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Research Brief

The Challenges of Population Ageing in the Philippines and Brazil

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Ageing is an inevitable phenomenon in human lives that emerge from the accumulation of a variety of molecular and cellular damage over time. Ageing may lead to a gradual decrease in physical and mental capacity, as well as a growing risk of chronic diseases such as Alzheimer's, stroke, and cancer (WHO, 2021c). However, these changes are neither linear nor uniform among different individuals (WHO, 2021c). The ageing process may be experienced in different ways because it is not only a biological but also a social phenomenon. That is, physical and social characteristics have a significant influence on people's health from childhood to the late stages of life. A few examples of overlapping social factors that may impact health are poor health care policies and barriers to its implementation, poor knowledge about ageing and the consequent negative stereotypes, migration and disruption of filial piety, and financial constraints derived from mandatory retirement. The promotion of healthy ageing is necessary and it requires a holistic framework of actions involving the government and civil society. If this goal is achieved, older adults can stay healthy and strong, live independently, and contribute to society.

In this paper, we identify important challenges to promote the population's healthy ageing in the Philippines and Brazil. We briefly review the related studies and compare the most relevant challenges in both countries.

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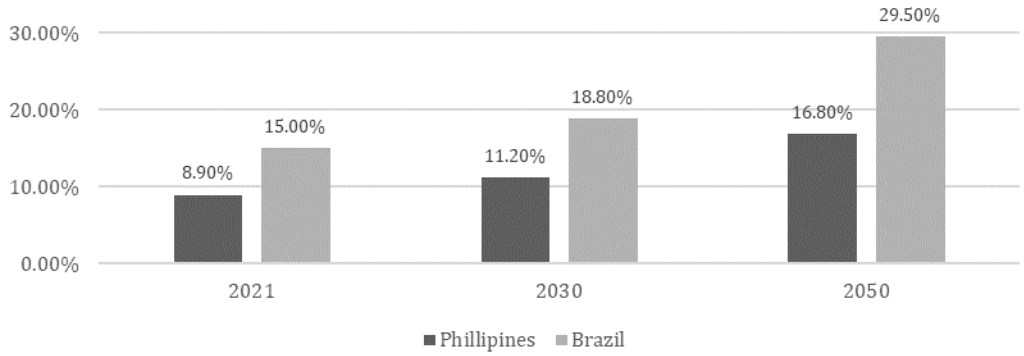
The context

The demographic landscape of countries across the globe is changing due to declining fertility rates and increasing life expectancy. The Philippines and Brazil are developing countries in different stages of transition to an ageing society. In the Philippines, the number of people aged 60 years and older is predicted to increase by 4.5% from 2010 to 2030 (Help Age Global Network, 2017). In a 2018 research by the Philippine Institute of Development Studies (PIDS), it was shown that Filipinos aged 65 years old and above would comprise 7% of the country's population by the year 2069 (Philippines a slowly ageing society, 2019). Brazil, on the other hand, became an "ageing" society in 2012 (AARP, 2019; Neumann & Albert, 2018). In 2030, older adults of 60 years of age or above may constitute around 18.8% of Brazil's population, while in 2050 it is predicted that it will reach almost 30% (refer to **Figure 1**).

Figure 1 | Percentage of the Population 60 to 100 years old.



Note. This graph shows the perspective of growth in the proportion of older adults (60 to 100 years old) to the whole population in the Philippines and Brazil. Data were obtained from United Nations via gapminder.org.

The demographic changes coupled with social and economic factors make a sound reason to look at the challenges of the population ageing in these two countries. In the following sections, we discuss the most important issues and how they are manifested in both contexts.

Inadequate health care policy and implementation

The inadequacy, if not absence, of health care policies focused on elderly care is evident among developing countries. In some cases, such as in Afghanistan, there is a total absence of specific policies; in other countries like India, structured plans, unfortunately, may have struggled to be effective due to the adoption of unrealistic parameters and lack of equity (Shetty, 2012). This is a serious situation as the quality of life for the older population may not be assured without effective legal mechanisms that mandate health, social, and economic sectors to respond to specific needs of the older population, especially older adults who need long-term care. These needs may consist of the following: promotion of knowledge and awareness about older adults' health and the potential risk factors, development of community-based geriatric care, and collection and report of age-disaggregated data. Effective policies to promote health and medical care for the older population require an overarching effort of health, social, rural, and

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urban development, and legal sectors (WHO, n.d.).

In the Philippines, Republic Act (RA) 9994 or Expanded Senior Citizens Act is the only legal infrastructure that ensures the health and socio-economic well-being of Filipinos of 60 years old or above. This law entitles senior citizens to a 20% discount in grocery, medicine, leisure, hospital, transportation, and other social services. In the study of Inabangan et al. (2019), it was shown that the discounts on food, medicine, and transportation significantly lessen the economic burden of Filipino older adults, which is also strictly complied by establishments through mandated discounts on goods and services. However, the study also noted a need for more aggressive information drives and hassle-free transactions. Another cited issue on health and social benefits mandated by this law is the reluctance of health services providers to give access to health services to older Filipino adults (Romualdez et al., 2011 as cited in Badana & Andel, 2018). Moreover, studies that delve into the effectiveness of this law in managing chronic diseases and long-term care are still lacking.

Brazil has already a universal health care program, called in Brazilian Portuguese - Sistema Único da Saúde or SUS, but there is still room for many improvements inside the system to attend to the needs of the aging population. The National Healthcare system is responsible for the welfare of 75% of the older population (Garcez-Leme & Leme, 2014). The public care costs for this group are concentrated in hospital costs, outpatient costs, long-stay institutions, home care, vaccinations, training of caregivers, and provision of medication. Currently, the annual budget and its implementation are still deficient, making it difficult to achieve a proper and fairly distributed management of chronic diseases, disability, trauma prevention, and health promotion across the country's territory (Garcez-Leme & Leme, 2014). Notwithstanding, many improvements have been seen since the creation of the SUS, such as the decline in unnecessary hospitalization among older adults (Macinko et al., 2010). Finally, the 2003 Federal Act known as "Estatudo do Idoso" was also a milestone in the history of public policies directed to older adults in Brazil, it gave older adults the right for preference in public health assistance, free medication for chronic disease, 24-hour family support when hospitalized, among others (Garcez-Leme & Leme, 2014).

Lack of institutional and geriatric care

There are many countries whose culture entails family care for older adult members based on filial piety. For example, in the Philippines the culture of dedication to the family many times outweighs the lack of institutional care, leaving the role of caring for older adults to the young family members (Duaqui, 2013; Badana & Andel, 2018). However, home care proportionated by families has its limitations; ageing may be accompanied by various health issues and physical disabilities that require proper knowledge and specialized care. Dementia, for example, is one of the major causes of disability and dependency among older adults (WHO, 2021b), which requires clinical assessment and specialized care. Hence, it is a type of chronic disease that could be more effectively treated if specialized care were offered through institutions (Dela Vega et al., 2018). Health and medical care of older adults in the family could also be financially

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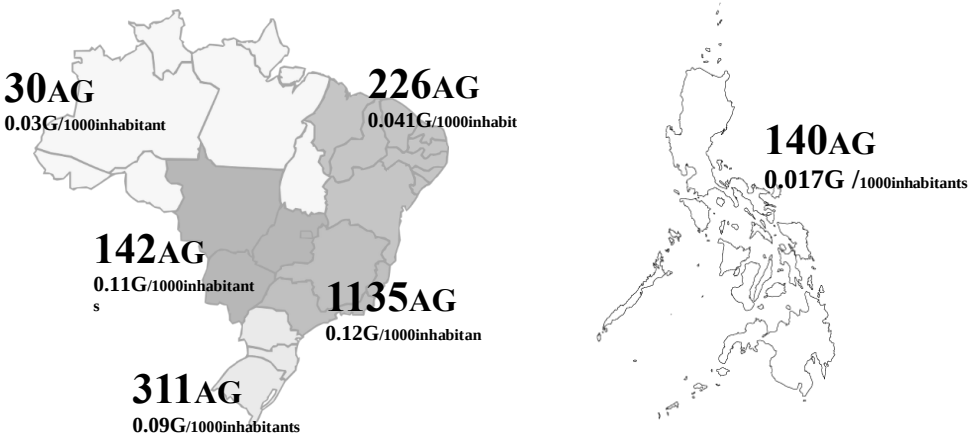
and psychologically draining, especially for women who are the predominant providers of informal care (Sharma et al., 2016). The presence of chronic diseases and functional disabilities that require long term care for older adults could aggravate financial and psychological problem by reduced household workforce (Badana & Andel, 2018). Moreover, the culture of filial piety as well as the constitution of traditional families have been in decline in developing countries due to rural exodus and modernization, making the new generations of older adults increasingly more dependent on public services (Cheung & Kwan, 2009).

The traditional culture of assigning care for older adults to the family needs rethinking. Governments should involve the communities and build institutions that shall provide geriatric care especially for those in the low and middle-income groups. The possibility that caregivers and families of care recipients will be stigmatized is there; but if local communities become more supportive of the caregivers and incentivize employees who provide elderly care on the side, this institutional caring will gradually become acceptable in Filipino society. Another innovation that works beyond family care is community-based care or intervention, which has been practiced in ageing societies like South Korea (Son et al., 2019), Japan (Saito et al., 2019), and Thailand (Prachuabmoh, 2015). Some places in Japan found another way of lessening the burden among family caregivers with home care services of health care professionals who regularly visit older adults' homes to conduct health checks and to help them in daily living activities (Kumamoto et al., 2006). These are some strategies that Philippine society may adopt to expand the options for geriatric care.

In Brazil, nursing homes and long-stay institutions for the older population are not enough to attend the demand (Garcez-Leme & Leme, 2014). Institutional care for ageing

Figure 2 | Number of active geriatricians (AG), and the number of geriatricians (G) per 1000 inhabitants in Brazil and the Philippines.



Note. This image (left) shows the unequal distribution of geriatricians among different regions in Brazil (Maia et al., 2013). Data based on regions were not found for the Philippines. Data for the Philippines (right) was obtained from the Retirement and Healthcare Coalition via the website Senate of the Philippines http://legacy.senate.gov.ph/press_release/2019/0505_angara1.asp accessed on 24/09/2021.

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people is mostly operated by the private sector utilizing resources that largely come from patients' fees. Moreover, geriatricians are lacking in Brazil. According to the IBGE (Institute of Geography and Statistics of Brazil), it is predicted that in 2027 there will be just one (1) geriatrician for every 12086 older people. Currently, the few active specialists are unequally distributed inside the country; while some states have 865 geriatricians attending in the universal health care system, there are some states with no more than three. Despite these problems, the implementation of the Family Health Strategy - a model of health care that uses a multidisciplinary team of professionals to provide preventive and basic health care involving the households as part of the environment of care – has helped the older people from poor areas and with functional limitations to access public health care services (Thumé et al., 2011).

Socioeconomic Inequality

Brazil, although is known as the largest economy in Latin America, is similar to the Philippines for having wide social and economic disparities. The World Bank calculated that the Gini index of Philippines was 42.3 in 2018; while in Brazil, it was 53.4 in 2019; both are quite far from developed countries known for having lower social inequalities, such as France with an index of 32.4 in 2018, or Japan, 32.9 in 2013 (World Bank, n.d.). The socio-economic reality of both countries is a huge barrier to the necessary reforms aiming at the promotion of healthy ageing. Lessening the socio-economic inequality would be necessary to deliver health care based on individualized medical needs (Shrivastava et al., 2013), guarantee a sustainable pension system that could compensate for the decline in filial piety, as well as improve socio-cultural factors necessary to create an age-friendly environment inside communities (Sander et al., 2015). These reforms may be difficult to achieve in a socially unequal context for different reasons, to name a few: access to individualized health care services may be disrupted by poor health literacy or unequal financial condition (Nielsen-Bohlman et al., 2004), discriminatory practice based on ageing may be intensified by gender or race discrimination (WHO, 2021a), and the efficiency of the public pension system may be undermined by special rules that may favor distinct sectors of society (Medeiros & Souza, 2014).

Experiencing the burden of social inequalities during the lifetime can directly affect individuals' health and the quality of ageing. This is manifested in the relationship between development and life expectancy. As the countries move to standards of higher GDP per capita, the life expectancy of their population also tends to rise. The "average life expectancy in developed countries is 79 years for males and 82 years for females; while on a global scale, the average life expectancy for males is 75 and 79 for females" (Szmigiera, 2021, para 1). However, considering economic development as a measure of the quality of health has its limitations. Bangladesh and Zambia have a similar GDP per capita, but the health indicators differ greatly; while in the first country the life expectancy is 73 years of age, in the second is just 20 years in 2018 (Fan et al., 2018). The reason for this discrepancy is the social inequality but also the variety of other factors affecting health across the lifespan that has been discussed in this article.

Brazil is the 12th largest economy in the world yet one among the countries with

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the highest social and economic inequalities (Beghin, 2008). According to the World Bank GINI index, the country is the 8th most unequal economy in the World. The concentration of income and wealth makes it hard for the growing number of older adults to access health and other social services (Barros & Goldbaum, 2018). In the same way, continued education, housing, water sanitation, and other basic factors that are essential to achieve healthy ageing are denied to many Brazilians due to their location, income, ethnicity, or gender. In response to this issue, many reforms were approved such as the law nº 10.741 of 2003 that ensures that any individual above 65 years old with no means of subsistence has the right to receive a minimum wage and to use public transport for free. This type of legal measure helped over the past years to secure the income of the older adults in a vulnerable situation and reduce poverty in this age group (Travassos et al., 2020).

Data from OECD show that 70 years old and above Filipinos are poorer than average poor adults (Fabonan III, 2019). Accordingly, the lack of pension, retirement, financial abuse, and abandonment are a few of the reasons for their poverty. Nevertheless, the National Healthcare Insurance Program is said to be a factor that improved the healthcare utilization of the Filipino older population (Siongco et al., 2020). On the other hand, the large number of child and youth dependents also worsen the case of older Filipinos. Many older adults stay longer in the workforce to be able to continuously support the young family members (Badana & Andel, 2018). The issues on youth dependency and old-age dependency should be taken with great consideration relative to the needs of the older population. The nutritional needs and medical needs of the older adults become secondary to the needs of the young family members. Despite the implementation of the Senior Citizen's Act, addressing the welfare and pension needs is still very limited and needs a focus on the preventive healthcare of the elderly. Another issue is rural and urban disparities in the delivery of health services. This is exacerbated by the fact that rural elders experience more poverty than their urban counterparts (Glasgow, 1993). Education, family size, family living arrangement, household wealth, poverty status, and chronic diseases are determinants of the older adults' daily care needs in rural areas (Hoi et al., 2011). This implies that older people who have less cultural capital and living in rural areas are more vulnerable to not receiving proper health care.

Social Isolation and loneliness

Social isolation – the lack of people to interact with regularly - and loneliness – the feeling of being alone or separated – may be increasing in the past decades as the number of unmarried people, children per household, volunteerism and religious affiliation have declined with modern life. Both problems greatly contribute to health issues of older adults as they can lead to depression, heart disease, hypertension, obesity, weakened immune system, cognitive decline, and even death (Holt-Lunstad et al., 2015; "Social isolation, loneliness", 2019). Loneliness and especially social isolation may be more frequent among older adults due to functional limitations and lack of family support. Shame resulted from ageism also can aggravate the problem if there are no opportunities for compensation and accessibility in the environment. Therefore, the lack of social connection is also an important challenge to be addressed to promote healthy

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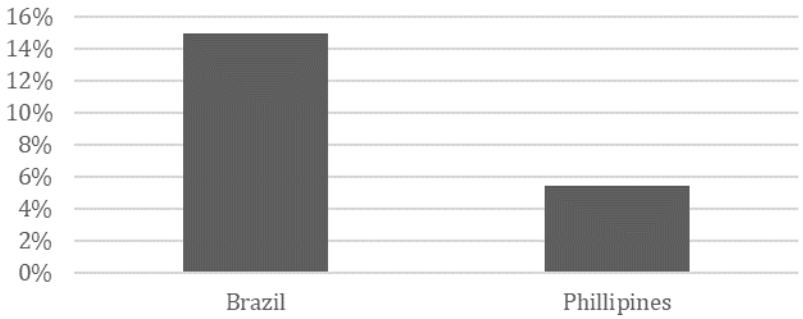
ageing in the Philippines and Brazil.

Filipino older adults in geriatric nursing homes experience loneliness due to social isolation, inadequate social engagement, and decreased life satisfaction (De Guzman et al., 2012). According to Shorey and Chan (2021), aside from healthcare needs, older adults living in isolation also need social support from their family members.

Meanwhile, the number of older adults living alone is increasing in Brazil. In the study of Negrini et al. (2018), it was found that already 15.3% of the older population live alone, and they have worse health status and health-related habits than people with social support.

Figure 3 | Percentage of older people living alone



Note. The graph shows the percentage of older people living alone in Brazil (Negrini et al., 2018) and the Philippines. Data obtained via help age website, https://ageingasia.org/ageing-population-philippines/ accessed on 24/09/2021.

The Covid-19 pandemic had also brought a significant negative impact on the well-being of the older population. Mandated isolation and physical distancing disrupted the daily activities of older people and their engagement to their kin and community. Loneliness and social isolation have become more prevalent among Brazilians, especially the older population, during the pandemic (Torres et al., 2021). Physical inactivity and a longer period of television viewing are also recorded as behavioral changes among Brazilian adults during the last year (Werneck, 2021). All these distressing experiences of isolation and disconnectedness during the pandemic are threats to the physical and mental health of the older population, but the extent of this problem is not yet completely known.

Older adults have a very specific need for love, care, and affection. Being able to build and maintain relations and contribute to community life are essential components of healthy ageing (WHO, 2020; Arcinas et al., 2020). There have been many studies showing that regular communication, whether face to face or technology-mediated, eases depression and improves well-being. Filipino older adults that have supportive people surrounding them are more inspired to be healthy and have more positive health-seeking behaviors (Bernardo &Tolentino, 2020). Loneliness and the lack of support and encouragement from significant others may lead to unhealthy lifestyles and habits (Novotney, 2019). However, effective interventions to combat social isolation and loneliness are not easy to be designed; they should be multifactorial, starting early at home with family education, extending to the school where children should learn to support peers feeling lonely and continue throughout the lifespan with the help of public

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policies to foster age-friendly environments where older adults can engage in social groups.

Ageism

Ageism means the stereotypes, prejudices, and discrimination based on age. Ageism is also a big barrier to healthy ageing (WHO, 2021a). Ageism in various forms of stereotypes, prejudices, and discrimination hinders the development of policies, programs, and opportunities for ageing population to live healthily and with dignity. There is a need to rethink our attitudes towards older people as “social burden” and underscore the continuing contribution of older people in our society (Unknown author, 2012).

In Brazil, ageism spread in many forms. Stereotypes are frequently propagated in television programs, advertisements, movies, interpersonal relationships, and in the speech of politicians. Discrimination, prejudice, and stereotypes toward older people are common in the country, are visible inside institutions through laws of mandatory retirement or norms to offer medical treatment based on age (Goldani, 2010). Parameters of beauty also express negative stereotypes, especially towards women. It is a common stigmatization of older women's appearance through excessive advertisements of cosmetic procedures to prevent the signs of ageing, media portrait of women that neglect their appearance as a sign of moral lassitude, and decrease of representativeness of older women in the media and politics (Goldenberg, 2018).

Filipinos perceive ageing relative to their life experiences with family and within their community (Badana & Andel, 2018). A supportive relationship with the family and community influence a better perception of ageing process. Nevertheless, ageism is still real and unconsciously influences older people's attitudes towards themselves. The younger generation perceives older adults as incapable of appreciating modernity and technology – that hinders access to information, technology for communication and mobile health use. Older people are always requested to have a younger companion whenever they have to see a doctor or make some formal or business transactions as if they are not capable of carrying out a sound judgment. These patterns of negative perceptions and behaviors towards older people become embedded in the lives, leading them to practice self-directed ageism (Magtubo, 2017). Finally, ageism in the form of age discrimination in workplaces is quite common in the country.

Based on the integrative review of Silva et al., (2021), ageism in the form of discrimination against older people has also increased during the Covid-19 pandemic affecting their quality of life. According to Brooke and Jackson (2020), negative discourses and media representations of older adults have become prevalent during the pandemic, which complicates more the patients with Covid-19 experience and the older adults general experience of the pandemic restrictive measures. This form of ageism creates a feeling of worthlessness and undervalue.

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CONCLUSION

Brazil and the Philippines are examples of developing countries in different stages of population ageing. In many aspects, Brazil is more advanced in the process, facing greater challenges derived from the ageing society, while it is creating more robust solutions. The country, which became a rapidly ageing society in 2012, has somehow unified the efforts to promote the healthcare needs of the older population in their universal healthcare program (SUS) and the federal act towards older adults, “Estatudo do Idoso”. On the other hand, the Philippines, which is transitioning to ageing society in 2030, has yet to capacitate the existing Expanded Senior Citizens Act to go beyond discounts on purchases and social services and focus on providing holistic healthcare for Filipino older adults. The country may use to some extent the process faced by Brazil as a model for future planning, however the good practices of the Philippines may also be a lesson for developing countries. International exchange of information and cooperation is one the key solutions for the decade’s problems. Yet, both countries still have a long way ahead to finally achieve basic standards of health promotion for the whole population. The ageing society poses difficulties to both countries in terms of the main challenges of population ageing discussed in this paper: healthcare policies, institutional geriatric care, socio-economic equity, social isolation, and the feeling of loneliness, as well as ageism. Recently with the Covid-19 pandemic, part of the progress is threatened by the economic crisis, as well as social and cultural factors of social isolation and ageism. These challenges need urgent attention, as the ageing population onus will be imposed in the future if nothing is done now. Notwithstanding, if healthy ageing is promoted and society can create an environment where older adults are able to contribute, in the future it will be possible to collect the dividends of the ageing population. Longevity dividend refers to the benefits that society can get from the ageing society through longer periods of productivity, wisdom, and talents, which can contribute to the economy and social environment (Sugar, 2019). Hence, tackling the challenges of population ageing is the first step to create a prosperous future in developing countries.

Conflict of interest:

None.

Ethical Clearance:

The study was approved by the institution.

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REFERENCES

Arcinas, M., Tolentino, M., Lituañas, C.R., Cadeliña, J. & Obayashi, Y.(2020). E-health and healthy aging among the participating countries in JST Sakura Science Exchange Program 2019. Asia-Pacific Social Science Review, 20 (2), 149-157.

AARP. (2019). Aging readiness and competitiveness - Brazil. https://arc.aarpinternational.org/countries/brazil

Badana, A. & Andel, R. (2018). Aging in the Philippines. The Gerontologist, 58 (2), 212–218. https://doi.org/10.1093/geront/gnx203

Bennet, T. Media, 'reality', signification. In: GUREVITCH, M., BENNETT, T., CURRAN, J. e WOOLLACOTT, J. (Eds.). Culture, society and the media. Londres: Routledge, 1992, p. 287 – 308.

Bernardo, M. & Tolentino, M. (2019). Community social capital and health status and health seeking behaviors among the elderly. Asia Pacific Social Science Review (Scopus), 19 (3), 155-166.

Barros, M. & Goldbaum, M. (2018). Challenges of aging in the context of social inequalities. Revista de Saúde Pública, 52, Suppl 2, 1. https://doi.org/10.11606/S1518-8787.201805200supl2ed

Beghin, N. (2008). Notes on inequality and poverty in Brazil: Current situation and challenges. Oxfam International. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/112516/fp2p-bp-notes-inequality-poverty-brazil-current-140608-en.pdf

Brooke, J. & Jackson, D. (2020). Older people and Covid-19: Isolation, risk, and ageism. Journal of Clinical Nursing, 29(13-14), 2044-2046. https://doi.org/10.1111/jocn.15274

Castro, Gisela G.S. "Precisamos discutir o idadismo na comunicação". Comunicação & Educação 20, nº 2 (1º de outubro de 2015): 101. https://doi.org/10.11606/issn.2316- 9125.v20i2p101-114.

Cheung, C.-K., & Kwan, A. Y.-H. (2009). The erosion of filial piety by modernisation in Chinese cities. Ageing and Society, 29(2), 179–198. https://doi.org/10.1017/S0144686X08007836

De Guzman, A., Maravilla, K., Maravilla, V., Marfil, J., Mariñas, J. & Marquez, J. (2012). Correlates of geriatric loneliness in Philippine nursing homes: a multiple regression model. Educational Gerontology, 38 (8), 563-575. https://doi.org/10.1080/03601277.2011.645443

Dela Vega, S., Cordero, C., Palapar, L., Garcia, A., & Agapito, J. (2018). Mixed-methods research revealed the need for dementia services and Human Resource Master

Plan in an aging Philippines. Journal of Clinical Epidemiology, 102, 115-122. https://doi.org/10.1016/j.jclinepi.2018.06.010

Duaqui, Y. (2013). Growing old gracefully: A Filipino family's grandmother story. Asia Pacific E Journal of Health Social Science, 2, 1-2. https://sites.google.com/site/asiapacificejournalofhss/

Fabonan III, E. (2019, August 12). Amid rising poverty, the elderly are working beyond their years. One News. https://www.onenews.ph/articles/amid-rising-poverty-the-elderly-are-working-beyond-their-years-2

Fan, V. Y., Bloom, D. E., Ogbuoji, O., Prettner, K., & Yamey, G. (2018). Valuing health as development: Going beyond gross domestic product. The BMJ, 363, k4371. https://doi.org/10.1136/bmj.k4371

Garcez-Leme, L. E. and Leme, M. D. (2014). Costs of elderly health care in Brazil: challenges and strategies: An update of a presentation given at the Pan-American Congress of Geriatrics and Gerontology in Ottawa, Canada, 2011 . Medical Express, 1, (1), 3-8. https://doi.org/10.5935/MedicalExpress.2014.01.02

Glasgow, N. (1993). Poverty among rural elders: trends, context, and directions for policy. Journal of Applied Gerontology, 12(3), 302–319. https://doi.org/10.1177/073346489301200302

Goldani A. M. (2010). The challenges of ageism in Brazil. Educacao & sociedade, 31(111), 411–434. https://doi.org/10.1590/S0101-73302010000200007

Goldenberg, M. (2018). The invention of a beautiful old age: in search of a freer, happier life. *Revista Brasileira de Geriatria e Gerontologia [online], 21*(5), 511-512. Available from: <https://doi.org/10.1590/1981-22562018021.180177>. ISSN 1981-2256. https://doi.org/10.1590/1981-22562018021.180177.

Help Age Global Network. (2017). Ageing population in the Philippines. www.helpage.org.

Hoi le V, Thang P, Lindholm L. (2011). Elderly care in daily living in rural Vietnam: need and its socioeconomic determinants. BMC Geriatrics, 2 (11), 81. https://doi.org/10.1186/1471-2318-11-81

Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. Perspectives on Psychological Science, 10(2), 227–237. https://doi.org/10.1177/1745691614568352

Inabangan, A., Garcia, L., & Abocejo, F. (2019). Evaluation of the Philippine Expanded Senior Citizens Act (RA 9994) on mandated privileges for the elderly. European Academic Research, 6, 6112-6138.

Kumamoto, K., Arai, Y., & Zarit, S. H. (2006). Use of home care services effectively reduces feelings of burden among family caregivers of disabled elderly in Japan: preliminary results. International Journal of Geriatric Psychiatry: A Journal of the Psychiatry of Late-life and Allied Sciences, 21(2), 163-170.

Levy, Becca R., Alan B. Zonderman, Martin D. Slade, e Luigi Ferrucci. "Age Stereotypes Held Earlier in Life Predict Cardiovascular Events in Later Life". Psychological Science 20, nº 3 (março de 2009): 296–98. https://doi.org/10.1111/j.1467-9280.2009.02298.x.

Macinko, J., Dourado, I., Aquino, R., Bonolo, P. de F., Lima-Costa, M. F., Medina, M. G., Mota, E., de Oliveira, V. B., & Turci, M. A. (2010). Major expansion of primary care in Brazil linked to decline in unnecessary hospitalization. Health Affairs (Project Hope), 29(12), 2149–2160. https://doi.org/10.1377/hlthaff.2010.0251

Magtubo, C. (2017, Jan 16). Ageism: elderly Filipinos discriminate against themselves. MIMS Today. Retrieved from: https://today.mims.com/ageism--elderly-filipinos-discriminate against-themselves.

Maia, G. A., Araú, S. de, Sugar, J., Carlota, A. P. P., Aloí, F., & Pimenta, sio P. (2013). Medical teaching in Brazilian public institutions and the needs of elderly people. Geriatrics, Gerontology and Aging, 7(2), 93–98.

Medeiros, M., & Souza, P. H. G. F. (2014). Previdências dos trabalhadores dos setores público e privado e desigualdade no Brasil. Economia Aplicada, 18(4), 603–623. https://doi.org/10.1590/1413-8050/EA344

Negrini, E., Nascimento, C., Da Silva, A., & Antunes, J. (2018). Elderly persons who live alone in Brazil and their lifestyle. Revista Brasileira de Geriatria e Gerontologia, 21 (05), 523-531. https://doi.org/10.1590/1981-22562018021.180101

Neumann, L. & Albert, S. (2018). Aging in Brazil. *The Gerontologist,* 58 (4), 611–617. https://doi.org/10.1093/geront/gny019

Nielsen-Bohlman L, Panzer AM, & Kindig DA. (2004). Health Literacy: A Prescription to End Confusion. Washington (DC): National Academies Press (US). In Health Literacy: A Prescription to End Confusion. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK216037/

Novotney, A. (2019). The risk of social isolation. American Psychological Association, 50(5), 32.

Philippines a slowly ageing society-PIDS study. (2019, July 6). Rappler. https://www.rappler.com/nation/philippines-ageing-population-pids-study

Prachuabmoh, V. (2015). A lesson learned from community-based integrated long-term care in Thailand. Asia Pacific Journal of Social Work and Development, 25(4), 213-224.

Saito, J., Haseda, M., Amemiya, A., Takagi, D., Kondo, K., & Kondo, N. (2019). Community-based care for healthy ageing: lessons from Japan. Bulletin of the World Health Organization, 97(8), 570.

Sander, M., Oxlund, B., Jespersen, A., Krasnik, A., Mortensen, E. L., Gerardus, R., Westendorp, J., & Rasmussen, L. J. (2015). The challenges of human population ageing. Age and Ageing, 44 (2), 185–187. https://doi.org/10.1093/ageing/afu189

Sharma, N., Chakrabarti, S., & Grover, S. (2016). Gender differences in caregiving among family—Caregivers of people with mental illnesses. World Journal of Psychiatry, 6(1), 7–17. https://doi.org/10.5498/wjp.v6.i1.7

Shetty, P. (2012). Grey matter: Ageing in developing countries. The Lancet, 379(9823), 1285–1287. https://doi.org/10.1016/S0140-6736(12)60541-8

Shorey, S. & Chan, V. (2021). The experiences and needs of Asian older adults who are socially isolated and lonely: A qualitative systematic review. Archives of Gerontology and Geriatrics, 92. https://doi.org/10.1016/j.archger.2020.104254

Shrivastava, S. R., Shrivastava, P. S., & Ramasamy, J. (2013). Health-care of elderly: determinants, needs and services. International Journal of Preventive Medicine, 4(10), 1224–1225.

Silva, M. F., da Silva, D. S., de Macedo Bacurao, A. G., Francisco, P., de Assumpcao, D., Neri, A., & Borim, F. (2021). Ageism against older adults in the context of the COVID-19 pandemic: an integrative review. Revista de Saúde Pública, 55 (4). https://doi.org/10.11606/s1518-8787.2021055003082

Siongco, K.L.L., Nakamura, K. & Seino, K. (2020). Reduction in inequalities in health insurance coverage and healthcare utilization among older adults in the Philippines after mandatory national health insurance coverage: trend analysis for 2003–2017. Environmental Health and Preventive Medicine, 25(17). https://doi.org/10.1186/s12199-020-00854-9

Social isolation, loneliness in older people pose health risks. (2019, April 23). National Institute on Aging. https://www.nia.nih.gov/news/social-isolation-loneliness-older-people-pose-health-risks

Son, K. J., Son, H. R., Park, B., Kim, H. J., & Kim, C. B. (2019). A community-based intervention for improving medication adherence for elderly patients with hypertension in Korea. International journal of environmental research and public health, 16(5), 721.

Sugar, J. (2019). The longevity dividend. In Introduction to Aging (3-18) Springer Publishing Company. 10.1891/9780826162946.0001.

Szmigiera, M. (2021, March 30). Life expectancy in industrial and developing countries

in 2020. Statistica. https://www.statista.com/statistics/274507/life-expectancy-in-industrial-and-developing-countries/

Thumé, E., Facchini, L. A., Wyshak, G., & Campbell, P. (2011). The utilization of home care by the elderly in Brazil's primary health care system. American Journal of Public Health, 101(5), 868–874. https://doi.org/10.2105/AJPH.2009.184648

Torres, J. L., de Souza Braga, L., de Souza Moreira, B., Castro, C. M. S., Vaz, C. T., de Souza Andrade, A. C., Andrade, F. B., Lima-Costa, M. F. & Caiaffa, W. T. (2021) Loneliness and social disconnectedness in the time of pandemic period among Brazilians: evidence from the ELSI COVID-19 initiative. Aging & Mental Health. https://doi.org/10.1080/13607863.2021.1913479

Travassos, G. F., Coelho, A. B. & Arends-Kuenning, M. P. (2020). The elderly in Brazil: demographic transition, profile, and socioeconomic condition . Revista Brasileira de Estudos de População, 37, e0129. https://doi.org/10.20947/S0102-3098a0129

Unknown author. (2012). The health-care challenges posed by population ageing. Bulletin of the World Health Organization, 90 (2), 82 - 83. World Health Organization. http://dx.doi.org/10.2471/BLT.12.020212

Werneck, A., Silva, D., Malta, D., Souza-Júnior, P., Azevedo, L., Barros, M., & Szwarcwald, C. (2021). Physical inactivity and elevated TV-viewing reported changes during the COVID-19 pandemic are associated with mental health: A survey with 43,995 Brazilian adults. Journal of Psychosomatic Research, 140, (110292). https://doi.org/10.1016/j.jpsychores.2020.110292.

World Bank (n.d). Gini index (World Bank estimate). https://data.worldbank.org/indicator/SI.POV.GINI

World Health Organization. (2020, October 26). Ageing: Healthy ageing and functional ability. https://www.who.int/westernpacific/news/q-a-detail/ageing-healthy-ageing-and-functional-ability

World Health Organization. (2021a, March 18). Global report on ageism. https://www.who.int/teams/social-determinants-of-health/demographic-change-and-healthy-ageing/combatting-ageism/global-report-on-ageism

World Health Organization. (2021b, September 2). Dementia. https://www.who.int/news-room/fact-sheets/detail/dementia

World Health Organization. (2021c, October 4). Ageing and health. https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

World Health Organization. (n.d.). Towards policy for health and ageing. http://www.who.int/ageing/publications/alc_fs_ageing_policy.pdf