population générale à stigmatiser les personnes âgées. En effet, elles attribuent à l'ensemble des personnes âgées ce qui en

réalité n'est valable que pour une minorité d'entre elles. Par exemple, si la littérature suggère qu'en Belgique seuls 8 % des personnes âgées sont institutionnalisées (Charlot, Cobbaut, De Mets, Hinnekint, & Lambert, 2009), les professionnels de la santé pensent que cela concerne 35 à 44 % des personnes âgées. En comparaison, la population générale estime la proportion des personnes de plus de 65 ans institutionnalisées à 25 %. Il en va de même pour d'autres paramètres tels que la solitude, la dépression, etc. (voir Figure 2).

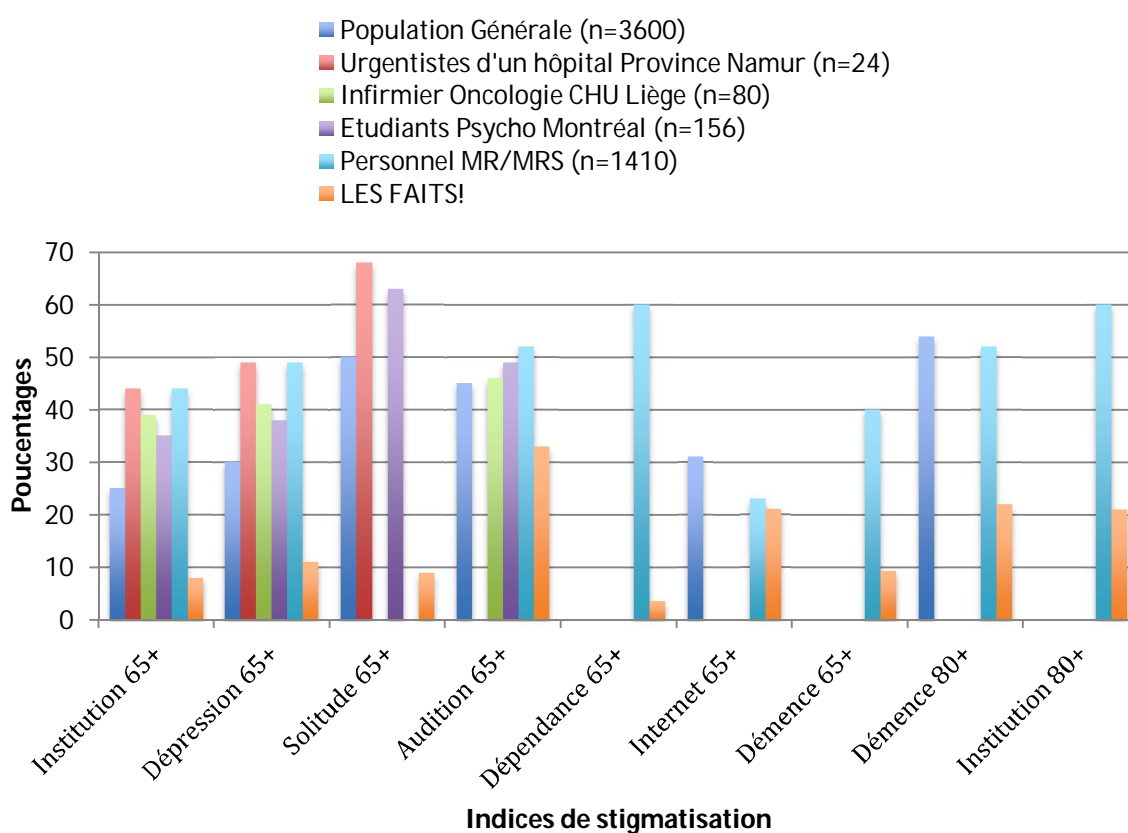


Figure 2. Indices de stigmatisation (en pourcentage) à l'égard des personnes âgées : constatation des différences existant entre les estimations et les faits (en orange). Le graphique est issu de Missotten, Schroyen, & Adam (2015).

Tenant compte de ces divers éléments, il nous paraîtrait utile de favoriser, chez les (futurs) professionnels de la santé, une meilleure connaissance du processus du

vieillesse, suscitant une vision plus réaliste : la majorité des personnes âgées s'adaptent bien à leur vieillissement et gardent un bon niveau de satisfaction de vie, de bien-être, etc. (Bhattacharjee & Mogilner, 2014; L. L. Carstensen et al., 2011). En conséquence, une formation adéquate devrait, à nos yeux, pouvoir aborder une sensibilisation au contexte de l'âgeisme actuel et à ses conséquences sur la santé physique et mentale des personnes âgées. Cela nous paraît d'autant plus nécessaire qu'une méconnaissance de la personne âgée et de la vision stéréotypée que l'on peut en avoir amène des changements dans nos attitudes. Comme nous l'avons observé dans notre troisième étude, cela peut plus spécifiquement se manifester par des modifications communicationnelles (de type « elderspeak »). A ce propos, une piste qui nous paraît intéressante à développer concerne la mise en place de formations spécifiques afin d'améliorer les aptitudes de communication des soignants avec les personnes âgées. En effet, des études précédentes ont démontré l'efficacité de ce type de formation en observant une réduction significative de l'elderspeak lors des interactions entre des infirmiers et des résidents de cinq maisons de repos (Williams, Kemper, & Hummert, 2003). Dans chaque maison de repos, 3 à 5 infirmiers (-ères) ont participé au programme (n = 20). Le but de la formation (3 sessions d'une heure) était d'une part de sensibiliser le personnel aux caractéristiques de l'elderspeak et de ses effets négatifs sur les personnes âgées et d'autre part de mettre en place des stratégies de communication plus efficaces. Plus concrètement, la formation consistait en une séance d'informations, des groupes de discussion, et des jeux de rôles. Les participants étaient également amenés à analyser une vidéo montrant une interaction entre un membre du personnel et un résident d'une des maisons de repos. Enfin, deux actrices simulaient une vignette clinique, afin d'illustrer de manière concrète l'elderspeak au quotidien. Les participants devaient alors réfléchir à quelles stratégies utiliser afin d'améliorer la communication. Par exemple, la phrase « Bonjour mon grand. Est-ce que l'on est prêt pour notre bain ? » devait être corrigée par « Bonjour Mr Jones. Êtes-vous prêt pour votre bain ? ». Afin de tester les bénéfices de cette formation, leur communication avec les résidents (n = 107) a été enregistrée avant et après le programme, lors de soins de routine. Des mesures linguistiques ont pu être évaluées par des logiciels informatiques (débit, fluence, longueur des phrases,...). Pour les caractéristiques plus subjectives (ton employé, utilisation des diminutifs...), des évaluateurs externes (n = 20) ont évalué les discours.

Les résultats ont mis en avant : (1) une diminution de l'emploi des diminutifs et pronoms collectifs (utilisation du « vous » plutôt que du « on »), (2) une augmentation de la longueur des phrases et du débit, (3) une réduction d'un ton directif et une augmentation d'un ton respectueux. Les effets bénéfiques pour le ton employé (moins directif et plus respectueux) lors de la communication ont pu être vérifiés dans une autre étude jusqu'à deux mois après l'intervention (Williams, 2006). Par contre, les autres effets ne semblent pas perdurer dans le temps. Étant donné l'importante proportion des personnes âgées souffrant d'un cancer, il nous semble essentiel de tester et d'améliorer ces techniques dans le contexte particulier de l'oncologie.

Outre cette sensibilisation à l'âgisme, l'adoption d'une vision plus nuancée et plus réaliste du vieillissement pourrait passer par une information par rapport aux éléments expliquant ce qui fait que la majorité des personnes âgées gardent un bon niveau de qualité de vie. Cela nécessiterait de se pencher notamment sur les théories dites du « vieillissement réussi ». Ces théories mettent en évidence que, malgré les pertes physiques, psychologiques et sociales, la majorité des personnes âgées s'adaptent bien à leur vieillissement et ont une meilleure qualité de vie que les plus jeunes (Brandstadter & Greve, 1994; Momtaz, Hamid, & Ibrahim, 2014). Qui plus est, la même constatation est applicable en oncologie : à long terme, après avoir survécu au cancer, les jeunes rapportent une moins bonne adaptation que leurs aînés (anxiété, dépression, peur d'une récurrence, problèmes sexuels...) (Kornblith et al., 2007). Nous allons prendre le temps de développer quelque peu deux de ces théories du vieillissement réussi : le modèle SOC (sélection-optimisation-compensation) et la théorie de la sélectivité socio-émotionnelle (P. B. Baltes & Baltes, 1990; L. Carstensen, Fung, & Charles, 2003).

La théorie SOC est composée de trois processus (P. B. Baltes & M. M. Baltes, 1990; Freund & P. B. Baltes, 1998) : sélection, optimisation et compensation. Premièrement, la *sélection* : étant donné que les ressources cognitives, sociales ou fonctionnelles diminuent avec l'âge, la personne âgée va concentrer son énergie sur certaines tâches prioritaires. Ensuite, elle va concentrer son énergie et sa motivation afin de favoriser un niveau optimal de fonctionnement dans les domaines sélectionnés. C'est ce que l'on nomme « l'optimisation ». Pour finir, elle va modifier ses manières habituelles de

fonctionner, utiliser des moyens alternatifs pour atteindre son but : de cette façon, elle *compense* le décalage entre ses ressources personnelles et ce que le milieu lui demande. Afin d'illustrer cette théorie par un exemple concret, imaginez un sportif de haut niveau qui commence à vieillir : ses ressources diminuent et il n'est plus capable de continuer à s'entraîner dans plusieurs sports différents. Il va donc sélectionner son sport de prédilection (ainsi, alors qu'ils faisaient régulièrement de la course à pied, du vélo et de la nage, il ne gardera plus que la course à pied). Ensuite, il optimisera ses performances en suivant par exemple un régime spécial et en s'entraînant plus longtemps sur ce sport particulier. Pour terminer, il pourra compenser les déficits liés à l'âge en augmentant ses échauffements (M. M. Baltes & Carstensen, 1996). Ainsi, cette approche se caractérise par la maximisation des gains (sélection et optimisation) en parallèle à la minimisation des pertes (compensation) (Freund & P. B. Baltes, 1998). Ce modèle est applicable à toutes les phases de la vie où nous faisons face à une diminution des ressources : période de stress, maladies, etc. (Freund & P. B. Baltes, 1998). Son fonctionnement est toutefois amplifié dans le domaine du vieillissement, étant donné que les individus sont plus susceptibles de faire face à des difficultés de santé (M. M. Baltes & Carstensen, 1996).

La deuxième théorie, celle de sélectivité socio-émotionnelle est basée sur le fait que la conscience du temps fait partie intégrante des caractéristiques spécifiques de l'espèce humaine (Carstensen, 1995). Ainsi, nous avons la possibilité de revivre les événements passés, de profiter du présent et de nous projeter dans le futur. Étant donné que les buts que nous nous fixons sont toujours inscrits dans un contexte temporel particulier, ils sont susceptibles d'évoluer au cours du temps et de l'avancée en âge (Carstensen, 2006). Deux grands comportements sont alors présents: soit préparer le futur, soit se focaliser sur le présent (Carstensen et al., 2003). Dans le premier cas, le but est d'étendre ses horizons, d'acquérir de nouvelles connaissances, de rencontrer de nouvelles personnes ou encore de prendre des risques. A contrario, lorsque l'on se focalise sur le présent, l'objectif est de vivre l'instant présent, investir dans des choses sûres et préférer les relations profondes (Carstensen et al., 2003). Ensuite, la théorie de la sélectivité socio-émotionnelle postule que notre comportement est guidé par la perception que nous avons du temps qu'il nous reste à vivre (autrement dit par notre « sentiment de finitude ») (Carstensen, 2006). Celui-ci est en partie relié à notre âge chronologique.

Ainsi, à 20 ans, nous avons une perception du temps très ouverte, et nous sommes donc plus orientés vers la préparation du futur : nous sommes enclins à développer de nouveaux contacts sociaux et à acquérir de nouvelles connaissances. A l'inverse, avec l'avancée en âge, nous aurions une tendance générale à voir le temps comme plus limité et donc nous orienter vers des buts à connotations émotionnelles et à valoriser les relations d'intimité avec nos proches (Carstensen et al., 2003). Ce sentiment de finitude n'est toutefois pas strictement superposable à l'âge chronologique : chez des jeunes à qui l'on vient de diagnostiquer une maladie grave comme le sida, le comportement change et est similaire à celui des personnes âgées (Carstensen & Frederickson, 1998).

Etant donné leurs implications cliniques, ces théories dites du « vieillissement réussi » nous paraissent importantes à exposer aux professionnels de soins afin de leur permettre de développer un regard plus contrasté sur le vieillissement (ce n'est pas que pathologie, détérioration, dépendance, etc.). Par ailleurs, elles peuvent également nous guider dans le choix des interventions à privilégier auprès des patients eux-mêmes. Ainsi, bien qu'une étude a démontré l'efficacité d'une intervention cognitive-existentielle auprès de personnes âgées souffrant de cancer (Gagnon et al., 2014), nous aurions tendance à rester prudents dans l'utilisation des techniques de restructuration cognitive auprès des personnes âgées. En effet, pour rappel les auteurs de cette recherche avaient axé leurs interventions sur l'emploi de techniques cognitivo-comportementales (TCC) (incluant de la restructuration cognitive) et existentielles (ex : permettre au patient de trouver dans ses souvenirs des moments magnifiques vécus qui l'ont fait se sentir vivant). Or, si nous prenons en considération les éléments de la théorie de la sélectivité socio-émotionnelle, il s'avère que les personnes âgées ont plutôt tendance à se rappeler les événements émotionnellement positifs (L. Carstensen & Mikels, 2005) alors que la restructuration cognitive est centrée sur les émotions négatives. Cet élément illustre une thématique plus globale (que nous ne développerons pas ici) qu'est la question de l'adaptation des techniques, notamment TCC, aux spécificités des personnes âgées. Divers auteurs (Laidlaw & Kishita, 2015; Laidlaw & McAlpine, 2008) s'intéressent particulièrement à cette question, notamment dans le but d'améliorer l'efficacité des thérapies TCC auprès des personnes âgées (les études actuelles étant essentiellement focalisées sur la dépression). Ils appuient de plus en plus

leurs propos sur la prise en compte d'éléments issus de théories gérontologiques, dont celles du vieillissement réussi. Dans cette perspective, certains auteurs (René, Kindynis, & Csillik, 2012; Sin & Lyubomirsky, 2009) soulignent le caractère prometteur des TCC 3^{ème} vague (ex : thérapie d'acceptation et d'engagement, « mindfulness », etc.) : il s'agit de techniques allouant une importance primordiale aux processus émotionnels et à l'exploration active des émotions, se focalisant sur l'acceptation des difficultés et des émotions, qu'elles soient positives ou négatives, afin de mettre fin aux mécanismes mentaux à l'origine de la détresse psychologique. L'efficacité grandissante de ces techniques avec l'âge (Sin & Lyubomirsky, 2009) peut à nouveau s'expliquer par le fait qu'elles paraissent cohérentes avec certaines caractéristiques liées au vieillissement réussi : centration sur l'ici et maintenant, valorisation de la composante émotionnelle, etc.

Compte tenu de ces différents éléments, une perspective thérapeutique, inspirée de la psychologie sociale, nous paraît particulièrement intéressante : l'affirmation de soi (« self-affirmation ») (Sherman & Cohen, 2006). Cette technique part du principe que les stéréotypes négatifs menacent l'intégrité des individus (i.e., son « self »). Elle propose donc de se focaliser sur une valeur importante pour soi, qui nous met en valeur, ou de s'engager dans une activité mettant en évidence une valeur importante pour nous (référence au concept de sélection du modèle SOC tout en étant que cette sélection ne s'effectue pas par hasard, le choix s'orientant, en référence à la théorie de la sélectivité socio-émotionnelle, vers un but émotionnellement significatif pour la personne). Cela permettrait de se concentrer sur des conceptions de soi centrales et positives, qui peuvent constituer une ressource pour lutter contre les stéréotypes. Dans cette perspective, une étude a montré que lorsqu'on « menaçait » des femmes à propos de leurs performances en mathématiques (« toutes les filles sont mauvaises en mathématiques »), l'utilisation d'une technique d'affirmation de soi permettait d'annuler les effets de ces stéréotypes négatifs. A contrario, si aucune intervention n'était effectuée, leurs performances étaient moins bonnes (Martens, Johns, Greenberg, & Schimel, 2006). De nombreuses études confortent ces résultats et donc l'efficacité de cette technique pour promouvoir un changement d'attitudes chez les personnes (pour une revue, voir McQueen & Klein, 2006) et plus particulièrement dans l'acceptation des messages relatifs à la santé (Sherman, Nelson, & Steele, 2000). Néanmoins, à notre

connaissance, cela n'a jamais été testé chez des personnes âgées. Il serait donc très intéressant de tester cette technique au sein de cette population.

Une autre technique, moins directement liée aux théories du vieillissement réussi, a été évoquée par d'autres auteurs (Hendriks, Oude Voshaar, Keijsers, Hoogduin, & van Balkom, 2008) : il s'agit de la psycho-éducation. Cette dernière a déjà fait ses preuves notamment dans le domaine du sexisme : les effets négatifs d'un stéréotype lié au genre (par exemple « les femmes sont mauvaises en mathématiques ») disparaissent si les femmes ont pu bénéficier d'une explication des mécanismes des stéréotypes (Johns, Schmader, & Martens, 2005). Cette technique a également montré son efficacité dans le traitement de l'anxiété chez les personnes âgées : donner plus d'informations sur les mécanismes de l'anxiété, de ses manifestations comportementales, de ses mécanismes d'actions, etc. semble particulièrement utile chez les seniors (Stanley & Beck, 2000). Bien que des études doivent être réalisées afin d'analyser l'efficacité de cette technique chez les personnes âgées dans le domaine de l'oncologie, nous pouvons émettre l'hypothèse qu'elle permettrait de combattre les stéréotypes liés à l'âge à condition bien entendu qu'elle ne soit pas emprunte de caractéristiques de l'elderspeak. Cette dernière remarque nous renvoie donc à l'utilité des formations des professionnels de la santé, quels qu'ils soient. Rappelons en effet que si l'âgisme a un effet direct sur les soignants et sur les patients, il y a également une interaction entre l'attitude des interlocuteurs des personnes âgées et ces dernières. Par exemple, si les patients ressentent des attitudes stéréotypées de la part du personnel soignant à l'égard de leur âge, ils se sentiront en moins bonne santé mentale, ressentiront plus de douleur corporelle et auront une moindre satisfaction générale des soins (Mandelblatt et al., 2003). Dans le cadre de notre étude, nous pouvons donc imaginer que les problèmes de santé tant physique que mental rapportés par les patients soient en partie influencés par les attitudes plus ou moins stéréotypées de la part du personnel soignant.

Limites des études et perspectives futures

Au vu des résultats des différentes études présentées au cours de ce travail, plusieurs éléments mériteraient d'être approfondis. Premièrement, dans l'étude sur la communication avec les médecins (étude 3) nous avons pu observer que lorsque les

professionnels avaient une vision négative du vieillissement, l'elderspeak était présent aussi bien pour un patient de 70 ans que pour un patient de 40 ans. Ce résultat nous a alors amenés à penser que l'étiquette « cancer » conduisait à considérer un patient comme plus âgé. Il serait donc intéressant d'explorer cette hypothèse plus en profondeur en demandant à des soignants d'évaluer l'âge de personnes sur base de leur visage. Ces personnes seraient présentées comme : (a) étant en bonne santé ; (b) souffrant d'une grippe, pathologie considérée comme banale à tout âge ; et (c) souffrant d'un cancer, pathologie associée à la personne âgée. Si nous confirmons l'hypothèse selon laquelle cette surestimation de l'âge serait d'autant plus importante que la vision du vieillissement du soignant serait négative (et ce uniquement dans le contexte d'un patient présenté comme souffrant d'un cancer), cela confirmerait que l'influence de l'âgisme pourrait déjà se manifester pour des patients d'âge « moyen » (40-45 ans). Transposant le même raisonnement au patient, il pourrait être intéressant de voir si une personne à qui l'on annonce un diagnostic de cancer s'évalue subitement comme plus âgée. En effet, l'âge ressenti est un prédicteur important de santé physique et mentale, contrairement à l'âge réel (Demakakos, Gjonca, & Nazroo, 2007). Afin de tester cette hypothèse, nous pourrions inviter des personnes (≥ 65 ans) à s'imaginer qu'elles ont été consulter un médecin pour un problème de fatigue généralisée et de douleurs musculaires (courbatures). Dans un groupe, le diagnostic fictif serait une grippe (maladie banale, non-associée à l'âge) tandis que pour un second groupe il s'agirait d'un cancer. Si le cancer est effectivement associé au vieillissement chez les participants, nous devrions nous attendre à ce qu'ils se sentent plus vieux dans le second groupe. Enfin, bien que nous ayons pu montrer que les médecins et étudiants en médecine avaient tendance à utiliser l'elderspeak lorsqu'ils s'adressaient à des patients âgés, nous ne savons pas quelles en sont les conséquences sur les patients. Les effets négatifs d'un tel discours ont pu être montrés sur la population générale (baisse de l'estime de soi, moindre confiance en ses capacités, etc.) (Ryan & Butler, 1996) et dans le contexte de la démence, où l'elderspeak augmentait les comportements de résistance aux soins (par exemple, les patients criaient, poussaient la personne, jetaient des objets, etc.) (Williams et al., 2009). De même, l'impact de la discrimination sur l'adhérence à un traitement a déjà pu être démontré dans le cadre d'études sur le racisme : les patients qui se sentaient le plus discriminés avaient tendance à refuser plus fréquemment un

traitement 16 semaines après les visites médicales. Cette relation est partiellement médiatisée par une moindre confiance dans le médecin (Hagiwara et al., 2013). Dès lors, il n'y a aucune raison de penser que les conséquences seraient différentes pour l'âgisme. Il serait donc intéressant d'évaluer si lorsqu'un médecin explique un traitement avec les caractéristiques de l'elderspeak, les participants le refusent plus fréquemment, jugent le médecin comme moins compétent ou encore se sentent plus vieux après l'explication.

Bien évidemment, il serait intéressant de répliquer les études que nous avons faites auprès des patients avec un plus grand nombre de participants. De même, il serait utile d'effectuer un suivi des patients sur les paramètres de santé au cours d'une plus longue période, afin de voir si la perception de leur vieillissement et/ou vision du cancer est toujours prédictive de la santé plusieurs années après. Cela permettrait également de voir si des effets de stigmatisation peuvent également être prédictifs de la mortalité. Dans le même ordre d'idée, des études épidémiologiques pourraient être utiles : nous testerions la vision de l'âge de personnes plus jeunes (à l'instar des études longitudinales de Levy et collaborateurs), et observerions si celles avec une vision plus négatives de l'âge sont plus susceptibles de développer un cancer que celles avec une vision plus positives.

Pour finir, nous noterons que si un tel constat est fait dans le domaine oncologique, il n'y a pas de raison de penser que l'influence de l'âgisme soit différente pour d'autres pathologies : nous pourrions donc envisager d'explorer son impact dans le domaine de la démence (cumulé à tous les stéréotypes que l'on peut avoir sur ce type de maladie neurodégénérative), mais également pour d'autres pathologies comme le diabète, les problèmes cardiaques, d'arthrose, etc. en parallèle avec les stigmas respectifs à ces types de maladie. Similairement, nous pourrions envisager d'étudier d'autres sources de stigmatisation. A ce propos, Parker et Aggleton (2003) abordent la problématique des groupes marginalisés, plus vulnérables car victimes d'un autre type de stigma comme la pauvreté ou la préférence sexuelle. Nous pourrions dès lors envisager d'étudier ces différents types de stigmatisation dans le milieu de l'oncologie mais également la possibilité de parler de « triple stigmatisation » : stigmatisations liées à la maladie, à l'âge mais également, par exemple, au statut socio-économique.

CONCLUSION

Nous vivons dans une société au sein de laquelle l'âge est le premier critère de discrimination (TNS Opinion & Social, 2015). Cette discrimination fait écho à une vision particulièrement négative du vieillissement (et des personnes âgées) caractérisée par les phénomènes d'âgisme et de jeunisme. S'il s'agit d'un phénomène sociétal, il est particulièrement marqué dans certains contextes tels que celui des soins de santé. En nous centrant sur le contexte spécifique de l'oncologie, nous avons ainsi vu que de nombreux éléments tendent à confirmer ce phénomène important de discrimination liée à l'âge et ce, tant au niveau de la clinique que de la recherche (Madan, Aliabadi-Wahle, & Beech, 2001; Murthy, Krumholz, & Gross, 2004; Protière, Viens, Rousseau, & Moatti, 2010). Et pourtant, le lien entre la vision que les soignants ont de l'âge et leurs attitudes n'avait, à notre connaissance, pas encore été testé. Dans ce but, nous avons mené deux études, une parmi des infirmiers(-ères) en oncologie et l'autre avec des médecins et étudiants en médecine. Ainsi, nous avons pu observer que plus les infirmier(-ères) ont une vision négative de l'âge, moins ils (elles) encouragent une reconstruction mammaire chez une patiente de 75 ans (comparativement à une patiente de 35 ans). Similairement, nous avons démontré que les médecins et étudiants en médecine avec une vision négative de l'âge font des phrases plus courtes et ralentissent leur débit tant pour une patiente de 40 ans que de 70 ans. Ces derniers résultats suggèrent ainsi que les manifestations de l'âgisme pourraient commencer très tôt.

Après avoir analysé les conséquences de l'âgisme pour le personnel soignant, nous nous sommes intéressés aux soignés eux-mêmes, en d'autres termes les personnes âgées. Pour mener à bien notre projet, nous sommes partis d'un constat interpellant : une perception négative de son propre vieillissement a d'importantes conséquences délétères sur la personne vieillissante dans le vieillissement « normal » (Levy, 2009). Si nous pouvions imaginer que la situation serait pire dans le vieillissement pathologique, nous avons été confronté à un manque d'études dans le champ. Par ailleurs, aborder le vieillissement pathologique, dans le cas présent au travers du cancer, amène à prendre en compte non seulement ces stigmas liés à l'âge mais également ceux liés à la pathologie. Or, à nouveau, si les effets d'une stigmatisation liée au cancer ont été bien étudiés parmi la population générale (Cataldo & Brodsky, 2013; Cho et al.,

2013), aucune recherche à notre connaissance ne s'était intéressée spécifiquement aux personnes âgées. Suite à ces observations, nous avons étudié ces deux types de stigmatisation parmi des personnes âgées de 65 ans et plus en oncologie. Ainsi, nous avons pu mettre en évidence que plus leur perception de leur propre vieillissement et/ou de leur vision du cancer est négative, plus ils rapportent des problèmes de santé mentale. Les problèmes de santé physique semblent, quant à eux, spécifiquement liés à une perception négative de leur vieillissement (et non à leur vision du cancer). Par un suivi longitudinal, nous avons pu affiner ce lien entre stigmatisation (liée au cancer et à l'âge) et santé (physique et mentale) des patients. Plus précisément, nous avons observé que tant la perception initiale que les personnes âgées ont de leur âge que leur vision du cancer au début de la maladie semblent être prédictifs d'une évolution mentale et physique défavorable. Si nous prenons en compte l'évolution de la perception de l'âge et du cancer à travers le temps, ces deux paramètres influencent toujours la santé mentale. Par contre, seule l'évolution négative de la perception du vieillissement (et non la vision du cancer) est liée à une évolution négative de la santé physique. Cette constatation nous amène à considérer ces deux stigmas comme des facteurs de fragilité dans l'évolution du cancer chez les personnes âgées.

Suite aux résultats de ces différentes études, nous avons mis en avant l'importance de développer des pistes thérapeutiques. Celles-ci peuvent concerner directement le personnel soignant, à travers des formations pour améliorer leur communication, mais également en les sensibilisant à la problématique de l'âgisme dans notre société actuelle et en abordant les théories du vieillissement réussi (et plus précisément le modèle SOC ou la théorie de la sélectivité socio-émotionnelle). Cela devrait permettre de développer une vision plus nuancée et plus réaliste du vieillissement (« tout n'est pas négatif : malgré certaines pertes, la majorité des personnes âgées gardent un bon niveau de qualité de vie »). Nous espérons ainsi qu'une amélioration de leurs connaissances du vieillissement impactera leurs attitudes quotidiennes dans leur interaction avec les patients. Il est également possible de mettre au point des interventions ciblées directement sur les patients eux-mêmes. Toujours sur base des théories du vieillissement réussi, les thérapies appliquées à la population générale peuvent être ainsi modifiées pour être en accord avec les spécificités de l'avancée en âge.

Pour conclure, il nous semble important de rappeler la recommandation 49 du Plan International d'Action sur le Vieillissement (recommandation faite lors de l'Assemblée Mondiale sur le Vieillissement qui avait eu lieu à Vienne en 1982) qui dit ceci : *« Les gouvernements et les organisations internationales qui s'occupent du problème du vieillissement devraient mettre en œuvre des programmes visant à informer la population en général du sujet du processus de vieillissement et des personnes âgées. Cette sensibilisation devrait débiter dès l'enfance et être dispensée dans les établissements d'enseignement de tous les niveaux ..., ce qui conduirait à une connaissance plus profonde du sujet et aiderait à corriger les attitudes stéréotypées que l'on observe trop souvent à cet égard dans les générations actuelles. »*. Il ne reste donc plus qu'à mettre en application cette déjà vieille recommandation ... !

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