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PinPinKorori or NenNenKorori: the historical and socioeconomic background of geriatric trauma care in Japan

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ABSTRACT

Introduction Aging is one of the most serious social issues, not only in Japan. A country's socioeconomic conditions must be taken into account when considering the issue of rapid aging. The purpose of this review was to introduce the historical and socioeconomic background of geriatric trauma care in Japan.

Method Literature review regarding the trauma care for the elderly written in Japanese and English.

Results "PinPinKorori" is a Japanese word which symbolizes an ideal, healthy life. "NenNenkorori" is the opposite of PinPinKorori. The Japanese elderly desire to live a healthy, active life and die (PinPinKorori) rather than being bedridden and dying in agony. A bedridden individual (NenNenKorori) is a candidate for receiving end-of-life care. End-of-life care is a form of trauma care for the elderly that ensures quality of death for those in need.

Conclusions I encourage the elderly to document their advance care preferences with decision-making capacity in order to avoid futile care. Healthcare providers should strive to provide optimum care to the patients in their best interest and ensure not to provide treatment that is not desired by the patients.

Level of evidence Level IV.

PINPINKORORI OR NENNENKORORI

'PinPinKorori' is a Japanese word which symbolizes an ideal, healthy life.[1] 'PinPin' means healthy without any illnesses, and 'Korori' means sudden death. Generally, the Japanese elderly desire to live a healthy life and die without being bedridden; they do not wish to suffer from diseases and illnesses, which cause considerable inconvenience. On the other hand, 'NenNenKorori' is the opposite of PinPinKorori. 'NenNen' means bedridden, and 'Korori' means sudden death. The Japanese elderly desire to live a healthy, active life and die (PinPinKorori) rather than being bedridden and dying in agony. A bedridden individual (NenNenKorori) is a candidate for receiving end-of-life care. In 1999, the Japanese Association of Gerontology reported the relationship between the age of becoming bedridden and the duration until death. For example, according to this report, becoming bedridden at the age of 70 years is associated with approximately 3 years until death; likewise, becoming bedridden at the age of 75 years is associated with approximately 3.5 years of a bedridden state until death. Differences between the healthy life expectancy and life expectancy were noted; the average differences were 9 years in elderly males and 13 years in elderly females.[2]

Death is a point of time, and living is a vector of death. Thinking about living is thinking about death. Discussing death pertains to how we can spend our end of life. The 2013 report of The National Congress of Social Security System Reform advocated for realizing death with dignity for mortal people, improving the quality of life at the end of life, and satisfying the quality of death.[3] Ideally, for trauma injuries, prehospital care at the right time, ambulance transport to the right place, adequate hospital care by the right medical provider, and rehabilitation are the keys to survival. However, in the real world, one-third of elderly individuals are candidates for end-of-life care.[4] End-of-life care is a form of trauma care for the elderly that ensures quality of death for those in need.

THE LEGENDS OF TONO

Japanese historian and folklorist Yanagida Kunio wrote a book titled, 'The legends of Tono'.[5] Tono is a city in Iwate Prefecture, which is also my hometown, the poorest region of Japan. Yanagida narrated the legend of an old man abandoned in the field. 'The legends in Tono' described an oral tradition of 'Denderano' or the lotus field. According to the folklore, the elderly man was brought to Denderano at the age of 60 years by his son with little food. At that time, elderly individuals were considered a burden to society, and the abandonment indicated a natural retirement of life. For a relatively short span of 200 years, the abandonment of life, a bizarre and tragic event, was common in this region at that time. From generation to generation, it was thought to be the only way for a family to survive and succeed in areas with insufficient food and resources. Practice of this rural custom has since ceased and remains a legend.

In the past, society did not allow the survival of those who could make little or no contribution to the happiness, well-being, or welfare of society. The 'normal' members of society are expected to contribute to society. Thus, the elderly were considered futile and non-normal, and, therefore, excluded from society. 'Normal' is based on the social notions of permission and elimination. As is expected, the value and meaning of 'normal' change with time and do not remain constant.

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GLOBAL AGEING, ALLOCATION OF MEDICAL CARE COSTS, AND FUTILE CARE

Confucius was a Chinese teacher, editor, politician, and philosopher. According to his principles, geriatric people or the elderly must be respected in East Asia.[6] He championed strong family loyalty and espoused the well-known principle, 'Do not do to others what you do not want to be done to you.'

Ageing is one of the most serious social issues, not only in Japan, but across the globe. It is estimated that by 2050, the proportion of elderly people over 65 years of age will make up 16% of the global population, whereas children aged less than 5 years will be 7%.[7] The rate of ageing has been increasing exponentially, especially in Asia.[7] The proportion of those aged over 65 years was 24% in 2010, and will increase to 40% by 2060. This proportion will be the same as that of South Korea and India in 2060. According to a recent press release, the Japanese government reported that the proportion of people aged over 70 years is 20% in 2018.[8]

A country's socioeconomic conditions must be taken into account when considering the issue of rapid ageing. Japan spent US$1 trillion, 30% of the Japanese National Income, on social security.[9] Moreover, the problem of a decreasing working population is faced by Japan and other Organization for Economic Co-operation and Development countries. In 2010, sixty-three percent of the working population contributed to the national income. However, by 2050, only 50% of the working population will contribute to the national income.

It has been debated to what extent we should allocate resources to healthcare of the elderly, particularly when there is no hope of cure or improvement in the condition. These arguments often stem from an economic standpoint given that our society does not have adequate resources to sustain the increasing healthcare costs of the elderly. A comparison of the healthcare costs of the elderly and the national income, usually indicated as gross domestic product, seems to suggest that a large share of our resources is spent on providing care for the elderly with terminal conditions. It seems that the legend of Tono has been revived in modern societies with ageing populations. At present, we are facing a similar dilemma—should we abandon the elderly by withdrawing possible treatments to save our resources? Personally, I cannot condone a society in which the end of wealth results in the end of life.

The word 'futile' means serving no useful purpose or completely ineffective. As a Japanese person, I find the word 'futile' quite strange, as I was educated and have lived in Japan with the principles of Confucius. When considering the sanctity and quality of life, life-prolonging principles, as well as a life-prolonging supremacist ideology, are justified.

In 2012, the Japanese Association of Gerontology announced that the socioeconomic issue between healthcare quality and healthcare costs is an unavoidable passage in the distribution of healthcare resources for end-of-life care.[10]

TO DIE WITH DIGNITY

Following an advance directive, where the individual states wanting a good quality of death, is one of the solutions to avoiding futile care. The American College of Surgeons Trauma Quality Improvement Program has developed the Best Practices Guidelines for quality improvement purposes.[11] These guidelines may be used by healthcare professionals as well as for quality improvement initiatives or programs. More than 40% of the patients prefer decision-making opportunities at the end of life, although 70% of them lack decision-making capacity.[11] The guidelines also emphasize the importance of advance directives for ensuring patients' decision-making capacity and determining care preferences. A living person documents their wishes concerning their medical treatment at the end of life, as an ideal way of end-of-life care.

In 2018, the Japanese Ministry of Health, Labour and Welfare reported the results of an attitude survey about healthcare at end of life.[12] According to the survey, 59.3% of the respondents answered 'yes' to the question, 'Are you concerned about end-of-life care?' However, 55.1% of the respondents answered 'No' to the question, 'Have you ever talked about end-of-life care?' Regarding the question, 'Do you agree that 'advance directives' in an emergency situation must be documented?' 66% of the respondents answered 'Yes'. Of the 66% respondents who agreed that advance directives must be documented, only 8.1% answered 'Yes' to the question, 'Have you ever documented an advance directive?' Unlike Japan, the proportion of those who have documented their advance directives is considerably higher in the USA, where 47% of the people aged over 40 years and 55% of nursing home patients have documented their advance directives.[13] In other countries, the ratio is relatively low at 12% in Germany[14] and Holland,[15] and less than 10% in the UK.[16 17]

In cases involving incapacitated patients who are unable to make healthcare decisions for themselves, a proxy directive is used to assign a surrogate decision-maker for them, who then makes the necessary decisions for medical treatment. However, there are no legal grounds for proxy directives in Japan.

The Physician Orders for Life-Sustaining Treatment (POLST) was developed by the Oregon POLST Task Force in 1991.[18] In 2015, the Japanese POLST was released by the Japanese Association of Clinical Ethics.[19] However, these also have no legal grounds, and an article opposing them was published by The Japanese Society of Intensive Care Medicine in 2017. Although the discussion regarding the legal acceptability of the Japanese POLST has not reached a conclusion, I, as a clinician and trauma surgeon, make a more suitable suggestion for providing care for the injured elderly. In Japan, during confusing clinical situations regarding end-of-life care, we follow guidelines[20 21]; The Guideline for Clinical Decision-Making Process on the ending of life was revised in 2018, and advocated to retain Advanced Care Planning, which is a process to identify and express values and goals of medical care.[22] The usage of guidelines is matched to the national character, which prefers soft laws, rather than hard laws. In Teikyo University, we are protected by the guidelines from medical litigation and legal action. The important attitude is that the surgeon must strive to provide optimum care to the elderly according to the preferences of the patients.

In conclusion, I encourage the elderly to document their advance care preferences with decision-making capacity to avoid futile care. Healthcare providers should strive to provide optimum care to the patients in their best interest and ensure not to provide treatment that is not desired by the patients. To quote late Shigeaki Hinohara, 'care for the elderly is difficult and entails misery. However, a day will come when you will be looked after by someone just as you did for the elderly.'[23]

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