



NEWSLETTER

Federation of Asian Organization for
Radiation Oncology



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Spring
2021

GREETING



Dear FARO Members and Friends,

It is a great pleasure to greet you in this 3rd issue of FARO Newsletter!

It is also a great pleasure to acknowledge our young colleagues of FARO Leadership Development Program who have prepared this 3rd FARO newsletter.

FARO and the world are facing various challenges in the midst of COVID-19 pandemic. However, we are in fact starting to find resilience in ourselves and solutions to cope with the difficulties of the current situation. First, FARO has initiated this Newsletter to update its members and friends about our activities. We have also started “FARO Webinars” at the end of last year and have conducted five successful webinars until April 2021. I believe that these new initiatives will not only help FARO in enduring through this difficult time but also further strengthen the solidarity and the ability to communicate and connect with each other in our future.

Since we started FARO in 2014, we have held our scientific event, FARO Meeting, in 4 countries: Japan (Kyoto, 2016), India (Bengaluru, 2017), Indonesia (Bali, 2018), and China (Shenzhen, 2019). We are continuing our endeavors this year and holding our 5th FARO Meeting on October 1-3 with Philippine Radiation Oncology Society (PROS) as the host, with the theme “Radiating Together for a Stronger Asia.” Although the Meeting will be in a virtual online format, we are hoping to make this event to commemorate our achievement of holding FARO Meeting for the fifth time with the maximum participation. I sincerely hope that we will have your participation in this event!

Finally, I would like to wish that all of you remain safe and healthy in your countries.

I am looking forward to seeing you in the 5th FARO Meeting virtually and in future FARO Meetings in person.

Sincerely,

Takashi Nakano
Secretary General, FARO

Special Report

COVID-19 Vaccine : A Survey From FARO Members

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It has been over a year since the COVID-19 pandemic started^[1] and vaccination programs have been conducted across the globe from the beginning of this year. The regulation and society response to this program may diverse in each country. Some people are fully enthusiastic to get vaccinated while others doubt the importance and safety of COVID-19 vaccines.^{[1][2]} As a feedback to this issue, we took a quick survey in March 2021 from The FARO members to get an insight about COVID-19 vaccination program condition. We got responses from ten countries which are Bangladesh, China, Indonesia, Japan, Malaysia, Mongolia, Pakistan, Philippines, Singapore, and South Korea.

All responders stated that COVID-19 vaccination programs are available in the countries. Since March 2021, they have started the program but its regulations vary in each country. For several countries like Bangladesh and Philippines, it is compulsory to get vaccinated. There is no obligation to join the vaccine program but it is highly encouraged in China and Indonesia. While the other six countries (Japan, Malaysia, Mongolia, Pakistan, Singapore, South Korea) do not oblige their people to be vaccinated.

Although 90% responders stated that the vaccines are publicly funded, yet 54.5% responders were unsure that most of people in their country would likely to get vaccinated. Bangladesh, China, Indonesia, Japan, Malaysia, Mongolia, Philippines, Singapore, and South Korea are the countries that publicly funded their

vaccination program. In Pakistan, the program is publicly and privately funded.

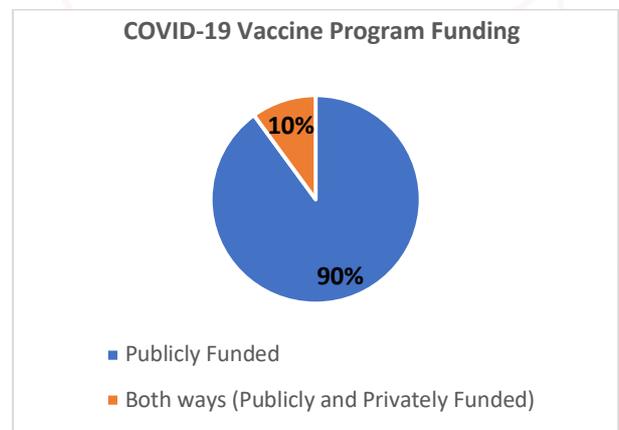


Figure 1. The COVID-19 Vaccine Program Funding

Then it is likely that society doubts are not due to personal costs. Vaccine hesitancy might arise because of limited information about any given vaccine and its safety^[2]. Our 72.7% responders feel safe about the vaccine but 27.3% are still doubt about it. A study based on health belief model shown that the perceived benefit (a perception that vaccination decreases the chances of getting COVID-19) and perceived barriers (not being concerned about the efficacy of new COVID-19 vaccine) were found to have the highest significant factors to make a person want to get COVID-19 vaccine.^[1]

Unfortunately, the number of available vaccines is still limited.^[4] So the WHO recommended three stages of vaccine supply scenario based on epidemiologic setting. Stage one is very limited vaccine availability or its supply just enough for 1-10% national population. Priority groups in this stage are health workers and elderly. Stage

two is limited availability or the supply enough for 11-20% national population. Groups with comorbidities, sociodemographic groups at significantly higher risk, teacher and school staff are priority in stage two. Stage three is moderate availability or enough for 21-50% of national population. Other essential workers outside health and education sectors, pregnant women, and other social group that have elevated risk of transmission are included in stage three priority groups.^[3] All countries in the survey give the vaccine to the priority group first. It might due to limited number of vaccine supply. Therefore, healthcare workers, elderly, and high-risk public service personnel are on the top list of COVID-19 vaccine program.

Every nation has their own vaccine acceptance target based on demographic structure, presence of underlying conditions, number of essential workers, and global vaccine production. An adequate vaccine acceptance is required to reach herd immunity and prevent community spread of COVID-19. At least 60-80% of the world population get vaccinated by the end of 2021 to achieve that goal. It means about 93.6 millions of people from South East Asia and Western Pacific region will be vaccinated.^[4] Result from the survey on March 2021, shown the number of population that has completed vaccination was varied in every country since the differences of each national population. The details are shown in the table below.

Country	Estimated percentage of population has completed COVID-19 vaccine	Estimated total population/targeted population	Estimated number of people get COVID-19 vaccinated
Bangladesh	4%	164,689,383	6,587,575
China	4%	1,439,323,776	57,572,951
Indonesia	9.96%	181,554,465 (targeted population)	18,082,824
Japan	Some medical personnel	126,476,461	-
Malaysia	0.5%	32,700,000	163,500
Mongolia	9.5%	3,278,290	311,437
Pakistan	Healthcare workers only	208,570,000	-
Philippines	2.2%	109,581,078	2,410,803
Singapore	10%	5,690,000	569,000
South Korea	0.9%	51,269,185	461,423

Figure 2. The survey result of estimated population has completed COVID-19 Vaccine (Data as per March 2021)

Since November 2020, 44 vaccine candidates have already entered clinical trial and some have been approved for limited used in general population.^{[5][6]} Some vaccines preference from our survey respondents can be seen in the fig. 3 below.

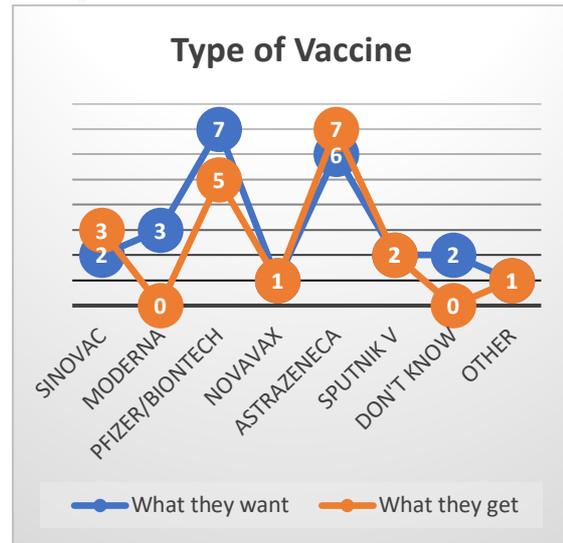


Figure 3. The comparison between the vaccine they want to get and what they actually get

Vaccines can be grouped according to the technological platform that used to elicit a protective immune response. Sinovac and Sinopharm contains inactivated SARS-CoV-2 viruses and need two doses to be effective. Novavax contains spike nanoparticles and matrix adjuvant of SARS-CoV-2 viruses. The Oxford-AstraZeneca, Johnson&Johnson, and Sputnik V based on spike protein DNA carried by adenovirus. While other preferable vaccine brands are mRNA-based vaccine from SARS-CoV-2 itself, such as Moderna and Pfizer/BioNTech.^[5] Pfizer reported 95% efficacy across age, race, and ethnicity. For AstraZeneca vaccine, the efficacy was 62.1% in participants who received two standard-dose vaccines and 90% in those who received a low dose at the first vaccine.^[7] Every vaccine has its characteristic and efficacy. And one might choose it according to their preference and availabilities in each country.

In terms of patient care, 72.7% of our respondents would suggest their patients to be vaccinated. Limited data are available on the safety and efficacy of COVID-19 vaccine in patients with cancer. It is known that patients with cancer have a higher risk of complication and mortality from COVID-19. Thus, a few organizations (NCCN, ASCO, ESMO, SITC) have released their preliminary recommendations supporting vaccination in all patients with cancer, including those receiving active therapy. Except for patients undergoing transplantation or adoptive cell therapy (vaccination might need to be delayed ≥ 3 months) and highly immunosuppressive therapies (might delayed to provide time for immune reconstitution).^[8]

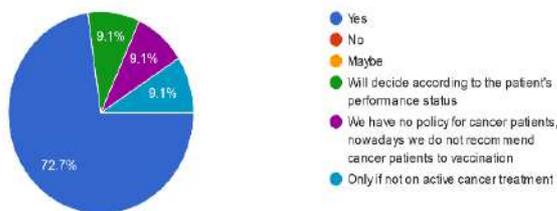


Figure 4. Vaccination Suggestion for Patients

A live COVID-19 vaccine would not be recommended for patients undergoing targeted, cytotoxic, or lymphodepleting therapies. Therefore, mRNA vaccine might be a better candidate for patients with cancer.^[9]

At the end, it is not really known whether the vaccination program will be effective to overcome the pandemic. However, people still give hope that it would be a way out of this global pandemic and to return to normal live.

References

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- [3] World Health Organization. (2021). *WHO SAGE ROADMAP FOR PRIORITIZING USES OF COVID 19 VACCINES IN THE CONTEXT OF LIMITED SUPPLY: An approach to inform planning and subsequent recommendations based upon epidemiologic setting and vaccine supply scenarios*. World Health Organization, pp.14-15.
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FARO ACTIVITY

The 3rd FARO WEBINAR: REPORT
Radiation Oncology Services in Asia
**Hypofractionated Radiotherapy
in Head and Neck Cancer**
During and Beyond the COVID-19 Pandemic



The COVID-19 pandemic issues have emerged in diversifying the resources needed to care for infected patients and put a noteworthy hassle on the cancer care system. Head and neck cancer (HNC) management require a multidisciplinary and resource-intensive approach; hence, HNC therapy is particularly vulnerable to the resource constraints correlated with the COVID-19 pandemic. HNC patients are also at higher risk of infection due to their therapies' immunosuppressive effects; multiple trips to the care center and transfers through various departments within the hospital, which is required over several weeks. However, the mitigation strategy should be addressed through in-depth analysis and discussion by the experts to have a prolific movement in managing HNC patients adequately amidst the pandemic, including adjusting the therapy fraction given.

Following the previous webinar series, the 3rd webinar FARO organized by the Indonesia Radiation Oncology Society (**IROS**) and their residents' association (**IRORA**) has successfully achieved its objectives in identifying recommendations for radiation oncologists treating head and neck cancer (HNC) in a time of finite resources and facilities availability.

With more than 400 hundred colleagues attending, the webinar also successfully drew many colleagues' attention from other than the 14 countries FARO members, who were from **Asia** (Cambodia, Macau), **Europe** (UK), and **America** (US, Canada, Brazil). The webinar broadcasted live through Zoom Webinars and YouTube platforms, which later the recordings can be accessed at:

bit.ly/IROSYOUTUBE

The discussion was led by Prof Qazi Mustaqh Hussain (Bangladesh), followed by lecture by Prof Kenneth Hu (USA), followed by case discussion and insights from the panelists. The two COVID-19 radiation therapy practice scenario approaches were in the early pandemic (risk mitigation) recommendation

is to continue to use of concomitant chemotherapy with conventional fractionation, and in the later pandemic situation (limited human resources and facilities) to use a hypofractionated radiation schedule.

Nevertheless, the hypofractionation schedule seems unpreferable for nasopharyngeal cancers. NPC patients have a small therapeutic window and are at risk for multiple late toxicities, such as: cranial neuropathy, temporal lobe necrosis, radiation-induced fibrosis, and dental issues. The IAEA Resource Sparing Curative Radiotherapy, Accelerated Hypo- vs. Normofractionated Radiotherapy for Locally Advanced Squamous Cell Cancer of the Head and Neck: The HYPNO trial (HYPNO) also excludes the NPC, and the data for hypofractionation is severely limited. Therefore, under COVID-19 pandemic conditions, conventional fractionation is still being the preferred treatment. As for hypofractionation scheme for other H&N cancer, regimens of 55 Gy in 20 fractionations or 64 Gy in 25 fractionations seems to be the most favored. Concurrent chemotherapy during hypofractionation can be delivered if the radiation dose is no more than 2.4 Gy.

Though hypofractionation for orofaringeal and laryngeal cancers seems to give promising results in the early experiences, more data is still needed from RCT trials on this matter. Such long-term toxicity/quality of life/function preservation data needs to be collected for further evaluation.

The third FARO meeting virtually has left a conducive and meaningful knowledge. As the COVID-19 continues emerging, radiation therapy management care is faced with many unforeseen challenges requiring adjustment of the protocols. Thus, sharing the information with the speaker, panelists, and participants gave the potential future development in radiotherapy practices for HNC management care. The hypofraction regimen, even after the COVID-19 pandemic, could benefit the patient worldwide, especially countries in the South-East Asian region that have an immense volume of patients.



GREETINGS from Participating Organization



INDONESIAN RADIATION ONCOLOGY SOCIETY (IROS) PROFILE

website: www.pori.or.id

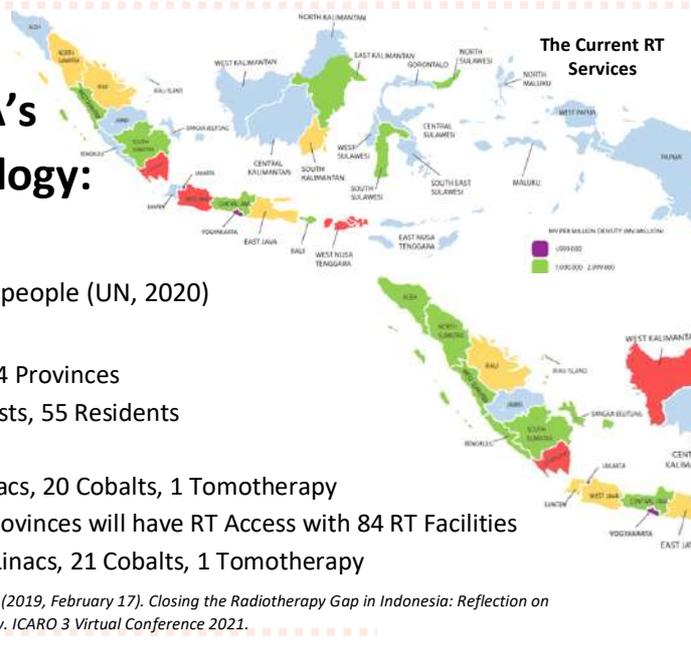
A Brief Look into INDONESIA's Radiation Oncology:

Population: **273,523,615** people (UN, 2020)

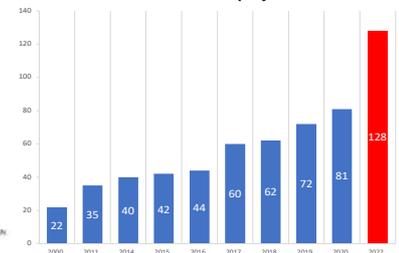
Radiotherapy Coverage: *

- Available in 16 out of 34 Provinces
- 123 Radiation Oncologists, 55 Residents
- 47 RT Facilities
- 81 RT Machines; 60 Linacs, 20 Cobalts, 1 Tomotherapy
- In 2022, 26 out of 34 Provinces will have RT Access with 84 RT Facilities
- 128 RT Machines; 106 Linacs, 21 Cobalts, 1 Tomotherapy

*Gondhowiardjo S, Jayalie VF, Octavianus S. (2019, February 17). Closing the Radiotherapy Gap in Indonesia: Reflection on National Roadmap Program from the Society. ICARO 3 Virtual Conference 2021.



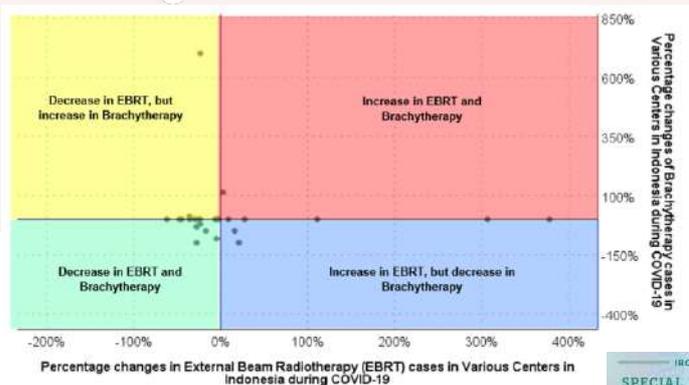
The growth of Radiotherapy in Indonesia: number of machines 2010-2020 and projection in 2021-2022



OUR COVID-19 RESPONSE

International publications on the COVID-19 impact in our country.

Handoko, et al. Ensuring safety and sustainability of radio-therapy services during the COVID-19 pandemic in resources constrain country: An Indonesian Experience. *Radiation Therapy and Oncology* 150 (2020); 57-60.



IROS Guidelines

in response to COVID-19 Pandemic



Journal of the Indonesian Radiation Oncology Society

Follow our Instagram account:

@pori.iros

for informations and join us on our monthly IROS Webinar series!



FARO WEBINAR SERIES

COMING SOON

THURSDAY, 27 MAY 2021



THE 6TH FARO WEBINAR
RECENT ADVANCES IN
RADIOTHERAPY OF BREAST CANCER:
HYPOFRACTIONATION AND IMRT

REGISTRATION LINK
<http://bit.ly/IROSROOM21st>



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Advancing
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CONTACT

IROS Secretariat
 por.i.ros@yahoo.com

5th FARO MEETING
 A Virtual Conference

Save The Date

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FOR A STRONGER ASIA

1 - 3 October 2021

Register yourself at <https://meet.faro-asia.org>



LIST OF EVENTS

EVENTS	DATE	CONGRESS VENUE	HOST / Registration Link
The 5th FARO Webinar “The New Classification and Treatment Strategy for Recurrent head and neck cancer”	22 April 2021	Virtual	Hosted by CSTRO
FARO Webinar “Updates of Radiotherapy for Breast Cancer”	27 th May 2021	Virtual	Hosted by KOSRO Registration link: http://bit.ly/IROSROOM21st
FARO Webinar “Recent Advances in Bladder Cancer Radiotherapy”	June 2021	Virtual	Hosted by SLCO
FARO Webinar “Value-based Medicine in Radiotherapy”	July 2021	Virtual	Hosted by MOS
The 5th FARO Meeting	1-3 October 2021	Virtual	<u>Hosted by the Philippines (PROS)</u> <u>Registration link:</u> https://meet.faro-asia.org
FARO Webinar “Proton Therapy for Paediatrics and Preservation of Fertility”	August 2021	Virtual	Hosted by JASTRO
FARO Webinar “Hippocampal avoidance-WBRT + Memantine vs SRS in Brain Metastasis/ SBRT in Oligometastasis”	November 2021	Virtual	Hosted by THASTRO
FARO Webinar “SBRT in Liver”	December 2021	Virtual	Hosted by MOSTRO

FARO MEMBERS ORGANIZATIONS

 	<p>Bangladesh Bangladesh Society of Radiation Oncologists (BSRO) http://www.bsro.info/</p>	 	<p>Mongolia Mongolian Society for Radiation Oncology (MOSTRO)</p>
 	<p>China Chinese Society of Therapeutic Radiation Oncology (CSTRO) http://www.csro.org/</p>	 	<p>Myanmar Myanmar Society for Radiation Oncology (MSTRO) https://www.mmcentral.org/societies/myanmar-society-for-radiotherapy-oncology/</p>
 	<p>India Association of Radiation Oncologists of India (AROI) https://aroiwb.org</p>	 	<p>Pakistan Pakistan Society of Clinical Oncology (PSCO) https://psco.com.pk</p>
 	<p>Indonesia Indonesian Radiation Oncology Society (IROS) http://www.pori.or.id/</p>	 	<p>Philippines Philippines Radiation Oncology Society (PROS) www.pros.org.ph</p>
 	<p>Japan Japanese Society for Radiation Oncology (JASTRO) https://www.jastro.or.jp/en</p>	 	<p>Singapore Singapore Radiological Society (SRS) http://srs.org.sg/</p>
 	<p>Korea Korean Society for Radiation Oncology (KOSRO) https://eng.kosro.or.kr</p>	 	<p>Sri Lanka The Sri Lanka College of Oncologists (SLCO) http://slco.lk/</p>
 	<p>Malaysia Malaysian Oncological Society (MOS) https://mymos.my/</p>	 	<p>Thailand Thai Association of Radiation Oncology (THASTRO) https://www.thastro.org/en/</p>

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