Cancer Nursing Profile Japan

Japanese Society of Cancer Nursing

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INTRODUCTION

Japan is an island country located in the Pacific Ocean and consisting of four large islands and numerous smaller ones. It covers the total area of 377,915 square kilometers. Japan is the second-most populous island country. Tokyo is the capital and the Greater Tokyo Area is the most populous metropolitan area in the world [1].

Flag

COUNTRY DEMOGRAPHICS

Total population as of 2019
Projected population as of 2050
Percent of population under age 15
Percent of population ages 65 and older

126,200,000 109,900,000 12%

28% [2]

Coat of arms



COUNTRY HEALTH STATISTICS

Life expectancy at birth females/males	87/81
Birth per 1,000 population	7
Deaths per 1,000 population	11
Infant mortality rate per 1,000 live births	2 [2]
Maternal mortality rate per 100,000 live births	5 [3]

HEALTH CARE SYSTEM

1. Please describe briefly your country's health care system model including public/private/nonprofit mix; type of primary health care facilities and hospitals.

Japan has a statutory health insurance system that is financed through general tax revenue and insurance premiums. Citizens can obtain also private insurance that covers care in private facilities and the cost of copayments. The out-of-pocket expenses differ and are lower for citizens with low incomes, the elderly and children [1].

2. Please describe briefly the financing of health care including Gross Domestic Product (GDP) per capita, percentage of GDP spent on health care, and the proportion allocated to primary health care.

In 2016, GDP per capita in Japan was estimated at US\$38,794.3, out of which 10.93% was spent on health care. In total, Japan spent US\$4,233.03 per person on health care in 2016 [4]. In Japan, there is no epidemiological survey specialized in primary health care.

CANCER CARE

1. Please provide key statistics in relation to risk factors (alcohol, smoking, diet, obesity rates, physical activity) and main causes of death.

Alcohol per capita
Smoking prevalence
Diet
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The top five leading causes of death in Japan in 2017 were malignant nesplasms, heart diseases, cerebrovascular diseases, senility without mention of psychosis, and pneumonia [10].

2. Please provide key cancer related data (incidence, survival, mortality for major cancers)

There were 883,395 new cases of cancer diagnosed in Japan in 2018. The number of new cancer cases was higher for males than females (504,648 and 378,747 respectively). The top five most frequent incidences of cancer in 2018 are presented by sex below [11]:

Incidence of cancer - males		Incidence of cancer - females			
Cancer type	Cases	% in total	Cancer type	Cases	% in total
Colorectum	82,641	16.4	Breast	66,101	17.5
Lung	79,431	15.7	Colorectum	65,510	17.3
Stomach	76,899	15.2	Lung	39,540	10.4
Prostate	70,654	14	Stomach	38,647	10.2
Bladder	28,922	5.7	Pancreas	21,499	5.7

In 2018, there were 409,399 cancer-related deaths with a higher number of male to female deaths (235,625 and 173,774 respectively). The top five most frequent cancer-related deaths in 2018 were: lung cancer (81,820 deaths - 20%), stomach cancer (48,535 deaths - 11.9%), colon cancer (40,580 - 9.9%), pancreas cancer (37,358 - 9.1%), and liver cancer (28,986 - 7.1%) [11].

In 2018, the 5-year prevalence of all cancers for all ages was 2,127,559 survivors, with a higher number of males than females (1,149,228 and 978,331 respectively) [11].

3. Please describe briefly key elements of the health system for cancer prevention, early diagnosis and screening, treatment, and palliative care.

Cancer has been the leading cause of death in Japan. The Cancer Control Act was enforced in 2007 and the Basic Plan to promote Cancer Control Programs was made in the same year.

The basic concepts of the law are as follows.

- 1 Promotion of cancer research and utilization of research outcomes
- 2 Equalization of cancer medical services
- 3 Development of cancer medical services to satisfy patients

Based on this law, the Japanese government built the Basic Plan to promote Cancer Control Programs. This plan must reflect the opinion of cancer patients and their families, as well as cancer

medical specialists and academic experts. Each prefecture is expected to build the Prefectural Plan to Promote Cancer Control modeling the national basic plan. The national government, local communities, medical insurance systems, physicians and surgeons will support each other to realize the above 3 basic concepts [12].

In accordance with the Plan, all municipalities have carried out quality control and evaluation of cancer screening, conducted cancer screening based on scientific evidence, and tried to improve the screening rate to 50% within 5 years.

In addition, training of staff specialized in cancer medical care has been promoted, and the function of core hospitals for cancer treatment has been enhanced, so that collaborative cancer treatment and quality of palliative care could be improved.

4. Please provide a brief description of major health promotion activities including national health education campaigns and services, including a description of cancer control health promotion activities, and the involvement of nurses.

Promotion of prevention/early discovery of cancer and equalization of cancer medical services have been implemented based on the "Basic Plan to promote Cancer Control Programs [13].

- ① Promotion of cancer prevention and dissemination/enlightenment
 - Dissemination/enlightenment related expenses
 Creation of brochures, etc, by Center for Cancer Control and Information Service
 Promotion of cancer screening through cooperation with enterprises
 Health support measure for females
 - · Research on emergency measures to overcome hepatitis, etc
- 2 Establishment of consultation support and information provision systems for cancer medical care
 - Improved information provision and support projects by Center for Cancer Control and Information Services
- (3) Promoting cancer education for children

The Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Health, Labor and Welfare have begun preparations to develop cancer education for children to learn the importance of health and life and to have correct knowledge about cancer.

Nurse specialists in cancer have been working in the areas of cancer prevention, chemotherapy/radiation therapy, and palliative care in order to improve patients' quality of life.

NURSING WORKFORCE AND EDUCATION

1. Number of registered nurses working in cancer control

There are 833 Certified Nurse Specialists specialized in oncology nursing (2019), 2454 Certified nurses (CNs) in Palliative care, 1646 CNs in Cancer Chemotherapy Nursing, 773 CNs in Cancer Pain Management Nursing, 372 CNs in Breast Cancer Nursing, 323 CNs in Radiation Therapy Nursing (2019) [14]. (in 2019, Cncer Pain Management Nursing Program integrated to Palliative care)

2. Qualifications, roles, and scope of practice for nurses working in cancer control

Qualifications	Roles and scope of practice
Certified Nurse Specialists in Cancer Nursing	Understand the physical and mental distress of cancer patients and provide high quality nursing care to patients and their families from the viewpoint of
	quality of life (QOL).
Certified Nurse in Palliative Care	Relieves painful symptoms such as pain, dyspnea, general malaise, and edema.
	Care for loss and grief to patients and families.
Certified Nurse in Cancer Chemotherapy	Safe handling and appropriate administration of cancer chemotherapeutic drugs
	Relieve side effects and support self-care
Certified Nurse in Breast Cancer Nursing	Supporting self-care and self-determination for patients receiving multidisciplinary treatment Support for psychological and social problems by changing body image
Certified Nurse in Radiation Therapy Nursing	Self-care support Providing a safe and comfortable treatment environment

[14]

3. Higher education institutions (HEIs) including university departments and faculties, colleges, and other public or private institutions that offer programs leading to a recognised nursing qualification in cancer control.

There are 79 Master programs for Advance Practice Nurse that is certified by Japan Association of Nursing Program in Universities (JANPU) [15]. Japan Nuring Association and some College of Nursing also provide the Program for Cirtified Nurse (19 ereas including 4 oncology nursing ereas. Those are 6 months program).

- 1. Provide a brief description of credentialing/accreditation systems for nurses working in cancer control.
- Certified Nurse Specialists in Cancer Nursing
 In order to become Certified Nurse Specialists in Cancer Nursing, it is required to complete
 a master's program at a nursing graduate school, and after at least 5 years of practical
 training, it is also essential to be certified by the Japan Nursing Association.
- Certified Nurses in the area of oncology In order to become a certified nurse, it is necessary to pass a certification examination conducted by the Japan Nursing Association after completing a 6-month training course. It is also needed to practice at least 5 years of practical training. [14]
 - 2. Provide a brief description of cancer nursing professional organisations, e.g. membership; objectives; key functions; role in policy-making.

The Japanese Society of Cancer Nursing was established in 1987, and since then, the society has been promoting the development and improvement of research and education regarding cancer nursing and contributes to the health and welfare of people. In order to fulfill its purposes, the society has been conducting the following activities:

- (1) Convene an Academic Conference
- (2) Publish official Journals
- (3) Improve practices in each nursing specialty and facilitate research and education activities
- (4) Cooperate and link with relevant national and international academic societies
- (5) Conduct international exchange activities
- (6) Conduct social activities to contribute to people's health and welfare
- (7) Conduct other activities deemed necessary to achieve the Society's purpose [16]
 - 3. Provide a brief description of continuing education training and structure for nurses working in cancer control, including necessary requirements for licensing/revalidation; access to continuing education, and sources of funding.

Both Certified Nurse Specialists and Certified Nurses in the area of oncology must undergo a renewal assessment every five years after acquisition is required to maintain the level of practice. [14]

4. Provide a brief description of nursing leadership positions and roles, e.g. at ministry, district, local and hospital levels; role in cancer policy-making; management of nursing services; in higher education and research institutions; in regulatory bodies; in national professional associations and trade unions; in nongovernmental organizations.

The Cancer Control Act promoted multidisciplinary team approach and the development of training for professionals including nurses. The Act also recommended that core cancer treatment hospitals should have trained nurse specialists like Certified Nurse Specialists and Certified nurses, so that they could support cancer patients and their family throughout the cancer treatment [17].

The Japan Society of Cancer Nursing started a "High-quality nurse training program in specialized areas (cancer / diabetes)" by the Ministry of Health, Labor and Welfare as part of the project in 2006. The Society developed a new training program for nurses in oncology area, so that the project could be conducted effectively in each region, thereby contributing to improving the quality of cancer nursing practice [16].

REFERENCES

- 1. Boslaugh, S.E., *Health Care Systems Around the World : A Comparative Guide*. 2013, Thousand Oaks, United States: Sage Publications.
- 2. Population Reference Bureau. *International indicators*. 2019 [cited 2019; Available from: https://www.prb.org/international/indicator/age65/snapshot.
- 3. WHO. *Maternal mortality. levels and Trends 2000 to 2017*. 2019 7/11/2019]; Available from: http://mmr2017.srhr.org/.
- 4. WHO. *Global Health Expenditure database*. 2018 8/11/2019]; Available from: https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=TO-AU.
- 5. OECD. *Alcohol consumption (indicator)*. 2020 6/1/2020]; Available from: https://doi.org/10.1787/e6895909-en/.
- 6. OECD. *Daily smokers (indicator)*. 2020 6/1/2020]; Available from: https://doi.org/10.1787/1ff488c2-en/.
- 7. OECD. "Non-medical determinants of health", OECD Health Statistics (database). 2020 6/1/2020]; Available from: https://doi.org/10.1787/data-00546-en/.
- 8. OECD. Overweight or obese population (indicator). 2020 6/1/2020]; Available from: https://doi.org/10.1787/86583552-en/.
- 9. WHO. *Prevalence of insufficient physical activity among adults. Data by country*. Global Health Observatory data repository 2018 27/11/2019]; Available from: http://apps.who.int/gho/data/node.main.A893?lang=en.
- Statista Research Department. Number of fatalities in Japan 2017, by cause of death. 2019 7/1/2020]; Available from: https://www.statista.com/statistics/624209/japan-leading-death-causes/.
- 11. International Agency for Research on Cancer. *Cancer Today Fact sheet*. 2018 27/11/2019]; Available from: https://gco.iarc.fr/today/fact-sheets-populations.
- 12. History of Cancer Control in Japan https://ganjoho.jp/data/reg_stat/statistics/brochure/2011/cancer_control_en.pdf
- 13. Cancer Control Measures https://www.mhlw.go.jp/english/wp/wp-hw5/dl/23010222e.pdf
- 14. Education for nurses https://www.nurse.or.jp/nursing/education/nintei/index.html
- 15. Japan Associatin of Nursing Program in Universities http://www.janpu.or.jp/download/pdf/koudo list.pdf
- 16. Japanese Society of Cancer Nursing http://jscn.or.jp/rule/index.html
- 17. Overview of Cancer Control Act https://www.mhlw.go.jp/english/wp/wp-hw4/dl/health_and_medical_services/P73.pdf