

RESEARCH ARTICLE

Japan's death-laden society: Five areas of prospective policy challenges

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Abstract

Today, Japan stands as the world's leading super-aged society. In the coming decade, preceding the rest of the aging globe, the country will phase into the next demographic stage called a "death-laden" society. Due in part to the aging and prospective mortality of the country's two major baby boom generations along with a projected decline in the number of the working age population, Japan will be laden with ballooning deaths from old age from 2030 onward for several decades to come. Only in recent years have researchers started paying attention to this demographic prospect, and to date, little study has been done to systematically examine how the coming of a death-laden society may affect the health, well-being, and comfort of those in advanced age in the country. This paper aims to contribute to the newly emerging body of literature on this subject by exploring, based mainly on findings from expert interviews, five key areas of policy challenges with which Japan's death-laden society will likely contend. These areas include: (1) *shortages in basic medical resources for the dying*; (2) *mounting public burden of disease*; (3) *potential prevalence of 'lonely deaths' among those in advanced age*; (4) *urgency to facilitate national discussions on end-of-life options*; and (5) *crematorium shortages and their cultural impact*. The future research is called for to help mitigate the impact of a death-laden society not only for Japan but also for other countries that may follow Japan's demographic path in the conceivable future.

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1. Introduction: The coming of Japan's 'death-laden' society

Over the past several decades, Japan has led the rest of the world in population aging. Preceding the rest of the aging globe, in 2007, Japan grew to be a "super-aged" society, a stage of population aging in which those aged 65 or older account for at least 21% of the total population (Higo and Klassen, 2016). By October 2021, the figure had reached 29.1%, a much higher rate than that of any other super-aged societies in the world. The dependency ratio of older people to those of working age – those aged 65 and over to those aged between 20 and 64, including both men and women – have also significantly increased over the past two decades; the ratio jumped from 28.7 in 2002 to 55.2 in 2021 (United Nations, 2022). The ratio for Japan in 2021 stood substantially higher than for any other country, suggesting that the burden of population aging on the younger population is greater for Japan than for any other part of the world. While

most of today's other super-aged societies are European countries including Italy, Portugal, Finland, and Greece, just in the coming few decades major economies in East and Southeast Asia – most notably, South Korea, China, Taiwan, and Singapore – will catch up with the rate of Japan (United Nations, 2019).

In recent years, a growing amount of literature has argued that just in the coming decade a super-aged Japan will transition into what is often referred to as a “death-laden” society (Fuji, 2018; Kurahara, 2020; Nagaoka, 2021). A death-laden society is characterized by a ballooning of deaths among its population, particularly of those in advanced age, and mounting challenges to the whole society, including the younger population, in its effort to protect individual members' wellbeing, comfort, and dignity in later life.

In this new stage of demographic shift, while remaining the world's leading super-aged society, Japan will experience a ballooning of deaths among its population, particularly of those in advanced age. During the second half of the 20th century, annually about 0.8 million people died on average, and that figure has rapidly increased to date. In 2030, the figure will reach about 1.6 million, which will remain through the 2060s. By contrast, the number of births has been steadily declining during this period of time in a nearly reverse fashion. The annual average births during the second half of the 20th century were about 1.6 million, and the projected figure for 2030 is about 0.8 million (United Nations, 2022). Nearly 80% of those deaths are projected to occur among those in their mid-70s and older (National Institute of Population and Social Security Research, 2022). This trend is driven in part by the prolonged longevity; the life expectancy at birth for both men and women jumped from 67.3 years in 1960 to 84.7 years by 2020, an almost 25% increase over the past five decades (Organization for Economic Co-operation and Development, 2022). Another factor behind the ballooning of deaths is the continuous aging and eventual deaths of the two major baby boom generations of the country's population. Together, these factors will result in rapid depopulation due mainly to a projected continuation of the decline or stagnation of childbirth (Higo, forthcoming). Hence, from 2030 onward for several decades to come, Japan will be a society that is characterized not only by the continuous aging of the population but also by being laden with a lasting trend of experiencing an unprecedented number of deaths in its older population. Much of the emerging body of the literature has focused on describing a death-laden society mostly from a demographic perspective or analyzing the causes and process of the demographic transition. To date, notably understudied

has been the prospective consequences of this transition – how the coming of a death-laden society will challenge Japanese society, culture, and individuals including those in advanced age.

This paper aims to contribute to the growing body of the relevant literature by exploring, albeit preliminarily, main areas of challenges, particularly from a policy perspective, with which a death-laden Japan will likely contend at least for several decades to come. Drawing on survey data that are publicly available and original data gathered from a series of expert interviews, this paper outlines five areas of challenge that call for immediate policy responses to protect the well-being, comfort, and dignity of those in advanced age not only today but also in the future. The five areas of challenge include: (1) Shortages in basic medical resources for the dying; (2) mounting public burden of disease; (3) potential prevalence of “lonely deaths” among those in advanced age; (4) urgency to facilitate national discussions on end-of-life options; and (5) the crematorium shortage and their cultural impact. An overarching goal of this paper is to contribute to the policymaking not only of Japan but also of other countries that may follow Japan's demographic path to becoming death-laden societies in the conceivable future, those in East and South-east Asia in particular. The experience of Japan as the world's prospective forerunner of a death-laden society may offer a source of policy lessons that may help those countries prepare to make the future of their aging societies more sustainable for the coming generations.

2. Data and methods

The discussion in this paper is based on two sets of sources: The first set of sources is a review of the relevant literature, both academic and policy, and findings from a series of descriptive analyses of survey data that are publicly available. These sources were utilized mainly to describe the basic characteristics and trends of Japan's death-laden society. The second is a set of findings from original data gathered in recent years from expert interviews, a qualitative research method instrumental to gaining in-depth information about specific issues, typically emerging ones, that are not necessarily publicly recognized (Döringer, 2020). The expert interviews were carried out to access and gather the latest information and specialized knowledge related to policy challenges with which Japanese society will likely contend over the coming decades particularly in the context of its continuous population aging. Together, these two sets of sources aim to empirically explore and discuss the policy prospects of Japan as the world's first death-laden society.

The expert interviews were conducted over the time span from February 2020 to October 2021 in Tokyo, Osaka,

and Nagoya. These locations were chosen because these are the most populous cities in the country and may also help capture some potential regional differences in interview participants' perspectives. A total of 24 experts participated in the interviews, including government officials, medical and health-care practitioners, representatives of medical institutions, and researchers affiliated with universities and think-tank organizations. Initially, three of the participants were invited to be interviewed due to their organizations' publicized concerns specifically regarding Japan's prospective transition into a death-laden society. Their concerns and discussions were publicly expressed in their whitepapers, newsletters, and online articles, among others. Then, a snowball sampling method was utilized to recruit the rest of the participants.

The interviews were designed to be in-depth and semi-structured and conducted in a one-on-one manner. Each interview followed a set of prepared questions centering around participants' accounts of their current concerns and challenges in pursuing their professional missions specifically in the context of the country's population aging and how those concerns and challenges will likely evolve in the conceivable future. In addition to exploring the participants' views of these prepared questions, the interviews also left some flexibility for unexpected themes to emerge. Due to the travel restrictions under the country's declaration of a state of emergency, nearly half of the interviews were carried out remotely using various ICT software programs including Zoom and Webex. All the interviews were voice-recorded and anonymously administered. The data were analyzed with a series of thematic coding and analyses to categorize specific concerns and challenges conveyed by the interview participants into broader themes. As a result of the thematic analysis, five themes in the data emerged, each of which is mutually related in reality and yet conceptually distinguishable enough to be discussed as a unique area of policy challenge in itself. In what follows, these five themes are discussed as five key areas of policy challenges that Japanese society will likely be urged to address on the verge of transitioning into a death-laden society.

3. Results and discussions

3.1. Shortages in basic medical resources for the dying

The first area of policy challenge for a death-laden Japan is prospective shortages in clinical doctors and hospital beds, basic medical resources necessary for those spending their last days of life at conventional medical institutions such as hospitals, due to the ballooning deaths in the country's population. Clinical doctors have been in short

in Japan since well before reaching the verge of becoming a death-laden society. This has been a publicly recognized issue since the mid-1950s, particularly in rural areas and on remote islands (Matsumoto, Kashima, Owaki, *et al.*, 2019). In addition, over roughly the past two decades, an increasing number of semi-rural areas and mid-sized cities across the country have come to face the same issue due in part to the migration of younger populations to larger cities, including those working in medical fields (Takata, Nagata, Nogawa, *et al.*, 2011). Dying at hospitals typically requires that doctors provide medical treatment, care, and support just as they do when treating injuries and illnesses of patients aiming to recover. In many cases, intensive care, extensive treatments, and use of advanced technologies are called for on behalf of those patients whom the doctors know are going to die at their hospitals (Interview data, Tokyo, March 22, 2020). It is highly likely that the coming of a death-laden society will exacerbate the doctor shortages that the country has been suffering from for decades (Interview data, Tokyo, August 15, 2021).

A death-laden Japan will also run short on hospital beds. This will be a major challenge as hospitals are the predominant place of death among the Japanese today. Figure 1 illustrates the composition of place of death among the citizens in 2020. In this year, about 68.3% of all deaths took place at hospitals. Those who died at home in the same year accounted for only about 15.7% of all deaths, and the corresponding figures for retirement homes and long-term care facilities were approximately 9 and 3%, respectively. While in recent years, the figure for homes has been on the rise, the majority of Japanese people – nearly 70% – die at hospitals today (Figure 1).

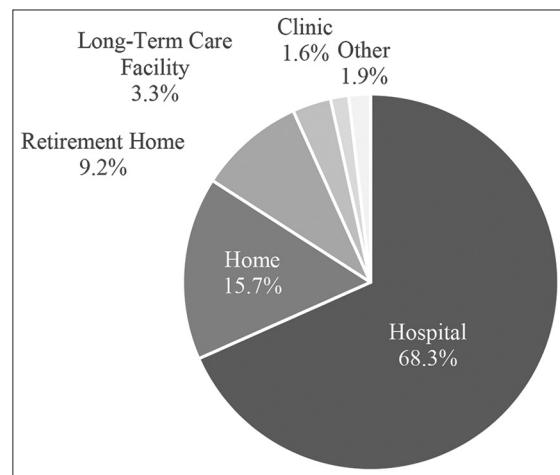


Figure 1. Composition of place of death, Japan, 2020 (%).
Source: Ministry of Health, Labor and Welfare (2022)

It is worth noting in this context that to date, the impact of the COVID-19 pandemic on this trend has remained unclear. Japan first declared a state of emergency on April 7, 2020, following the World Health Organization's declaration of a global pandemic on March 11, 2020. According to the Ministry of Health, Labor and Welfare (2022), the figure was 71.3% as of March 2018, roughly 2 years before the state of emergency, and 68.7% as of March 2021, about a year after the first declaration of the state of emergency. While no substantial change is observed during this period of time, one may argue, data of the coming few years are necessary to make a more accurate projection of the projected shortage in hospital beds.

Japan is unique among developed countries in this trend that hospitals are the primary place of deaths for the population. Since the early 1990s, an increasing number of countries in Europe and North America have come to promote not only "aging in place" but also "dying in place" in response to a growing demand from those of advanced age and those dying who call for respecting individual dignity, rights, and autonomy in choosing where to die (Cohen and Gott, 2015). Policy responses in those countries include expanding home care services and increasing the number of hospices for those citizens who desire to spend their past days at the places with which they feel most familiar and comfortable – typically their own homes or hospices in their communities, instead of hospitals (Gutiérrez-Sánchez, Gómez-García, Roselló, *et al.*, 2021). In the case of Japan, while medical communities have raised their voice to follow such overseas trends, no official policy measure has been announced to date, at least at the national level (Interview data, Osaka, April 8, 2021). If hospitals continue serving as the dominant place of death, a death-laden Japan will inevitably face a significant shortage in the conventional pace to die: Hospital beds. According to an estimate by the Research Institute of Economy, Trade and Industry (2018), as of 2019 about 882,000 people aged over 70 died in hospital beds, which consumed approximately 90% of the capacity of all hospital institutions across the country. In 2030, the number for the same age group is projected to reach nearly 1,460,000. Assuming that today's rate of hospital death will remain the same, by 2030, the annual shortage of hospital beds is projected to be for about 600,000 patients, and the number will only grow over the succeeding decades (Research Institute of Economy, Trade and Industry, 2018).

3.2. Mounting public burden of disease

Against the backdrop of global population aging, "burden of disease" – the impact of health-related challenges on various aspects of society, including the financial cost of care for older populations – has been a primary concern

among most developed countries across the world (World Health Organization, 2008). Japan is no exception; as the world's leading super-aged society, the country has been contending with growing public health-care expenses for decades (Gilmour, Liao, Bilano, *et al.*, 2014). This burden of disease is therefore the second area of challenge for Japan in its transition to a death-laden society, with the financial costs projected to reach insolvency. This is the case particularly if no major change is made to the way in which people have conventionally relied on medical and health-care resources during the last stage of their lives (Interview data, Nagoya, September 28, 2020).

Figure 2 illustrates the trend of national health-care expenditures for medical care and long-term care from 2000 through a projected 2040. In the country's categorization scheme in the public expenditure, briefly put, medical care refers to that provided by hospitals and clinics, and long-term care to that offered by other institutions serving for older people, including homecare providers and hospices. In-home care is categorized into the former so long as it is provided by hospitals or clinics for medical purposes. Both medical and long-term care fall under the coverage of the National Healthcare Insurance and the country's universal health-care program, which is financed largely by the working-age population through their payroll taxes and premium contributions (Ministry of Health, Labor and Welfare, 2021). Especially over the past two decades, national expenditures on these areas have been rising rapidly; in 2000, the expenditure on medical care was 202.9 billion USD, and that on long-term care was 26.3 billion USD. By 2020, the figure for each area had increased to 328.7 and 116.9 billion USD, respectively. According to a recent projection made jointly by the Cabinet Office, the Ministry of Finance, and the Ministry of Health, Labor, and Welfare (2018), the figures for both areas will continue

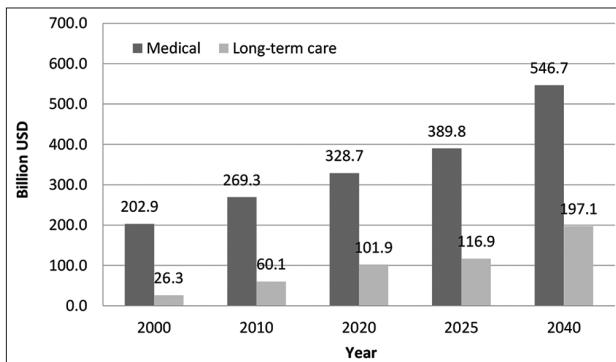


Figure 2. National health-care expenditures for medical care and long-term care, Japan, 2000-2040* (billion USD).

Source: Cabinet Office, Ministry of Finance, and Ministry of Health, Labor and Welfare (2018)

increasing in the future due to anticipated growth of health-care needs associated with the continuous aging of the population over the coming decades. By 2040, the expenditures are projected to jump to 546.7 for medical care and 197.1 billion USD for long-term care (Figure 2).

This projected public burden of disease is unsustainable and should the current framework to finance the expenditures be maintained in the era of a death-laden society (Interview data, Tokyo, 6 July 2021). As discussed above, the majority of people in Japan die at hospitals, for which significant financial resources are spent providing medical care for patients suffering terminal health conditions. Over the next decade, the country may see an increase in the number of people who die, or choose to die, at long-term care facilities as an alternative to the conventional, hospital deaths (Interview data, Tokyo, July 6, 2021). Whether dying at hospitals or long-term care facilities, however, the ballooning of deaths from old age will only contribute to pushing the burden of disease to insolvency. Simultaneously, this challenge will be further exacerbated by a continuing decline in the working age population who primarily finance the public health-care budget.

3.3. Potential prevalence of "lonely deaths" among those in advanced age

The third area of challenge is a possible adverse effect of promoting "dying in place" for those in advanced age in Japan who wish to die at home rather than in hospitals. Despite hospitals remaining the dominant place of death, the majority of older people in the country would actually prefer spending their final days at their homes. According to an opinion survey conducted in 2020 with a nationally representative sample of those aged 75 to 84, above 64% of them expressed their desire to die at their own homes. Moreover, over 85% of those preferring their homes reasoned that they considered that being at home would allow them to maintain a sense of self, comfort, and dignity up until the last moment of their lives (Nippon Foundation, 2021). Policymakers in the country might find it urgent to follow other countries in promoting "dying in place" both to accommodate such preference of today's older population and to help mitigate the prospective growth of public health expenditures.

However, pursuing this policy direction may create a potential adverse effect: A prevalence of what is often referred to as "lonely deaths" among those in advanced age. A "lonely death" refers to an incident when an older person living alone spends his final years living alone and then dying at home without care or attention from others, including his own relatives, after which the deceased

body is discovered by an unacquainted neighbor weeks or months after his death (Kato, Shinfuku, Sartorius, *et al.*, 2017). Older people living alone in urban areas are likely to face a greater risk of lonely deaths than those in rural counterparts due mainly to a greater likelihood for the former to be childless and have weaker ties to the communities in which they reside (Interview data, Tokyo, July 19, 2021).

In the Tokyo area, for instance, incidents of "lonely deaths" have been rapidly surging in recent decades. Figure 3 illustrates the trend from 2002 through 2021 of the number of those aged 65 or older who died at home alone and were investigated by the Tokyo Medical Examiner's Office on the causes of death. One thousand two hundred and seventy-four people allegedly died "lonely deaths" in 2002, and the number jumped to 5258 by 2021, above a four-fold increase in two decades (Tokyo Medical Examiner's Office, 2022). To date, the data for the whole country are not readily available. The case of Tokyo, nonetheless, may suggest that a similar trend has been taking place in other major cities also, and that in the coming decades, this grim phenomenon will likely prevail among a larger share of older people across the country (Interview data, Tokyo, October 3, 2021).

Dying in place with a sense of comfort and dignity requires, in many cases, close care and quality support from informal caregivers – the dying person's spouse, children, or siblings in particular – especially during the person's last days (Brink, 2008). In Japan, however, over the past several decades, the number of older people who live alone has been steadily increasing due in part to a combination of their prolonged longevity, loss of spouses and siblings in later life, and living away from or not having children (Suzuki, Dolley, and Kortt, 2021). Moreover, due to the rising number of unmarried or childless people in the country, in a death-laden, Japan, the size of the childless older population is also expected to grow at a rate unparalleled in the country's history (Park, 2020).

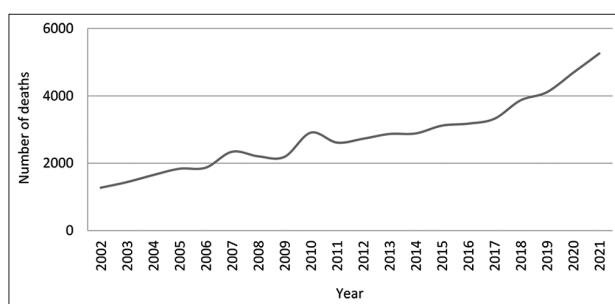


Figure 3. Number of those aged 65 or older who died at home alone and were investigated on the causes of deaths, Tokyo, Japan, 2002-2021.
Source: Tokyo Medical Examiner's Office (2022)

Under pressure from the coming of a death-laden society, as mentioned earlier, some policymakers in Japan may find the promotion of “dying in place” a necessary policy direction (Interview data, Tokyo, June 3, 2021). According to a hypothetical estimate for the case of Tokyo, if successfully promoted, a pursuit of “dying in place” could potentially mitigate the shortage in hospital beds by up to 30% by 2030 (Interview data, Tokyo, April 12, 2021). However, if rushing unprepared, this may, in turn, cause a surge in the prevalence of “lonely deaths,” thus simply trading one major public health issue for another with which society must contend for decades to come. First, an increase in the incidence of “lonely deaths” directly threatens the comfort and dignity of those dying. In addition, it would result in increasing public health expenses for responding to a range of associated medical and legal needs. Hence, careful strategy and preparation are called for in promoting “dying in place.” On the verge of becoming a death-laden society, Japan is immensely pressured to quickly develop an appropriate policy strategy to carefully and effectively rearrange the medical and social infrastructures for those with terminal health conditions to die in their preferred places in the way they wish.

3.4. Urgency to facilitate national discussions on end-of-life options

Japan must engage not only those in advanced age but also all citizens in a hard discussion on a subject that is highly controversial but may require swift policy consideration: End-of-life options. As discussed above, many of those in advanced age in the country desire “dying in place” in search of greater comfort and dignity during their last days. To prepare for the ballooning deaths in the coming decades, Japan today needs to solicit national consensus on whether and how the country may offer those dying a new end-of-life option in addition to what is available today.

Under Japan’s current institutional framework, the only end-of-life option that is publicly acknowledged is to arrange “dignified death” (Spoden, 2020). One may seek “dignified death” by leaving advance directives for medical decisions before one’s own death, which spells out his or her preferences regarding medical treatment in the event of terminal illness, falling into a state of coma, or reaching the late stages of dementia near the end of life (Japan Society for Dying with Dignity, 2022). Unlike euthanasia, this option does not involve any medical intervention to actively shorten – let alone actively terminate – the patient’s life. With the option of “dignified death,” the dying person may simply seek to die “naturally” by expressing their desire to refuse mere life-extending medical interventions. This way, the person may avoid unnecessary suffering and relieve caregivers of emotional

and financial burdens caused by critical medical decision-making during moments of crisis or grief (Hirayama, Otani, and Matsushima, 2017). Over the past few decades, an increasing number of medical institutions and related organizations have come to consider “dignified death” as de facto legal. However, a lack of codified laws that explicitly justify this practice still leads many clinical doctors to remain wary of patients’ requests to pursue this option (Interview data, Tokyo, 11 May 2021).

Meanwhile, other developed countries around the world have already moved forward to legalize end-of-life options that involve doctors’ active role in responding to patients’ desire to shorten their lives. One example is “physician-assisted suicide,” a form of voluntary euthanasia that may be applied only to those suffering from terminal health conditions who consistently express a conscious desire to shorten their lives to end their sufferings (Kamm, 1999). Unlike euthanasia in its conventional form, this option involves doctors assisting a patient’s suicide by providing the necessary means such as lethal doses of medication, or information about the means, for the patient to use to perform the life-ending act (Ahlzen, 2020). In recent years, an increasing number of countries around the world have legalized this option, including Switzerland, Belgium, the Netherlands, Luxembourg, Canada, Spain, and some regions of the US and Australia (Canetto and McIntosh, 2022). While a pursuit of individuals’ rights to control their deaths is the proclaimed reason to legalize this end-of-life option, behind this trend, one of the root causes to call for access to this option stems from the steady aging of those countries’ populations (Interview data, Tokyo, 22 February 2021).

To date, Japanese laws have never permitted any form of euthanasia including “physician-assisted suicide.” Due in part to the lack of open public discussion about end-of-life options, neither the government nor medical professional communities have ever taken the initiative to formally discuss the possible importance of introducing this option, or anything similar, to Japan (Interview data, Nagoya, July 29, 2021). The lack of the discussion stems in part from a traditional cultural value held among the citizens, today’s older generations in particular, that tends to regard death and dying as a highly private matter (Interview data, Osaka, February 14, 2021). The coming of a death-laden society will likely force the country to respond to the demands of an unprecedented number of older people potentially seeking to legalize “physician-assisted suicide” as a desirable option to be added to “dignified death.” Despite this strong likelihood, however, the lack of national discussion to date indicates that Japan remains unprepared for facing this scenario.

3.5. Crematorium shortages and their culture impact

Against the backdrop of ballooning deaths in Japan, an unprecedented concern in the country's modern history has emerged regarding how individual bodies are handled after death: A growing shortage of crematoriums. While currently observed only in a limited number of urban areas, if persisting in the coming decades and growing nationwide in scale, crematorium shortages may also grow to become a broader cultural issue (Interview data, Tokyo, July 16, 2021). As the fifth area of challenge, Japan is pressured to address how the crematorium shortages may contribute to undermining a cultural legacy that has long supported remaining relatives in managing their grief and loss of the deceased.

The shortages have first caused a substantial delay in the timing of carrying out cremations in Tokyo and Osaka areas. Across Japan, since the early 20th century at least, a cremation has typically been held on the 3rd day after one's death (Suzuki, 2000). Over the past several years, however, a rising number of residents in those areas have come to wait for 10 days, even for 2 weeks in some cases, on a waiting list to cremate their deceased family. In the coming decade, such a delay will likely begin to occur in many other major cities across the country (Interview data, Tokyo, July 21, 2021).

This is a grim trend particularly to the case of Japan. While not legally mandated, cremation, as opposed to burial, has substantially been the only method available to clear away corpses since the early 20th century. Even today, in 2021, above 99.8% of all deceased bodies were cremated; by far the highest rate across the world, rendering Japan unique from an international perspective (Cremation Society, 2022). The shortages are also escalated by a steady decrease in the number of crematory facilities, particularly in urban areas, over the past decades. In 2000, there were about 2100 registered facilities across the country, but the number had dropped to nearly 1400 by year 2020 (Japan Association of Environmental Crematory, 2022). Behind this trend is active urban planning and renovations in which many cities have engaged particularly since the 1980s. Both city governments and funeral industries have experienced significant challenges in maintaining, let alone newly establishing, crematory facilities, and facing fierce opposition from local residents who are fearful of negative impacts that the presence of crematory facilities may create on the real estate value and public images of their communities (Interview data, Tokyo, November 8, 2020).

Crematorium shortages are more than a public health issue; this may contribute to eroding the national cultural

framework that has long supported remaining relatives through the emotional challenges caused by their grief and loss of deceased family members: Family unity through funeral reunion. Conventionally, cremation is conducted in the late morning only an hour or two after the main funeral rite to make it easier for attendees from afar – immediate family members, remote relatives, friends, and coworkers – to attend the event and return home on the same day (Suzuki, 2000). In response to the emerging shortages, however, a growing number of families in Tokyo and Osaka areas are opting to cremate their deceased members outside the conventional hours while keeping the conventional date, 3 days after the death (Interview data, Osaka, 22 May 2020). Furthermore, some families choose to use funeral homes and morgues located in rural areas so as to carry out funerals in the conventional date and hours. Either way, despite their effort, an increasing number of those families have suffered from a lower turnout in the funeral attendees mainly because these alternative approaches interrupt some prospective attendees' daily schedules (Interview data, Tokyo, 12 March 2021).

A funeral provides many with an opportunity to hold a family reunion, which helps to give both the hosts and attendees a sense of intimacy and social bonding. This way, funerals have long served as a significant cultural event in which people emotionally support each other by sharing their grief, and thus mitigating their intense sense of loss (Tsuiji, 2006). In the coming decades, the ongoing shortage in crematoriums will likely erode the role of such cultural legacies for an increasing number of families in urban areas, possibly across the country, by causing the need for funerals to be conducted outside the conventional time and space. While cultural impacts of this trend may be profound, to date, no specific policy measure has been discussed at the national level to address this prospective challenge (Interview data, Tokyo, March 18, 2021).

4. Conclusion: Call for the future research

Today, Japan is on the verge of another demographic transition that will significantly affect its society and culture – just in the coming decade, if not sooner, the world's first super-aged society will become the world's first death-laden society. This prospective transition deserves international attention as a new set of unique challenges for the death-laden society begins to manifest.

This paper has contributed to advancing the growing body of the literature on this emerging subject by exploring and outlining main areas of prospective policy challenges that Japan must swiftly address to mitigate the impact of this transition. The challenges outlined in this paper include but are certainly not limited to five areas of policy

concerns related primarily to the health, well-being, and comfort of citizens of all ages, but particularly those in advanced age and those living out their past days as well as their relatives. Together with the continuous shrinking of the working-age population, the ballooning of deaths – annual deaths of 1.6 million people – will likely exacerbate already existing shortages in clinical doctors and hospital beds and contribute to pushing to insolvency the national expenditures for medical and long-term care. These challenges will be inevitable especially if hospitals remain the primary place of Japanese citizens' death in the coming decades. Promoting "dying in place," however, will create the grim risk of a further prevalence of "lonely deaths" among those in advanced age and living in urban areas. Japan is also under pressure to begin swiftly increasing citizens' end-of-life options, such as physician-assisted suicide, should a majority of them call for it. Finally, but not of the least importance, a shortage of crematoriums needs to be effectively addressed. An immediate policy measure needs to be implemented not only for the sake of public health and sanitation but also to help preserve the cultural legacy that has long supported remaining family members in managing their grief and loss of the deceased.

Death-laden society is a newly emerging subject. To date, little systematic study has been done to discuss the impact of the coming of this new phase of demographic shift. Furthermore, this paper is based mainly on findings from exploratory research; thus, the discussions presented above are only limited and preliminary. More research, both empirical and theoretical, is called for to continue examining the way in which a death-laden society will affect the health, well-being, and comfort of those in advanced age in Japan, including and beyond the five areas of policy challenges discussed in this paper. Of particular importance for the future research is to pay close attention to the prospects of rural areas of the country, including remote islands, as a result of the transition into a death-laden society. These areas have experienced more rapid aging and population implosion than the rest of the country. Therefore, these areas will likely not only contend with greater challenges in the five policy areas as explored in this paper; the transition into a death-laden society may also generate challenges that are unique to these areas. As such, among the goals for the future research should be to uncover how unevenly the coming of a death-laden society affects those of advanced age and their relatives in large cities compared to rural and remote regions of the country.

Furthermore, important is to examine how the future changes to labor market institutions and the prospects for national economic vitality may be affected by Japan's transition into a death-laden society. The burst of the

asset price bubble in the early 1990s weakened long-term employment security of workers of all ages, which has contributed to reduced productivity in some sectors of the labor force (Kamabayashi and Kato, 2016). Together with mounting pressure from the rapid aging of the population, Japan's fragile economic situation has led to austerity-motivated cuts to welfare policies and programs for older people, including public pensions and public health-care programs for the aged (Suzuki, Dolley, and Kortt, 2021). A thorough assessment of the impact of a death-laden society includes calls for close attention to the associated current and future prospects for Japan's national economic vitality and competitiveness within the ever more competitive global economy.

The future research should also draw policy suggestions to help mitigate the prospective risks and challenges of Japan's transition into a death-laden society. Such suggestions would also serve as a source for the current and future policymaking of other countries that may follow the path of a super-aged Japan to become death-laden societies in the conceivable future including South Korea, China, Taiwan, and Singapore. Specific and sound policy suggestions require future, more issue-specific research. Nonetheless, a possible direction that future policymakers might consider drawing from this paper is to expand the existing policy paradigm surrounding older people and later life. To date, the age-related policy goals in many countries commonly focus on protecting the health, well-being, and more broadly the quality of life of older people. The prospective challenges of a death-laden Japan, as explored in this paper, suggest that in the conceivable future, rapidly aging societies including Japan itself more explicitly include a goal of enhancing what may be referred to as the quality of dying. In a death-laden society, more and more people will likely call for societal support for protecting comfort and respecting dignity not only in the experience of the advanced stage of their lives but also during the very process of their dying. Such a policy direction should also aim to help younger people become less laden with various burdens brought on by the prospective ballooning of deaths in their society.

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References

- Ahlzen, R. (2020). Suffering, authenticity, and physician assisted suicide. *Medicine Health Care and Philosophy*, 23(3): 353-359.
<https://doi.org/10.1007/s11109-019-09929-z>
- Brink, P. (2008). Determinants of home death in palliative home care: Using the interRAI Palliative Care to assess end-of-life care. *American Journal of Hospice and Palliative Medicine*, 25(4):263-270.
<https://doi.org/10.1177/1049909108319261>
- Cabinet Office, the Ministry of Finance, and the Ministry of Health, Labor and Welfare. (2018). The future of social security: Looking ahead to year 2040 [in Japanese]. United Kingdom: Cabinet Office. Available from: https://www.5.cao.go.jp/keizai-shimon/kaigi/minutes/2018/0521/shiryo_04-1.pdf
- Canetto, S.S., & McIntosh, J.L. (2022). A comparison of physician-assisted/death-with-dignity-act death and suicide patterns in older adult women and men. *American Journal of Geriatric Psychiatry*, 30(2), 211-220.
<https://doi.org/10.1016/j.jagp.2021.06.003>
- Cohen, J., & Gott, C. (2015). Dying in place in old age: Public health challenges. In: Van den Block L, Albers G, Pereira SM, et al, editors. *Palliative Care for Older People: A Public Health Perspective*. Oxford: Oxford University Press, p.107-119.
- Cremation Society. (2022). International Statistics 2019. Available from: <https://www.cremation.org.uk/internationalcremation-statistics-2019> [Last accessed on 2022 Jun 08].
- Döringer, S. (2020). The problem-centered expert interview: Combining qualitative interviewing approaches for investigating implicit expert knowledge. *International Journal of Social Research Methodology*, 24(3):265-278.
<https://doi.org/10.1080/13645579.2020.1766777>
- Fuji, K. (2018). What would the coming of a death-laden society bring about to Japan? [in Japanese] *Communications of the Japan Association of Real Options and Strategy*, 10(2):36-38.
https://doi.org/10.12949/cjaros.10.2_36
- Gilmour, S., Liao, Y., Bilano, V., & Shibuya, K. (2014). Burden of disease in Japan: Using national and subnational data to inform local health policy. *Journal of Preventive Medicine and Public Health*, 47(3):136-143.
<https://doi.org/10.3961/jpmph.2014.47.3.136>
- Gutiérrez-Sánchez, D., Gómez-García, R., Roselló, M.L., & Cuesta-Vargas, A.I. (2021). The quality of dying and death of advanced cancer patients in palliative care and its association with place of death and quality of care. *Journal of Hospice and Palliative Nursing*, 23(3):264-270.
<https://doi.org/10.1097/NJH.0000000000000752>
- Higo, M. (2022). A “death-laden society”: The next stage of a hyper-aged Japan and health challenges ahead. *Aging and Health Research*, In press.
<https://doi.org/10.1016/j.ahr.2022.100110>
- Higo, M., & Klassen, T.R. (2016). Reforms of retirement policies: Three common paths in aging Japan and Korea. *Journal of Aging and Social Policy*, 29(1):70-83.
<https://doi.org/10.1080/08959420.2016.1187035>
- Hirayama, Y., Otani, T., & Matsushima, M. (2017). Japanese citizens' attitude toward end-of-life care and advance directives: A qualitative study for members of medical cooperatives. *Journal of General and Family Medicine*, 18(6):378-385.
<https://doi.org/10.1002/jgf2.100>
- Japan Association of Environmental Crematory. (n.d.). Statistics on crematoriums across the country [in Japanese]. Japan Association of Environmental Crematory. Available from: https://www.j-sec.jp/files/f_1546821957.pdf [Last accessed on 2022 May 20].
- Japan Society for Dying with Dignity. (n.d.). What is ‘Living will’? [in Japanese]. Japan Society for Dying with Dignity. Available from: <https://www.songenshi-kyokai.or.jp/living-will> [Last accessed on 2022 Apr 21].
- Kamabayashi, R., & Kato, T. (2016). Long-term employment and job security over the past 25 years: A comparative study of Japan and the United States. *ILR Review*, 70(2):359-394.
<https://doi.org/10.1177/0019793916653956>
- Kamm, F.M. (1999). Physician-assisted suicide, the doctrine of double effect, and the ground of value. *Ethics*, 109(3): 586-605.
<https://doi.org/10.1086/233923>
- Kato, T.A., Shinfuku, N., Sartorius, N., & Kanba, S. (2017). Loneliness and single-person households: Issues of kodokushi and hikikomori in Japan. In: N Okkels, CB Kristiansen, & P Munk-Jørgensen, editors. *Mental*

- Health and Illness in the City. Berlin: Springer, p.205-219.
- Kurahara, M. (2020). Study on the end-of-life care in elderly person facilities in many-death society-through the case of end-of-life care in special elderly nursing home 'shakunagesou.' [in Japanese] *AIJ Journal of Technology and Design*, 26(63):707-712.
<https://doi.org/10.3130/aijt.26.707>
- Matsumoto, M., Kashima, S., Owaki, T., Iguchi, S., Inoue K., Tazuma, S., et al. (2019). Geographic distribution of regional quota program graduates of Japanese medical schools: A nationwide cohort study. *Academic Medicine*, 94(8):1244-1252.
<https://doi.org/10.1097/ACM.0000000000002688>
- Ministry of Health, Labor and Welfare. (2021). Annual Whitepaper on Work and Welfare, 2021. Tokyo: Ministry of Health, Labor and Welfare.
- Ministry of Health, Labor and Welfare. (2022). Vital Statistics. Tokyo: Ministry of Health, Labor and Welfare. Available from: <https://www.mhlw.go.jp/toukei/list/81-1.html> [Last accessed on 2022 Mar 16].
- Nagaoka, M. (2021). Getting Prepared for the Coming of a Death-laden Society [in Japanese]. Japan: Heibonsha.
- National Institute of Population and Social Security Research. (2022). Population Statistics. Japan: National Institute of Population and Social Security Research. Available from: <https://www.ipss.go.jp/p-info/e/population%20%20statistics.asp> [Last accessed on 2022 Jul 07].
- Nippon Foundation. (2021). National Survey on the End-of-life Decisions. Tokyo: Nippon Foundation Available from: https://www.nippon-foundation.or.jp/app/uploads/2021/03/new_pr_20210329.pdf [Last accessed on 2022 Jun 26].
- Organization for Economic Co-operation and Development. (2022). Life expectancy at birth. Paris: Organization for Economic Co-operation and Development. Available from: <https://www.data.oecd.org/healthstat/life-expectancy-atbirth.html> [Last accessed on 2022 Jul 19].
- Park, E.H. (2020). Ultra-low fertility and policy response in South Korea: Lessons from the case of Japan. *Ageing International*, 45(2):191-205.
<https://doi.org/10.1007/s12126-020-09365-y>
- Research Institute of Economy, Trade and Industry. (2018). The Necessity to Restructure the Healthcare System in Response to Cultural Transformations caused by the Coming of a Death-laden Society-RIETI Policy Discussion Paper Series 18-P-020 [in Japanese]. Tokyo: Research Institute of Economy, Trade and Industry. Available from: <https://www.rieti.go.jp/jp/publications/pdp/18p020.pdf> [Last accessed on 2022 Jun 20].
- Spoden, C. (2020). Deciding one's own death in advance: Biopower, living wills, and resistance to a legislation of death with dignity in Japan. *Contemporary Japan*, 32(1):63-82.
<https://doi.org/10.1080/18692729.2020.1714279>
- Suzuki, H. (2000). The Price of Death: The Funeral Industry in Contemporary Japan. United States: Stanford University Press.
- Suzuki, K., Dolley, B.E., & Kortt, M.A. (2021). Addressing loneliness and social isolation amongst elderly people through local co-production in Japan. *Social Policy and Administration*, 55(4):674-684.
<https://doi.org/10.1111/spol.12650>
- Takata, H., Nagata, H., Nogawa, H., & Tanaka, H. (2011). The current shortage and future surplus of doctors: A projection of the future growth of the Japanese medical workforce. *Human Resources for Health*, 9(14):1-7.
<https://doi.org/10.1186/1478-4491-9-14>
- Tokyo Medical Examiner's Office. (2022). Statistical Database. Tokyo: Tokyo Medical Examiner's Office. Available from: <https://www.fukushihoken.metro.tokyo.lg.jp/kansatsu/database/03toukei.html> [Last accessed on 2022 Feb 11].
- Tsuji, Y. (2006). Mortuary rituals in Japan: The hegemony of tradition and the motivations of individuals. *Ethos*, 34(3):391-431.
<https://doi.org/10.1525/eth.2006.34.3.391>
- United Nations. (2019). World Population Ageing 2019, Highlights. New York: United Nations. Available from: <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf> [Last accessed on 2022 May 22].
- United Nations. (2022). World population prospects 2022. New York: United Nations. Available from: <https://www.population.un.org/wpp> [Last accessed on 2022 Aug 27].
- World Health Organization. (2008). The Global Burden of Disease, 2004 update. Geneva: World Health Organization. Available from: https://www.apps.who.int/iris/bitstream/handle/10665/43942/9789241563710_eng.pdf