

Asian Radiology Forum 2015 for Building an Asian Friendship: A Step toward the Vigorous Intersociety Collaboration in Asia

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According to the reports presented at the Asian Radiology Forum 2015, organized by the Korean Society of Radiology (KSR) during the Korean Congress of Radiology (KCR) in September 2015 in Seoul, there is an increasing need to promote international exchange and collaboration amongst radiology societies in Asian countries. The Asian Radiology Forum was first held by KSR and the national delegates of Asian radiological partner societies, who attended this meeting with the aim of discussing selected subjects of global relevance in radiology. In 2015, current stands, pros and cons, and future plans for inter-society collaboration between each Asian radiological partner societies were primarily discussed. The Asian radiology societies have international collaborations with each other through various activities, such as joint symposia, exchange programs, social exchange, and international membership. The advantages of continuing inter-society collaboration in most of the Asian radiology societies include international speakers, diverse clinical research, and cutting edge technology; while limited range of financial and human resources, language barrier, differences in goals and expectations are claimed as disadvantages. With regard to the future, most of the Asian radiology societies focus on expanding partner societies and enhancing globalization and collaboration programs through various international meetings and exchange programs.

Index terms: Radiology; International cooperation; Asia; Oceania; Internationality

INTRODUCTION

The Asian Radiology Forum was first organized by the Korean Society of Radiology (KSR) in order to introduce radiology societies in each Asian country and intensify the collaboration between radiological societies from Asia. At the Korean Congress of Radiology (KCR) 2015, the theme

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“Building an Asian Friendship” was discussed focussing on current status and inter-society collaboration in the representative’s society. National delegates of the following radiological societies from Asia, including the president or executive members, were invited to this meeting to introduce their society and present their opinions about international collaboration amongst radiological societies: KSR, Indonesian Society of Radiology (ISR), College of Radiology Malaysia (CRM), Myanmar Radiology Society (MRS), Radiological Society of Thailand (RST), Vietnamese Society of Radiology and Nuclear Medicine (VSRNM), Philippine College of Radiology (PCR), Indian Radiological and Imaging Association (IRIA), Uzbekistan Radiology Society (URS), Radiological Society of Pakistan (RSP), the Royal Australian and New Zealand College of Radiologists (RANZCR), Chinese Society of Radiology (CSR), Hong Kong College of Radiologists (HKCR), Japanese Radiological

Society (JRS), and Chinese Taipei Society of Radiology (CTSR).

It was demonstrated that current status of the representative's societies differs in many aspects, including members, organization, subspecialization, scientific meetings, and publication. The need for inter-society collaboration in each radiological society is commonly recognized and its pros and cons are relatively similar. In this paper, we reported the most important opinions presented by the participants of the Asian Radiology Forum at the KCR 2015 and the discussions and conclusions about the current stands, pros and cons, and future plans for inter-society collaboration in different radiological societies of the Asia (Fig. 1).

Current Status of Representative's Society and Inter-Society Collaboration

Royal Australian and New Zealand College of Radiologists

The RANZCR represents over 3300 members (including 2666 members and 619 trainees) in Australia and New Zealand to ensure the appropriate, proper, and safe use of radiological and radiation oncological medical services. The RANZCR consists of two sub-societies including radiology and radiation oncology. The role of faculty of clinical radiology is setting, promoting and continuously improving the standards of training and practice in diagnostic and interventional radiology for the betterment of the people of Australia and New Zealand. While the role of faculty of radiation oncology is advancement of patient care and the specialty of radiation oncology through setting quality standards producing excellent radiation oncology specialists

and facilitating research, innovation, and collaboration in cancer treatment.

In current stands and intention for inter-society collaboration, the RANZCR is a member of AOSR, American Roentgen Ray Society (ARRS), European Society of Radiology (ESR), and European Society for Radiotherapy and Oncology. It also has collaborations with American College of Radiology (ACR), The Royal College of Radiologists (RCR), and Radiological Society of North America (RSNA). The advantages of inter-society collaboration are sharing information and resources, avoiding unnecessary duplication, and broadening range of resources available to membership; while the disadvantages are information overload, potential distraction from real work and core business, and risk of miscommunication.

Future inter-society collaboration plans of the RANZCR include revalidation, appropriate use of radiation exposure, imaging guidelines, subspecialisation, accreditation, and member engagement.

Chinese Society of Radiology

The CSR was established in April, 1937 as a nonprofit national community dedicated to radiology research and clinical work. It has 80000 radiologists and its own annual meeting i.e., Chinese Congress of Radiology (CCR), which is the largest conference of CSR with more than 10000 participants. The CSR has 12 subspecialty societies mainly based on different organ systems: neuroradiology, abdominal imaging, pediatric imaging, musculoskeletal imaging, interventional radiology, molecular imaging, chest imaging, MRI, breast imaging, head and neck imaging, contrast agent, and youth committee of CSR.

In current stands and intention for inter-society collaboration, the CSR is focusing on maintaining the traditional relationship with RSNA, ESR, ARRS, KSR, and JRS and expanding the scope of exchanges with other societies.

Chinese Taipei Society of Radiology

The Radiological Society of Republic of China was founded in 1951 and re-named as CTSR in 1991. Its goal is to promote imaging sciences and bring all related medical fields together to benefit each patient, encourage research and academic activities, organize education events and scientific meetings of different scales, and publish the Journal of Radiological Science. It serves as a consultant to the government for medical care policy and has 1116 radiologist members and 184 trainees for a 23 million



Fig. 1. Photograph of representatives of participating societies at Asian Radiology Forum 2015 held during Korean Congress of Radiology 2015 in Seoul.

population. The board certification system is established since 1985. There are 9 different subspecialty societies based on organ systems. It has several Memorandum of Understanding partners, including Federacion Argentina De Asociaciones De Radiologia, ARRS, ACR, Japanese Society of Interventional Radiology, KSR and has held numerous international joint symposia with its partner societies; there are no real cons to intersociety collaboration as long as the numbers are not too excessive.

Hong Kong College of Radiologists

The HKCR was incorporated in 1991 as one of the 15 constituent colleges of the Hong Kong Academy of Medicine. It encompasses 3 specialties, including radiology, radiation oncology, and nuclear medicine. The HKCR has 687 members, including 485 qualified radiologists, consisting of 334 radiologists, 131 clinical oncologists, and nuclear medicine specialists. It has two medical universities with 350 medical graduates. The HKCR has its official journal named "Hong Kong Journal of Radiology".

In current stands and intention for inter-society collaboration, the HKCR considers it very important to have strong liaison with all professional societies and colleges. Regarding pros and cons of inter-society collaboration, the advantages are considered as geographical advantage of central Asia, cutting-edge technology, interaction with colleagues and professionals from all over the world, and incentives for continued medical education (CME) credits and specialty training. While the disadvantage is lack of human and financial resources. The HKCR has plans to further strengthen the support of young radiologists from neighboring countries, closely collaborate with regional and specialty societies and continue to bid for regional and international conferences in future.

Indian Radiological and Imaging Association

The IRIA was established in 1931 and is a registered society with more than 12000 members; its main objective is to promote diagnostic radiological and imaging modalities. The IRIA specifically organizes CME to educate residents and young faculty members through its academic part "Indian College of Radiology and Imaging". The IRIA circulates a scientific medical journal named "Indian Journal of Radiology and Imaging" and organizes its annual conference in different parts of the country.

Indian Radiological and Imaging Association has various international collaborations through joint symposium and

several exchange programs of national delegates, speaker, and fellowship. For example, there were KSR-IRIA Friendship Symposia in 2013 and 2015. The IRIA representative, O.P. Bansal, stated that fraternity at the international level increases the society's visibility, and projects for intersociety collaboration should be encouraged. It should be noted, however, that the lack of understanding by participants of the need for international collaboration could reduce its effectiveness.

Indian Radiological and Imaging Association believes that radiology as a whole will benefit from collaboration and consolidation, and aims to promote specific opportunities for collaboration, including joint annual meetings and research collaboration in radiology and imaging sciences.

Indonesian Society of Radiology

The ISR has 1200 members with approximately 200–250 active members and specifically 24 branches across Indonesia. There are 9 subspecialties, including interventional-cardiovascular, thorax, neuro-head and neck, breast, gastrointestinal, urogenital, musculoskeletal, radio-nuclear, and pediatric radiology. Indonesian College of Radiology is a committee established by the ISR to support radiology education, set up curriculum of radiology training, provide national board examination of radiology and offer accreditation. The ISR has an annual scientific meeting for general and subspecialized radiologists.

The ISR focuses on international membership, fellowship program, visiting symposium with KSR, invited speaker, and visiting professor. Especially, the ISR has an external examiner system in Indonesian radiology examination board. In future, the ISR aims to put an emphasis on increasing the number of radiologists using local and abroad training centres, improving knowledge and skills of the radiologists, and negotiating with insurance company to cover all radiology procedures.

Japan Radiological Society

The JRS was established in 1940 and currently has 9178 members including 6149 board certified radiologists. The main activities of the JRS are as follows: conduct scientific meetings, publish a scientific journal in English (Japanese Journal of Radiology), conduct the Japanese Board of Radiology, promote researches on radiological science, support activities for the protection against radiation hazards, and collaborate with related societies or associations. Japan Radiology Congress (JRC), which is

the largest annual meeting in the JRS, is organized as a joint meeting of 4 societies, including JRS, Radiological Technology, Medical Physics, and Industries Associated to Radiological Systems. Specifically, according to the data on the number of physicians and radiologists per million population in The Organisation for Economic Co-operation and Development countries in 2007, the number of physicians per million population ($n = 2000$) was much higher than the number of radiologists per million population ($n = 30$) in Japan.

In current stands and intention for inter-society collaboration, Japanese government offers financial support to foreign doctors who come to Japan and institutions are willing to accept them and encourage interaction. As for future plans for inter-society collaboration, the second Asian Radiology Forum will be held in Japan during the JRC 2016 on April 14–17th, 2016.

Korean Society of Radiology

The KSR was established in 1945 with the mission to promote the advancement of radiology and related sciences, as well as medical services through collaboration among its members; to establish advisable health care policies and foresee their implementation for promotion of national health; to safeguard its members' rights and interests and to ensure a practice environment suitable for quality medical services. The KSR currently has 4368 members, including 3764 board-certified radiologists and 604 residents as well as 938 international membership in India ($n = 142$), Malaysia ($n = 111$), Indonesia ($n = 98$), Philippines ($n = 91$), and Thailand ($n = 90$). The KSR covers 12 affiliated subspecialty societies based on organ systems. Among 4368 practicing radiologists, 57.5% are subspecialized radiologists while 42.5% are general radiologists.

The KSR holds two major annual meetings: one is the international annual congress of KSR, i.e., KCR, with more than 77% of the sessions held in English and the other meeting consists of training courses for domestic members, mainly focusing on strategic planning. The KSR has one international bimonthly journal (Korean Journal of Radiology), which has been indexed at SCI-expanded and Medline since 2001 and one domestic monthly journal (Journal of the Korean Society of Radiology).

The KSR promotes active international collaborations via visiting symposia, European School of Radiology advanced imaging multimodality seminar, ARRS virtual mini symposium, joint symposia, and several exchange programs.

The KSR representative, Prof. Seung Hyup Kim, stated that active attitude to collaboration, intimate partnership with Asian societies involving an Asian regional community and international speakers, diverse clinical research, constant ongoing projects for collaboration, and international annual congress of KSR are commendable. However, limited budget for KSR international liaison, limited range of support for exchanging speakers and national delegates, and overload on KSR members and the office are the current issues to be addressed.

For the future, the KSR representative, S.H. Kim, claims that expanding partner societies, dedication toward the Asian radiology community, enhancing globalization of KCR, and enhancing collaboration programs are important as suggested by KSR's new slogan: "Open, Balanced, Sustainable".

Korea is hosting the office of Asian Oceanian Society of Radiology (AOSR) in Seoul.

College of Radiology Malaysia

The CRM is the only body representing the radiologists and a college under the Academy of Medicine of Malaysia. It currently has 417 members, including 367 board-certified radiologists. Currently, the CRM has inter-society collaborations with Singapore, Hong Kong, and Korea.

Through inter-society collaboration, the CRM aims to reduce gaps in radiology practice and knowledge, promote collaboration and mutual assistance on matters of common interest, assist each other in research, achieve better utilisation of radiology services, and promote subspecialty training. At the same time, it is important to maintain mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all societies. It should be noted that CRM's financial and human resources are limited regarding international collaborations. The CRM plans to focus on various international meetings for inter-society collaboration, such as Asia Oceania Society of Paediatric Radiology in 2016, Association of Southeast Asian Nations (ASEAN) Association of Radiology (AAR) in 2017, and Asian Australasian Federation of Interventional and Therapeutic Neuroradiology in 2018. Also, CRM plans to work on guidelines for clinical practice in radiology, such as iRefer, following guidelines of the RCR.

Myanmar Radiology Society

The MRS was established in 1972 and currently has 300 members. It is running 7 subspecialty societies, including

interventional radiology, body imaging, paediatric radiology, musculoskeletal radiology, neuroradiology, ultrasound section, and women's imaging. The MRS holds an annual meeting and monthly Continuing Educating Programs, covering various subspecialties. The MRS is a member of AAR and AOSR. It has collaborations with radiological societies in Korea, Thailand, Singapore, Japan, and Taiwan and works closely with RSNA and ESR.

The MRS needs international support particularly with training programs and requires recruitment of more radiology experts for advanced technologies. It is also striving to develop the society with members who achieve a certain international standard in radiology.

Radiological Society of Pakistan

The RSP has approximately 700 life members, 300 members, and 200 associate members, including radiologists, oncologists, nuclear medicine specialists, health physicists, and radiographers. Specifically, an Executive Council is elected and the Society is based in a new province every two years.

The RSP invites presidents of other societies during its annual conference, exchanges delegates of different levels for different durations on reciprocal basis, facilitates publishing papers, and keeps a permanent link on the websites of other societies. The inter-society collaboration is certainly mutually beneficial, learning from experiences and different radiology equipment while language barrier is a limitation. Future plans for inter-society collaboration include joint research projects, joint training programs, joint conferences and workshops, and frequent exchange of delegates.

Philippine College of Radiology

The PCR was established in 1910, its subspecialty societies in 1948, including the 8 recognized specialty societies. The PCR has approximately 1500 board-certified radiologists and 550 residents in training. It has 4 subspecialty societies based on imaging modality: Ultrasound Society of the Philippines, Philippine Radiation Oncology Society, CT-MRI Society of the Philippines, and Philippine Society for Vascular and Interventional Radiology. The newest society is the breast imaging society. They have various types of annual meetings, including annual convention in February and training workshop.

The PCR offers accreditation of training programs, curricula of training programs, certification of radiologists,

and promotes professional development of radiologists and clinical practice guidelines.

Royal College of Radiologists of Thailand

The RST was founded in 1962 and the Royal College of Radiologists of Thailand (RCRT), which is a government organization under the Medical Council of Thailand, has been working under the same administrative committee since 1992. The RST currently has 1924 members and 6 subspecialties including diagnostic neuroradiology, advanced body image, neurointervention, body intervention, radiation oncology, and nuclear medicine. The RST mainly serves as an organization of multi-professional groups in imaging related fields including radiologists, technologists, physicists, imaging informatics, and radiological nurses. The RCRT is responsible for residency and fellowship training programs in radiology, as well as in radiation oncology and nuclear medicine, and supports medical education for qualified radiologists serving as the collective expert opinion group related to imaging issues for the Medical Council of Thailand. The RCRT has its own journal named "ASEAN Journal of Radiology", which is responsible by both RCRT and RST.

The RST has strong intention of promoting inter-society collaboration in academic field, research, and social exchange. It is a member of AAR, which has an office in Bangkok. International collaboration offers an opportunity for trainees and young radiologists to expose and get acquainted to other Asian radiologists and exchange knowledge, culture and experiences, which may also lead to an opportunity for multicenter research trials. However, financial restriction and language barrier need to be overcome. RST plans to focus on joint conferences with other societies, such as International Congress of Radiology, AOSOR, educational courses by American Institute for Radiologic Pathology-the RCRT, exchange program for residents and fellows, visiting professorship, and research collaboration.

Uzbekistan Radiology Society

The URS was first organized in 1937 with the following objectives: to provide and coordinate educational programs for the benefit of radiologists, to enhance relationship between radiologists and other physicians, and to promote exchange of information between radiologists. It has less than 200 members but hosts its own international congress every two years and organizes and coordinates various types

of scientific meetings, including conferences, symposia and master-classes. Its main office is located at Tashkent Medical Academy.

The URS is an associate member of the ESR and a member of the AOSR, and collaborates with radiologists' association of Russia in St. Petersburg and Kazakhstan. It also has training programs for Uzbekistan radiologists in Austria, South Korea, Turkey, Czech Republic, and Germany. International collaboration enables information exchange and favorable environment for multicenter research, but there may be differences in goals and expectations and administrative decentralization, which act as main disadvantages. However, in the future, the URS plans to continue close relationship with ESR and AOSR and develop various collaborations with the radiology societies of other Asian countries.

Vietnamese Society of Radiology and Nuclear Medicine

The VSRNM was established in 1961 and has 750 radiologists and 100 interventional radiologists. It has 5 regional sub-societies based in Hanoi, Hue, Ho Chi Minh, Thanh Hoa, and Hai Phong. The VSRNM holds two major annual meetings: one is the annual meeting of VSRNM and the other is the annual meeting of Interventional Radiology. Recently, the society held its 17th annual meeting. It also publishes its own journal named "Vietnamese Journal of Radiology". The VSRNM runs domestic and international training programs; it has a 3 year-residency program with additional 2 years for the first degree and 2 years for the second degree.

The VSRNM organizes international collaborations mainly through joint symposium. The VSRNM sends representatives to attend AOCR and KCR annually and the VSRNM organized the 1st conjoint session between the AOSR and KSR at the 17th Congress of VSRNM in 2015. International collaboration enabled exchange of useful advanced knowledge and techniques while language barrier remains a problem. For the future, the VSRNM aims to focus on joint symposium between the AOSR and KSR and has plans to support Vietnamese doctors to study in other Asian countries through exchange programs.

Current Status of the Partner Societies

Most of the individual Asian and Oceanian radiology societies were established before 1970 and the HKCR was most recently established in 1991. The CSR has the largest number of radiologists with 80000 active members. The

KSR specifically has international membership with other Asian radiology societies and the number of radiologists is relatively low in the JRS, as compared with that of physicians. The primary role of the radiologists in major hospitals is to communicate with clinicians on image interpretation, improve image quality, and secure patient safety. Recently, clinicians have become subspecialized, with an increasing amount of knowledge on specific parts of medicine. Therefore, the only way for radiologists to assert their role in such an environment is to work closely with clinical partners, with equivalent knowledge about a medical subspecialty and take an active role in multidisciplinary team.

In terms of organization, most of the societies have a single committee. However, the ISR has an independent committee to support education, curriculum, and accreditation of radiology and provide national board examination of radiology in Indonesia. The RST also has an independent committee named RCRT, which is responsible for residency and fellowship training, a medical education, and an expert opinion related to imaging issues for the Medical Council of Thailand. On the other hand, the VSRNM has 5 area-based sub-societies in major cities of Vietnam; and the RANZCR consists of two sub-societies including clinical radiology and radiation oncology.

With regard to subspecialization, the radiation oncology is included in the radiology society in the RST, PCR, RSP, RANZCR, and HKCR and the nuclear medicine is included in the ISR, RST, RSP, and HKCR. The relationship between general and subspecialist radiologists in Asia is complex and there are diverse organizational issues faced by societies in each Asian country. Subspecialization differs between each society. Most of the societies have organ-system based subspecialization, which has been adopted both in the structure of radiological services and in the training curriculum, while the PCR has subspecialization based on different imaging modalities.

Regarding scientific meeting, most of the societies have their own annual meetings. CCR holds the largest conference in terms of the number of participants. KSR has an international annual congress named KCR, in which English sessions consist of more than 77% of the entire congress. The JRC, which is the largest annual meeting in the JRS, is organized as a joint meeting of 4 societies, including JRS, Radiological Technology, Medical Physics, and Industries Associated to Radiological Systems. Regarding publication, the KSR, CSR, RCRT, HKCR, CTSR, VSRNM, IRIA, and JRS have

their own journals.

Current Stands and Intention for Inter-Society Collaboration

Most societies have collaborations with other Asian radiology societies, have connection with the RSNA and ESR and are currently a member of the AOSR. The RANZCR is also a member of the ESR, and the URS is an associate member of the ESR. The Asian radiological societies have several international collaborations with each other through joint symposium, exchange program, social exchange, and international membership. Especially, the ISR has an external examiner system in Indonesian radiology examination board. The PCR has accreditation of training programs, certification of radiologists, and clinical practice guidelines for inter-society collaboration; and the URS has training programs for Uzbekistan radiologists in other countries. In the JRS, Japanese government offers financial support to foreign doctors.

Pros and Cons of Inter-Society Collaboration

There are many advantages of continuing inter-society collaboration in most of the Asian radiology societies, such as international speakers, diverse clinical research, and cutting edge technology. Another important issue for inter-society collaboration is an active attitude towards collaboration, international annual congress, reducing gaps in radiology practice and knowledge, and promoting subspecialty training. The inter-society collaboration could be a very important contribution to clinical research by providing opportunity for multicenter research, avoiding unnecessary duplication, and broadening range of resources. While limited range of financial and human resources, language barrier, differences in goals and expectations are claimed as disadvantages of inter-society collaboration in most of the Asian radiology societies.

Future Plans for Inter-Society Collaboration

Most of the Asian radiology societies are focusing on expanding partner societies and enhancing globalization and collaboration programs through various international

meetings and exchange programs. They are also trying to develop and promote their society to achieve a certain international standard. Specifically, RANZCR put an emphasis on the appropriate use of radiation exposure, imaging guidelines, subspecialisation, accreditation, and member engagement. The HKCR has plans to further strengthen the support of young radiologists from neighboring countries.

CONCLUSIONS

Current status of the Asian radiology societies is heterogeneous in terms of purpose, organization, subspecialization, publication, and scientific meeting. However, they clearly have a common need for inter-society collaboration, providing many advantages for clinical practice, research, and training, which can form a basis for globalization and innovation. Maintaining integrity of inter-society collaboration is needed in the future, in order to satisfy the need of each society.

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