An Aging Population: A Global Ticking Time-Bomb

Introduction

It is a widely-known fact that the worldwide population is ageing. With one-fifth of the global population predicted to be over the age of 60 by 2050 (1), we are facing a multitude of new questions and challenges surrounding how we manage health and care of the increasing elderly population worldwide.

A rapidly-shifting world demographic is reflected in the fact that the issues we are facing in global healthcare are evolving to mirror an ageing population. Health issues which correlate with increasing age, such as non-communicable diseases, mental health conditions and certain types of cancer, are becoming more prevalent – a phenomenon known as the worldwide "epidemiological transition" (2). This also means that delivery of healthcare globally needs to change its approach in order to keep up.

The impact of an ageing population is complex and multifaceted, making it an incredibly challenging topic to unpick. We are not simply attempting to unravel healthcare issues associated with ageing on an individual basis, but also on a local and global scale. Impacts on already-stretched health and social care systems around the world are already becoming apparent. The effects are universal and indiscriminant – from high-income to low-income countries; those who are resource-rich and resource poor; countries who already have a high proportion of aged individuals and those with a relatively "young" demographic.

In response, public health policies are ever-evolving and adapting to attempt to meet the increasing demands associated with the exponentially-changing population. Increasingly however, we are being forced to think: will there come a time when we can no longer cope?

What does an ageing population mean?

Generally, people around the world are living longer lives – but this does not necessarily mean healthier lives.

Changes in demographics are reflected by changes in disease patterns throughout the world. It is well-established that those in an older age group are more susceptible to ill health, and are at higher risk of developing chronic and debilitating conditions - especially those in the oldest age categories (3). Most prevalent are non-communicable diseases such as cancer, stroke, lung disease and cardiovascular disease (4). This is reflected in the fact that we are also seeing number of deaths from such diseases steadily increasing in the last few years (5).

In 2008, non-communicable diseases already accounted for over 80% of the disease burden in high-income countries. Trends predict that middle- and low- income countries will also move in the same direction as their high-income counterparts; by 2030 over three-quarters of disease burden will be represented by non-communicable conditions in middle-income countries, and over half in low-income countries (6).

The World Health Organization estimated that $1 billion in economic losses in India and China are the result of the treatment of heart disease, stroke and diabetes (6). Indeed, the

costs of treating cardiovascular disease alone represents between 1% and 3% of GDP in most developed countries (7). Consequentially, the requirement for long-term care and follow-up will mean that managing such conditions would create a considerable burden on global healthcare.

The "epidemiological shift" makes it likely that there will be a rising volume of chronic conditions if trends continue, far superseding acute short-lived diseases. In the next decade, it is anticipated that there will be more deaths and disabilities worldwide as a result of non-communicable diseases and cancer, than parasitic and infectious diseases (6). Due to their chronic nature and associated dysfunction, the management of such diseases presents a huge healthcare and financial burden worldwide.

Along with non-communicable diseases, cancer incidence is also expected to rise in the wake of an ageing population (6). It is predicted that new cancer cases will rise to 17 million by 2020, and 27 million by 2030, with a growing portion found in "less-developed" countries (6). The profound physical, emotional and mental effects of cancer require multidisciplinary team management and access to good end-of-life care, which also requires large amounts of resource expenditure. This is likely to lead to huge consequences on our world population.

Rising prevalence of cancer is particularly concerning in lower income countries. These countries often lack resources and access to cancer therapy, in comparison to their more economically-developed counterparts (8). Increasing demands combined with lack of resources would make management of cancer difficult on a large scale for already-struggling economies. Sadly, a "crisis point" therefore may be reached earlier in such countries, and it is imperative that we consider how we can remedy such health inequalities.

The impact of mental health conditions is equally important as that of "physical" health problems. Dementia is a particularly prevalent topic for discussion at the moment, and it's alarming rise in prevalence means it is often referenced as a "ticking time bomb" for public health.

By 2030, it is expected that there will be 75.6 million cases of people with Dementia worldwide, almost double that now (6). This will undoubtedly have huge implications on already-strained healthcare systems. In 2010 alone, approximately $604 billion was spent towards looking after those with dementia. To put this into perspective, if it were a country, worldwide dementia care would be the 18th-largest economy in the world (9)(10). With a significant portion of care for affected individuals being "informal", especially in low- and middle-income countries, we must consider the knock-back effects that those taking time out of work to care for relatives will have on society and the economy. Unless something changes, the burden of Dementia will only continue increasing alongside the ageing population.

Discussion and Looking to the future

The phrase "ticking time bomb" suggests that it is only a matter of time before the consequences of the shifting world demographic overwhelm our current health systems, and demands outstrip resources. Now more than ever it is crucial that we look to the future, implementing plans and policies to prevent a global crisis. Therefore, comprehensive and achievable public health strategies must be put in place.

As already referenced in this essay, cardiovascular disease, chronic respiratory disease, dementia and cancer are discussed repeatedly in publications relating to the impact of global ageing. Such important issues have already been identified, however the challenge lies in finding solutions. It has been discussed that preventative medicine and promotion of "healthy ageing" can be a key area for focus for this (11). We already spend huge amounts of money and resources on treating such conditions, however we need to divert our attentions more towards primary and secondary prevention of such diseases instead. In order to provide for this, healthcare resources could be mobilized to focus more on public health strategies such as health promotion, cancer screening programs, and an increased emphasis on good social care. This could present part of an answer to ease the rising demands.

Acknowledging the fact that healthcare resources and budgets are limited, we must consider how current systems can adapt to the changing population. As the world ages, one such potential approach would be re-distribution of resources to services which manage issues most relevant to older populations. Japan is a country which is a successful example of this approach. As the only country where over 30% of the proportion of the population is over 60 years old, Japan has adapted its policies to account for the growing pressures presented by a high proportion of older citizens (12). It has achieved this by redistributing the money in the healthcare system coming from employed insurance-payers, towards cutting insurance costs and increasing provision for long-term care and welfare of the elderly (13). Perhaps, like Japan and other countries which have adopted this approach, global healthcare resources may be mobilized in a way that means more focus is put on health and social care of elderly populations.

Japan however is a high-GDP country; we must consider that middle- and low-income countries will also be trying to cope with the burdens of an ageing demographic, with more limited resources (14). These countries may be the first to bow to increasing pressures. As previously discussed, resource redistribution within countries is a potentially successful strategy. Perhaps resources may not only be mobilized within countries, but also between countries in order to share resources and manage the global effects of ageing population as one entity.

Global ageing is complex. As one of the most prevalent issues of our time, it warrants due discussion, debate and deliberation. We already recognize the established and developing impacts of an increasingly elderly population, and should henceforth be trying to reach suitable and effective solutions. There is, however, a huge discrepancy between idealistic and realistic approaches to softening the impacts on worldwide health and social care. We must therefore constantly re-evaluate how best to manage with what resources we have. Unfortunately, such a vast and important topic of discussion goes far beyond the limited scope of this essay. However, as one of the most pressing issues in healthcare for current and future generations, we will surely be discussing the topic of rising impacts of global ageing time and time again.

Citations

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