

This is a peer-reviewed, final published version of the following document and is licensed under Creative Commons: Attribution-No Derivative Works 4.0 license:

Bennett, Rachel ORCID logoORCID: https://orcid.org/0000-0002-5780-8786 and Zaidi, Asghar (2016) Ageing and development: Putting gender back on the agenda. International Journal on Ageing in Developing Countries, 1 (1). pp. 5-19.

Official URL: https://www.inia.org.mt/wp-content/uploads/2016/07/Complete-Issue.pdf

EPrint URI: https://eprints.glos.ac.uk/id/eprint/3796

Disclaimer

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

Ageing and development: Putting gender back on the agenda

Rachel Bennett¹ and Asghar Zaidi²

Abstract. We live in a world where women over fifty account for almost one quarter of the total population. This article highlights the potential of global population ageing as a vehicle for socio-economic development and demonstrates the value of taking a gendered approach to ageing and development. With the use of country level data on gender equality, education, health and life expectancy in later life, the analysis shows that older women in low-income countries face disproportionate disadvantages relative to both their male counterparts in low-income countries and female counterparts in high-income countries. For instance, an older woman in a low-income country is over 24 times less likely to have completed secondary education than an older woman in a high-income country. Despite the widely documented female survival advantage, an older woman in a low-income country spend a smaller percentage of her remaining life expectancy at age sixty in good health than her male counterparts. Our analysis show there are strong correlations between gender inequality and diminished life expectancy and healthy life expectancy at age 60 amongst both genders, indicating that both older women and older men fare better when they live in societies which realise the contributions of women to the development process. The correlation is particularly strong in low-income countries, suggesting countries with the lowest levels of economic development have the most to gain from promoting gender equality. The United Nations Millennium Development Goals (2000-2015) had given an exclusive place to women in the standalone goal on maternal mortality and a goal on gender equality and female empowerment with explicit indicators on school enrollment amongst girls and literacy amongst young women. These goals are linked to the achievements such as the near doubling of the number of women in parliament and a near halving of the maternal mortality ratio over the last twenty years. However the development discourse has given minimal attention to women beyond reproductive age. The new, broader post-2015 Sustainable Development Goals provide unparalleled opportunities to place gender back on the emerging ageing and development agenda, support both older men and women to realise their potential and in the process maximize opportunities for prosperity and wellbeing for all.

Keywords: ageing, gender, equality, development, Sustainable Development Goals.

¹ University of Gloucestershire, United Kingdom. (rbennett3@glos.ac.uk)

² University of Southampton and London School of Economics, United Kingdom. (Asghar.Zaidi@soton.ac.uk)

Introduction

This article makes the case that population ageing is not a prohibiting phenomenon for social and economic development but can strengthen the case for supporting the wellbeing and prosperity of populations across the life course. It also explores the interrelationships between gender equality and health in later life globally in order to highlight the importance of placing gender on the agenda for all processes linked with ageing and development.

Population ageing is unprecedented and profound

We live in an incredible world, almost unimaginable to that lived in by our grandparents. Increasing numbers of us are living longer than ever before, we are also healthier and many more of us can look forward to the prospect of an active and healthy life in old age. The world's population is ageing across all regions of the world. As fertility declines and life expectancy increases, the proportion of population aged 60 and over are growing in countries rich and poor. There are currently around 900 million people aged 60 or over worldwide, representing approximately 12.5 per cent of the global population. By 2050, this will have increased to 2.1 billion or 21.5 per cent of the global population.

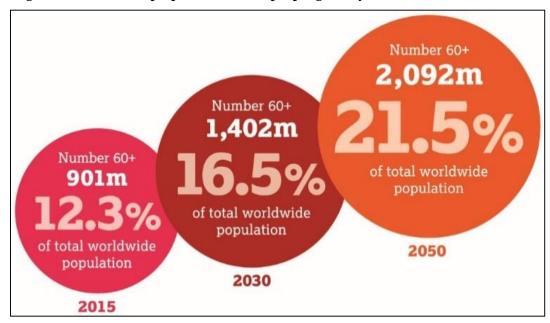


Figure 1: Number and proportion of older people globally in 2015, 2030, 2050

Source: UNDESA Population Division, World population prospects: the 2015 revision, as cited in HelpAge International (2015).

People over 60 now outnumber children under five, and by 2050, they will outnumber those under 15. These demographic changes are most rapid in the developing world which, by 2050, will be home to eight out of 10 of the world's over 60s. The speed of population ageing,

especially in low- and middle-income countries, has led many commentators to say that the developing world is 'growing old before it grows rich'.

Population ageing will have profound impact, especially since many of the governments around the world have yet to put in place the policy frameworks to respond to the challenges posed by the ageing of their populations. There is a mismatch between advances in longevity and in the evolution of policies that protect and empower older people. In particular, many of the sub-Saharan, Middle Eastern and Asian countries fall short in their awareness of potential of older people in being net contributors in the development process. Policies to support a dignified and secure old age should be of serious concern not just to older people but also to today's young people, not least because they are the ones who stand to benefit from them in the longer term. The 2014 Human Development Report makes an important point in this respect: early interventions result in more resilient, secure and healthier adults (United Nations Development Programme, 2014a). The longer term benefits of this justify the expenditures to be made for better education, health and employment opportunities for both young and old. Larger older population also implies greater voting power. Many countries now have political parties formed by the pressure group of older people. There is no evidence though, as yet, that this grey voting power is causing conflict between young and old. That said, there is a gap between the generations, especially in terms of knowledge and wisdom. With supportive environments and good planning, older people can contribute more effectively in the mentoring of younger people.

Population ageing a motive for development

In contrast to the preceding Millennium Development Goals (United Nations, 2000), the new post-2015 Sustainable Development Goals (SDGs) (ibid., 2015a) make a specific mention of older people and ageing as a cornerstone of sustainable development. In monitoring the SDGs, there is a broader commitment that "all indicators should be disaggregated by sex, age, residence (urban/rural) and other characteristics, as relevant and possible". Goal 3, Ensure healthy lives and promote wellbeing for all at all ages, is particularly relevant for older people as it has older people as one of the main beneficiaries for all future international development processes. Indeed, every person should be able to live the best life that they can at every stage, with dignity and freedom of choice. The SDGs pledge "no one will be left behind" and "to reach the furthest behind first", implying that every individual must benefit from the development process and that the most vulnerable should get the highest priority in the development agenda. People's experiences of older ages vary enormously depending on where they live. Countries that support human development throughout life are more likely to attain higher levels of quality of life of older people and also have higher rates of their participation in volunteering, working and engaging in their communities. The evidence available in the Global AgeWatch Index, since its launch in October 2013, has helped us identify contexts in which older people fare better, and point to policy interventions that are effective in reducing their vulnerabilities (for purpose and methodology of Global AgeWatch Index, see Zaidi, 2013).

The countries doing best in the Global AgeWatch Index have social and economic policies supporting older people's capabilities for employment, wellbeing in terms of income and health and autonomy with the help of enabling environments. They have long-standing social welfare policies delivering universal pensions and better access to healthcare, as well as action plans on ageing. This approach is apparent not just in some Western, Nordic and North American countries but also in some medium income countries like Chile, Argentina and Mauritius (HelpAge International 2015).

Figure 2: Global AgeWatch Index ranking of 96 countries with respect to older people's wellbeing, 2015

1. Switzerland	21. Chile	41. Vietnam	61. Croatia	81. Ghana
2. Norway	22. Czech Republic	42. Mauritius	62. Dominican Republic	82. Honduras
3. Sweden	23. Estonia	43. Armenia	63. Lithuania	83. Lao PDR
4. Germany	24. Belgium	44. Ecuador	64. Belarus	84. Morocco
5. Canada	25. Spain	45. Romania	65. Russia	85. Jordan
6. Netherlands	26. Slovenia	46. Sri Lanka	66. Serbia	86. Nigeria
7. Iceland	27. Uruguay	47. Malta	67. Bangladesh	87. Iraq
8. Japan	28. Costa Rica	48. Peru	68. Montenegro	88. Uganda
9. USA	29. Georgia	49. Bulgaria	69. Paraguay	89. Rwanda
10. United Kingdom	30. Cyprus	50. Philippines	70. Nepal	90. Zambia
11. Denmark	31. Argentina	51. Kyrgyzstan	71. India	91. Tanzania
12. New Zealand	32. Poland	52. China	72. Mongolia	92. Pakistan
13. Austria	33. Mexico	53. Albania	73. Ukraine	93. West Bank & Gaza
14. Finland	34. Thailand	54. El Salvador	74. Indonesia	94. Mozambique
15. Ireland	35. Latvia	55. Bolivia	75. Turkey	95. Malawi
16. France	36. Colombia	56. Brazil	76. Venezuela	96. Afghanistan
17. Australia	37. Italy	57. Nicaragua	77. Moldova	
18. Israel	38. Portugal	58. Tajikistan	78. South Africa	
19. Luxembourg	39. Hungary	59. Guatemala	79. Greece	
20. Panama	40. Slovakia	60. South Korea	80. Cambodia	

Source: HelpAge International (2015)

Norway and Sweden for instance progressively invested in education, healthcare, employment and training, and social security throughout the life course long before they became "high income countries". Likewise, countries such as Mauritius and Sri Lanka are lighting the way for other emerging economies. In Sri Lanka, long-term investments in education and health have generated a cumulative lifetime advantage for many older people, offering lessons to other South Asian countries such as India and Pakistan. While in Mauritius nearly all the over 60s receive a non-contributory pension, which offers lessons for Africa in providing income security for older people (HelpAge International 2015).

Population ageing a spur for development

Older people remain vulnerable in many ways as in previous generations, but they also have the potential to be active and productive long after the traditional age of retirement. Modern technological, economic and social environmental breakthroughs make all of this possible. Yet until relatively recently our understanding of the capacities and vulnerabilities of people in older ages has been tied to pre-industrial precepts about ageing and its challenges.

As countries age, they need to invest in supporting the contributions, experience and expertise of their growing number of older citizens. An example is Japan, a hyper-ageing country, with a third of the population over 60. As early as the 1960s, it adopted a comprehensive welfare policy, introduced universal healthcare, a universal social pension, and a plan for income redistribution, low unemployment rates and progressive taxation. This investment has paid off not just with a healthier labour force and increased longevity. As a result, Japan is currently not just the oldest, but also one of the healthiest and wealthiest countries in the world. Western European and Nordic countries also illustrate the range of approaches to policies on ageing and the associated positive results. A clear message is that greater social policy priorities, including social protection and universal social services are required to empower older people, without losing sight of making welfare systems more sustainable.

The post-2015 Sustainable Development Goals give us an unparalleled opportunity to shape the international and national development agenda that will have people and their prosperity at their core. The hard work of ensuring that the SDGs are implemented and deliver on their commitments will test our commitment to ending the most serious problems we face today. Identifying conceptually-clear, commonly-, and frequently-measured indicators that will enable global comparisons will be a major challenge. The work of the Global AgeWatch Index, and also the Active Ageing Index (Zaidi & Stanton 2015), provide strong insights into the larger task ahead for UN Member countries to improve both the credibility of indicators and their measurement. If we get this right we will be sure to capture progress and outcomes for all people all ages.

Cumulative gendered disadvantages

The experience of ageing varies dramatically between men and women, as documented by a wealth of research on ageing and gender, predominately from the perspective of high income countries. Cumulative gendered disadvantages in terms of socio-economic position, access to resources and roles and relationships have been shown to manifest in poorer outcomes for women in later life (Pratt, 1997, United Nations Economic Commission for Europe, 2009; Zaidi, Gasior, & Zólyomi, 2013). However, Knodel and Ofstedal (2003) amongst others have highlighted that a blanket assumption of a female disadvantage at older ages may be detrimental to supporting older people most in need and advocate the value of contextualised understandings of the role of gender in the ageing experience. We are only starting to understand gendered experiences of ageing in developing countries settings, and also discuss roles of both older men and women within families.

In terms of the dynamics of gender and health, a commonly observed phenomenon is the 'female survival advantage'. Indeed female life expectancy at birth started to exceed male life expectancy at birth in every country globally for the first time a decade ago (Barford, Dorling, & Smith, 2006). The female advantage is linked both to biological explanations and to different exposures and responses to environmental and social risk factors (Liang, Bennett, Sugisawa, Kobayashi, & Fukaya, 2003). The female survival advantage contributes to the fact that the majority of older people are women: 54% of the world's population aged 60 years or over are women and 61 per cent of the world's population aged 80 years or over are women (United Nations Population Division, 2015). The gender difference in old age survival is projected to eventually narrow in western countries as women are increasingly exposed to lifestyle-linked risk factors (Centers for Disease Control, 2004; Des Meules, Manuel, & Cho, 2003). However the dynamics of gender differences in old age survival in other world regions with varying socio-cultural and economic conditions has received minimal attention in the scientific literature. A recent study in Kenya's Nairobi slums showed unadjusted mortality rates did not differ significantly between older men and women and that the female advantage only becomes apparent after accounting for the cumulative influence of individual characteristics, social networks, health status and socio-economic status (Bennett, Chepngeno-Langat, Evandrou & Falkingham, 2016). Women and girls in this setting experience significantly more limited economic opportunities across the life course than their male counterparts and over two thirds of older women are currently unmarried, which is likely to be a measure of social and economic vulnerability given the patriarchal nature of Kenyan society (Ezeh, Chepngeno, Kasiira, & Woubalem, 2006). Thus, the findings on gender and old age survival suggests the female advantage in old-age survival may not apply to contexts where women experience very significant disadvantages across multiple life domains.

The female survival advantage has frequently been observed alongside a paradoxical finding that women have poorer self-rated health than men (Oksuzyan, Peterson, Stovring, Bingley, Vaupel, & Kristensen, 2011). This manifests into a greater length of time spent in poor health amongst women, indeed the female survival advantage itself extends the length of time women spend in poor health (Luy & Minagwa, 2014) and can mean females need extra care, especially during the late stages of their lives. As women outlast their male partners in most instances, they are also less likely to have access to informal care from their partners and may be at higher risk of social isolation. Older women and older men in many low- and middleincome countries have limited access to formal social security, but opportunities for paid employment and pension coverage can be particularly scarce for women (Lloyd-Sherlock, 2010). Whilst men and boys are engaged in care work (and this is likely to be underreported and underrepresented), women and girls shoulder a disproportionate responsibility for caring globally (Chopra, Kelbert, & Iyer, 2013). This can limit their economic opportunities and earning potential. However involvement in care work can also lead to greater role continuity and opportunities to contribute to their families and communities in later life. For example, the role of older women in particular in providing care for children and grandchildren affected by the HIV epidemic in sub-Saharan Africa has been highlighted and championed in academic literature and policy documents (Schatz, 2007; World Health Organization, 2007). Studies focusing on earlier stages of the life course show clear advantages of investing in the education and empowerment of women and girls for the health and wellbeing of women,

their families and their communities (Kar, Pascual, & Chickering, 1999; Schultz, 2002; Varkey, Kureshi, & Lesnick, 2009; Zaidi 2014).

Research methods

Data

The analyses draw on country level data across a number of income levels, gender equality and health indicators. The World Bank (2015) country classifications based on Gross National Income (GNI) per capita were used to categories countries as high-income, middle-income and low-income. The United Nations (2014b) Gender Inequality Index (GII) was used to provide a measure of gender equality. The GII is a composite measure scored between 0 and 1 based on indicators which includes three broad categories of indicators relating to:

- health (the maternal mortality ratio and the adolescent (15-19 years) birth rate),
- empowerment (share of seats in parliament held be women, percentage of women aged 25 or older with secondary education or higher and percentage of men aged 25 or over with secondary education or higher) and
- the labour market (percentage of women aged 15 or over in the labour market and percentage of men aged 15 or over in the labour market).

Values closer to 0 indicate that the human development lost due to gender inequality is lower (for more information, see United Nations Development Fund, 2014b).

In addition, the percentage of older men and older women with secondary or higher education was used as measures of gender equality specific to the current cohort of older people. This data was compiled by the Global AgeWatch (2015) and sourced from Barro-Lee (2010). Moreover, life expectancy at 60 and healthy life expectancy at 60 were used as measures of health. Life expectancy at 60 is the average number of years a person aged 60 can expect to live, whilst healthy life expectancy at 60 is the average number of years a person aged 60 can expect to live in good health, both assuming age-specific mortality rates remain constant. These are key indicators of the health of older people and constitute two of the three health measures used for the Global AgeWatch Index (for details, see Zaidi 2013). Both measures are also available disaggregated by gender for the majority of countries. The data were compiled by the Global AgeWatch (HelpAge International, 2015), drawn from the World Health Organisation (2013) and the Institute for Health Metric and Evaluation (2010).

The analytic sample included 139 countries with complete data across the variables described above. Countries with missing data across the health and gender equality measures were disproportionally low-income countries: 39 per cent of United Nations member states classified as low-income could not be included due to incomplete data compared to 19 per cent of high income United Nations member states. This reflects a broader challenge of data availability for ageing research globally, and particularly in developing countries. However in total 72 per cent of United Nations member states were represented in the analysis, thus it covers a large majority of countries.

Methods

To investigate income level and gender differentials across the health and gender equality variables their average values for high-income, middle-income and low-income countries were calculated. The median was used as an alternative average to the mean due to the non-normal distribution of some of the variables. The interquartile range was presented as a measure of variability. The associations between the GII and healthy life expectancy at 60 and life expectancy at 60 stratified by gender and country income level were assessed using Spearman's Correlation Coefficient.

Key findings

Gender inequality and older people's educational attainment by country income level

Table 1 includes average Gender Inequality Index score by country income level. There is a clear relationship: low-income countries will be losing the most the human development potential due to gender inequality, with an average GII score over 4 times higher than that in high-income countries. The table also presents data on the average percentage of older men and women with secondary or higher education by country income level. The results show that globally older women have lower educational attainment than older men and that educational attainment of older people is worse in low-income countries than in high or middle-income countries. The trend by income level is particularly pronounced for older women: an older woman in a low-income country is over 24 times less likely to have completed secondary education than an older woman in a high-income country.

Moreover, there is also a greater inequality within country income levels. An older woman in a low-income country has approximately one quarter of the chance of having at least finished secondary education than an older man, whilst in a middle-income country the equivalent chance is approximately two thirds and in a high-income country the equivalent chance is approximately three quarters.

Table 1: Average Gender Inequality Index and educational attainment of older population by country income level and gender

	High-income		Middle-income		Low-income	
	Median	(IQR)	Median	(IQR)	Median	(IQR)
GII index score	0.13	(0.16)	0.43	(0.18)	0.60	(0.15)
Percentage of older population with secondary or higher education						
Men	68.6	(37)	27.5	(34)	9.2	(2)
Women	53.5	(50)	17.5	(29)	2.2	(4)

Notes: Authors' analyses of educational attainment data compiled by HelpAge International (2015), the United Nations Gender Inequality Index (2014b) and country income data from the World Bank (2015). Median refers to the value of the second quartile (or midpoint) of the frequency distribution of the variable. IQR (interquartile range) is the difference between the third and first quartile and is used as a measure of variation.

Limited educational attainment of older women in low-income countries is indicative of a systematic disadvantage of women in the society from early childhood. These experiences and further disadvantages during the subsequent stages of the life course place them at a higher risk of living in poverty in later life (Zaidi 2014).

Life expectancy and healthy life expectancy at 60 by country income level and gender

Table 2 presents average life and healthy life expectancy at 60 by country income level and gender. There is strong evidence of acute inequality between country income levels for older women. For example, older women living in a high-income country can expect to live almost six and a half years longer in good health from her 60th birthday than an older woman in a low-income country, whilst differences amongst men are less stark. There is a clear female survival advantage in later life in high-income countries: on average, older women in these countries can expect to live three years longer than their male counterparts. However, in low and middle-income countries women can only expect to live only one additional year of life over their male counterparts. The findings on healthy life expectancy show that this difference by country income level are even more pronounced: whilst older women in high-income countries enjoy on average an additional 2.8 healthy years as compared to older men, in low-income countries there is hardly any female advantage in healthy life expectancy.

Table 2: Average life and healthy life expectancy by country income level and gender

	High-income		Middle-income		Low-income	
	Median	(IQR)	Median	(IQR)	Median	(IQR)
Life expectancy at 60 years						
Men	22.0	4.0	18.0	3.0	16.0	1.0
Women	25.0	2.0	19.0	4.0	17.0	2.0
Female survival advantage (years)	3.0	-	1.0	-	1.0	-
Healthy life expectancy at 60 years						
Men	16.0	2.0	13.7	3.0	12.3	18.8
Women	18.8	2.0	15.4	3.0	12.4	3.0
Female healthy survival advantage (years)	2.8	-	1.7	-	0.1	-
Average percentage of life expectancy at						
age 60 spent in good health						
Men	72%		76%		77%	
Women	75%		81%		73%	

Notes: Authors' analyses of life expectancy at 60 years and healthy life expectancy at 60 years compiled by HelpAge International (2015), the United Nations (2014b) Gender Inequality Index and country income data from the World Bank (2015). Median refers to the value of the second quartile (or midpoint) of the frequency distribution of the variable. IQR (interquartile range) is the difference between the third and first quartile and is used as a measure of variation. The bottom rows are calculated by dividing median healthy life expectancy at 60 years by median life expectancy at 60 years.

Furthermore, older women in low-income countries can actually expect to spend a lower percentage of their life expectancy at age 60 in good health, whilst an older man in a developing country can expect to spend 77 per cent of his remaining life expectancy at 60 in good health, an older women can only expect to spend 73 per cent of her remaining life expectancy at 60 in good health.

Life expectancy at 60, healthy life expectancy at 60 and gender inequality

Figure 1 illustrates the relationship between male and female life expectancy at age 60 and Gender Inequality Index (GII) score. The first graph shows clearly that older women enjoy longer life expectancy at age 60 in countries with lower levels of gender inequality.

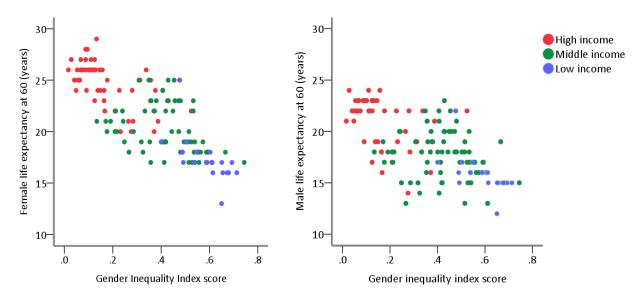


Figure 3: Female/male life expectancy at 60 by GII score and country income level

Notes: Authors' analyses of life expectancy at 60 years data compiled by HelpAge International (2015), the United Nations (2014b) Gender Inequality Index and country income data from the World Bank (2015).

The relationship is weaker for men's life expectancy (shown on the second graph), but still apparent. This trend suggests that living in a country with high levels of gender equality is beneficial for both older women and older men. The data points are colour coded by country income level and reveal that even amongst countries of the same income level, those with lower levels of gender inequality achieve higher life expectancy at 60.

These trends are confirmed in table 3 which presents the correlation coefficients for the relationship between life expectancy and healthy life expectancy at 60 for women and men and gender inequality index, collectively and by country income level. It is evident that there is a strong statistically significant correlation between both life expectancy and health life

expectancy at 60 and the Gender Inequality Index for older men and older women. The correlation is particularly strong for life expectancy at 60 in low-income countries, for both men and women. These results identify a specific policy priority for low-income countries: reducing gender inequality will have the most benefit in terms of improving health outcomes.

Table 3: Spearman's correlation coefficient for the relationship between health indicators and the GII index, by country income level and gender

	High- income	Upper middle income	Low- income	All		
Men						
Life expectancy at 60	-0.477***	-0.234**	-0.758***	-0.642***		
Healthy life expectancy at 60	-0.439***	-0.289**	-0.099	-0.612***		
Women						
Life expectancy at 60	-0.569***	-0.497***	-0.779***	-0.800***		
Healthy life expectancy at 60	-0.589***	-0.573***	-0.444*	-0.799***		

^{***}p<0.001, **p<0.01, *p<0.05

Notes: Authors' analyses of life expectancy at 60 years and healthy life expectancy at 60 years data compiled by HelpAge International (2015), the United Nations (2014b) Gender Inequality Index and country income data from the World Bank (2015). A correlation coefficient close to -1 is indicative of a strong negative correlation. A correlation coefficient close to 1 is indicative of a strong positive correlation.

Discussion

Experiences of ageing vary enormously by where an individual lives, but also by their gender. The empirical results in this article highlight that older women in low-income countries are disproportionally disadvantaged relative to both their male counterparts and to their female counterparts in higher income countries. The average percentage of older women with at least secondary education in a low-income country stands at just 2.2 per cent - indicative of lifetime of disadvantage and curtailed opportunity and empowerment. The emergence of a universal female survival advantage in life expectancy at birth has been attributed to reductions in maternal mortality and the emancipation of women earlier in the life course (Barford, Dorling, & Smith, 2006). Indeed the United Nations Millennium Development Goals (2000-2015) included a standalone goal on maternal mortality and a goal on gender equality and female empowerment with explicit indicators on school enrollment amongst girls and literacy amongst young women. The goals can be linked to achievements including the near doubling of the number of women in parliament and a near halving of the maternal mortality ratio over the last twenty years (United Nations, 2015b). Yet, the development discourse has given minimal attention to women beyond reproductive age, despite the fact that women aged over 50 years account for almost one quarter of the world's population (Global AgeWatch Index, 2015).

The results in this article show the female survival advantage in life expectancy at age 60 is much more modest in low and middle-income countries than in high-income countries. Moreover, we find that older women in low income countries not only spend a greater absolute length of time in poor health relative to older men, but that they also spend a greater percentage of their remaining life expectancy at age 60 in poor health than older men. This speaks to an urgent need to provide for the health and economic wellbeing of older women in low-income countries.

The findings presented herein also examined the interplay between country income, health outcomes in later life and level of potential human development lost to gender inequality, as measured by the United Nation's Gender Inequality Index (GII). The GII draws on health indicators which focus on younger women (maternal mortality ratio and the adolescent birth rate) but also empowerment and labour force participation indicators without an upper age limit (share of seats in parliament held by women, labour force participation disaggregated by gender and educational attainment disaggregated by gender). The results show a very clear correlation between lower levels of gender inequality and better life expectancy and healthy life expectancy at 60 for older people. Older women and older men fare comparatively better when they live in societies that realise the contributions of women to the development process, regardless of whether they live in a country classified as low-income, middle-income or high-income. This provides strong evidence for reducing gender inequalities and empowering women globally, and builds on existing literature which shows improving the status of women is beneficial for their families and communities (Kar, Pascual, & Chickering, 1999; Schultz, 2002; Varkey, Kureshi, & Lesnick, 2009; Zaidi, 2014). Given the inequalities faced by older women, investment in the status and opportunities of this age group should be given greater prominence alongside investment in younger women and girls.

The post-2015 SDGs have given us an unparalleled opportunity to shape the international and national development agenda, with people and their wellbeing at their core. In this way, the SDGs represent a key milestone for placing older people and ageing on the development agenda. The SDGs also go further than their predecessors in tackling gender inequality and championing the position of women and girls. The goal dedicated to gender equality, goal 5: achieve gender equality and empower all women and girls, has a much broader (and age inclusive) remit than its counterpart in the Millennium Development Goals. Comparable data on older people globally is scarce. Yet, comparable data on older people globally by gender is even scarcer. The commitment to disaggregating indicators by relevant characteristics in the SDGs will not only make it possible to highlight the position of older people separately from other adults and to monitor progress in supporting older people, but also to monitor the inequalities among the older people and monitor progress in supporting older men and older women. Promoting access to education, employment and training, healthcare and social security throughout the life course contribute to wellbeing for all and help insure positive outcomes in later life. The development discourse focused on the early life stages has long recognized the centrality of gender equality and female empowerment to achieving its goals. The emerging ageing and development discourse must also place gender firmly on the agenda in order to fulfill our global commitments to 'leave no one behind' and 'to reach the furthest behind first'.

References

- Barford, A., Dorling, D., & Smith G.D. (2006). Life expectancy: Women now on top everywhere. *British Medical Journal*, 332 (7545), 808.
- Barro-Lee. (2010). *Educational attainment database*. Accessed 17 May 2016 from: http://barrolee.com.
- Bennett, R., Chepngeno-Langat, G., Evandrou, M., & Falkingham, J. (2016). Gender differentials and old age survival in the Nairobi slums, Kenya. *Forthcoming*.
- Centers for Disease Control. (2004). *Deaths: Final data for* 2002. Washington, DC: United States National Vital Statistics Reports, Volume 53, Number 5.
- Chopra, D., Kelbert A., & Iyer, P. (2013). *A feminist political economy analysis of public policies related to care: A thematic review*. Empowerment of Women and Girls Evidence Report Number 9. Institute of Development Studies, Brighton, United Kingdom.
- Des Meules, M., Manuel, D., & Cho, R. (2003). Mortality, life and health expectancy of Canadian women. *Women's Health Surveillance Report*. Ottawa: Canadian Institute for Health Information and Health Canada.
- Ezeh, A., Chepngeno, G., Kasiira, A., & Woubalem, Z. (2006). The situation of older people in poor urban settings: The case of Nairobi, Kenya. In B. Cohen, & J. Menken (Eds.), *Aging in sub-Saharan Africa: Recommendations for furthering research* (pp. 189–213). Washington, DC: National Academies Press.
- Global AgeWatch Index. (2015). *Older women count*. Accessed 17 May 2016 from: http://www.helpage.org/global-agewatch/population-ageing-data/infographic-olderwomen/.
- HelpAge International. (2015). *Global AgeWatch Index 2015: Insight report*. London: HelpAge International.
- Institute for Health Metrics and Evaluation. (2010). *Global burden of disease study*. Accessed 17 May 2016 from: http://ghdx.healthmetricsandevaluation.org/sites/default/files/record-attached
 - files/IHME_GBD_2010_HALE_BY_COUNTRY_1990_2010_Y2010M02D23.CSV.
- Kar, S., Pascual, C.A., & Chickering, K. (1999). Empowerment of women for health promotion: A meta-analysis. *Social Science & Medicine*, 49 (11), 1431-1460.
- Knodel, J., & Ofstedal, M. (2003). Gender and aging in the developing world: Where are the men? *Population and Development Review*, 29 (4), 677-698.
- Liang, J., Bennett, J.M., Sugisawa, H. Kobayashi, E., & Fukaya, T. (2003). Gender differences in old age mortality: Roles of health behavior and baseline health status. *Journal of Clinical Epidemiology*, 56 (6), 572-582.
- Lloyd-Sherlock, P. (2010). *Population ageing and international development: From generalisation to evidence.* Bristol: Policy Press.
- Luy, M., & Minagwa, Y. (2014). Gender gaps-life expectancy and proportion of life in poor health. *Health Reports*, 25 (12), 12-19.
- Oksuzyan, A., Peterson, I., Stovring, A., Bingley, P., Vaupel, J.W., & Kristensen, K. (2009). The male-female health-survival paradox: A survey and register study of the impact of sex-specific selection and information bias. *Annals of Epidemiology*, 19 (7), 504-511.
- Pratt, C. (1997). Ageing: A multigenerational, gendered perspective. *Bulletin on Ageing*, 2 (3), 1-9.

- Schatz, E (2007). 'Taking care of my own blood': Older women's relationships to their households in rural South Africa. *Scandinavian Journal of Public Health*, 35 (69 suppl.), 147-154.
- Schultz, T. (2002). Why governments should invest more to educate girls. *World Development*, 30 (2), 207-225.
- United Nations. (2000). *United Nations Millennium Declaration*. Accessed 31 May 2016 from: http://www.unmillenniumproject.org/documents/ares552e.pdf.
- United Nations Development Programme. (2014a). *Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. Human Development Report 2014.* Accessed 21 April 2015 from: http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf.
- United Nations Development Programme. (2014b). *Gender Inequality Index*. Accessed 17 May 2016 from: http://hdr.undp.org/en/composite/GII.
- United Nations. (2015a). *The Sustainable Development Goals*. Accessed 31 May 2016 from: http://www.un.org/sustainabledevelopment/sustainable-development-goals/ (Accessed 31st May 2016).
- United Nations. (2015b). *The Millennium Development Goals Report 2015*. Accessed 30 May 2016 from: http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%2 0(July%201).pdf.
- United Nations Economic Commission for Europe. (2009). *Gender equality, work and old age*. Policy Brief on Ageing No. 2. Geneva: United Nations Economic Commission for Europe.
- United Nations Population Division. (2015). *World Population Ageing Report* 2015. Accessed 31 May 2016 from: http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA20 15_Report.pdf.
- Varkey, P. Kureshi, S., & Lesnick, T. (2010). Empowerment of women and its association with the health of the community. *Journal of Women's Health*, 19(1), 71-76.
- World Bank. (2015). *Country income classifications*. Accessed 31 May 2016 from: http://data.worldbank.org/country.
- World Health Organization. (2013). *Global Health Observatory Data Repository: Life expectancy data by country*. Accessed 17 May 2016 from: http://apps.who.int/gho/data/view.main.680.
- World Health Organization. (2007). *Impact of AIDS on older people in Africa: Zimbabwe Case Study*. Accessed 31 May 2016 from: http://apps.who.int/iris/bitstream/10665/67545/1/WHO_NMH_NPH_ALC_02.12.pdf.
- Zaidi, A. (2013). *Global AgeWatch Index 2013: Purpose, Methodology and Results*. Report prepared for HelpAge International, Centre for Research on Ageing, University of Southampton. Accessed 31 May from: http://www.helpage.org/download/52949b561453d/
- Zaidi, A. (2014). *Life cycle transitions and vulnerabilities in old age: A review*. Occasional Paper, UNDP Human Development Report Office, New York. Accessed 31 May from: http://hdr.undp.org/sites/default/ files/hdr_2014_zaidi_final.pdf

- Zaidi, A., & D. Stanton (2015). *Active Ageing Index 2014: Analytical Report*. Geneva: United Nations Economic Commission for Europe & Brussels: European Commission, Directorate General for Employment, Social Affairs and Inclusion.
- Zaidi, A., Gasior, K. & Zólyomi, E. (2013). Poverty among the older women and pensions policy in the European Union countries. In B. Marin (Ed.), *Welfare in an idle society? Reinventing retirement, work, wealth, health and welfare* (pp. 97-108). London: Routledge.