Policy Report

Implications for policy and planning to foster solidarity between the generations and enhance healthy life among older adults

Work Package 2

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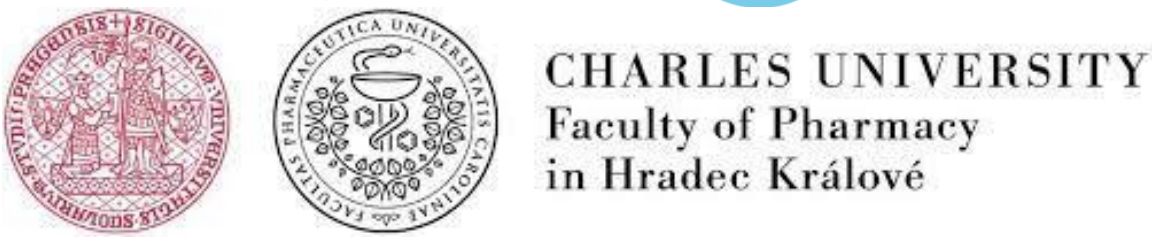

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Table of Contents

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About EuroAgeism WP2

EuroAgeism is set to advance the field by delivering an attractive multi-disciplinary, inter-sectorial, international research, training and supervision program on ageism. Addressing issues of ageism is of significance to foster intergenerational solidarity and enhance healthy life among older people. EuroAgeism Work Package 2 (WP2) consists of five research projects on the topic of "ageism in access to goods and services." WP2's research primarily concerns ageism as a barrier to accessing goods and services, including appropriate social and health services and medication for older adults. Early-stage researcher (ESR) 6 Laura Allen, evaluates ageism in news discourses around long-term care institutions. Jovanna Brkic (ESR7) examines ageism in relation to inappropriate prescribing, polypharmacy and medication mismanagement. Abodunrin Aminu (ESR8) and Atiqur sm-Rahman (ESR9) concern the manifestation of ageism in different healthcare and social care settings, including long-term care institutions and social care facilities. Wenqian Xu (ESR10) examines local communication policies and the public image of ageing. Projects provide knowledge about ageism as a barrier in different settings and nations.

Notes on contributors

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Angela Kydd is a Clinical Professor in Nursing, a joint role at Robert Gordon University (RGU) and NHS Grampian in Aberdeen. Her PhD focused on the experiences of frail older people living in transitional care. She has written and taught on gerontology and dementia courses and wrote and taught a nurse specialist programme in gerontological nursing which was revised for use by the World Health Organization. Angela teaches internationally and has led several European Intensive Programmes. Her research includes; philosophies of care in nursing homes, a seven country project on attitudes towards gerontological nurses and on teaching student nurses to interview older people about their experiences of care. She has co-edited a gerontology textbook, contributed to an open access textbook on Ageism and has many peer reviewed publications. RGU is a partner on the EuroAgeism project and Angela is Director of Studies for two of the Early Stage Researchers.

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Wenqian Xu obtained his Ph.D. in Ageing and Social Change at Linköping University, Sweden, in 2021. He was a Marie Curie ITN EuroAgeism PhD fellow during a 3-year period from 2018. He is affiliated to the Swedish National Graduate School for Competitive Science on Ageing and Health. His research interests lie in the intersection of media studies and gerontology. He published research articles in renowned scientific journals, such as Ageing & Society, Journal of Aging Studies and the Journals of Gerontology Series B. Since August 2021, he has worked as a consultant for advocacy and partnership at the Healthy Ageing (AGE) Unit of World Health Organization Regional Office for the Western Pacific.

Introduction

This policy document is a compilation of the studies of the five Early Stage Researchers (ESRs) in Working Party (WP) 2. WP2 explores ageism in access to goods and services: social and health services (formal, informal) and appropriate drug treatment. It examines the origins, manifestations, and consequences of ageism in social life, social and health care services and medication treatment. The integration of the five programmes of individual study provides an opportunity to identify common threads of contextual influences on the manifestation of ageism and its negative outcomes, such as poor access to goods and services, including access for people living with dementia; social support; health and social care, including timely and appropriate medications. Given its multidimensional nature, ageism has to be studied from a multi-disciplinary perspective to consider both the individual (micro), social (meso) and structural (macro) levels. As such, WP2, through the five ESRs programmes of study, will compare and contrast the intersections between individuals and society. This analysis involves ageist attitudes and behaviours - perpetuated by the media - and held by older adults, by others in their social environment and those of service providers.

WP2 addresses ageism as a factor that impacts all aspects of life including social relations, media, social care and health care. This policy document provides a synthesis of the five programmes of work to highlight the implications for, and to inform policy on, fostering solidarity between generations and enhancing healthy life among older adults.

Background

The Madrid International Plan of Action on Ageing (MIPAA) is an influential United Nations (UN) document focusing on population ageing published since 2002. It serves as an international policy framework to commit UN member states to include ageing in social and economic development policies. This UN global action plan encourages society to move beyond the portrayal of stereotypes and to shed light on the full diversity of older people; it also calls for more positive images of older people that spotlight "the wisdom, strengths, contributions, courage and resourcefulness of older women and men, including older persons with disabilities" (United Nations, 2002: 51). Regional policy (e.g. the Regional Implementation Strategy for the Madrid International Plan of Action on Ageing) often emphasizes the significance of promoting realistic and heterogeneous portrayals of older people, as well as positive views of ageing (see UNECE, 2012).

As a contribution to the MIPAA in 2002, the World Health Organisation published Active Ageing: A Policy Framework which defined active ageing as "the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age" (WHO, 2002, p.12). The policy framework emphasizes autonomy and independence of older adults; not only physically, but as an integrative lifestyle of participation and health in the social, cultural, economic, civic, and spiritual arenas. This multidimensional view of health that encourages active and healthy ageing is a key approach to ageing policy to address life-long inequalities for older adults. Additionally, the WHO published the "Global Action Plan on the Public Health Response to Dementia" in 2017 which details seven action areas for the WHO member states with a vision of preventing dementia while also supporting persons with dementia, their carers, and families to live meaningful lives with dignity. The action plan brings international attention to dementia and prioritises

the mental and social wellbeing of older people living with dementia and their carers (WHO, 2017). This action has been reinforced by the work of Alzheimer's Disease International (ADI). The organisation started a series of World Alzheimer Reports, which provide a comprehensive source of global socioeconomic information on dementia. This series addresses people's experiences of living and dying with dementia, the experiences of carers and friends and best practice for service providers. The first, in 2020 focussed on dementia related design and the built environment (ADI, 2020) and the second focussed on the journey through the diagnosis of dementia (ADI, 2021). Such work serves to address the stigma and inequalities experienced by people living with dementia, described in Issue 4 below as the 'double jeopardy of ageism'.

Ageism, which refers to stereotyping, prejudice, and discrimination against people based on their age, is a barrier to the healthy and active ageing agendas set forth by organizations such as UNECE and WHO Regional Office for Europe. It is often seen as a social problem that needs to be confronted. Since 2016, the WHO has taken the lead in developing a global campaign to combat ageism in the form of tackling "individual and social attitudes, stereotypes and behaviours towards people on the basis of their age, as well as the laws, policies and institutions that either perpetuate ageism or do little to stop it" (Officer & de la Fuente-Núñez, 2018: 295). In March 2021, the WHO published the first global report on ageism, which presents evidence on the nature and magnitude of ageism, its determinants and its impact, as well as outlines a framework for action to reduce ageism including specific recommendations for different social actors. Additionally, the United Nations has proclaimed 2021–2030 the Decade of Healthy Ageing, with WHO leading international action to improve the lives of older people, their families and communities.

The present policy report is located in a broader policy context, tackling the factors that adversely impact older peoples' health status and their participation in community and society. Across the EU, there are a variety of health and social care systems, as well as region-specific areas for improvement. The present document is situated in this diverse setting, acknowledging the complexity of the topic of ageism among these different social and policy environments. As a project result of EuroAgeism, this report is explicitly concerned with exploring and addressing the issues of ageism that are important to older people's health and wellbeing. The recommendations address the importance of fostering solidarity between the generations as a means to tackling ageism and improving the health and wellbeing of older adults.

Since ageism is a complex problem that manifests cognitively, affectively, and behaviourally, addressing ageism to enhance healthy life for older adults must be understood and confronted from multiple disciplines and perspectives. Ageism exists not only interpersonally, but institutionally as well, through policies on the macro level. It is for these reasons that EuroAgeism exists, as a multidisciplinary, multisectoral, international network of researchers working to decrease ageism across Europe and the globe and to contribute their research findings to policy. The authors, all early-stage researchers (ESRs), of this policy document are part of WP2, and as such, our work has focused on addressing ageism in health and social care. A key part of our research has been on the stereotypes of, and discrimination towards, older people at the macro, meso, and micro levels.

Stereotypes can be defined as simplistic categorizations of individuals and groups, and cognitively, they can aid in everyday functioning as we encounter swarms of information. Stereotypical images of older people can be positive, such as wise and malleable, or negative, such as slow, cognitively impaired, frail, sick, or weak. According to the stereotype content

model, the beliefs we form about another person or group is often along a spectrum of either socially warm or socially cold, and one of competent or incompetent (Fiske, Cuddy, Glick, Xu, 2002). Research on attitudes towards older adults has shown that older people are frequently viewed as universally socially warm but incompetent, in other words, "doddering but dear" (Cuddy & Fiske, 2002). Prevalent stereotypes that are benevolent can lead to the patronization of older people and can be the root of counterproductive policies despite good intentions (Cary, Chasteen, & Remedios, 2016). Both negative and positive stereotypes of ageing impact the way society views and treats its older age groups. The attitudes held towards older adults inform policy and practice (Swift et al., 2016) and can lead to discrimination based on age.

Stereotypes and age discrimination are prevalent in the health and social care sector (Kane & Kane, 2005). Nurses, caregivers, and student nurses have been found to have negative attitudes towards working with older people (Holroyd et al., 2009; Kydd et al., 2014). Stereotyping and negative attitudes towards older adults can manifest into forms of discrimination in health, social and long-term care. Examples include exclusion of older people from clinical trials, medical research proposals, certain types of screenings, and specific treatments (Buttigieg et al., 2018). The root of these ageist beliefs begins in a person's social environment; it is not just the healthcare setting that these attitudes are derived from, but rather exposure to ageism throughout the life course from various sources (Levy, 2009). This exposure throughout the life course can be interrupted by intergenerational contact, in which individuals encounter and connect with others of different ages. Intergenerational solidarity is key to combating ageism (Christian et al., 2014).

In this document, we describe sources of ageism on a macro level: in the public discourse (in print and social media) and how these sources impact attitudes, beliefs, and behaviours towards older people resulting in age discrimination. We then describe the ageist practices seen in health and social care contexts. We conclude by providing three policy recommendations with an aim to address the root causes of these issues, as well as practical measures to address age discrimination at the macro, meso, and micro levels.

Issues

This section presents five issues which have been explored by the five ESRs in WP2 in their research. Researching these ongoing ageism issues is an important step to improve our understanding of ageism in particular social contexts and highlight the need to foster solidarity between the generations to enhance healthy life among older adults.

Issue 1: Ageist media portrayals that affect older people's health and wellbeing

Highlights

- Stereotypes of older people in the media can reflect, shape and reinforce society's attitudes and responses to older people, growing older and population ageing. Both positive and negative age stereotypes can have enabling and constraining effects on older people's attitudes, decision-making actions, and, consequently, their health and wellbeing.

- Ageist narratives surrounding us in popular media often mirror and shape policy narratives and debates around older people and ageing.
- Tackling ageism in the media is one of the important steps to combat age discrimination, reduce social injustice and foster intergenerational solidarity.
- We should jointly work to enhance accountability of portraying age/ageing/older people, challenge negative discourses of ageing in the media and policy, as well as foster more positive and realistic views about our age and ageing.

Ageism is pervasive and evident in many social institutions, such as work and employment, health, social and long-term care, education, medicine, advertising and the media, and so forth. The media, including films, television, print and social media, generally echoes and reinforces ageist images of older people. Researchers focusing on ageism in the media have approached the representation of older people by considering the textual, auditory, visual, and discursive aspects of media texts. Loos and Ivan (2018) argued that the representations of older people and the characteristics displayed in them are important for promoting social justice and power balance, given that these representations can produce and reproduce age stereotypes. Stereotypical representations of older people in the media can have a negative impact on older peoples' physical, mental, behavioural and social functioning (Bai, 2014). It has been argued that the media can reproduce negative social constructions that frame old age (Christensen, 2019), as well as serving to legitimate power relations and inequalities between age groups (Angus & Reeve, 2006). Tackling ageism in the media is often addressed as an important issue in policy and advocacy (see United Nations DESA, 2016; WHO, 2020).

ESR10's research project on "ageism in the media" (part of EuroAgeism programme) examined social media representations of older people generated by local authorities and media companies, with a particular focus on exploring how older people are represented and how social media content about older people is produced. This project reveals the complexity and nuance in the representation process and the meanings generated by the representations of older people in social media. More specifically, the outcomes of this project illuminate three ways in which the social media representations of older people can lead to ageism:

(1) Stereotyping of older people through signifying practice.

As indicated in the study (Xu, 2020), the selection and exclusion of meanings (i.e., signifying) about older people and later life were achieved through the configuration of codes relating to various properties of media products (visual, textual, auditory and digital), when older people were represented as being associated with certain signs, activities and contexts in the media. This signifying process applies to the representation of both older people and other age groups. For example, the visual codes "coffee breaks" and "foot bathing" were mostly used to configure visual images of older people, while the visual codes "physical exercising" and "vocational training" were predominantly linked to visual images of teenagers. The codes used in the representation process may carry age-related attributes and sociocultural meanings in the given context, which indicates signs of age stereotyping.

(2) the generation and negotiation of meaning concerning older people and later life among social actors with asymmetrical power relations.

Relations of power are inscribed and reproduced by media representations from the constructionist point of view. As indicated by the study (Xu, 2021a), the power implicated in representations of older people has been twofold. As argued by previous studies, age strata

are coupled with corresponding unproblematized norms. When it comes to the context of municipal life of older people, it was found that older people were represented in a less diversified manner and in fewer active roles than younger age groups. This suggests asymmetrical power relations among age groups in the context, where older people have insufficient cultural capital (e.g., lifestyles, skills and habitus related to art or cultural tastes) compared to their younger counterparts. In this regard, such social media representations of older people reproduce the relations of age power in that given context, which may suggest a relatively low level of municipal investment in supporting older people to maintain their status as active actors, and thus lead to ageism. The other power perspective is concerned with how older people should live during later life. Xu (2021b) found that the data of inquiry demonstrated several social expectations of older people living with dementia in the reality show discourse, which indicated the exercising of such power. Specifically, the analysis suggests that older people were expected to maintain their physical and mental health, pursue personal life goals and to have an active lifestyle, as well as contributing to their family and community. In this regard, such representations of older people embody neo-liberal tenets, which promote individual effort and responsibility for managing challenges in later life. This social practice of power may contribute to normalising such expectations towards older people, irrespective of whether they wish to live up to them, which may lead to ageism.

(3) the use of both formal and informal rules of social media in the context of social media logic permeating into other institutions (Xu & Taghizadeh Larsson, 2021).

Xu and Taghizadeh Larsson (2021) found that communication officers performed the institutional activities related to generating social media representations of older people. Specifically, the study found that communication officers at a municipality complied with institutional policy concerning social media use and the procedures of visual image production, adjusted to the photographic standards of good social media photos, and promoted social media engagement with the photos. These findings suggest that social media logic may have a function in determining the representation of older people in local-authority-managed social media, making use of its rules, both formal and informal. In this regard, the way in which social media logic functions in the production process for social media photos of older people within local authorities, may stabilize the stereotypical representations of older people (especially the young-old, namely third agers), which may lead to institutional ageism.

This research sheds light on the process of establishing the stereotypical third-age (or young-old) representation as a convention for social media, which can be seen as institutional ageism. The stereotypical third-age representation appears prominent in the different contexts and various types of social media. These findings on social media have implications for policy, given that policy discourse of older people often reproduces age stereotypes, neglects the diversity of older populations and emphasises individual responsibility of managing later-life challenges in a similar vein. For example, policymakers often reiterate negative stereotypes of older people as being technologically incompetent (which was found in the visual images produced by local authorities).

Ageism is not only manifested as ageist portrayals of older people on social media but also identified in newspaper discourse of long-term care (as explained in Issue 2), which can be seen as one of the social determinants of older people's lives.

Issue 2: Newspaper discourse of long-term care that leads to ageism

Highlights

- Public discourse on older adults and long-term care, particularly in the news, impacts society's views on life in residential care and influences policies on ageing and care. The overwhelming negative, sceptical, and panicked tone of news on residential care then forms negative stereotypes within society about later life.
- The voices and experiences of older adults living in residential care are often not sought or considered in news media about long-term care. This is because of barriers to interacting with residents that are institutional, geographical, privacy-based, and ethical.

The assumptions that become common knowledge which hold power in society are known as cultural models or narratives (Gee, 2011). Older adults in need of care are stereotyped as frail, dependent, and no longer able to manage daily tasks autonomously (Higgs & Gilleard, 2016). The cultural narrative of needing care in old age is intertwined with the cultural narrative of residential long-term care. Residential long-term care is an umbrella term for a senior living setting that provides care or assistance, including assisted living, personal care, memory care, or 24/7 skilled nursing care. Residential care is a base for the cultural model surrounding older persons, where residents are viewed "with institutional categories, in the language of decay, decrepitude, or surprising fitness" (Gubrium & Holstein, 1999, p.533). As highly stigmatized settings (Dobbs et al., 2008), residential long-term care facilities have a negative cultural narrative in society; the experience is characterized by dependence and a loss of control (Ayalon, 2016). Such an overemphasis on residential care as the norm for later life may prevent policy development for other types of care, such as home-based or personal assistance care.

Discourse that is journalistic is powerful in its ability to shape cultural models and issue agendas (Richardson, 2007); discourse in the news constructs and simultaneously, is constructed by the cultural narratives of the time (Potter, 2004). Therefore, the portrayal of residential long-term care in news discourse is a major contributor to and reflector of the cultural narrative of older adults needing care and the residential care experience.

Research on news depictions of residential long-term care have found mostly negative coverage which focuses on a government institution like the Centers for Medicare and Medicaid (40.9%) or the nursing homes industry (42.9%); residents or families are portrayed as the main actor in only 11% of US news articles (Miller et al., 2017). During the COVID-19 pandemic, there was a significant increase in news coverage of residential long-term care because of the coronavirus spread in these settings (Miller et al., 2020). Throughout the pandemic news coverage, older adults and residents across the globe have been represented stereotypically as a homogenous "other" group, passively vulnerable to the virus (Bravo-Segal & Villar, 2020; Morgan et al., 2021; Zhang & Liu, 2021). This image of older people in residential care may have a negative impact on perceptions of the care experience in later life, and ageist stereotypes may therefore continue to spread as a result of the news coverage during the pandemic.

The research of **ESR 6** on the COVID-19 news coverage of residential care has found that residents' voices were excluded and substituted with those of family members, care

managers, and care workers (Allen & Ayalon, 2020). This exclusion allowed for a stereotypical and polarized portrayal of older people and later life, particularly in residential care. Families, managers, and care workers are voicing their concerns in an effort to advocate for older adults and improved care. Such advocacy efforts, while well-intentioned, normalize speaking on behalf of residents instead of listening to them and asking them directly about their experiences and opinions. Failure to recognize this substitution of voices may lead to not only a distorted understanding of care, but also a pathway for other stakeholders' care decisions to be observed instead of the residents' (Allen & Ayalon, 2020).

It is imperative that the voices of residents are heard and amplified, and not just paraphrased by others. Residents of long-term care face several challenges to engagement in this media and storytelling process, including geographical, institutional, privacy-based, and ethical barriers. Residential care facilities do not typically have an established relationship with their neighbours, and residents rarely engage civically with their community (Villar et al., 2020). ESR 6 has found that residential care operators and managers do not trust news reporters seeking information about their facility, because of the overwhelmingly negative portrayal of facilities in the news, especially during the COVID-19 pandemic. Residential care professionals fear poor or unfair representation of their facilities; they are therefore unforthcoming to inquiring entities and typically do not enthusiastically connect a reporter to a resident or staff member for an interview. While this reservedness may be justified, it is another challenge to the public hearing directly from residents about their experiences. Finally, laws concerning health information protection and privacy discourage residential care professionals from disclosing contact information about residents to inquiring reporters. Simple steps can be taken by residential care professionals to obtain residents' informed consent, but are frequently not pursued.

Media portrayals and discourse of older people can possibly influence how older people shape their identity and perceive themselves, as well as can impact the way in which other members of society and policymakers perceive and treat older people. In this regard, such media portrayals can not only contribute to self-directed ageism but also lead to other-directed ageism against older people. Both self-ageism and other-directed ageism may have effects on older people's health and wellbeing (which is further explained in Issue 3).

Issue 3: Effect of age discrimination on the health and social relationship of people aged 65 years and over.

Highlights

- This study argues that age discrimination is detrimental to the health and well-being of older individuals and that research should not only focus on the effect of self-directed ageism on health, which always seems to spotlight older adults' attitudes to ageing while ignoring the extrinsic factors.
- The findings from this study demonstrate the connection between age discrimination and frailty. It establishes that age discrimination can influence both frailty development and frailty progression.
- This study also argues that lack of social relationship (loneliness) plays a crucial role in explaining the mechanism by which age discrimination influences the health of older adults. The study findings showed that older adults who reported age

discrimination were more likely to become lonely and eventually become frail or frailer in future.

- The findings from this study suggest that there is a need to tackle age discrimination against older adults to foster healthy ageing.

There has been a growth in the population of older people globally as a result of increasing life expectancies (Rychtařiková 2019). On one hand, the increasing life expectancy and the resultant increase in the numbers of older people have been seen as a success story. This is because older people have continued to contribute positively to societies in many ways. A case study is the COVID-19 pandemic that has seen many older adults volunteer from retirement to augment the shortage of healthcare staff and other essential workers (UNECE 2020). Besides, older people are known to be part of the largest contributors to the thirds sectors including informal carers, childcare and other volunteering activities. More broadly, population ageing has also been shown to boost the silver economy (products, goods and services designed for older individuals) and potentially opens new opportunities for future economic development (Ahtonen 2012). On the other hand, the demographic projection showing that there will be more older individuals in future have sometimes been perceived negatively in society (Swift et al. 2017). These negative perceptions of ageing are usually linked to the belief that older individuals contribute minimally to societal development and that older people are disproportionately the largest beneficiaries of healthcare and social security (Swift et al. 2017). Thus, leading to a false assumption that all older persons are vulnerable and always dependent.

The negative perceptions of ageing internalised by people could affect their attitudes towards older individuals (Levy 2009). Sometimes, the internalised negative perceptions can lead to a form of direct or indirect discriminatory behaviour against older people. Age discrimination is described as a form of discriminatory behaviour against a group of people or an individual that is solely motivated by age-bias. Age discrimination has been shown to be detrimental to health. For instance, a previous study published in the Lancet Journal of Public health found that older individuals who reported age discrimination in the UK were more likely to develop poor health conditions (Jackson et al. 2019). Aside from the direct impact on health, age discrimination can also potentially affect the quality of social relationships of older adults. The social relationship is a key element of human existence and it plays a central role in maintaining good health and well-being (Umberson and Karas 2010). The social relationships of individuals are defined by their social contact and social participation. The quality of the social relationship is also associated with the social network of a person. Most often, individuals have to maintain regular contacts with members of their social network to maintain good social relationships. Social isolation objectively measures the frequency of social contact with members of the same social network and isolation reflects the lack or absence of frequent contact (Fakoya et al. 2020). Sometimes, individuals who maintain frequent social contacts may still have the feeling of being isolated. This subjective feeling of isolation is regarded as loneliness and reflects the psychological interpretation of good social relationships (Fakoya et al. 2020). Researchers focusing on social relationships have identified the danger associated with social isolation and loneliness (Valtorta et al. 2016). For instance, one study from the United Kingdom found that individuals who lack good social relationships were less likely to live longer, as mortality risk was 26% higher among those who were socially isolated or lonely (Holt-Lunstad et al. 2016). Other studies found that older individuals are at

higher risk of social isolation and loneliness due to factors such as limited mobility, long-standing illness, cognitive deterioration and living alone (Fakoya et al. 2020; Coyle and Dugan 2012).

The work of **ESR 8** addresses the relationship between age discrimination and frailty among older adults aged 65 years and over, by analysing data from the English Longitudinal Study of Ageing. A prospective research design was utilised and the same cohort participants were followed through a period of eight years. In the ELSA study, participants reported age discrimination that occured within one year prior to the data collection in places such as grocery shops, restaurants, in access to services and even in the hospitals. The project findings demonstrate the detrimental effect of age discrimination on the health and well-being of older adults in the following ways: (1) Age discrimination significantly increased the risk of frailty among older adults by 60% (2) Poor health status was significantly associated with reported age discrimination (3) The findings showed that there was a 77% increase in the risk of loneliness among older people aged 65 years and over who have reported age discrimination. Overall, the findings from this study highlight the importance of addressing ageism/age discrimination. These findings imply that interventions targeted at reducing age discrimination could potentially improve the social relationship of older people and promote healthy ageing.

In 2013, a Consensus Group facilitated by the International Academy on Nutrition and Aging (I.A.N.A) and the International Association of Gerontology and Geriatrics proposed that beyond physical frailty, there is a new entity "cognitive frailty" that can potentially affect the health and well-being of the older population (Kelaiditi et al. 2013). The International Consensus Group proposed that cognitive frailty can be established in a person with physical frailty and cognitive impairment. Cognitive frailty may explain the mechanism behind the development of neurodegenerative diseases (Kelaiditi et al. 2013). This is a relatively new area in frailty research as previous studies have mostly focussed on physical manifestation of frailty (Gobbens et al. 2010). Findings from the ESR 8 project suggest that loneliness could be linked with both frailty and mental health of older people. Interestingly, the association between age discrimination and frailty status of older adults aged 65 years and over was further explained through loneliness in the result of the study. Thus, further investigation of the impact of ageism (age discrimination) on the health outcomes of older adults living with cognitive impairments is explained in Issue 4.

Issue 4: Older adults living with dementia: Double jeopardy of ageism

Highlights

- Older adults with dementia face discrimination because of their age and their diagnosis of cognitive impairment.
- Societal education plus education for health and social care staff may serve to address the prejudices of ageism.

People living with dementia (PlwD) not only face ageism due to being elder, but also encounter prejudices, negative attitudes, and discrimination because they live with dementia (Evans, 2018). As a result, PlwD might feel stigmatized as discrimination "compounds the neurological related problems" they already experience (Bartlett & O'Connor, 2007, p. 108).

There has been a growing research literature on stereotypical perceptions and attitudes about PlwD as well as discriminatory practices towards PlwD. Researchers have tried to answer questions about the general public's perceptions about PlwD, what PlwD think about themselves, and how care professionals perceive and treat PlwD, as well as how cultural contexts contain and support stereotypical beliefs and attitudes, etc. Answers to these pertinent questions have been addressed within specific research areas with different conceptual and methodological backgrounds. Conceptually, research have focused on attitudes, stereotypical beliefs, and discrimination as well on the experience of stigma. Research about stereotypical attitudes has often been pursued in relation to professional staff working with older adults (Williams et al., 2017) often within clinical research traditions (like nursing studies), while research about stereotypes and stigma often has a background in research about illness representations in the general population (Werner et al., 2017). It is obvious that these different research traditions and areas are investigating related empirical phenomenon: stereotypical attitudes and beliefs resulting in discrimination, social exclusion, and stigma.

ESR 9 conducted a scoping review of the literature with the purpose to highlight the different conceptual and methodological approaches used as well as the various groups being investigated (general population, PlwD and their relatives, staff) and the findings from studies in the combined research field of ageism and dementia. The finding of the scoping review revealed how stereotypes and attitudes are practiced in different levels of the society:

(1) stereotypes and attitudes in the general population: The negative stereotypes and attitudes toward PlwD are typically influenced by societal perspectives of ageing, ageing related beliefs, and individuals education level. Higher education was found to be associated with a lower level of stereotypical beliefs. However, these attitudes also differ among community people who have and have no experience of taking care of a person with dementia. Similarly, the media contents published in newspapers and several social media platforms often influence the way of thinking about older age or older adults in a certain way.

(2) stereotypes and attitudes of older adults themselves: The lack of knowledge and understanding of dementia symptoms, fear of social rejection and isolation, and fear of labelling are key underlying components that contribute to elevating dementia-related stigma among PlwD.

(3) stereotypes and attitudes among staff: The review result showed that the health and care professionals (e.g. physical therapist, health care students, non-medical staff, other medical practitioners) have stigmatic perception. The frontline physicians show negative attitudes toward PlwD and perceived dementia as a stigma. This stigmatic perception often influences the tendency to overestimate dementia for depressed and frail patients without seeking additional information. The attitude towards PlwD slightly differs among nurses and formal care workers where the level of experience plays a crucial role. That is, the longer experience as a nurse, the lower the level of negative attitude. There is a communication problem between care workers and progressive patients with dementia. This stereotypical notion was mainly associated with inadequate training, poor remuneration, lack of separate dementia unit in the workplace and overall job satisfaction.

(4) stereotypes and attitudes as part of culture: With a great variety, the cultural beliefs such as religiosity, family belief, shame and embarrassment influence the attitudes

toward PlwD. In other words, cultural beliefs contribute to the development of dementia related stigma and stereotypes often resulted in negative impact on the help-seeking behaviours for dementia care. Moreover, the attitudinal factors have appeared differently among several ethnic groups as well. This review found the general perceptions among different racial and ethnic minor groups have a higher negative attitude toward PlwD. All the literature discussed on cultural aspects in relation to dementia jointly agreed the lack of knowledge and education on dementia in each culture.

(5) stereotypes and attitudes of family members: Family caregivers have a higher level of stress especially among the women who are employed outside home. Negative attitudes are higher among women than men and there is an association between caregiver burden and structural and/or affiliated stigma. Adult children in these families have stigmatic beliefs regarding dementia and PlwD.

Overall findings from this scoping review showed that research on ageism and dementia is fairly limited. In order for research in this field to move forward there is need to clarify concepts like attitude, stigma and discrimination, as well as a need to incorporate various groups of study participants. From policy aspects, there is a need to build awareness among the general population as well as among the older adults with and without dementia. In particular, knowledge about dementia needs to be extended through social campaigns where media could be an effective tool in order to disseminate dementia related authentic information to the grass-root level. It is important to integrate PlwD in the policy making process. Policies are needed to support informal caregivers so that they don't experience stress leading to negative stereotypes. Addressing these issues would be advantageous to research as well as in policy reformation. Proper utilization of resources and development of appropriate guidelines can help facilitate better understanding of ageism in dementia, but barriers must still be addressed.

Physical and cognitive frailty in geriatric patients increase the risks of inappropriate drug prescribing and polypharmacy. Evidence confirms also the opposite phenomenon that inappropriate geriatric prescribing and polypharmacy fasten the onset of geriatric frailty and cognitive impairment, including dementia, in older adults. Multiple pharmacological effects of medications on ageing brain (due to higher permeability of blood brain barrier in the aged and different reactivity of receptor sites) cause symptoms of cognitive impairment or behavioural changes (e.g. aggressivity), and contribute to worsening of health status and dementia [DF2] . To better understand the aspects of ageism in medication use, the ESR7 research focused specifically on: inappropriate prescribing in older adults.

Issue 5: Inappropriate prescribing in older adults and aspects of ageism

Highlights

- Inappropriate prescribing (overprescribing, underprescribing, misprescribing) in older adults is very frequent and increases morbidity and mortality, reduces the quality of life, and increases health care utilization and costs.
- Inappropriate geriatric prescribing is highly prevalent in all settings of care, but particularly in long-term care due to the higher vulnerability and higher frailty of older adults residing in nursing homes. It is also highly prevalent in low- and middle-income

countries due to poorer economic situations and lower availability of medication safety and medication management services.

- The phenomenon of excessive use of medicines in older patients, in comparison to lower utilization of non-pharmacological strategies, highlights the frequent problems of overprescribing and insufficient individualization of drug schemes. Also, the low availability of clinical pharmacy and clinical pharmacology services in many countries (services helping to individualize drug schemes) contributes to frequent inappropriate geriatric prescribing and polypharmacy.
- Ageism in medication use in older adults is evident at macro-level (in drug regulatory area), meso-level (in health care organizations and provision of services), and micro-level (in attitudes and acts of carers – professionals and non-professionals, and patients themselves).
- In order to reduce prevalent ageist practices in healthcare, more emphasis should be given to geriatric regulatory measures, geriatric guidelines, educational and training strategies and age-specific health and drug recommendations. Also, priority should be given to the development and implementation of medication safety and medication management services, clinical pharmacy and clinical pharmacology services, and non-pharmacological treatment strategies.

Ageism at the macro-level (health policy), meso-level (healthcare organizations and healthcare services) and micro-level (providers of care, informal carers and patients) contributes to the common issues of inappropriate prescribing, polypharmacy, and medication non-adherence in older adults (World Health Organization, 2021). As an aspect of indirect or covert ageism is also considered the involvement of few older patients in clinical trials (trials that examine the overall efficacy and safety of medications) (Crome & Pollock, 2004).

Underrepresentation of older adults in clinical trials limits the generalisability of their results to the population that uses medications the most, the geriatric patients (Herrera et al., 2010). Older adults have been excluded from clinical trials both implicitly (based on having chronic conditions or taking multiple medications) and explicitly (based on age) (Florisson et al., 2021). In 1993, The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH), representing drug regulators from Europe, the USA and Japan, produced guidance stating that 100 older adults above 65 years should be included in clinical trials (International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use, 1993). The guidance was adopted by drug regulators around the world. However, this low recommended number is not adequate to represent a highly diverse older population.

Polypharmacy is usually defined as the use of five or more medications, and hyperpolypharmacy as the use of ten or more medications (Rollason & Vogt, 2003). Polypharmacy increases the risk of adverse drug reactions, medication interactions, and non-adherence. It also negatively impacts healthcare costs. Polypharmacy poses a higher risk of adverse outcomes in older adults due to age-related and pharmacokinetic and pharmacodynamic changes. (Payne & Avery, 2011).

Polypharmacy and hyperpolypharmacy in older adults may result from guidelines-driven prescribing. Clinical guidelines, based on findings from clinical trials in which older

adults with multimorbidity were not included, usually focus on single disease conditions (Hilmer & Gnjidic, 2009). These guidelines usually do not take into consideration geriatric multimorbidity, which is frequent in the older population. Thus, following several guidelines in multimorbid patients often results in polypharmacy and negative patient outcomes (Molokhia & Majeed, 2017).

It is important to distinguish between appropriate and inappropriate polypharmacy (Aronson, 2004). Appropriate polypharmacy is when all medications are prescribed to achieve specific therapeutic goals agreed with the patient, the patient is willing and able to take all medicines as intended, the risk of adverse drug reactions is minimized, the efficacy of drug treatment is maximized, and the actual therapeutic value of drug regimen is adequately monitored. Inappropriate polypharmacy is when: one or more medications fail to achieve the therapeutic goals, medications are not needed because there is no indication or indication has expired, the dose is unnecessarily high, or medications put the patient at a high risk of unacceptable adverse drug reactions, and the patient is not willing or able to take one or more medications as intended (Stewart et al., 2017).

Prescribing multiple medications in older patients in some circumstances can be appropriate, but older adults using polypharmacy must be appropriately and continuously monitored for drug efficacy, safety and supported in adherence to medications. Drug regimens in older patients should also be highly individualized because of age-related changes in pharmacokinetics and pharmacodynamics and sudden changes in efficacy and safety of medicines caused by the worsening of chronic diseases. Therefore, the services of clinical pharmacists and clinical pharmacologists helping to individualize drug schemes and monitor their efficacy and safety are crucial (in all high-risk patients, but especially in older patients).

Inappropriate prescribing encompasses prescribing unnecessary, ineffective, or high-risk medications, inappropriate doses or treatment duration, and not prescribing potentially beneficial medications (Clyne et al., 2016). Inappropriate prescribing affects older adults more seriously due to higher morbidity, polypharmacy, and age-associated physiological changes, which can alter the pharmacokinetics and pharmacodynamics of drugs and consequently increase the sensitivity of older individuals to drug effects (Spinewine et al., 2007). It is associated with adverse health outcomes, increased health care utilization and costs (Cahir et al., 2014). Frail older adults are more vulnerable to inappropriate prescribing than healthier ones (Schmader et al., 2004). Furthermore, inappropriate prescribing can contribute to a further increase in geriatric frailty (Gnjdic et al., 2012).

Patient adherence, as defined by the World Health Organization, is "the degree to which the person's behaviour corresponds with the agreed recommendations from a health care provider" (World Health Organization, 2003). Non-adherence includes overuse, underuse and incorrect use of medicines. Non-adherence is a highly prevalent problem in older adults (in up to 50 %) in different settings of care around the world (Cross et al., 2020). It can be intentional (a person decides not to take a medication) and non-intentional (forgetfulness, physical problems, complexity of the drug regimen etc.) (Wroe, 2002). It is associated with negative health outcomes (e.g. suboptimal response to treatment, recurrence of illness) and increased healthcare costs (Sokol et al., 2005). Complex medication regimens and a higher number of medications negatively affect adherence (Kardas et al., 2013). Thus, some older adults who have multiple chronic diseases and take more medications are at higher risk of non-adherence (Verloo et al., 2017). Furthermore, changes that may occur with increasing age – physiological (e.g. swallowing difficulties) and cognitive (e.g. forgetfulness) can

negatively impact adherence (Patton et al., 2017). Therefore, specific support to some older adults is needed to ensure a safe and appropriate medication treatment. However, first, we have to ensure that the prescribed drug regimen is individualized and appropriate. Otherwise, when adherence to inappropriately prescribed medications is improved, morbidity and mortality of older adults increase (Garfinkel et al., 2015).

Despite the fact that the world population is ageing, the number of physicians looking for training in geriatrics is declining. Geriatrics remains an unpopular specialization (Blachman et al., 2021). The studies have shown that most physicians who are responsible for providing care to older adults have little geriatric training (Callahan et al., 2017). Furthermore, physicians, who are the major prescribers of medications, receive suboptimal training in geriatric pharmacotherapy both at an undergraduate and postgraduate level (Lavan et al., 2015).

In the light of all the above-described problems, the ESR 7 project goals were to quantify the magnitude of inappropriate prescribing in older adults in several countries and to identify risk factors for such prescribing in order to support the development of evidence-based policies and public health interventions to address these issues. Therefore, we conducted a systematic literature review on the prevalence of potentially inappropriate prescribing in older patients in all settings of care in Central and Eastern European countries and a prospective international study to describe the prevalence and risk factors for potentially inappropriate prescribing in community-dwelling older adults, mostly from Central and Eastern European countries. We also examined the availability of high-risk medications for older adults on drug markets of several countries and the availability of clinical pharmacy services in these countries.

Our systematic literature review showed that the prevalence of potentially inappropriate prescribing in older adults in Central and Eastern Europe is high 34.6%, but with a wide variability from 6.5 to 95.8%. The prevalence was higher in long-term and outpatient settings than in acute and community settings. Most of the studies were conducted in high-income countries, and there were no studies from Bosnia and Herzegovina, Bulgaria, Estonia, Latvia, Montenegro, North Macedonia and the territory of Kosovo. Thus, our findings are more applicable to high-income countries in Central and Eastern Europe.

We also conducted a prospective multicentre study on potentially inappropriate prescribing in community-dwelling older patients in several countries, namely Bulgaria, Croatia, Czech Republic, Estonia, Serbia, Spain, and Turkey. Our preliminary analyses showed that the prevalence of potentially inappropriate prescribing was very high, 61% (the lowest prevalence was in the Czech Republic – 37% and the highest in Croatia – 74%). The main risk factors associated with potentially inappropriate prescribing were polypharmacy and being female, which is in agreement with previous studies. Females tend to be more often exposed to polypharmacy and inappropriate prescribing; thus, further studies should explore gender inequities in medication use.

We also examined the availability of high-risk medications for older adults in several countries. Our findings confirmed high approval rates of potentially inappropriate medications on pharmaceutical markets of several countries – Spain (71%), Portugal (67%), Turkey (67%), Hungary (55%), Czech Republic (50%) and Serbia (42%). Also, our results confirmed that the applicability of tools used to assess the appropriateness of prescribing differs across countries. These tools are important for the improvement of the

appropriateness of drug prescribing in older adults by: educating healthcare professionals and patients, serving as a tool for evaluating the quality of care, and for examining the patterns and trends of medication use among older adults. Unfortunately, they are still not fully respected by many prescribers and used in many countries. These tools should be further developed to be readily used across countries, regularly updated, promoted, and utilized in daily clinical practice in order to improve the quality of drug prescribing in older patients.

During our work on regulatory studies, we also confirmed that clinical pharmacy services in Central and Eastern Europe are less developed in all settings of care compared with Western European countries, the USA and Australia. Clinical pharmacy services should be developed and implemented in various settings of care in this region in the near future. The particular focus should be on the primary care sector to prevent costly and harmful drug-related hospitalizations in older adults.

Policy recommendations

Recommendation 1: Reducing ageism in the media

To reduce media portrayals of older people that may lead to ageism, it is important to produce more authentic, balanced, diverse and thoughtful portrayals of older people, as well as to enhance accountability of media content producers (e.g., journalists, marketing strategists, communication officials).

It has been seen that public governance can "support public services, government administration, democratic processes, and relationships among citizens, civil society, the private sector, and the state" (Dawes, 2008: 86). Yet, there is evidence that the expected benefits of governance are yet to be attained in countries where it has been implemented, strengthening calls for enforcing effectiveness (not purely efficiency) and achieving desirable impacts (not merely producing output) (Saxena, 2005). As one of the core institutional principles of governance, accountability is defined as the "social relationship in which an actor feels an obligation to explain and to justify his or her conduct to some significant other" (Bovens, 2009: 184). Accountability has undoubtedly positive attributes associated with greater transparency and fair governance. Additionally, assessing the actual conduct of institutions is highly desirable (Bovens, 2010). When it comes to representing older people in the media and policy, improvements to accountability are expected to be seen. The production of media content concerning older people can be seen as an accountability task for different sectoral organizations who have the (moral or legal) responsibility to protect the rights of older people or offer services to older people. Accountability requires the implementation of governance initiatives to facilitate communication between older people and media content producers (Pina et al., 2007). This communication is emphasized in existing research as a prerequisite for the realization of citizen participation. However, this communication remains underdeveloped in most instances (Piqueiras et al., 2020).

Accountability in generating media representations of older people entails increased participation of older people and other civil society actors (e.g., viewers' and pensioners' associations) in generating and evaluating media content about older people, while also enhancing the dialogue with senior citizens. In this way, older people can directly participate in creating content agendas, generating representations of themselves, and evaluating posted media content to meet their and other people's informational needs. For instance,

Ivan et al. (2020) advocate for the visual communication rights of older people, involving older people in the creation of digital visual content and enhancing older people's power to meaningfully influence their representations (Ivan et al., 2020). In this regard, the participation of older people has the potential to strengthen their position within the power structure of representations of older people. Citizen participation can come in the forms of political, policy and social participation (Meijer et al., 2009) and it can be achieved through the acts of obtaining information, engaging in deliberation and participating in decision-making (Oates, 2003). Given the various forms and levels of participation, governments and other policy institutions should further encourage and facilitate older people and other civil society actors to engage in generating media representations of older people. This can have positive effects in terms of formulating public policy, encouraging multi-sectoral dialogue and acting to improve services and care for older people.

Since media representations of older people are generated in different media, country and social contexts, policy recommendations for preventing ageist media portrayals should be tailored to suit the local context. With a focus on media portrayals of older people living in residential long-term care, policy measures should be adjusted to reduce stereotypical representations of older people in the context of long-term care. In doing so, we could promote a shift of culture from negative discourse of ageing towards more positive discourse of ageing in our society.

Recommendation 2: Education and training of health and social care staff

Training of healthcare professionals and care staff on ageism, attitudes towards ageing and older adults and stigma surrounding impairments, and the myths of working with older people is needed.

In residential long-term care specifically, reducing social stigmas and stereotypes surrounding residential long-term care is essential. This would involve steps towards portraying a more authentic and diverse residential care experience in the media, such as those proposed by ESRs 6 and 10 in their policy brief, "Policy Measures to Reduce Stereotypical Representations of Older People in Long-Term Care" (Xu & Allen, 2021). Healthcare professionals and care staff in long-term care, such as social workers, facility operators, managers, and care staff, should be trained on ageism and dementia stigma, and the harmful effects of ageist portrayals of long-term care. Training with long-term care professionals should emphasize the importance of supporting outside entities' access to speaking with residents, so as to promote an authentic image of their residential care experiences. Combatting stereotypes of later life and residential care is a crucial part of improving and enriching the health, wellbeing, and care of older persons. Long-term care professionals should ensure that residents understand the meaning of their consent in instances where they are interviewed or depicted in the media; their preferences and comfort should be prioritized. Finally, training should be implemented to support operators and care managers to create a protocol that adheres to national, state, and regional policies regarding health information privacy and protection of residents.

To effectively address ageism in healthcare, there is a need for a multi-faceted approach that will focus on the different areas in which older individuals are potentially exposed to discriminatory experience, including self-directed ageism. One of such approaches is to develop a strategy that will include training of healthcare workers. This is one of the strategies

also suggested by the WHO in its global campaign to combat ageism, including other strategies such as policy changes and intergenerational contact. For instance, a lead researcher from a University in Canada conducted a meta-analytic review of over 60 articles on ageism interventions (Burnes et al. 2019). Burnes and his colleagues found that educational and intergenerational interventions had the highest impact on reducing ageism. Healthcare professionals are prone to overlooking discriminatory situations in medical protocols especially if it forms part of their daily routines. An example of health-worker training could be to avoid standardising every procedure across all age spans. This will ensure that services are patient-centred and supports are offered to the individuals and not just the treatment of the disease. Aside from training healthcare professionals on the awareness/identification of ageism, there is a need to encourage health workers to support older adults against self-directed ageism. For example, sometimes the interaction between older people and the medical facilities is based on the preconceived notion or attitudes to ageing of older adults themselves. As members of the society, older people are also at risk of holding negative perceptions of ageing that could affect their health-seeking behaviours. Thus, it is important for health-workers to educate older people on preventative activities that can be beneficial to health while working together with older people to understand their health priorities and personal wellness goals.

Given the benefits of intergenerational contact and educational interventions (Requena et al., 2018), intergenerational interventions can decrease ageism, as they bring older people and young people together and promote cross-generational interaction and friendship.

Recommendation 3: Interventions to improve appropriate medication use in older adults

Ensuring appropriate medication use in older adults is a public health issue of major concern due to the high prevalence of inappropriate prescribing (Cooper et al., 2015). Improving the appropriateness of medication use can improve patient outcomes and reduce healthcare costs (Suleman & Movik, 2019).

Interventions to improve appropriate medication use in older adults should focus on overprescribing and misprescribing (i.e. reduction of inappropriately prescribed medications), as well as on underprescribing (i.e. reduction of prescribing omissions by prescribing necessary medications when clinically indicated). Improvement of inappropriate prescribing can be accomplished by different types of interventions, including: professional interventions, for example, education of prescribers; organizational interventions, for example, medication review, deprescribing, information and communication technology interventions such as clinical decision support systems; and financial and regulatory interventions. The interventions should be introduced and provided by policymakers, healthcare planners, healthcare professionals and educators, and supported by the active involvement of patient organizations and patients themselves (Rankin et al., 2018).

A number of validated tools have been developed to assist in promoting appropriate geriatric prescribing (Stewart et al., 2017). These tools can also be used to measure the effectiveness of interventions aimed to improve geriatric prescribing. They can be categorized into explicit (criterion-based) and implicit (individual judgement-based) tools. Explicit tools are lists of drugs to be avoided (because of the high risk) or added to the therapy (because of the substantial benefit) and are easy to use and interpret. On the other hand, implicit tools

are quality indicators of prescribing that clinicians apply using individual judgment; they are time-consuming and reliant on assessor knowledge and clinical skills (O'Connor et al., 2012). Medication reviews using explicit or implicit approaches or combinations of explicit and implicit approaches can improve the appropriateness of prescribing for older adults. Medication review is a systematic assessment of the pharmacotherapy of a patient that aims to optimize medication use by providing a direct change or a recommendation. It involves evaluating the safety and efficacy of each medication for an individual patient (Christensen & Lundh, 2016). Also, it considers patient preferences and understanding, adherence, interactions and biochemical monitoring (Zermansky et al., 2001). It should involve medication reconciliation, i.e., creating the most accurate list of patient medications, which is important, especially during the transitions in care (Rogers et al., 2006).

Planned and supervised withdrawal of medications that are inappropriate can reduce adverse effects, improve quality of life, and reduce drug burden and costs (Gnjidic et al., 2014). Such a process is called "deprescribing" that is an intervention that aims to reduce polypharmacy, inappropriate medication use, thereby improving patient's outcomes (Thompson & Farrell, 2013). Discontinuation of medication use is the most often recommendation made during the medication review, but the least often implemented action (Brulhart & Wermeille, 2011). Many barriers hamper deprescribing, such as healthcare professionals' knowledge and beliefs, guidelines that usually do not include information on how to deprescribe medications, and patient pressure to prescribe medications (Boghossian et al., 2017).

Many interventions have been designed to improve medication-taking ability, medication adherence, or both in older patients that are targeted at older persons or their carers. These interventions can be classified as behavioural (e.g. reminders, multi-compartment pillbox), educational and mixed (George et al., 2008). However, interventions aimed to improve adherence should not focus only on patients and their carers but on a broader context, i.e., health systems and prescribers (Ryan et al., 2014); thus, it is also necessary to develop and implement these more holistic system-based interventions.

Interventions should be implemented to raise awareness and educate healthcare professionals and the general public about the benefits and effectiveness of non-pharmacological strategies that in certain disorders, symptoms or diseases should be used instead of pharmacological alternatives. For example, in insomnia, instead of using benzodiazepines and z-drugs, which can cause serious adverse effects in older adults (such as impaired cognition, impaired mobility, increased risk of falls, drug dependence), non-pharmacological interventions should be used. Also, non-pharmacological strategies should complement most of the pharmacological approaches. Furthermore, as ageism contributes to problems in access and lower quality of mental health care for older adults, both should be improved to treat common mental disorders in older adults, such as depression (which can be treated with psychotherapy, either alone or in combination with antidepressant medications) (Jayasekara et al., 2015; Robb et al., 2002).

Intergenerational solidarity in combating ageism in medication use also relates to better education and training of middle-aged care professionals in aspects of ageism and appropriate geriatric care. Furthermore, healthcare students should receive more comprehensive training in gerontology, geriatrics and geriatric pharmacotherapy, regardless of their future career path. Also, continuing medical education courses should incorporate education and training in gerontology and geriatrics (Lavan et al., 2016). Moreover, it is

necessary to educate all generations in all aspects of ageism to reduce its harmful consequences in various sectors, including the area of appropriate medication use.

Other interventions that can improve the appropriateness of medication use include pharmaceutical care and clinical decision support systems. Pharmaceutical care involves pharmacists moderating patient drug therapy in collaboration with physicians, patients and carers in order to support safe and effective medication use (Hepler & Strand, 1990). Clinical decision support systems can improve medication safety and the quality of prescribing by providing recommendations related to dosing, dosage, medication initiation, medication discontinuation, medication avoidance, as well as important alerts on drug duplication, contraindications and drug interactions (Marasinghe, 2015).

Older adults should not be excluded from clinical trials based on arbitrary decisions simply because of chronological age, presence of chronic diseases or taking multiple medications. Future clinical guidelines should change their perspective from a single disease approach focused on younger adults to be more inclusive and applicable to patients of different health statuses and all ages.

Taking all above into consideration, actions and interventions to reduce ageism in medication use and its negative consequences are needed at the macro-level (by changing laws and policies), meso-level (by implementing evidence-based services in healthcare organizations), and micro-level (by changing attitudes, knowledge/skills and behaviour of healthcare providers, carers and by the active involvement of patients themselves in rational geriatric pharmacotherapy).

Policy recommendations to address crosscutting concerns around ageism

This section gives general policy advice which serves to address crosscutting concerns that are shown in the above-mentioned issues of ageism.

Raise awareness to combat ageism in provision of goods and services to older adults. There is an essential need to dispel negative images of ageing and older people and negative attitudes associated with old age. Given the manifestations of ageism in popular media and its intensification during the COVID-19 pandemic, it is vital to raise awareness of ageism (especially implicit ageism which remains unchallenged) to ensure the provision of goods and services to older people. Media campaigns are encouraged in local movements to combat ageism.

Educate the public and the young about ageism. Educating the public, particularly children and youth, about ageism is a proven strategy to combat people's ageist beliefs. These learning programs teach students about ageism and its negative effects on individuals and society, as well as alternative images of ageing and later life that challenge stereotypes. There is a need for financial support of these ageism education initiatives, particularly in schools and youth programs, both to promote education of the public, as well as to support research on the most effective methods and content of the programs.

Foster intergenerational interactions. Fostering solidarity between the generations has shown to be beneficial to people across the lifespan. Various studies have highlighted the benefits of intergenerational projects. Since older members of society have

been deprived of the opportunities that are available to other age groups, it is important to make policies and plan for the needs of an ageing population. In recent years, such efforts can be seen in initiatives such as Age Friendly Cities and Communities, which have been designed for different generations (for example pre-school clubs, social clubs and so on). Whilst these initiatives address the needs of age groups, we suggest more needs to be done to work on fostering intergenerational solidarity. This would call for a more nuanced and life span approach to creating communities of people and policy makers and planners need to address ways in which the 'young' are not segregated from the 'old.'

Invest in ageism research. Ageism-in-the-media, especially ageism in the digital landscape, remains insufficiently researched. In this area, further work is needed to improve our understanding of the ways in which other non-individual digital media adopters represent older people. There is a need to give more prominence to the algorithms associated with digital media, as these platforms are increasingly becoming independent of digital media users in terms of the representation of social phenomena. Audience research can help to improve our knowledge of the effects of digital media representations on the well-being of audiences.

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