Accepted version 16 October 2018

**Population Ageing in a Globalised World: *Risks and Dilemmas?***

**Hafiz T.A. Khan**

Professor of Public Health & Statistics

The Graduate School

University of West London

St Mary's Road, London W5 5RF, United Kingdom

Email: hafiz.khan@uwl.ac.uk

&

Associate Research Fellow

The Oxford Institute of Population Ageing

The University of Oxford

66 Banbury Road, Oxford OX2 6PR, England, UK

Email: hafiz.khan@ageing.ox.ac.uk

**Abstract**

The 21st century has been described as the first era in human history when the world will no longer be young. There will be drastic changes in many aspects of our lives including socio-demographically, financial preparedness, and attitudes towards healthcare in older age. This article focuses on global population ageing and will evaluate the likely risks and dilemmas of demographic ageing within the context of the health and wellbeing of individuals. Four main areas covering the unequal distribution of risks in later life will be discussed: i) burden of disease in epidemiological transition, ii) financial security in retirement, iii) familial resources for older peoples’ care, and iv), a workforce for older peoples’ care. While population ageing is a global trend, its impact is not equal everywhere. Some important dilemmas are illustrated in this paper that may also fuel the potential risks of ageing in society. Interesting findings emerged that could be useful to policy-makers for formulating future planning and policy implementation. The study indicates that developing countries are likely to face more challenges than developed countries in the years to come.

KEYWORDS

Global ageing, Globalisation, Public Health, Risks and Dilemmas

1. **Introduction**

This purpose of this article is to explore understandings around global ageing, its impact on later life, and some related risks and dilemmas that may hinder growth in the ageing process.

The population on our planet has increased steadily over the years. In 1950, the world’s population stood at around 2.5 billion and by 2000, it had increased to around 6.1 billion. It is estimated that the population will continue to grow and according to projections by the United Nations (UN), there will be approximately 9.7 and 11.2 billion people in the world by 2050 and 2100 respectively. So a trend of population growth is obvious although the overall growth rate has fallen in recent times compared to previous years. The aggregate scenario does not tell us the inherent age-sex distribution of the population in a particular country. This is because population change is quite dramatic in many places and has directly impacted on the age-structure in almost every country1,2. Social scientists have accepted that long-term demographic change has had an impact on later end of life3-5. This situation has happened primarily due to changes in three main drivers – fertility, mortality and migration. The evidence of falling fertility, increasing life expectancy at birth and uncertainties in migration have created an obvious demographic transition which is now well recognised by demographers. It is argued that although migration can slow down the process of ageing, it has also created many complex questions for the recipient countries and can stimulate nationalism, and the country’s politics. Despite future uncertainties, the UN projects that by 2050, USA and Canada, Europe and Australia will gain more than 2 million people per annum whereas Asia, Latin America, the Caribbean and Africa will lose about the same number of people.

Young people generally migrate from developing to developed countries for improved quality of life and such a movement impacts their home country demographics. Developed countries will be competing amongst themselves to attract highly skilled migrants. Looking at the years 1950-2050, population change will be faster in developed countries than in developing countries. In Europe, it is likely to be even higher than the more developed countries. Existing research shows that life expectancy for women is likely to be longer than for men in all parts of the world. For example, in the UK in 2016, life expectancy for women was 3.6 years more than for men. However, male life expectancy is increasing faster than it is for females causing the gap between both sexes to close. As a result of these changes, the sheer number of older people aged 65 years and over is increasing and sometimes at a rate that was even faster than first expected. This may simply be because we do not yet fully understand the impact of mortality and life expectancy.

There is an increasing global trend in the percentage of older populations with a clear variation observed across the major geographical regions as well as in countries and territories4. By 2030, it is believed that a quarter of the population in Asia will be over 60 years and at the same time a quarter of the population in the developed world will be over 65 years of age. By 2050, a quarter of the population will be over 60 years in almost every continent in the world except Africa. There will be huge variation in terms of absolute size and relative rates across these countries. In today’s world, 65 years of age looks like the new 40 as people feel physically strong and also have confidence in their health status. In recent years, researchers have become interested in exploring populations aged 80+ years i.e., the oldest old group (see for example6,7. There is a growing trend of this oldest-old cohort through the years 1950-2050 and by 2050, there will be more than 350 million in the 80+ population globally with most of them living in less developed countries. A little over 50 million people aged 80+ will be seen in Europe. A complete opposite scenario is indicated by the percentage rate. Our analysis shows that the percentage rate will be higher in developed countries and be the highest in Europe. The trend analysis shows that the 80+ populations follow an exponential growth rate. This means that the increase may be beyond our imagination. By 2050, Japan will have the highest percentage (about 15.6%) of the 80+ population in the world followed by China and Hong Kong (15.6%). Japan is already known as a ‘super ageing’ society7. This can explained by the fact that Japanese population size has been affected by long-term low fertility as well as having no immigration policy, whereas China and Hong Kong’s oldest-old age groups are likely to be affected by the one child policy and outward migration. Also by this time, the USA and UK will have approximately 11.8% and 9.5% respectively of 80+ populations. The lower rate in these countries is due to their sustainable immigration policies that will give them both longer to adjust their ageing society programmes.

Global ageing is a reality of today and the UN has identified some major issues regarding the trajectories of ageing8:

* Population ageing is unprecedented i.e., the 21st century will witness rapid ageing at a pace not seen before.
* Population ageing is pervasive i.e., a global phenomenon that will affect everyone. Countries that started the planning process late will have less time to adjust.
* Population ageing is enduring i.e., there will not be a return to the younger populations that were so familiar to our ancestors.

In England9, living longer is associated with more years living with a disability per 100,000 of the population although the rate declined gradually by age during the years 1990-2013. The fact of the matter is that the global ageing scenario has been reshaping over the years. For example, in 1980, the global age-sex distribution of population was pyramid shaped, then became bell shaped in 2015 and is heading towards barrel shaped by 2050. Such a trend tells us that the absolute and relative increase in the number of people aged 80+ years is noticeable compared to any other age groups. This gives an impression that individual countries will follow a similar pattern although there are huge variations in the ageing process across countries. For example, Japan has already been listed as a super ageing society as its population aged 65+ years has increased at a faster rate7.

It is evident from Figure 1 that successive generations are living longer and they experience numerous trajectories in life expectancy. Almost half the babies born in 1851 in England and Wales survived to the age of 45 years, whereas life expectancy from birth in 2011 is expected to be 79 years and 98 years for those born in 2031. It is highly likely that today a higher proportion of people will live for longer compared to the same age group of any past generation and this varies by age10. The number of centenarians has increased at a fast rate and will reach around half a million in number by 2066. Increased longevity increases the likelihood of some form of disability that is prevalent among 6% of children, 16% of working age adults, and 45% of those at state pension age and over. Currently, there are over 11 million disabled people in the UK that is almost 18% of the total population and costs around £80 billion per annum.

**Figure 1: Proportion of persons surviving (on a cohort basis) to successive ages, according to mortality rates experienced or projected, persons born 1851 to 2031, England and Wales**

Source: Adopted Figure 7.9: Office for National Statistics10.

Table 1: Proportion of life spent in poor health at age 65, England (2013-2015).

|  |  |  |
| --- | --- | --- |
|  | At birth  | At age 65 years |
| Males | Females | Males | Females |
| Life expectancy at birth  | 79.5 | 83.1 | 18.7 | 21.1 |
| Healthy life expectancy | 63.4 | 64.1 | 10.5 | 11.2 |
| Number of years in poor health  | 16.1 | 19.0 | 8.2 | 9.9 |
| % of life in poor health  | 20.3 | 22.9 | 43.9 | 46.9 |

Source: Public Health England9.

Older people will necessarily have to face huge risks and challenges in their later lives. A few key challenges around global ageing are presented next with regard to the way it shapes peoples’ lives. The topics for discussion are as follows:

1. Burden of disease in old age
2. Financial security in retirement
3. Familial resources for older peoples’ care
4. Healthcare workforce for older people.

***Burden of disease:***

In recent decades, there has been an on-going epidemiological transition around changes to the leading causes of death from acute and infectious diseases to chronic and non-communicable diseases. With the trend of increasing longevity, non-communicable diseases (such as heart disease, stroke, cancer, diabetes and dementia) are becoming big threats to individuals as well as to the public health systems of every country. These diseases are also linked with disability, dependency and long-term care needs. Older people are also highly likely to suffer from multi-morbidities. The subject of multi-morbidity is becoming hugely important, as older people may also have limited mobility, a higher chance of suffering from obesity and dependency and of having complex illnesses. The morbidity pattern globally has changed over the years and due to ageing trajectories, dementia is becoming one of the top causes of death particularly among females as they live longer than their male counterparts. In 2016, around 11.11 million people aged 70+ died because of cardiovascular disease, followed by cancer (3.93 million), respiratory disease (2.35 million) and dementia (2.23 million)11. There is a higher prevalence of dementia in low and middle-income countries than in high-income countries. Therefore, developing countries need to think seriously before it is too late in order to effectively manage the dementia epidemic. Ageing is a natural process but it creates huge demands for healthcare and other services. The disease pattern is changing over time mainly because of technological usage and environmental changes, and particularly lifestyle changes and families having to cope with complex multi-morbidities in their family units. All this represents a huge strain on healthcare systems in every country and represents a big challenge for global public health.

***Financial security:***

Finance in later life is very often discussed in main stream media but it is an immensely important topic for today as more and more people fall into financial vulnerability in their old age. This is happening mainly due to lack of knowledge about old age and dependency, social change, lack of financial preparedness and lack of savings. People living in Asia used to rely on their children as insurance in their old age. However, children are becoming less reliable as a means of financial support for their parents and those older people that do not have this support, tend to suffer more from financial difficulties and vulnerabilities. Savings are thus necessary for an older person to help ensure wellbeing in later life12. There are a number of ways people can save their money such as pay-as-you-go (PAYG), through work pension schemes and a mandatory provident fund etc12,13. The most attractive of these options is the work pension savings scheme although only a small percentage of employees receive this kind of benefit. Unlike developing countries, developed countries have various policies to support their employees. In 2000, work pension schemes covered more than 90% of the workforce in OECD countries and provided the opportunity for many to save money for later life. Since poverty and vulnerability are common in developing countries, an old age allowance called social pension (non-contributory) has been introduced under a social protection scheme. This is a good initiative taken by many countries where the governments try to implement the policy through NGOs and agencies. However, the coverage of actual needy people is still very small and governments need to give more attention to this. A century ago, workers in Europe would be lucky to reach retirement age, but today the expectation is that people will live more than 20 to 30 years after their retirement. This is a huge achievement for mankind but it has created threats for existing pension systems. The number of pensioners is increasing day-by-day relative to contributors meaning there is a need to reform the pension policy scheme. In recognising the impact of an ageing population, the UK has taken the initiative by reforming its pensions policy and adopting new legislation. The UK Government has also taken steps to abolish age and gender discrimination in the workplace.

For example, the Equality Act gives protection to older people in the UK and the compulsory retirement age of 65 years is fully abolished as of 6th April 201113, 14. Women's State Pension age will increase more quickly to 65 years between April 2016 and November 2018. From December 2018 the State Pension age for both men and women will start to increase to reach 66 years by October 202015. Critics see this as a discriminatory impact of UK government - changes to the state pension age for women from 60 to 66. It has left some women in their early 60s destitute.

**Familial resources:**

Family has often been viewed as the main source of informal care in many countries, particularly in Asia. In the past, family households could be quite large but modernisation and urbanisation have affected family size and structure. The impact over the long term has been to affect and reshape living arrangements in a household with more and more people today tending to live in nuclear family units. The idea of joint and extended families is becoming weaker and it is often the case that new generations do not want to take responsibility for their parents. As a result, older people living mainly in low and middle-income countries are quickly becoming vulnerable in their households. Living arrangements have changed over the years across the globe. For example, in Japan between 1960 and 2005 there was a drastic fall in the percentage of people aged 65+ years living with their children and an increasing trend for people to be living alone. This is not a good indicator for the health and social care services of this country. A similar kind of trend can be seen in most countries in the world. The increase in the number of older people will put a strain on costs for medical and nursing care services in Japan. As an example, in the UK, it is predicted that average cost of care will increase in later life16.

As mentioned earlier, traditionally the cost of covering older peoples’ care was seen as a family responsibility but it seems that this norm no longer exists. In the era of global ageing, perhaps one of the most common key concerns among individuals and family members in many countries is how to meet the increasing demand for healthcare, particularly the real challenges in old age morbidity and health. The “Future of Retirement Surveys” reported that attitudes across the world towards bearing the cost of care in later life vary across countries in developed as well as in developing countries17. One of the key findings is that individuals in developed countries believe that the government will bear the cost of care in their old age, whereas people in developing countries believe that they will have to bear the cost of such care themselves17. It can also be seen that the number of people aged 15-64 years able to support people aged 65+ years is declining over time.

Figure 2: Dependency ratio between 200 and 2050.

Source: Adapted from Khan et al. 17

As successive generations live longer and fertility falls dramatically, the onus of care falls on the shoulders of current generations within a household. Figure 2 above considers the situation of a four-generation society and how different generations are likely to support and maintain contact with them. Generation 1 (G1) indicates the great grandparents generation; generation 2 (G2) is the grandparents’ generation; generation 3 (G3) being the parents’ generation and generation 4 (G4) is the current generation. According to traditional norms, the older generations should be supported by the younger generations and therefore G1 can be supported either by G2, G3 and G4 or jointly. Taking the situation of a one-child household in G4 then today, their care responsibility would be huge if they had to take care of G3, G2 and G1. Extrapolating from this position, it could be that a member of the current generation (G4) may need to take care of a maximum of 14 people that is quite absurd. Of course, this responsibility could be shared among siblings if there was more than one child in the household. However, increasing family size is not a realistic option. Therefore, alternative care and support systems need to be developed outside of the household and many countries are approaching it from within the communities. People in communities can help to share the care burden and provide better services for its older generations.

**Figure 3: Care responsibilities between generations.**

**G1**

**G4**

**G3**

**G2**

GGF

GGM

GF

Father

GGF

GM

GGM

Son / Daughter

GGF

GGM

GF

GGF

Mother

GGMM

GM

**1**

**2**

**4**

**8**

**+**

**+**

**1**

**8**

*Note: Current generation G4 may need to take care of maximum of 14 people.*

*GM: Grandmother (GM), Grandfather (GF), Great-grandmother (GGM), GGF-Great-grandfather (GGF)*

**Healthcare workforce for older people:**

A healthcare workforce generally includes doctors, dentists, nurses as well as a host of allied health professionals. The existing healthcare workforce may not have a proper understanding of the complex health needs of people in an ageing society and therefore will need appropriate training and skills for capacity building. There has been a growing demand for adequate numbers of care workers to cope with the needs of ageing populations and provide appropriate treatment. Health policy should therefore seriously include geriatric care and a healthcare budget should be allocated proportionately so that a country can effectively meet the care needs of its older people. Realising the extent and depth of the care needs required for older people, many countries have already reshaped their health systems to make them more appropriate to meet those needs. Social care also plays an important role in enhancing health and wellbeing of older people18. There is an important need to develop this service sector further at both public and private levels with proper monitoring provided by the Health Ministry. Many NGOs would be happy to contribute to such initiatives and would be very useful for helping to meet the future needs of ageing societies.

The next section discusses the relevance of globalisation in the context of ageing societies and then explores some modern dilemmas related to ageing issues.

1. **Globalisation**

Globalisation could be interpreted as an increased diffusion of worldwide connections between peoples and arguably has brought some benefits. The world is increasingly interdependent in many ways including socially, economically and environmentally. For example, sharing values and ideas, helping people on humanitarian grounds and fighting for common interests may be of benefit to humankind. Inclusiveness in society may also help provide better results and so help avoid uncertainties in political and social life. Developed countries, for example, can hire highly skilled migrants when they are needed to boost the labour force and the economy where geographical boundaries, race, religion, colour and ethnicity are not perceived as barriers. In the 21st century, therefore, self-isolation may not be a wise policy for any economy. As variation exists in all spectrums of life, questions can be raised around such issues as what happens when various actors in the world economy do not play their roles with trade and free movement of labour for instance?

***Dilemma 1: Differential politics and nationalism***

Effective politics involves decision-makers taking the right decisions on behalf of the nation. In the case of the USA, for example, this is vital. The current US President Donald Trump is concerned with promoting a policy of “America First” and seems to be taking an anti-globalist position. Since he became US President a trade war was started with neighboring Canada, also with Mexico, China, and even with its European partners. This approach to policy by the US has strained and potentially damaged long-term relationships and trust between the countries affected. There is an obvious economic implication too as many countries are dependent on US policy. The US has reduced its humanitarian activities and closed its USAID offices in many countries including Bangladesh. This has impacted on millions of lives and thus a question arises: *Will the US pull its resources from international obligations in terms of international aid to countries where older people need those resources?*

***Dilemma 2: Brexit:***

The Brexit idea seems to run counter to globalisation and its implementation could see the UK isolated from the rest of Europe. It is predicted in some quarters that Brexit, whatever form it takes, could ruin the political and economic interests of the UK. Whilst the UK is pulling itself away from the EU, it wishes to remain operating in the global market but without EU regulations. In that situation questions arise: *How does Brexit square with human rights conventions especially regarding how older people are treated in the UK? At present, a huge number of EU workers contribute to the NHS in the UK so what will happen to the NHS if EU workers decide to leave the country?*

***Dilemma 3: Financial protection***

Older people need financial support in order to lead a continued life of good health and wellbeing. But there is always a risk that they will become financially vulnerable. In developing countries, parents invariably spend nearly all their resources on educating their children and so can barely save any money to see them through their later lives. Parents willingly do this while placing great trust in their children that they will take on support responsibilities for their parents when they reach old age. But what happens if the children do not take on these responsibilities? What if the previous social solidarity norms change between generations? *Are nation-states sufficiently prepared for providing social protection to their older people? What is the impact of the state pension age increase on the quality of life of older people in the UK?*

***Dilemma 4: Health and Social Care***

Huge amounts of health and adult social care are needed in order to effectively support an ageing society. This requires a sustainable plan and investment to produce an adequately trained nursing and social care workforce. In developed countries people may rely on their government to provide social care support but in developing countries there may be a shortage of qualified workers to provide social care nursing for older people. Policy-makers need to understand the reality of demographic changes and the demands they can put on health and social care in their countries. *How can a country provide primary, secondary and tertiary levels of care without strong leadership and a development plan? How serious are policy-makers on providing quality of care to older people?*

***Dilemma 5: Social Exclusion***

Older people find it difficult to learn and adapt to the rapid changes in a globalised society. The Internet, Information Technology, smart phone use and in particular, social media play important roles in connecting people across generations but it can provide an additional burden for many older people to maintain such kinds of communication. Gaps between grandchildren and grandparents can increase over time due to rapid changes in technology even in low and middle- income countries. *So the question is: How can older people be effectively integrated within social networking and communications systems?*

1. **Concluding remarks**

The challenges involved in ensuring a high quality of life for older people in ageing societies have been addressed in this article. It forms part of the University’s public lecture series focusing on contemporary issues. Professor Khan gave a presentation on ‘Population ageing in a globalized world: Risks and dilemmas,’ and answered questions from the audience. The lecture is topical as ageing is a major issue facing contemporary societies and it is important that people have an understanding of what is unfolding. The 21st century has been described as the first in human history where the world will no longer be young, leading to drastic changes in areas of finance, demographics, social attitudes and adult social care support. Because of the rapid scale of change that the demographic time-bomb is poised to unleash upon the global population, every country will go through the experience.

An ageing population presents many challenges and ignoring them could undermine the potential benefits and opportunities that living longer could bring. Whilst lengthening lifespans is a global trend, the impact is not spread equally across the world. Production of healthcare to meet the growing demand of elderly care would be big challenge on the one hand and financing the cost of care at individual and national levels would be on the other. Many countries in the world are not prepared for that. Developing countries are likely to face more challenges than developed countries in the years to come. Ageing should not be considered as a problem because of unmanageable size, care burden and cost. There are also huge opportunities of ageing as older people make an increasing contribution to society as workers, volunteers, taxpayers, and carers. Future research might on the preventive side of diseases in order to reduce the financial burden and wellbeing in later life.

**Acknowledgements**

This article is part of my professorial lecture that I gave at the University of West London on 30 May, 2018. I am grateful to the audience for their valuable comments that helped me to rethink the practical implications of my research in ageing populations. I am grateful to Dr. Helen Findlay and Professor Jason Powell for their valuable comments and suggestions.

**AUTHOR:**

Professor Hafiz KhanPhD is Professor of Public Health & Statistics at theGraduateSchool, University of West London and an associate research fellow at the Oxford Institute of Population Ageing at the University of Oxford, UK. He trained as a statistician and has developed his academic career in the area of public health over the last 25 years. His current research interests include healthy ageing, co-morbidity in later life and long-term care and support provision for older people. He has published important articles on health and population related issues and disseminated research findings through all media. He has co-authored two books, "Research Methods for Business and Social Science", Sage, 2007 and 2014. He is a fellow of the Royal Statistical Society and the Royal Society for Public Health and is a member of the academic advisory panel of the UK Commonwealth Scholarship Commission.

ORCID

*Hafiz T.A. Khan* @ https://orcid.org/0000-0002-1817-3730

REFERENCES

1. Khan, HTA. Age Structural Transition and Ageing of Population in Bangladesh, *Generations Review* **16**(1):6-10, 2006.
2. Raeside, R. and Khan, H.A. The Ageing Scottish Population: Trends, Consequences and Responses, *Canadian Studies in Population* **35**(2):291-310, 2008.
3. Khan, HTA and Leeson, G. The Demography of Ageing in Bangladesh: *A Scenario Analysis of Consequence*, *Hallym International Journal of Ageing* **8**(1):1-21, 2006.
4. Bloom, DE and Luca, DE. The Global Demography of Aging: Facts, Explanations, Future. PGDA Working Paper No. 130. 2016. Programme on the Global Demography of Ageing, Harvard University. <http://www.hsph.harvard.edu/pgda/working/>
5. Khan, HTA, Hossain, S, and Deane, J. Nexus between demographic change and elderly care need in Gulf Cooperation Council (GCC) Countries: Some policy implications, *Ageing International* 42(4): 466-487, 2017.
6. [Silverstein](http://journals.sagepub.com/doi/10.1177/0164027502245003), M, and [Parker](http://journals.sagepub.com/doi/10.1177/0164027502245003), MG. Leisure Activities and Quality of Life among the Oldest Old in Sweden. Research on Ageing 25(5): 528-547, 2002.
7. Halaschek-Wiener, J, Tindale, LC, Collins, JA, Leach, S, McManus, B, Madden, K, Meneilly, G, Le, ND, Connors, JM, Brooks-Wilson, AR. The Super-Seniors Study: Phenotypic characterization of a healthy 85+ population. *Plos One* 13(5):e0197578, 2018.
8. UN. World Population Ageing: 1950-2050. Department of Economic and Social Affairs. Population Division. <http://www.un.org/esa/population/publications/worldageing19502050/>
9. Public Health England (2017). Life expectancy and healthy life expectancy. <https://www.gov.uk/government/publications/health-profile-for-england/chapter-1-life-expectancy-and-healthy-life-expectancy>.
10. ONS. National Population Projections, 2008-based, Series PP2 No 27 Office for National Statistics, 2010. Accessed on 9th October 2018. http://webarchive.nationalarchives.gov.uk/20160107172326/http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2008-based-reference-volume--series-pp2/index.html
11. Ritchie, H and Roser, M. Causes of Death, 2018. Accessed on 12 October <https://ourworldindata.org/causes-of-death>.
12. Khan, HTA. How retirement is financed in the East and West: *An investigation of Hong Kong and the UK employees’ surveys*, pp 83-110, 2017*.* In: “Ageing workplaces from an East West perspective” edited by Matt Flynn, Tony Chiva & Yuxin li, Emerald

<http://www.emeraldinsight.com/doi/book/10.1108/9781787146389>

1. Leeson, G. and Khan, HTA. The move to abolish mandatory retirement age: The case of the United Kingdom, pp. 291-308, 2015. Chapter contribution to an edited book *Mandatory Retirement in Japan and South Korea: The Past, Present, and Future, by* Masa Higo and Thomas Klassen. Routledge.
2. Equality Act 2010. Protected Characteristics. <https://www.legislation.gov.uk/ukpga/2010/15/contents>
3. UK Pension Act 2011. State Pension age timetables. Accessed on 09 October 2018. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/310231/spa-timetable.pdf>
4. Cost of care in old age rises to average of £50,000. Accessed on 12th October 2018 <https://www.theguardian.com/society/2011/mar/21/care-old-age-funding>.
5. Khan, HTA, Leeson GW, Findlay H. Attitudes Towards Bearing the Cost of Care in Later Life Across the World. *Illness, Crisis and Loss* **21**(1):49-69, 2013.
6. Khan, HTA, Hafford-Letchfield, T. and Lambert, N. Single women living alone in later life: Evidence from Understanding Society Data. Pp. 155-175,Chapter 10, 2018. In “Sexuality, Sexual and Gender Identities and Intimacy Research in Social Work and Social Care A Lifecourse Epistemology” edited by Priscilla Dunk-West and Trish Hafford-Letchfield, Routledge.