

### Meeting Report

# UICC International Session: What are the implications of sharing the concept of Universal Health Coverage for cancer in Asia?

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The Japan National Committee for the Union for International Cancer Control (UICC) and UICC - Asia Regional Office organized an international session as part of the 74th Annual Meeting of the Japanese Cancer Association on the topic "What are the implications of sharing the concept of Universal Health Coverage for cancer in Asia?" Universal Health Coverage (UHC) is included in the United Nations' Sustainable Development Goals and aims to ensure that all people can receive high-quality medical services, are protected from public health risks, and are prevented from falling into poverty due to medical costs or loss of income arising from illness. The session discussed the growing cost of cancer and the challenges that this poses to the establishment and deployment of UHC in the Asian region, where countries face budgetary and other systemic constraints in tackling and controlling cancer. It was noted how sharing concepts on UHC will assist mutual learning among Asian countries and help in the formation of guidelines that can be adapted to national and regional realities. Presentations included a status report on UHC for cancer control in Thailand, and a report from the WHO Kobe Centre concerning prospects for collaborative research on UHC. Also discussed were the current status of cancer burden and control in China and Korea and Japan's progress in systemizing cost-effectiveness evaluation. The final presentation highlighted the importance of gathering social and economic data across Asia in order to build a picture of commonalities and differences in the region.

he Union for International Cancer Control (UICC) is a membership organization that exists to help the global health community accelerate the fight against cancer. Founded in 1933 and based in Geneva, UICC's growing membership of over 760 organizations across 155 countries features the world's major cancer societies, ministries of health, research institutes, and patient groups. Together with its members, key partners, the WHO, World Economic Forum, and others, UICC is tackling the growing cancer crisis on a global scale. As part of the official program of the 74th Annual Meeting of the Japanese Cancer Association the Japan National Committee for UICC and UICC - Asia Regional Office (ARO) organized an international session to discuss the topic "What are the implications of sharing the concept of Universal Health Coverage (UHC) for cancer in Asia?" The UICC International Session was held shortly after the historic adoption of the 2030 Agenda for Sustainable Development by the United Nations (UN), in which UHC is included among the Sustainable

Development Goals. The objectives of UHC are to ensure that all people can receive high-quality medical services, are protected from public health risks, and are prevented from falling into poverty due to medical costs or loss of income arising from illness. These objectives accord with the principles of the UICC World Cancer Declaration. An urgent challenge facing cancer specialists is to share a common awareness of UHC, given that cancer faces unique difficulties for the establishment and deployment of UHC. Cancer in Asia is characterized by its diversity and difficulty in sharing measures due to differences in medical care standards. The session sought to share concepts on UHC that will serve to assist mutual learning among Asian countries according to their level of development. Experts in various fields and from the countries of China, Korea, Japan, and Thailand gave presentations. The session was co-chaired by Hideyuki Akaza, Strategic Investigation on Comprehensive Cancer Network, Interfaculty Initiative in Information Studies/Graduate School of Interdisciplinary

Information Studies, University of Tokyo (Tokyo, Japan), Xishan Hao, Chinese Anti-Cancer Association (Tianjin, China), and Jae Kyung Roh, Yonsei Cancer Center, Yonsei University College of Medicine (Seoul, Korea).

# Introduction: The Purpose of the UICC International Session

Hideyuki Akaza noted that rapid economic growth and prolonged life expectancy in Asia have resulted in the emergence of an aging society. This aging society has resulted in an increase in cancer incidence and expanding medical costs.

Furthermore, there are different levels of health-care standards and investment in social security in Asia has created unbalanced medical equity. Diverse physician and patient views with regard to cancer treatment also arise through different socio-economic backgrounds and cultural differences.

On September 25, 2015, the United Nations adopted the 2030 Agenda for Sustainable Development. These 17 sustainable development goals (SDGs) and 169 targets will drive efforts to end extreme poverty and fight inequality. They also represent a historic moment for the non-communicable disease (NCD) community.

The third of the SDGs states:

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.<sup>(1)</sup>

In addition, one of the targets included in the Agenda is:

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

This represents a concrete commitment to UHC by the UN. Various countries are adopting reforms toward UHC.

When we consider cancer we have to address both economic issues and the emergence of aging societies. The ratio of mortality to incidence is very high in low income countries, rising to as high as 80% for some cancers. The issue of the aging society is also presenting challenges for UHC. Already in Japan, in 2015, the proportion of the population over 65 years of age is over 25%. Consideration will need to be given to how to respond to increased cancer incidence due to the aging of society.

In the specific case of prostate cancer in Japan, the great majority of cases (70–80%) emerge in patients 65 years and older. It can naturally be expected, therefore, that an aging society will experience an upturn in cancer incidence. This increase in incidence also entails increases in treatment costs. New agents for prostate cancer are emerging, but all of these are expensive.

Indeed, recent medical developments have seen increases in the provision of more expensive types of treatment to treat conditions that were previously untreatable. In addition, these new drugs are being used to treat people who would previously have been untreated. The reasons for this are the increasing safety of intervention, more acceptable and less invasive interventions, changing attitudes to chronological age as a reason for refusing treatment, and changing expectations about health and disease.

Asian countries present a diversity of economic levels and health-care resources. In an article submitted to *The Lancet Oncology* in 2013,<sup>(2)</sup> a study reported on the treatment of clinically localized prostate cancer according to the level of health-care resources, divided by "basic level," "limited level," "enhanced level," and "maximum level." The therapeutic costs for prostate cancer vary considerably according to these levels and "maximum level" treatment may be difficult for countries to provide.

The economic burden of cancer in Asian countries was discussed at the UICC-ARO Session at the UICC World Cancer Congress in Melbourne, Australia, in December 2014 and also at a UICC-ARO and UICC Japan roundtable meeting. The details of the roundtable discussion in Melbourne were subsequently published in the *Asian Pacific Journal of Cancer Prevention.* (3)

The discussions at this UICC International Session will continue the discussions that took place in Melbourne in 2014, with various speakers addressing the issue from various perspectives.

# How Does a Middle Income Country Like Thailand Provide Universal Access to Cancer Prevention, Treatment, and Care Under the UHC Policy?

Suwit Wibulpolprasert (International Health Policy Program, Ministry of Public Health, Thailand) noted that it is very timely to discuss UHC given increasing pressures on health-care systems due to increasing incidence and aging. He noted that Thailand may provide a good example of how a middle income country has worked to provide universal access to cancer prevention, treatment, and care.

Thailand has had UHC since 2002. At that time per capita gross domestic product (GDP) was a mere \$US1900. The Government is committed to UHC, and currently 17% of the total national budget is spent on health. Out-of-pocket payment is 12% of total health expenditure. The total health expenditure represents <6% of GDP. There is universal population coverage, and health care is provided free at point-of-service, with negligible co-payment requirements. Services are comprehensive, including prevention and promotion and essential drugs, including anticancer drugs. In terms of coverage for cancer, the main items for coverage are cancer prevention, screening, treatment, and palliative care.

Thailand has limited resources and therefore it focuses strongly on cancer prevention activities. For example, there is strict control of tobacco and alcohol, through the Tobacco Control Act (1992) and Alcohol Control Act (2007). There is also a "sin tax" that stipulates an addition 2% levy on excise tax on tobacco and alcohol products, which is provided to the Health Promotion Fund managed by the Thai Health Promotion Foundation, the chair of which is the Prime Minister. The fund receives approximately \$US115 million each year. Vaccines are being provided for hepatitis B and human papilloma virus vaccination programs are also currently being piloted in Thailand, with a view to expanding coverage nationwide.

With regard to cancer screening, currently only Pap-smears and visual inspection with acetic acid are covered for persons aged 30–60 years every 5 years. These efforts have accomplished 68% coverage in 2013. Measures are being taken to explore colorectal and gastric cancer screening for high risk populations, as well as once-in-a-lifetime hepatitis B screening and the use of the American Stop Smoking Intervention Study for Cancer Prevention for tobacco and alcohol screening under

UHC. Mammography screening is not considered cost-effective under UHC and delivery capacity is not affordable.

When UHC was launched in Thailand in 2002, cancer treatment was not initially covered. However, from 2005 cancer treatment was included under UHC due to high demand and the cancer treatment network has since expanded. There are currently 22 networks and 641 centers around the country. The provider is paid through diagnosis-related groups in a bundled payment. Standard protocols for priority cancers have been developed since 2008, in cooperation with the Cancer Association of Thailand, and there are now 12 protocols in place. Payment for treatment is fixed, based on diagnosis-related groups (inpatients) and fee schedules for the protocol (outpatients). The fee schedule system was developed learning from the system in operation in Japan. High-price drugs are being paid for separately. The total cost of cancer treatment in the UHC system of Thailand was 6% of the total UHC budget in 2014, which is less than the burden of disease for cancer in Thailand.

The UHC system in Thailand does not include all cancer drugs that are registered in Thailand in its benefit package, unlike in Japan, where all registered drugs are covered. Of the more than 2000 drugs registered in Thailand, there are a total of 735 drugs on the national essential drugs list, which is subdivided into lists, ranging from A to E. List D items (139 items) are medicines that require expert diagnosis and include high-price anticancer drugs. List E items (42 items, divided into E(1) and E(2)) include very highly priced specialized medicines that require pre-approval, including anticancer drugs, such as trastuzumab and letrozole, which have recently been added to the list. Seven of these List E medicines are under compulsory licensing due to a failure in negotiations with pharmaceutical companies.

For the reimbursement of highly priced anticancer drugs, a central bargaining system is in place, with central government procurement being implemented for List E(2) items (including seven anticancer drugs), with the medicines being distributed through vendor-managed inventory to the medical facilities. List D items (16 anticancer drugs) are procured through local purchasing, with the medical institutions being reimbursed in cash, within the price negotiated through central bargaining. The Health Intervention and Technology Assessment (HITA) program is often used to support price negotiations with pharmaceutical companies as means of seeking cost-effective provision in the Thai health-care setting. For example, in the case of oxaliplatin, the original price was set at THB8000. However, the use of HITA showed that the threshold price that would make oxaliplatin cost-effective in the Thai setting was THB5000 THB. The government then negotiated a reduced price of THB2500 THB with the drug company, in line with government budget limitations. The government engages in these central negotiations in order to ensure that high price drugs are available for patients in Thailand.

When the abovementioned centrally based price negotiations fail, it is possible for government-use licenses (GUL; compulsory licensing) to be implemented (under the stipulations of TRIPS Article 31b, and the Patent Act of Thailand, Article 51). The government has implemented GUL for seven essential medicines, including four antineoplastic drugs. The implementation of GUL has had the effect of achieving considerable price savings and provides a stimulus to pharmaceutical companies to engage in price negotiations.

In terms of palliative care, the National Palliative Care Strategy was approved by the National Health Assembly and Commission in 2014. This strategy focuses on family- and

community-based care, supported by health facilities. Financial support is provided under UHC for pain treatment, oxygen, and chronic ulcers. The palliative care network now extends to 65 nodes with 549 centers and 363 friendship (self-help) nodes with 1618 centers.

Remaining challenges for Thailand include the formation of a cancer registry. Risk factors still exist, although tobacco use has decreased to 18–19% of the population. One of the biggest challenges is to expand services, incorporating protocols, surgery, pathology, radiology, oncology, and palliative care. Further efforts also need to be made to respond to the issue of very high-priced drugs. Another challenge is to fully harmonize the three major health insurance funds in Thailand under UHC.

**Discussion.** A participant from Kumamoto, Japan, referred to the constantly increasing cost of drugs and asked if Thailand engages in efforts to evaluate the cost effectiveness of new drugs, in a similar way to the National Institute for Health and Care Excellence (NICE) in the UK. He noted that there is no mechanism in Japan to evaluate cost effectiveness.

Suwit Wibulpolprasert responded that HITA program is positioned within the Ministry of Health of Thailand and has cross-linkage to NICE. The HITA program is used as a means of working closely with colleagues across the region to evaluate cost effectiveness. In Thailand, items for evaluation also include budget impact, drug delivery, and equity of access, in addition to cost effectiveness. There are now 22 radiotherapy centers all over Thailand and the private sector is being increasingly involved, at a price that is the same as those services provided by the public facilities.

Jae Kyung Roh (Yonsei University College of Medicine, Korea) added that in Korea there is a very similar system, where the Health Insurance Reimbursement Agency (HIRA) determines cost effectiveness, in a similar manner to NICE.

Suwit Wibulpolprasert noted that HITA works closely with National Evidence-based healthcare Collaborating Agency and HIRA of Korea and it is likely that collaboration will continue to increase in the future.

## Advancing NCDs in UHC and Possible Role of WHO Kobe Centre

Shinjiro Nozaki (WHO Kobe Centre, Japan) noted that in September 2015 the UN adopted new SDGs in the 2030 Agenda for Sustainable Development. The government of Japan has placed priority on global health governance and healthy aging and recently a WHO Global Forum on Innovations for Ageing Populations<sup>(4)</sup> was held at the WHO Kobe Centre. When considering UHC and healthy aging, NCDs are a major target, and in 2011 the UN General Assembly adopted the Political Declaration for Prevention and Control of NCDs. The WHO is engaged in a variety of operations and initiatives to tackle NCDs.

On October 1, the WHO published the first World Report on Health and Aging. (5) In this report, NCDs are a major target for research and program implementation. The WHO definition of UHC is as follows:

Universal health coverage (UHC) is defined as ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.

This definition of UHC embodies three related objectives: (i) equity in access to health services – those who need the

services should get them, not only those who can pay for them; (ii) that the quality of health services is good enough to improve the health of those receiving services; and (iii) financial-risk protection — ensuring that the cost of using care does not put people at risk of financial hardship.

All member states of the WHO have endorsed the definition of UHC and the WHO is developing a plan of action for the future. Universal health coverage provides a good opportunity to rethink and re-orient health systems and the WHO is considering the following approaches: (i) emphasis on prevention and health promotion and quality of services; (ii) community engagement and person-centred approaches; (iii) defining services, including rehabilitation and palliative care; (iv) integration within health systems and across sectors, including considerations of well-being in addition to health; (v) priority for most vulnerable groups; and (vi) health financing and social safety nets, with effective policy coherence. The major agenda items for UHC are: (i) health service delivery; (ii) follow-up for Millennium Development Goals; (iii) health-care financing; (iv) human resources for health; and (v) affordable and accessible medicines and health technologies.

The government of Japan has launched a new strategy on global health diplomacy in 2013 and this policy will be a focus for the G7 Health Ministers' meeting in 2016 in Japan. In discussions with the government of Japan, the WHO has suggested that it would be beneficial for Japan to share useful lessons from its experiences with other countries, including comprehensive health services for citizens, universal health insurance system, long-term care insurance, medical expenditure control system, and innovation for NCDs. Japanese society entered the era of the super-aged society in 2007 and in 2012 it is estimated that 24.1% of the population is aged 65 years and over. The aging society will create new health needs and opportunities for early prevention and health promotion (particularly for NCDs), and Japan is well positioned to share its experiences.

In other Asian countries also, the aging society has already started or is projected to start in the near future. Aging societies create new social and health needs. These include the need for financing strategies and incentives, NCD prevention and control initiatives, and community models of care and support. Given the new needs arising in aging societies, the government of Japan has proposed a new Nippon Initiative on UHC.

The WHO Kobe Centre is expected to become a think-tank within the WHO, which will have convening power. The Kobe Centre is looking to act as an interface across the issues of UHC, innovation, and aging, with cross-cutting research activities and other emerging issues (e.g. dementia). Linkage with the Japanese government's Nippon Initiative on UHC is also planned and the center is seeking to collaborate with Japanese and international academic institutions. In addition, an annual global forum on UHC, innovation, and aging is also planned.

**Discussion.** Jae Kyung Roh noted that usually the WHO and the World Bank tend not to be oriented to Asia. He requested that the WHO Kobe Centre work to identify methods of engaging in research that is more relevant to Asia.

Shinjiro Nozaki responded that the WHO Kobe Centre is a global research center and is not able to focus exclusively on issues facing a certain region. However, there are moves to identify subthemes for research and establish research priorities. There are plans to hold a consultation on a future research agenda for the center and this consultation exercise will

include experts and academics from various countries, including emerging economies in Asia.

#### Cancer Burden and Control in China

Xishan Hao (Chinese Anti-Cancer Association, China) noted that the global cancer burden has continued to grow and cancer is now a significant cause of mortality in many countries. There are differences between incidence and mortality between countries. In developed countries the mortality rate is less than the incidence rate, but this situation is reversed in developing and emerging countries.

In urban China, between 1990 and 2011, the proportion of all deaths caused by cancer rose from 21.9% to 27.8%. In the case of rural China, the proportion increased from 17.5% to 23.6% over the same period. From 1989 to 2008 the cancer incidence for all cancers has increased from 184.81 per 100 000 population to 286.69. This figure suggests that one in four people in China will experience cancer during their lifetime.

As already noted by Hideyuki Akaza above, cancer is an age-related disease and cancer incidence increases along with increases in the population's mean age. The top cancer incidence and mortality rates in China for men are lung, stomach, liver, colorectal, and esophagus; for women, they are breast, lung, colorectal, stomach, and liver (China Health Statistics Yearbook 2011).

In terms of challenges for cancer control in China, the major challenge is to reduce lifestyle-related risk factors. Nearly one-third of the world's smokers live in China and the male smoking rate still stood at 52.9% in 2010. The government of China has recently decided to engage in further measures to strengthen tobacco control. In terms of perceptions of cancer, a study has shown that people in China tend to perceive cancer pessimistically or fatalistically, with 43% of Chinese people responding that "cancer = death."

In terms of other efforts at cancer control, the government's program of vaccination for hepatitis B has resulted in a reduction in the prevalence rate of hepatitis B surface antigen carriers in children aged <5 years from 9.6% in 1992 to 0.96% in 2006.

The Chinese National Breast Cancer Screening Program (2008–2009) provided free screening services to asymptomatic women in regions of 30 provinces, as part of the Early Detection and Early Treatment of Cancer program. The goals of the Chinese National Breast Cancer Screening Program included: (i) to perform breast cancer screening among the high-risk-age population and to promote women's health at the community level; (ii) to improve the doctor's screening skills in local areas and to establish cancer primary prevention and health-care systems; and (iii) to develop screening strategies for breast cancer prevention in China. The program was government-funded and targeted women aged between 35 and 69 years. A total of 910 830 women were screened and 466 cancer cases were detected. This study confirmed that early detection and proper treatment is essential for breast cancer.

The second phase of breast cancer screening was implemented through the Multi-modality Independent Screening Trial (2008–2010. Eligible women were examined by clinical breast examination, mammography, and breast ultrasound, concurrently. The proportion of early-stage in screening-detected breast cancer was larger than that found in clinical-detected breast cancer. Smaller cancers with less lymphatic metastasis were also found in screened cancer. (8)

In China, further efforts are planned in expanding UHC and China will continue to work in collaboration with other countries.

**Discussion.** Jaeyong Shin (Yonsei University College of Medicine, Korea) asked whether there are plans in China to expand the cancer screening plan to gastric cancer or colorectal cancer. With regard to anticancer drugs, he asked whether there are regional disparities concerning the drugs that are available.

Xishan Hao responded that China has 31 provinces, each of which has their own policies concerning health-care, although UHC programs are not very advanced. The central government provides funds to provincial governments to organize their own programs. In terms of screening for gastric and colorectal cancer, while it would undoubtedly be valuable to engage in research and screening, there are few national government grants available. On the local level, various gastric and colorectal cancer screening studies are underway.

# Korean Experiences of UHC and Cancer Control – Focusing on the National Cancer Screening Program

Eun-Cheol Park (Yonsei University College of Medicine, Korea) noted that the National Cancer Screening Program (NCSP) was launched in 1999. The background to the launch of the NCSP was the increasing burden of cancer in both epidemiologic and economic aspects. In 1999 the cancers with the highest incidence were stomach, lung, liver, colorectal, breast, and cervical.

In 1999, screening was launched for stomach, breast, and cervical cancer, but covered initially just 3% of the population, although Medical Aid covered all costs. In 2002, the program was extended to a larger proportion of the population and the costs were covered by Medical Aid and health insurance premiums. The program was expanded to include liver cancer screening in 2003 and colorectal cancer in 2004. Within a period of 6 years, from 1999 to 2005, UHC was achieved for cancer screening for five cancers in Korea.

Over the course of 10 years, since 2004, the participation rate in screening for cancer has increased overall from 38.8% to 67.3% and most screening is implemented as organized, rather than opportunistic, screening.

National screening guidelines were developed in 2002 by the Ministry of Health and Welfare, with the cooperation of the National Cancer Center and academic societies, which set out the content of services for screening and the target age range.

In terms of cost-effectiveness of screening, one characteristic of screening in Asia is the low cost-effectiveness of breast cancer screening in comparison to Western countries. This is attributable to the lower rate of incidence of breast cancer in Asia.

From 2005 an initiative was launched to develop guidelines for screening quality in breast and other cancers. A pilot project was implemented in five hospitals from 2006 to 2007 and a major project was implemented for 3 years from 2008 in general hospitals and clinics, with a total of 2000 screening units. Cancer screening units were subject to a 13-point evaluation, with each unit being provided with feedback. The result of this initiative was a significant increase in the sensitivity of the NCSP for breast and liver cancers.

The contributing factors to Korea's successful achievement of UHC in cancer screening are the fact that universal coverage under national health insurance and Medical Aid already covered the population. The 10-Year Plan for Cancer Control and government initiatives also helped to drive UHC in cancer screening to a successful conclusion. Universal health coverage

in cancer screening has helped to improve the 5-year relative survival rate for all cancers and screening participation rates have also increased.

In terms of further challenges, there is a need for evidence-based guidelines in Korea and efforts will be required to further boost the quality of screening. Thyroid cancer has been increasing in incidence in recent years and measures for screening for this type of cancer are needed. It will also be of particular importance to share experience among Asian countries to further improve guidelines and make them relevant to the Asian context.

**Discussion.** Hideyuki Akaza asked what measures are being implemented for screening of prostate cancer in Korea.

Eun-Cheol Park responded that new guidelines have recently been issued, which have added lung, thyroid, and prostate cancer screening. The final recommendations of the new guidelines stipulate that screening for thyroid and prostate cancer should be provided to high-risk populations.

Jae Kyung Roh added that the blood test for prostate cancer is very simple and it would be advisable to include screening for prostate cancer in the national program. In addition, for colorectal cancer it would be more effective, although more expensive, to include endoscopy as part of the screening program.

#### Cost Effectiveness of Cancer Care in Japan

Takashi Fukuda (National Institute of Public Health, Japan) noted that, according to the WHO World Health Report 2010, (9) there are three dimensions to consider when moving towards universal coverage. These are direct costs (proportions of the costs covered), services (which services are covered?), and population (who is covered?). Ideally, the concept of UHC is achieved when all individuals are covered and can receive all kinds of care with no limitation on health-care budget.

In Japan the public health insurance scheme covers the whole population. However, there are approximately 3000 health insurance bodies. Some of them are occupation-based, for example, a large company organizes its own health insurance body, and some are community based. People in Japan have to join one of the health insurance bodies. In 2010, Annual Medical Expenditure is \(\frac{4}{3}\)7 trillion, which is approximately 8.3% of GDP.

Medical expenditure has continued to increase by approximately \( \)1 trillion every year. One of the reasons for increasing medical expenditure is population aging. The proportion of elderly people occupies 23% of the whole population. However, another big reason is increasing technologies in health care, such as advanced medical equipment and new drugs.

In terms of the funding sources for medical expenditure, less than half (49%) of the expenditure is borne by health insurance premiums. Thirty-eight percent of the expenditure is paid by tax from the central and local governments. The proportion of tax payment is increasing every year. Patients' out-of-pocket payments account for approximately 13% of total expenditure.

Expenditure is increasing in Japan not only due to population aging, but also due to innovation of new technologies, with new advanced diagnostic and treatment technologies having been introduced. If insurance premiums or tax funding are limited, it will be necessary to consider efficient use of the health-care budget.

If a new technology is more effective compared to the old one, it should be covered by health insurance schemes that cover the whole population. In this case, people must agree to bear increasing expenditure. Conversely, it may be possible to prioritize cost effective technologies. Health insurance coverage decisions and reimbursement prices are determined by the Ministry of Health, Labor and Welfare and are not dependent on health insurance bodies. Prices are revised every 2 years and the Ministry has to consult with the Central Social Insurance Medical Council (CSIMC).

In terms of debate with CSIMC, the Cost Effectiveness Evaluation Committee was established in April 2012, including health-care insurers and providers, as well as members of government, industry, and medical experts. The issues discussed by the committee are: (i) a basic concept for a system for cost-effectiveness evaluation; (ii) operational process of cost-effectiveness evaluation; and (iii) application of results. To date, a total of 28 meetings have been held.

In June 2015 the government of Japan issued its Basic Policy on Economic and Fiscal Management and Reform 2015, in which it was noted that:

... it will consider the cost-effectiveness of insurance coverage of medicine and medical devices as a way to cope with the sophistication of healthcare. The government will introduce such cost-effectiveness analysis on a trial basis for the FY2016 revision of remunerations for medical treatment. Subsequently, it will seek to promptly introduce cost-effectiveness analysis on a full-fledged scale.

The possible process for evaluation will include: topic selection, primary analysis submitted by manufacturers, review and re-analysis by expert groups, appraisal, and a decision. Economic evaluation will not be the only rule for decision-making, with other aspects, such as ethical and social factors, also being taken into account.

The Cost Effectiveness Evaluation Committee has discussed how to prioritize technologies to be evaluated. It is likely that evaluation will begin with existing medicines and medical devices, in order to avoid delays to insurance coverage.

The methods of analyses include taking into account a health-care payer perspective. In addition, quality-adjusted life years will be a primary outcome measure. Evaluation guidelines will be proposed by the academic members of the committee, with local data being requested from research groups and academic societies in order to support analyses.

In terms of appraisal and decision-making, it is anticipated that a new appraisal committee will be established under the CSIMC. Not only the results of cost-effectiveness analyses, but also ethical and social aspects of the treatment will be considered by the committee. The results of analyses and appraisals will be mainly used for pricing adjustment, not for insurance coverage decisions. Preparations are underway to implement cost-effectiveness analysis on a trial basis from April 2016.

**Discussion.** Shigeo Horie (Juntendo University, Tokyo, Japan) noted that cost-effectiveness analyses mainly focus on critical outcomes, quality-adjusted life years, and medical expenditures. However, he asked how the introduction of a medical device that may improve hospital efficiency overall would be evaluated.

Takashi Fukuda responded that individual technology assessments focus on the results and cost of the treatment. Evaluation of overall hospital efficiency is a separate matter, although it may be discussed within the process.

#### Universal Health Coverage and Interdisciplinary Research: The Significance of Cross-Boundary Cancer Studies

Jae Kyung Roh (Yonsei University College of Medicine, Korea) noted that Asia has huge populations with diverse ethnicity and cancer prevalence is increasing among Asian countries. However, appropriate guidelines for cancer control suited to Asian people are still urgently needed. It is important for Asian countries to prepare guidelines that can respond to diverse socio-economic conditions.

In Korea, cancer become the most common cause of death in 1983. Cancer incidence is increasing rapidly, but the survival rate has also improved significantly during the last three decades. The socio-economic environment of Korea is characterized by a mandatory national health insurance system, coupled with a NCSP and voluntary check-ups for early detection. There is also aggressive competition between the big five hospitals in Seoul. The national lifestyle of Korea has also changed in recent years, with increased urbanization, improved hygiene, and an ongoing Westernization of diet.

The number of cancer patients is increasing by approximately 6% annually, with incidence of breast, colon, thyroid, lung, bladder, and prostate cancers increasing, compared with declines in uterine, cervical, stomach, and liver cancer. Five-year survival rates are up from 41.2% in 1993–1995, to 68.1% in 2008–2012. The improvements that have been achieved over the last three decades are probably due to a number of factors: (i) primary prevention, including education, improved hygiene, and antismoking campaigns; (ii) vaccination for hepatitis B and human papilloma virus; (iii) NCSP for early detection; and (iv) mandatory national health insurance leading to improvement of treatment methods and multimodality team approaches.

The Japan–Korea Bilateral Joint Seminar on Cross-Boundary Cancer Studies Toward the Cancer Cure in Asia was held at Yonsei University, Seoul in February 2014. It was organized by Yonsei University and the University of Tokyo, and was sponsored by the National Research Foundation of Korea and the Japanese Society for the Promotion of Science.

The seminar was held against the backdrop of the increasing incidence of cancer in the Asia-Pacific region and the importance of interdisciplinary research efforts between Asian countries. It provided a common working platform to bring together both medical and non-medical fields. It represented a significant first step towards international and interdisciplinary efforts to be extended to China and the wider Asian region. Interdisciplinary discussions on cancer from medical, pharmaceutical, anthropological, and social points of view sought to create a new knowledge network on existing networks in diverse fields. It is hoped that a second seminar can be held in the near future. (10–12)

#### How do People in Asia Perceive Cancer-Related Issues?

Shigeto Sonoda (University of Tokyo, Japan) noted that his presentation would be discussing public health in general, rather than cancer specifically. He explained that he is from a sociology background and has sought to attempt macroeconomic data to examine commonalities and differences across Asia.

Many people talk about Asia, but the scope and concept of Asia are different from person to person. The concept of the *Asianization* of Asia is that Asia is coming to be viewed and to be understood as a whole. In order to understand Asia from a scientific point of view, it is important to gather data. Unless all countries share a common understanding about the necessity of data collection it would not be possible to gain a full picture about Asia. There is a dynamic relationship between the understanding of Asia and the collection of data. There are

some data archives that have been accumulated to date, including the AsiaBarometer and the East Asia Social Survey.

The information that these data have provided have been interesting and highlighted differences in perceptions within the Asian region. With regard to a question concerning "Relative trust with public health system" that was included in the AsiaBarometer survey, people in different countries gave different responses, with Chinese people indicating a lower level of trust than people in Japan and Korea. Responses to a question about "Relative expectations of government expenditure for public health" also showed significant differences from country to country, with Japan reporting high expectations and China reporting considerably lower expectations.

Commonalities among countries can be found in a cohort analysis of East Asian countries, where it has been found that people's opinions on the perceived importance of health tend to increase with age, while satisfaction with health decreases with age (with Hong Kong being an exception in this case).

The East Asia Social Survey, which was implemented in 2010, focused on public health issues. Even though public health systems have been created, they cannot work properly unless they are effectively utilized; the survey was implemented with the aim of identifying means of making system utilization more effective. In response to the question "How much do you worry about being unable to receive healthcare when needed?" the responses of people in Japan and Korea were similar, whereas a greater proportion of people in China cited great concerns about receiving healthcare. In terms of hindrances to healthcare, differences between Japan, Korea, and China are also very distinct. By looking into the mindsets of people in the different countries of Asia, it may be possible to elucidate ways of enhancing the effectiveness of health-care systems and delivery.

There are various variables that could be included in potential questions in an "Asia Cancer Barometer," including health conditions, health check-ups, and exercise, care management, medical insurance, and socio-economic conditions. The creation of an "Asia Cancer Barometer" will enable study of the social dimensions of cancer in Asia and will empower fruitful cross-national interdisciplinary research on UHC for cancer. It is important to create a common archive of information and exchange ideas in Asia as a means of identifying new directions for cross-boundary research.

#### **General Discussion**

Norie Kawahara (University of Tokyo, Japan) noted that, since 2009, the Asia Cancer Forum has been engaged in the global health agenda. It is truly exciting that the SDGs have been recently adopted by the UN. However, in the cancer community there is still a lack of understanding and consideration about the importance of the UHC. Every year there are remarkable developments in cancer care and treatment, but not everyone can benefit from these advances in medical science. The challenges being faced by developed and developing

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countries are also starting to converge. Around the world, and particularly in Asia, there are concerns that economic growth is slowing. Under this severe situation we need a great degree of intelligence to judge the health economy. It is to be hoped that this session will represent a small step in gathering such intelligence.

Tomoyuki Kitagawa (Japan National Committee for UICC) mentioned a small but important concern in Japan with regard to UHC. He noted that, while he understood the concept of UHC, there is no appropriate Japanese translation for the term "universal health coverage" and even in Japanese language materials it is usually used in its English form. Although the term may be understood by health-care professionals it will be very difficult for members of the public to understand unless an appropriate Japanese translation can be devised, that would also be media-friendly. It is important to make the concept of UHC more understandable in all countries in Asia as part of efforts toward Asianization.

Tetsuo Noda (UICC Board Member, Cancer Institute of Japanese Foundation for Cancer Research) noted that there are many differences between the countries of Asia in terms of cancer treatment and control. However, it is annual meetings, such as this, the 74th Annual Meeting of the Japanese Cancer Association, that provide excellent opportunities for people from different countries and different areas of specialty to come together. It is important for members of the cancer community in Asia to meet together regularly and share information and to make joint efforts to highlight the issues that Asia faces. This UICC international session has made an important contribution in that regard.

Shigeo Horie noted that UHC is an admirable and attractive idea, but it also presents unique challenges for health policy. One factor for this challenge is that there is a lack of facilitation and transition between various aspects of cancer control, including prevention, treatment, and palliative care. The involvement of the general public is also important, particularly in preventive education.

It was also noted that the World Bank and the WHO have jointly developed a set of indicators for assessing the progress of UHC, and these could be utilized in the future. In addition, it was suggested that economic uncertainty could possibly provide impetus towards UHC as it was in the 1997–1998 financial crisis that concern about health-care coverage peaked in Korea, following which UHC for cancer care was implemented.

Shinjiro Nozaki noted that the WHO Kobe Centre will be working to translate WHO documents into Japanese and seeks to advance collaboration with the Japanese government and academic institutions.

Jae Kyung Roh thanked all presenters and attendees and closed the session.

#### **Disclosure Statement**

The authors have no conflict interest.

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