



Review

Ageism and age discrimination in health care: Fact or fiction? A narrative review of the literature



Angela Kydd*, Anne Fleming

School of Health Nursing and Midwifery, University of the West of Scotland, Hamilton Campus, Almada Street, Hamilton, Lanarkshire, Scotland, United Kingdom

ARTICLE INFO

Article history:

Received 6 May 2015

Accepted 11 May 2015

Keywords:

Ageism
Age discrimination
Health care
Old age
Person centred

ABSTRACT

Ageism and age discrimination are terms used in best practice statements and in the literature to define negative attitudes towards older people and towards people because of their age (whether old or young). However, 'old age' is a nebulous concept with definitions ranging from the over 50s to the over 85s. In seeking to explore ageism and age discrimination within health care, this paper discusses the concept of 'old' and discusses the findings of a narrative review of the literature on these two concepts. Results show that negative attitudes have been perceived by users of health care services, but the reasons are not clear. Such attitudes are usually reported in acute health care settings, where targets and quick turnover are encouraged. Thus people, usually those with complex needs, who require longer periods of recuperation and rehabilitation following an episode of ill health, are troublesome to staff working in a system geared up for early discharges. This type of service user is usually over the age of 85. Recommendations from this paper include the need for acute frailty units, with well trained staff, where frail older people can be comprehensively assessed, receive timely and targeted care, followed by a supported discharge.

© 2015 Elsevier Ireland Ltd. All rights reserved.

Contents

1. Introduction	432
2. Methods for reviewing the literature	433
2.1. Data sources	433
2.2. Criteria for inclusion/exclusion in search strategy	433
2.3. Risk of bias assessment	433
3. Findings	433
4. Emerging trends from the literature review	433
4.1. The nature of discrimination (see Table 2)	433
4.2. The changing role of hospitals (see Table 3)	434
4.3. Social worth versus compassion (see Table 4)	434
5. Discussion	436
6. Conclusion	437
Contributors	437
Competing interests	437
Funding	437
Provenance and peer review	437
Acknowledgements	437
References	437

1. Introduction

Ageism is commonly defined as an act of discrimination based upon numeric age and as such it has a stigmatising property frequently cited as a component of poor quality care for older people.

* Corresponding author. Tel.: +44 7886260637.

E-mail address: angela.kydd@uws.ac.uk (A. Kydd).

Ageism, coined by Butler in the 1960s [1] refers to discrimination exhibited to people purely because they are 'old'. Age discrimination however has a different focus. Arbitrary decisions concerning people because of their ages, whether young or old, is at the heart of age discrimination [2,3]. The words are commonplace, but the term 'old' is a nebulous concept, making ageism difficult to define. Historically old was viewed as being 60 for women and 65 for men (the state pension age for many years), yet the state pension age has increased and retirement is no longer compulsory. People are living longer, with the middle-old healthier [4], yet some studies report that after the age of 85 there is an increased likelihood of vulnerability [5]. The Office for National Statistics (ONS) 2001 census [6] showed the oldest old group constitutes the largest population increase, rising 25% to 1.25 million people. The very old (centenarians) were estimated to be 13,780, of whom 710 were over 105 years of age. In Scotland, population figures [7] show an increasing and ageing population of 5,295,403 with the proportion of over 65s increasing to 17%. Projections estimate that between 2010 and 2035 those aged 75 and over will increase by 82% and the estimated 820 centenarians in Scotland will increase to 7600 by 2035.

These demographic changes have led to sub categories of 'old', defined by Neugarten in the 1960s [8] being recognised. This includes the young old (65–74), the middle old (75–84) and the old old (85 years and older) [8,9]. Further sub definitions are suggested by the International Longevity Centre [4] and these are octogenarians (80–89), nonagenarians (90–99), centenarians (100 or over), semi-supercentenarians (105–109) and the supercentenarians (over 110 years of age). The rise in the numbers of the oldest old in poor health could have detrimental effects on the sustainability of welfare state arrangements [10] with Tadd and colleagues [11] suggesting that acute target driven hospitals are not the right place for a vulnerable frail person with multiple needs. Findings echoed by Silvester [12] and Dent [13].

So is age or old age well enough defined for a prejudice to be placed? An article on poor quality care and negative patient experiences calls for a return to caring, but does not mention age as a factor of poor care [14].

Given that a large percentage of the UK health care users are 'old', as defined by their numeric age, this paper sets out to explore the concept of ageism and age discrimination in healthcare through a narrative review of the literature. The aim is to determine if ageism and age discrimination exist within health care systems.

2. Methods for reviewing the literature

The Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) [15] statement and flowchart was used to assist the authors in reporting on the existing literature regarding the topic area.

2.1. Data sources

The following databases were searched for full text, English language and peer-reviewed articles from April 2005 to April 2015: Medline, CINAHL complete, CINAHL with full text, SocIndex with full text, PsychInfo, Psychology and Behavioural Sciences Collection and Health Source: Nursing/Academic Edition. The key words used were *ageism* and *healthcare*, and *age discrimination* and *healthcare*. The bibliographies of key texts were used to source further articles.

2.2. Criteria for inclusion/exclusion in search strategy

The full text articles were screened independently by both authors. Articles were retained where there was evidence of ageism or discrimination by age in the text, and where there were clear implications for healthcare settings, organisational practice and

Table 1
Search strategy results.

Key word(s)	Limiters	Results
'Ageism'	April 2005–April 2015	N = 125
'Age discrimination'	English	Medline (14)
'Healthcare'	Full text	CINAHL complete (17)
	Abstract	CINAHL with full text (14)
	Peer-reviewed	SocIndex with full text (10)
		PsychInfo (12)
		Psychology and Behavioural Sciences Collection (19)
		Health Source: Nursing/Academic Edition (39)

individual practices. Also included were articles regarding the education of healthcare workers where specific interventions were introduced to address ageism.

2.3. Risk of bias assessment

No disagreements required to be resolved regarding the inclusion/exclusion of the reviewed articles by the two authors.

3. Findings

The search strategy sourced 125 citations as shown in Table 1.

Of these, 50 citations were retained after the removal of duplicates. The articles were reviewed and 28 articles were retained for inclusion of the literature reviewed (see Fig. 1).

4. Emerging trends from the literature review

The review of the literature revealed three emerging trends; the nature of discrimination; the changing role of hospitals and social worth versus compassion. Key to all of these themes was the belief that person centred care could combat ageist or discriminatory practice. For this reason Kitson's [16] three core elements of person centred care were adapted for use. These are Patient participation and involvement; Relationship between the patient and the health professional and The context where care is delivered. For the purposes of this analysis Kitson's first two core elements were merged into a core element called *Relationship, involvement and participation* and we used the third core element *The context where care is delivered*. The two core elements were then mapped against the three trends found in the analysis of the literature review. The results are presented in the tables below.

4.1. The nature of discrimination (see Table 2)

These 5 articles give instances where ageism or age discrimination were thought to be prominent in a range of health and social care settings and fit with the combined theme of Kitson [16] of *Relationship, Involvement and Participation*. It should be noted that the examples of ageism were not specific to older people and that not all age discrimination was negative in nature. Stereotypical societal viewpoints of old age were commonly cited; that of being frail, weak, dependent and non-productive members of society. The focus was often on the need to eliminate ageist attitudes in student healthcare professionals and how this might be achieved. However, some authors spoke of dignity in relation to equality [17,18] and although these papers acknowledged that older people receive poor care – they also mention many other groups who were marginalised

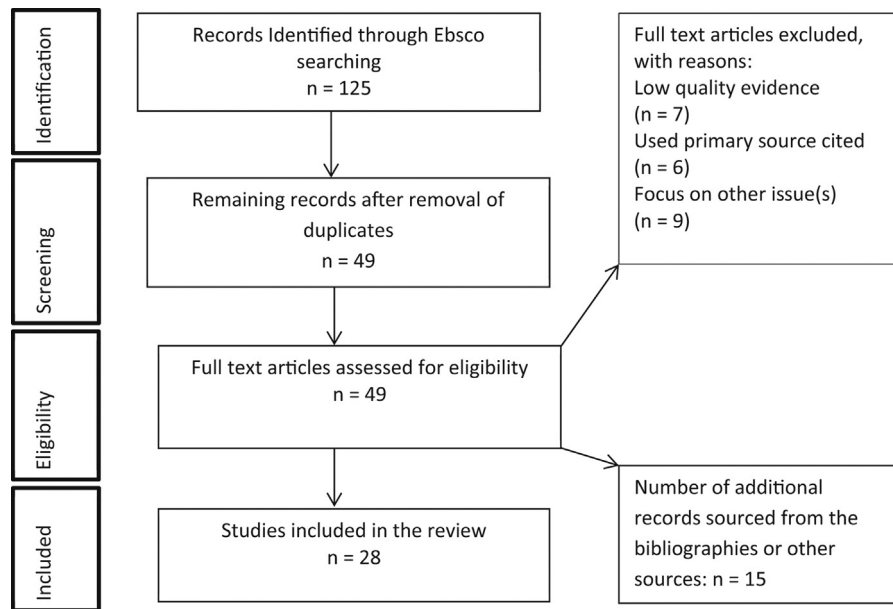


Fig. 1. Flow diagram of article selection.

and called for the health care system to respect equality and diversity in the patient population. A systematic review on educational strategies to address ageing [13] found little homogeneity on the strategies used for the target populations. A second focus was the need to provide a specialist service for older people [18] in order that relevant services for people with age accumulated illnesses are treated by trained staff. However, health inequalities are frequently cited when referring to ageist services, but if the reason for the difference in treatment makes clinical sense, then age is immaterial [18]. 'Old' people as such are a diverse population and a paper [20] on ageing homosexual men found that participants were worried about prejudices that may be exhibited to them in their later life, more because they were homosexual, rather than because they were 'old'. This points to the fear people have of becoming vulnerable in a system where they can be judged. A point made later in the section on Social Worth versus Compassion. The problem is that what is meant by ageing 'gets older every year' [21] and until a clear definition of what constitutes old is made – then how can ageism and age discrimination be identified?

4.2. The changing role of hospitals (see Table 3)

The 10 articles in Table 3 have three pertaining to age discrimination [3,22,23] and seven pertaining to ageism and all but one paper [30] fit with the theme of Kitson [16] of *The Context of Where Care is delivered*. They have been grouped to show the effect of the changing role of hospitals. Hospitals and wards that specialised

in the care of older people have been closed and replaced by large acute hospitals. The specialist services of geriatricians have diminished at a time when the numbers of the oldest old (85+) are increasing [3]. With this comes a lack of specialist staff, which is apparent in the prescribing practices of doctors working in acute services [29]. There is a call for in-patient services to be 'age attuned' [22], a finding recommended in several studies [27,28] and for specialist services to be available for frail older people [28]. There is however a rise in community integrated teams and telehealthcare in a bid to keep people well and at home where possible [23]. This 'gerontechnology' [24] movement serves to enable older people to take charge of their health and illnesses. Advances in health care have meant that meant disabled people are living longer and one article speaks of the 'double jeopardy' of ageing with a disability [25]. Some older people, not wanting the stigma of being disabled may refuse to use hearing aids [30] or walking sticks [25]. This gives an interesting insight into the prejudices the ageing population may have about the disabled population.

4.3. Social worth versus compassion (see Table 4)

The 13 articles in Table 4 have four pertaining to age discrimination [2,31–33] and nine pertaining to ageism [34–42] and fit with the combined theme of Kitson [16] of *Relationship, Involvement and Participation*. These have been grouped into a trend labelled 'social worth versus compassion' and the overarching finding is that through the provision of person-centred care, the negative

Table 2
The nature of discrimination.

Citation	Findings	Key theme
Key words – Ageism and Healthcare		
Baillie and Matiti [17]	Discrimination is present in healthcare settings, and stresses the need for person-centred practice to alleviate this.	Relationship, Involvement and Participation
Kane and Kane [18]	Suggest ageism more prevalent in long term care, particularly when comparing LTC for younger and older age groups. 'Paternalism' is common in healthcare workers and ageist. Subtle ageism e.g. DNR's	Relationship, Involvement and Participation
Brown et al. [19]	It was difficult to evaluate the effectiveness of educational interventions in health care curricula to negate ageism.	Relationship, Involvement and Participation
Kushner et al. [20]	Three main themes relating to the ageing experiences of these men were identified: 'homophobia', 'being with someone' and 'future care'.	Relationship, Involvement and Participation
Rosowsky [21]	Refers to manifestation of ageing, ageism in healthcare settings.	Relationship, Involvement and Participation

Table 3
The changing role of hospitals.

Citation	Findings	Key theme
Key words – Age Discrimination and Healthcare		
Topinková et al. [22]	A four step process to improve prescribing and adherence to medication was proposed including overcoming age discrimination.	The Context of Where Care is Delivered
Davies [3]	Good description of types of discrimination.	The Context of Where Care is Delivered
Webster and Hayes [23]	Suggests that progress has been made in reducing ageism in the NHS but not in all areas. A lack of reporting required on progress in this area is believed to contribute to this lack of overall progress.	The Context of Where Care is Delivered
Key words – Ageism and Healthcare		
Joyce and Loe [24]	Deepens our understanding of the socio-historical contexts surrounding ageing bodies and ageing enterprises, including biomedicalisation of ageing, the rise of anti-ageing or longevity medicine; and the rise of gerotechnology industries and professions.	The Context of Where Care is Delivered
Sheets [25]	People with disabilities are living longer making them subject to prejudice on two counts. Transition between services can be poor, and there is evidence of service gaps.	The Context of Where Care is Delivered
Watkins and Waterfield [26]	Five higher order themes emerged: 1. The university course; 2. The clinical education experience (being a student); 3. Ageism in the healthcare setting; 4. The rehabilitation environment and 5. Participants' attitudes/perceptions of older people.	The Context of Where Care is Delivered
Kydd and Wild [27]	Five themes emerged: 1) ageism; 2) learning environment; 3) working environment; 4) professional esteem and 5) specialist status.	The Context of Where Care is Delivered
O'Neill [28]	One of the strongest arguments against ageism and apocalyptic demography is an economics paper that demonstrates that greater longevity after 1970 has added \$3.2 trillion to the US economy. New technologies for ageing care are also themselves potent agents for industrial development.	The Context of Where Care is Delivered
Spinewine et al. [29]	Suggests that there is a need to assess the whole person (PCC) rather than only acute needs. Highlights the need for improved communication with the older person and between and across healthcare settings.	The Context of Where Care is Delivered
Jennings [30]	Older adults with hearing loss are subject to double negative stereotypes. With longevity the older adult may not receive the same attention as the younger older adult with hearing loss.	Relationship, Involvement and Participation

values attributed to old age would be eliminated. Further, that compassionate and high quality care would prevent 'professional socialisation' into institutional discriminatory practices for any group of people. Perceived discrimination was reported on in one article on pre-natal care [2], which involved self-reported feelings of being treated differently, and not well, because of one's status, race or age. Such perceptions have resulted in poor compliance, greater risk of depression and poorer health outcomes. However, the findings showed that age discrimination was more likely amongst young mothers (under 19 years of age) and older mothers (those over 35 years of age). In a sample of 5762 women, is it possible to say that age, race or status was the reason for poor care, when it was found that 1 in 5 women felt discriminated against? The authors felt that perhaps a heightened awareness of discrimination may have led to greater feelings of sensitivity the women had about their age, race or status and perhaps had attributed poor care on their perceptions of why this might be. Another article explored perceived discrimination in terms of race, gender, height or weight or other reasons over the life course of individuals [31]. This suggests that individual's may be self-labelling. Out of 2718 participants, all from ethnic minority groups, 83% reported feelings of discrimination. The findings showed that those who felt discriminated against were more likely to suffer from pre-menstrual dysphoric disorder. The authors speak of subtle and blatant discrimination, but there is little detail on how this manifested itself – other than to say that it was self-reported. A third study on perceived discrimination explored end of life care [32]. Out of 73 participants, comprising of Arab Muslims, Arab Christians, Hispanics, black people and white people with an age range of 50–83, the findings on self-reported discrimination was as follows. Muslim

women spoke of cultural barriers, black people spoke of inequalities and white people spoke of age discrimination. The authors suggest that as populations become more diverse, there is a greater need to provide culturally and sensitive end of life care. The final article in this section addresses the treatment of older people [33]. It outlines past treatment of people based on age alone, which is now against the law. It goes on to call for an accurate and timely assessment of an individual, where age can be a factor in determining clinical judgement. It further states that people of the same age will all present differently and thus co-morbidities, the individual's wishes and expected outcomes for example, will influence treatment. The authors conclude that discrimination purely on the basis of age is not straightforward and decisions not to treat are confounded by multiple variables. This supports the promotion of an 'age attuned' service [28].

With regard to the articles on ageism, four [34–36,40] examined the variables that influenced attitudes towards ageing in different populations, including knowledge of ageing, ageing anxiety, the extent of contact with older people, education and work setting. Generally the results of these articles were inconsistent as reported also by Lui [35]. Four articles [37–40] considered how the attitudes held health and social care workers influenced aspects of care including involvement in research studies, assessment, symptom management and treatment decisions. Again the results were inconclusive as illustrated by Yeom [40]. This study found significant relationships between specific age-related beliefs about symptoms and symptom management on quality of life in older adult breast cancer survivors. However these findings may not be generalisable as the participants were mostly Caucasian, from similar socio-economic groupings and received care in a narrow range

Table 4
Social worth versus compassion.

Citation	Findings	Key theme
Key words – Age Discrimination and Healthcare		
Pilver et al. [31]	Eighty-three percent of the participants reported experiencing discrimination (due to race, gender, age, height or weight, or other reasons) in their lifetimes.	Relationship, Involvement and Participation
De Marco et al. [2]	18.53% of mothers reported discrimination by providers during prenatal care, labour, or delivery, most commonly because of age or insurance status.	Relationship, Involvement and Participation
Duffy et al. [32]	Different ethnic groups had different preferences towards end-of-life care. Age discrimination was only prevalent in American whites group responses.	Relationship, Involvement and Participation
Rai and Abdulla [33]	Treatment decisions should be based on clinical need, not the patients choice, adhering to quality of life rather than prolonging years.	Relationship, Involvement and Participation
Key words – Ageism and Healthcare		
Boswell [34]	1) Knowledge of ageing had a significant, inverse relationship with ageism; 2) individuals reporting higher ageing anxiety also tended to report higher ageism; 3) Higher compassion was associated with lower ageism; 4) Contact with older adults was not significantly related to ageism.	Relationship, Involvement and Participation
Liu et al. [35]	Reported attitudes towards older people were inconsistent with positive, negative and neutral attitudes being noted across registered and student nurses and appear to be slightly less positive since 2000.	Relationship, Involvement and Participation
Ferrario et al. [36]	1) More knowledge about ageing was related to positive attitudes towards older adults and vice versa; 2) There was general consistency between the students' and the older adults' views.	Relationship, Involvement and Participation
Imbody and Vandsburger [37]	Ageist attitudes lead towards "hostile", abusive treatment of older individuals, therefore effective tools are required to detect elder abuse and highlight this as an important social problem.	Relationship, Involvement and Participation
Heath [38]	Challenging NICE is appropriate; challenging our own assumptions and practices could be more difficult.	Relationship, Involvement and Participation
Wiseman [39]	Being young, mentally healthy and a parent was more likely to promote treatments being provided.	Relationship, Involvement and Participation
Yeom and Heidrich [40]	Developing and testing nursing interventions focusing on enhancing both positive beliefs about symptom management and effective communication in old age is suggested.	Relationship, Involvement and Participation
Hatch [41]	Discusses society's views of the negative social worth of older women as compared to men and how both social policy and healthcare discriminate against older women.	Relationship, Involvement and Participation
Ericson-Lidman and Strandberg [42]	Four themes emerged: 1) Dialoguing with oneself; 2) Dialoguing with others; 3) Taking measures in perceived right direction, and 4) Distancing and energising.	Relationship, Involvement and Participation

of healthcare settings. Some consensus in the reported findings was found in the self-perceptions of age held by older adults and how this impacted on health. These self-perceptions ranged from the belief that symptoms of ill health were a normal part of ageing [40], to societal devaluing of both men and women due to ageing that is more prejudiced against older women than older women themselves self-fulfilled [41]. This supports the notion of a societal value judgement that individual's internalise. Despite these negative inconsistencies in beliefs and attitudes surrounding ageism, Ferrario [36] found a high correlation between the perceptions of older adults' views on successful ageing with the findings of the literature on successful ageing. Imbody [37] reviews screening tools for elder abuse and neglect, and calls for comprehensive services to prevent elder abuse going unnoticed. These services require to communicate well with each other in order that elder abuse is not concealed by the older person or their family. Boswell [34], in studying the predictor factors of ageist attitudes in undergraduates in the allied health and mental professions calls for compassionate professionals, as compassion is related to a more persistent pattern of helping behaviour. The final article [42] explored how care staff for older people ($n=28$) cope with their conscience within the workplace. Four themes and 14 sub-themes emerged from this research: Reflection over what is right or wrong to do, Ransacking oneself, Setting limits for oneself and Confirming oneself as good

enough. Frequently the instances that had caused the conscience to be active surrounded a lack of personnel, time or knowledge. Poor coping strategies resulted in sickness and 'burn-out' and the conclusion stressed the need for staff to be able to share difficult situations and their way of dealing with them, amongst their staff team. This was because in order to provide high quality care, care providers had to look after their own health.

5. Discussion

Although ill-defined, old age is a time of vulnerability. Thus the actual age that someone is when they are vulnerable can differ from the over 50s to those over a 100. Yet illness is part of a human experience, 'a predicament no mortal can escape' [43]. Illness denotes someone who is suffering and who is dependent and vulnerable. Perhaps it is the *individual's experience of vulnerability* that needs to be addressed, rather than their race, ability, class colour, sexual orientation or creed (which may indeed overlap). It is perhaps no longer helpful to speak of 'older people' as a group. However, in a time when healthcare providers are streamlining their services to provide a quick fix and discharge back into the community, supported living facilities or into care homes, hospitals are not an environment for those who no longer need medical treatment. Yet the lack of restorative or rehabilitative facilities, especially for the

oldest old, can mean that some people have little or no opportunity to reach their health potential. In an older population, where physiological stressors can have a deleterious effect on other bodily systems and where family support may not be as accessible, this can lead to further health crises and frequent readmission to the acute hospital setting. Age alone is no predictor of the need for services; indeed those with the longest life expectancy also have the longest healthy life expectancy [7] and therefore the shortest time in need of healthcare. However, when frail older people do present to health services they need focussed and timely treatment [12,13]. In situating our findings within an adaptation of Kitson's framework it is clear that *Relationship, involvement and participation* is essential for the focus of an individual's care and the *Context where care is delivered* is influential for the provision of an age attuned service. In an editorial on the ageing world, O'Neill [28] refers to an 'age attuned' health service as one that can cope with the frailties and vulnerabilities of the oldest old in dedicated frailty units.

6. Conclusion

In conclusion, we pose the question if an 85 year old, black, lesbian, non English speaking homeless, convict with an alcohol related brain injury was given poor care – what would such treatment be labelled? If an individual has an experience of poor care they will possibly seek to understand why this might be. In times of vulnerability one possibly looks to attributes and labels they attach to themselves in order to make sense of why they feel they may have been treated in a negative and different way to others. There is no excuse for treating any individual badly, especially when they are in a position of need. Perhaps in providing such labels we promote discrimination. Hippocrates [44] reminds us that the role of the healthcare professional is “to cure sometimes, treat often and to comfort always”.

Contributors

Dr Angela Kydd: developed the concept of the paper, the introduction and the analysis and findings of the papers. Dr Anne Fleming: completed the literature search, methods for reviewing the literature, the findings and analysis of the papers.

Competing interests

The authors declare no conflict of interest.

Funding

Funding was provided by the University of the West of Scotland Institute of Older People's Health and Wellbeing to employ an independent researcher to work with the lead author on this paper.

Provenance and peer review

Commissioned; externally peer reviewed.

Acknowledgements

We would like to acknowledge the work of Alison Forde, Subject Librarian at the University of the West of Scotland for her help in citing the references.

References

- [1] Butler R. Age-ism: another form of bigotry. *Gerontologist* 1969;9(4 Pt 1):243–6.
- [2] De Marco M, Thorburn S, Zhao W. Perceived discrimination during prenatal care, labor, and delivery: an examination of data from the Oregon pregnancy risk assessment monitoring system, 1998–1999, 2000, and 2001. *Am J Public Health* 2008;98(10):1818–21.
- [3] Davies N. Reducing inequalities in healthcare provision for older adults. *Nurs Stand* 2011;25(41):49–55.
- [4] Valentina Serra V, Watson J, Sinclair D, Kneale D. Living beyond 100: a report on centenarians. London: International Longevity Centre; 2011.
- [5] Baltes P, Smith J. New frontiers in the future of aging: from successful aging of the young old to the dilemmas of the fourth age. *Gerontology* 2003;49:123–35.
- [6] Office for National Statistics. What does the 2011 census tell us about the oldest old living in England & Wales?; 2013. p. 1. Available at <http://www.ons.gov.uk/ons/rel/census/2011-census-analysis/what-does-the-2011-census-tell-us-about-older-people/-what-does-the-2011-census-tell-us-about-older-people-short-story.html> (accessed 13.04.15).
- [7] NHS Submission from Greater Glasgow and Clyde Demographic Change and Ageing Population Inquiry. Available at [http://www.scottish.parliament.uk/S4.FinanceCommittee/Inquiries/NHS.Greater.Glasgow.and.Clyde\(1\).pdf](http://www.scottish.parliament.uk/S4.FinanceCommittee/Inquiries/NHS.Greater.Glasgow.and.Clyde(1).pdf) (accessed 13.04.15).
- [8] Neugarten B. Middle age and aging. Chicago and London: The University of Chicago Press; 1968.
- [9] Touhy T, Jett K. Ebersole and Hess' toward healthy aging: human needs and nursing responses. 8th ed. Missouri: Elsevier; 2012.
- [10] Christensen K, Doblhammer G, Rau R, Vaupel J. Ageing populations: the challenges ahead. *Lancet* 2009;374(9696):1196–220.
- [11] Tadd W, Hillman A, Calnan S, Calnan M, Bayer T, Read S. Dignity in practice: an exploration of the care of older adults in acute NHS trusts. London: Commissioned by the Dept of Health DoH; 2011.
- [12] Silvester K, Mohammed M, Harriman P, Girolam A, Downes T. Timely care for frail older people referred to hospital improves efficiency and reduces mortality without the need for extra resources. *Age Ageing* 2014;43:472–7.
- [13] Dent E, Chapman I, Howell S, Piantadosi C, Visvanathan R. Frailty and functional decline indices predict poor outcomes in hospitalised older people. *Age Ageing* 2014;43:477–84.
- [14] Goodenough J. The deteriorating health of nursing in the United Kingdom today: an acute episode or a long-term condition? *Int J Hum Caring* 2012;16(3):42–5.
- [15] Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: the PRISMA Statement. *PLoS Med* 2009;6(6):e1000097. <http://dx.doi.org/10.1371/journal.pmed.1000097>.
- [16] Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy. *Med Nurs* 2012;69(January (1)):4–15.
- [17] Baillie L, Matiti M. Dignity, equality and diversity: an exploration of how discriminatory behaviour of healthcare workers affects patient dignity. *Divers Equal Health Care* 2013;10:5–12.
- [18] Kane R, Kane R. Ageism in healthcare and long term care. *Generations* 2005;29(3):49–54.
- [19] Brown C, Kother D, Wielandt T. A critical review of interventions addressing ageist attitudes in healthcare professional education. *Can J Occup Ther* 2011;78:282–93.
- [20] Kushner B, Neville S, Adams J. Perceptions of ageing as an older gay man: a qualitative study. *J Clin Nurs* 2013;22(23/24):3388–95.
- [21] Rosowsky E. Ageism and professional training in aging: who will be there to help? *Generations* 2005;29(3):55–8.
- [22] Topinková E, Baeyens J, Michel J, Lang P. Evidence-based strategies for the optimization of pharmacotherapy in older people. *Drugs Aging* 2012;29(6):477–94.
- [23] Webster J, Hayes N. Facing the future. *Nurs Old People* 2009;21(10):11.
- [24] Joyce K, Loe M. A sociological approach to ageing, technology and health. *Sociol Health Illn* 2010;32(2):171–80.
- [25] Sheets D. Ageing with disabilities: ageism and more. *Generations* 2005;29(3):37–41.
- [26] Watkins C, Waterfield J. An exploration of physiotherapy students' perceptions of older adult rehabilitation. *Phys Occup Ther Geriatr* 2010;28(3):271–9.
- [27] Kydd A, Wild D. Attitudes towards caring for older people: literature review and methodology. *Nurs Old People* 2013;25(3):22–7.
- [28] O'Neil D. Editorial dialogue at Davos for an aging world. *J Am Geriatr Soc* 2011;59(8):1540–1.
- [29] Spinewine A, Swine C, Dhillon S, et al. Inappropriate use of medicines in elderly inpatients: qualitative study. Inappropriate use of medicines in acute care for the elderly related to a focus on acute care, providers' passive attitudes about learning, and paternalistic decision making. *BMJ* 2005;331:935.
- [30] Jennings M. Audiologic rehabilitation needs of older adults with hearing loss: views on assistive technology uptake and appropriate support services. *J Speech Lang Path Audiol* 2005;29(3):112–24.
- [31] Pilver C, Desai R, Kasl S, Levy B. Lifetime discrimination associated with greater likelihood of premenstrual dysphoric disorder. *J Womens Health* 2011;20(6):923–31.
- [32] Duffy S, Jackson F, Schim S, Ronis D, Fowler K. Racial/ethnic preferences, sex preferences, and perceived discrimination related to end-of-life care. *J Am Geriatr Soc* 2006;54(1):150–7.
- [33] Rai G, Abdulla A. Treatment of older people. *Clin Risk* 2012;18(5):197–201.
- [34] Boswell S. Predicting trainee ageism using knowledge, anxiety, compassion, and contact with older adults. *Educ Gerontol* 2012;38(1):733–74.

- [35] Liu Y, Norman I, While A. Nurses' attitudes towards older people: a systematic review. *Int J Nurs Stud* 2013;50(9):1271–82.
- [36] Ferrario C, Freeman F, Nellett G, Scheel J. Changing nursing students' attitudes about aging: an argument for the successful aging paradigm. *Educ Gerontol* 2008;34(1):51–66.
- [37] Imbody B, Vandsburger E. Elder abuse and neglect: assessment tools, interventions, and recommendations for effective service provision. *Educ Gerontol* 2011;37(7):634–50.
- [38] Heath H. Evidence or discrimination? *Nurs Old People* 2005;17(4):3.
- [39] Wiseman D. Patient characteristics that impact healthcare resource allocation choices: relative impact of mental illness, age, and parental status. *J Appl Soc Psychol* 2007;37(9):2072–85.
- [40] Yeom H, Heidrich S. Relationships between three beliefs as barriers to symptom management and quality of life in older breast cancer survivors. *Oncol Nurs Forum* 2013;40(3):E108–18.
- [41] Hatch L. Gender and ageism. Ageism in the new millennium. *Generations* 2005 (Fall).
- [42] Eva Ericson-Lidman E, Strandberg G. Dealing with troubled conscience in municipal care of older people. *Nurs Ethics* 2013;20(3):300–11.
- [43] Pellegrino E. Some things ought never be done: moral absolutes in clinical ethics. *Theor Med Bioeth* 2005;26(6):469–86.
- [44] Hippocrates. BrainyQuote.com. Xplore Inc.; 2015 <http://www.brainyquote.com/quotes/quotes/h/hippocrate379317.html> (accessed 06.05.15).