

# Sinaran

### MALAYSIAN SOCIETY OF RADIOGRAPHERS

Affiliated to The International Society of Radiographers and Radiological Technologists (I.S.R.R.T.)

## **Greetings from ISSRT**

### Greetings:

On behalf of the Board of Management of the Radiographers and Radiological Technologists (ISRRT), I wanted to express our congratulations to you for the revitalization of your newsletter the 'Sinaran'. Newsletters such as the 'Sinaran' provide a much needed source of communication to the membership and radiography professionals in the region and beyond. This publication should be a wonderful vehicle for providing information about the latest updates and sharing knowledge and experiences with radiographers and the radiotherapy community.

Let me also extend my congratulations to MSR President, Ms. Chan Lai Kuan and the MSR Board for their work to revive the 'Sinaran' and for the wonderful work of the Malaysian Society of Radiographers.

Please extend our best wishes to your leadership and members. We look forward to working with you in the future.

Warm Regards,

Michael D. Ward

Dr. Michael D. Ward, Ph.D., RTR, FASRT

President, ISRRT





Dr. Michael D. Ward, Ph.D., RTR, FASRT

President, ISRRT

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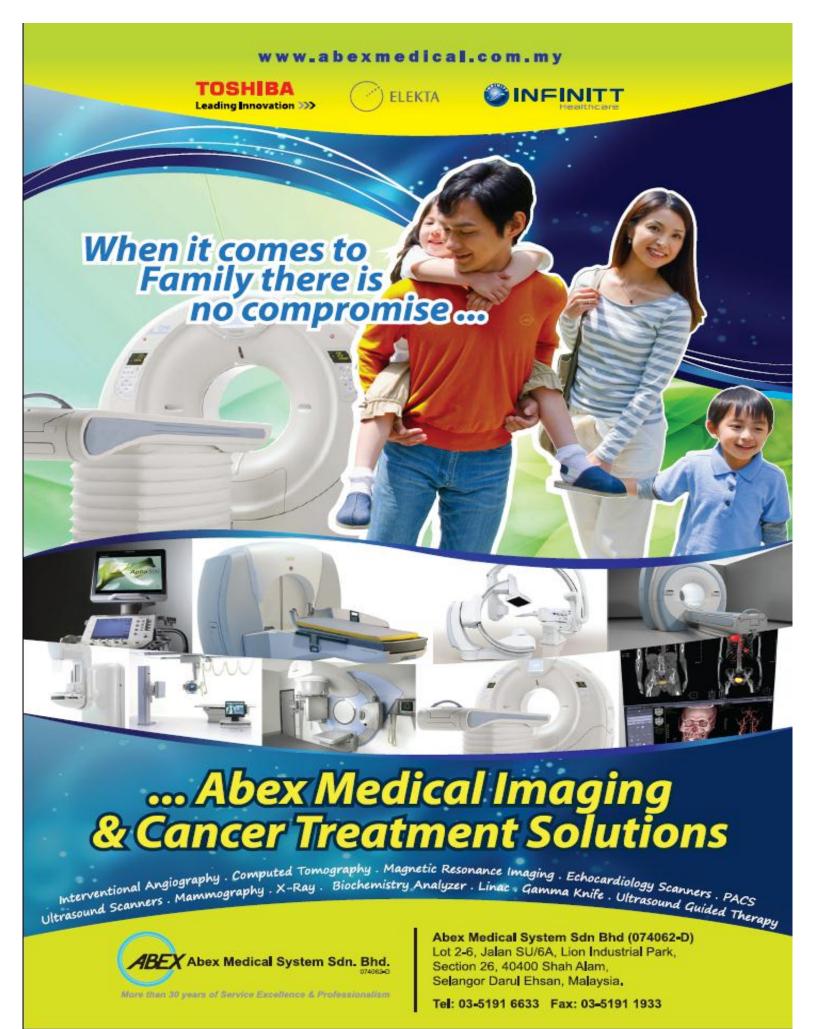
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## Message from the President

Warm Regards to all MSR Members

I would like to praise the Lord for giving me good health and time each day to do the things that I set out to do. It's been a pleasure serving MSR as president for 2011 and I am thankful for His Grace to allow me to continue to serve in 2012. I am very happy that after such a long silent we finally are able to continue the publication of our newsletter "Sinaran". My gratitude goes to our new elected editorial subcommittee Mr. Mohamad Norman and his team from PPUKM. I personally would like to take this opportunity to thank Mr. Mohd Norman for his willingness to take up the challenge to continue the publication of the newsletter.

I will personally take up the supervisory responsibility and continue to guide to ensure there is no discontinuity of our newsletter. I hope with the publication of the 1st issue of "Sinaran" 2012, it will begin another era where by the content, presentation and support comes from all members and not just from the editorial board.

I have to apologize on behalf of my editorial chairperson for not able to do the given job since her election in 2011 as she is facing some critical family crisis. The MSR executive members and me would like to send our support and regards to her and ask God to sustain her so that she will have strength and courage to face the challenges during this difficult time. May God bless her and family members.

I would like to take this opportunity to ask all radiographers (members or not) to contribute articles, messages, reports or any knowledge, skills or experiences that you can share with others for the betterment in career, life or just edification of soul.

Just to bring to all members' notice that "Sinaran" is being read by our ISRRT ex-president Mr. Robert George and

he has high praise regarding the standard. Recently, I have received a mail from a Nigerian Radiographer Adejoh, Thomas concerning our newsletter. He wanted to know why there is none after year 2008. His comment is very encouraging:

Your newsletter is well-written, educative and informative; however the latest edition on your website is that for 2008. Hoping you will upload that for 2009, 2010 and 2011 to educate us further.

With this I have to congratulate and pay my tribute to the previous editorial committee Ms Gina Gillyot, Ms. Sripriya and also Ms Chanthriga for their notable accomplishment and a job well-done. We the editorial team this time will take up the challenge to do if not better at least as well as before. In view of that I pledge to all radiographers, let us together put in some extra effort to make "Sinaran" a newsletter that we can proud of.

Thank You and Best Wishes. God Bless.

Chan Lai Kuan

### SHOULD RADIOGRAPHERS REPORT?

Stephen LITTLEFAIR MSc, Faculty of Health Sciences, The University of Sydney,

"Radiographers reporting? Over my dead body." The above unattributable quote was heard in the corridors of 38, Portland Place, London (the home of the Royal College of Radiologists) in early 1999. (1)

The issue of radiographic reporting has been a longstanding issue between radiographers and radiologists starting in the early 1900s and leading eventually to the subordination of the radiographic profession. (2)

By the third decade of the 1900s, radiologists claimed expertise in reporting radiographs when in February 1924, the council of the newly founded Society of Radiographers (SoR) in the United Kingdom issued a resolution directing;

"That no non-medical member shall accept patients for radiography, radioscopic or therapeutic work except under the direction and supervision of a qualified medical practitioner. Neither shall any such member make any report or diagnosis on any radiographic or screen examination". (3)

However, since 1971, when Swinburne (4) proposed that senior radiographers who underwent a period of supplementary training could triage images between normal and abnormal, there has been increased debate regarding reporting by radiographers.

In subsequent years there has been a plethora of publications indicating that radiographers, after considerable training, can undertake reporting successfully (5, 6, 7, 8, 9, 10). This evidence, in addition to the author's own experience of autonomous plain film reporting (11), prompted the title "Should radiographer's report?" since all the evidence demonstrates that radiographers CAN report.

In the United Kingdom the involvement of radiographers in image interpretation reporting is now well established (12), but the question remains, why not elsewhere?

There are a number of barriers to introducing advanced practise. The objections of radiographers themselves, whether in clinical or management roles, those of other medical professions and finally, the objections presented by the radiological fraternity.

Limited funding for training opportunities, lack of reimbursement for the extra responsibility, unenthusiastic radiographers and poor staffing levels have all been cited by the radiography profession (ibid).

The risk of litigation is also a major cause for concern amongst radiographers wishing to report radiographs, but it should be stressed that radiographers live with the risk of litigation every day in their use of markers and film identification and that the law of medical negligence is a complicated process (13)

Certain conditions must be satisfied before liability can be considered. The person who is accused must have committed an error; this act must have been in breach of the person's duty; and this must have caused harm to the injured person. The complainant must prove the allegation against the doctor by citing the best evidence available in medical science and by presenting expert opinion. Broadly speaking, two requirements must be shown in order to bring such a claim. That there was negligent medical treatment or diagnosis, and that this treatment caused an injury or some harm that would not have otherwise occurred.

Medical staff may decide that they want a radiological report. The question should be posed; does this mean a report by a radiologist or simply an accurate and timely report? Many specialities want no report at all. "I do not make any decision based on a radiology report and MUST see all films." (14). In addition, Naresh et al (1996) noted that radiological reports for post operative joint surgery were unnecessary and not cost effective. (15) In some cases the debate over image reporting has become an intense dispute especially in neurology and cardiology where physicians and surgeons desire to undertake radiological procedures, interpret the findings and treat the condition demonstrated. (16)

In 2006 the Royal Australian and New Zealand College of Radiologists (RANZCR) indicated that reporting "cannot be effectively delegated to those who have not been specifically trained as medical practitioners and then as radiologists."(17) The report proposed that radiologists had a duty of care and legal responsibility to the patient, they had specialist clinical knowledge, the transfer of roles would lead to a shortage of radiographers, radiologists would be deskilled in certain reporting areas and a good deal of radiological diagnosis involved consultation with referring clinicians and, as such, reporting could not be delegated to radiographers.

Are these objections justified and so insurmountable that reporting is beyond the scope of trained radiographers? In answer to the first argument, it is fundamental to radiographic practise that radiographers are expected to have a duty of care to their patients

(18), whilst any shortage of radiographers is a problem that should be managed by radiography supervisors and their own professional bodies.

That radiologists have specialist clinical knowledge because of their medical education is beyond question. However, in the field of mammography, what specialist knowledge is required to understand the correlation between history (breast lump) and diagnosis (benignity or malignancy)? In this area, pattern recognition is the prime diagnostic skill and cannot be proffered as an argument to prevent trained highly skilled mammographers from image interpretation.

Deskilling and consultation, (or lack of), are already genuine areas of concern to the radiology profession. Both these issues have been a cause for disquiet as a result of teleradiology and outsourcing of examinations. Dixon and Fitzgerald argued in 2008 (19) that "Simple referrals -- knee MR, headache -- 'stolen' by outsourced providers, can lead to problems, not just in training residents but also in deskilling established radiologists," and that "Radiology is essentially a clinical partnership with the referring physician. Discussion of complex cases is best handled at clinical meetings where all parties attend." RANZCR, 2008, likewise criticised tele-radiology. (20). The outsourcing of examinations, however, continues.

In addition, The Royal College of Radiologists in 2005 also noted that as a result of sub-specialisation a radiologist outside his area of expertise may become deskilled (21).

In response to this report (22) Professor Rodger (2006), as well as supporting radiographers, suggested that the loss of income to radiologists by allowing radiographer reporting was a factor that the workforce report failed to acknowledge.

"Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients." (23). As previously indicated, a literature search will uncover numerous publications demonstrating the reporting abilities of well trained radiographers in a number of modalities. (24, 25, 26, 27, 28, 29). Given the evidence available, there are no grounds for the status quo to remain. In fact, the deficiencies of the present situation should be questioned and highlighted.

Radiologists, whilst fittingly being regarded as the gold standard, are not infallible and diagnostic errors occur and re-occur. (30). A number of radiographs remain unreported (31) and in some instances there is a delay in the communication of results (32, 33). These facts raise the suggestion that there may be a shortage of radiologists or an increase in the number of radiological examinations. Indeed, members of the radiology profession have conceded that "despite a downward trend in

average weekly hours worked, many radiologists continue to be uncomfortable with their heavy workloads" (34). These areas could be improved by using trained radiographers to report.

Many films are viewed initially by inexperienced junior medical staff who have to make medical decisions based on their own judgment of the appearances presented (35). "Medical students report that they have limited exposure to radiology teaching during their medical school training. The test results suggest that medical school training enabled them to commence their probationary year with a 'just safe' level of radiology knowledge and skill" (36). In 2002, Scheiner et al proposed that medical students should undergo radiology clerkships, and that "learning radiology through medical and surgical rotations was insufficient and ineffective" (37). In 2007 there was a total number of eighty five hours radiological teaching in a six year undergraduate medical programme (38). The presence of a well trained reporting radiographer in an emergency department would benefit the system, the medical staff and, most importantly, the patient.

The Code of Professional Conduct (39) for doctors in New South Wales advises that medical duties can be delegated to other health staff who are deemed competent to perform such tasks. In fact, due to a shortage of radiologists in the Pacific Island nations, a project supported by the RANZCR was conducted between 2004 and 2006 aimed at up-skilling radiographers from South Pacific countries in basic radiological interpretation of plain film radiographs (40).

It is vital that the RANZCR be involved in the training of reporting radiographers if they are to feel be confident that the training and assessment of reporting radiographers is rigorous and robust. Such education must have the support of the student's workplace: the radiology manager, hospital CEO, legal team and a radiologist mentor. All reporting course need to be university accredited, and any assignments, case studies must be assessed at Masters level. There must also be an element of research and reflection in the curriculum. The final film reading examination should have a pass mark of 95%. Any student attaining 90-94% would require an additional viva voce examination. All students failing the examination would be allowed one re-sit before having to sit the whole course again.

It is an absolute necessity that the assessment of students be not only challenging but also survive thorough scrutiny. By passing such a test, not only will the student have confidence in their own skill but the patient and the medical profession will be left in no doubt about the abilities of the reporting practitioner.

#### **REFERENCES**

- Thomas N 2005 in Interpreting Trauma Radiographs J. McConnell, R. Eyres, J Nightingale. p7 Blackwell
- Larkin G 1983 Occupational Monopoly and Modern Medicine.
   Tavistock Press

- Jordan M 1995 The maturing years: a history of the society and college of radiographers, Society of Radiographers, London, 1995
- 4. Swinburne K. 1971 Pattern recognition for radiographers. Lancet 1:p589-590
- 5. Culpan G et al, 1998, Radiographer reporting results of 10000 cases. RCR symposium
- 6. Bates JA, 1994, An audit of the role of the sonographer in non obstetric ultrasound, Clincial Radiology, 49, 617-20
- 7. Loughran CF, 1994, Reporting of fracture radiographs by radiographers: the impact of a training programme, British Journal of Radiology, 67, 802, 945-50
- Haiart DC Henderson J A comparison of interpretation of screening mammograms by a radiographer, a doctor and a radiologist: results and implications, British Journal of Clinical Practice, 45, 1, 43-45
- Cheyne W et al, 1987, The radiographer and the front line diagnosis, Radiography, 53, 609, 114
- Renwick I, 1991, How well can radiographers triage x-ray films in an accident and emergency department, British Medical Journal, 302, 568-69
- Littlefair S 2006 Chest reporting by radiographers Synergy Feb.
- 12. The Society of Radiographers 2008 Scope of Radiographic Practise
- Alderson CJ Hogg P 2003 Advanced radiographic practice—the legal aspects Radiography 9, pp305-314
- 14. Bailie DS http://orthodoc.aaos.org/SportsMedDoc/ FAQsHandout.doc The Orthopedic Clinic Association
- 15. Naresh K Nayak K Rorabeck CH Bourne RB Mulliken B Robinson E 1996 Interpretation by radiologists of orthopedic total joint radiographs: Is it necessary or costeffective? Canadian Journal of Surgery; 39: p393-396
- Lakhan SE Kaplan A Laird C Leiter Y 2009 The interventionalism of medicine: interventional radiology, cardiology, and neuroradiology International Archives of Medicine 2009, 2:p27
- 17. The Royal Australian and New Zealand College of Radiologists 2006 Role Evolution in Diagnostic Imaging RANZCR Response to QUDI QS3 Discussion Paper on Role Evolution
- The Society of Radiographers 2002 Statements for Professional Conduct, March

- 19. Dixon AK Fitzgerald R 2008 Outsourcing and Teleradiology: Potential Benefits, Risks and Solutions From a UK/European Perspective Journal of the American College of Radiology Volume 5, Issue 1, January, pp 12-18
- RANZCR 2008 Radiology and Health Sector Reform Submission to The National Health and Hospitals Reform Commission May
- 21. The Royal College of Radiologists 2005 Changing Working Lives

  December
- 22. Rodger A 2006 In letter to The Medical Journal of Australia 186: 615-616.
- 23. British Medical Journal 1996; Editorial: Evidence based medicine: what it is and what it isn't 312:71-72 (13 January)
- 24. Wivell G, Denton ERE, Eve CB, Inglis JC, Harvey 2003 I Can Radiographers read Screening mammograms? Clinical radiology vol. 58, no I, pp. 63-67
- Bradley AJ 2005 Accuracy of reporting of intravenous urograms: a comparison of radiographers with radiology specialist registrars Clinical Radiology Volume 60, Issue 7, July pp 807-811
- Booth AM, Mannion RAJ, 2005 Radiographer and radiologist perception error in reporting double contrast barium enemas: A pilot study Radiography Volume 11, Issue 4, November pp 249-254
- Brealey S, Scally A, Hahn S, Thomas N, Godfrey C, Coomarasamy A 2005 Accuracy of radiographer plain radiograph reporting in clinical practice: a meta-analysis Clinical Radiology, Volume 60, Issue 2, pp 232-241
- 28. Cassidy S, Eyres RD, Thomas NB, Whitehouse R, Williams PL.A 1999 comparative study of the reporting accuracy of clinical radiographers and radiology registrars. British Journal of Radiology 72(S):19.
- 29. Robinson PJA, 1998, Pattern recognition and radiographer reporting, Radiography, 4, 3, pp 155-157
- Berlin L 2007 Accuracy of Diagnostic Procedures: Has It Improved Over the Past Five Decades? American Journal of Radiology 188: pp1173-1178
- 31. Patty A 2007 November 3, The Sydney Morning Herald
- 32. Raskin MM 2006 Survival Strategies for Radiology: Some Practical Tips on How to Reduce the Risk of Being Sued and Losing Journal of the American College of Radiology September Volume 3, Issue 9, pp 689-693
- 33. The Royal Australasian College of Surgeons Annual Scientific Congress 2006 15-19 May A prospective review of trauma radiology reporting at a major trauma centre.

### **'FAILING TO FAIL'**

#### ANDY GOH (LECTURER)

### KOLEJ OF RADIOGRAPHY, PPUM

Examination and assessment are ongoing processes in the teaching world. As a teacher, most probably you have been exposed to all sort of guidelines or programs in teaching methodology which includes delivering teaching materials, setting up examination questions and assessment method. In the end what matter most to us is the results – excellent, pass or failed.

Here, lie several issues. For instance, how do you give minimum competency grades in a certain field to students when you know that they don't comes anywhere near minimum competency? How do you record a student's conduct as "satisfactory" or even "good" when he has been disruptive, rude, ill-mannered and lazy? Shall credit been given based on what the students have done, or shall them be penalised for not doing according to the 'standards'.

A lecturer, tutor, teacher, clinical instructor, local preceptor or different fancy names to call an evaluator is the person who holds the power to grade these students. As a person in power you may choose to be 'generous or stingy' in giving credit.

When a student attended every lecture sessions, handed over every assignment given to them and showed up in the clinical placements as scheduled. And yet they still can't make it up in final semester examination, shall the teacher give the benefit of doubt to the student by giving 'extra' marks and pushing it over the pass line? Or in cases where these students are just in satisfactory category, should the teacher just upgrading the marks into excellent territory?

Is it far easier to pass a student than to fail them? Is it a true win-win situation for the person being evaluated and the evaluator? Is it true that a teacher find it difficult to fail a student? The reasons are in doing so is both time-consuming in terms of the paperwork and also emotionally difficult. Besides that, failing this student may jeopardise his chances of moving ahead and the teacher rather not be the one responsible for

holding them back. There are also arguments that say enabling students to perform well in their examinations is by itself a form of motivation for them.

In clinical environment, local preceptors found it difficult to create and maintain professional boundaries between themselves as mentors and their students. The local preceptors have a friendly relationship with the students and often counted them as a part of the working team and they might socialise with them, which makes it difficult to fail them. Most of the time the students receive good assessment marks which do not represent the truth achievement. And if these students are later on at the next level found to lack the skills required, let the persons at the next level deal with it. As far as the school and the system are concerned, there should be no question on the assessment or evaluation standard used by the clinician. The school have more than done its part by raising the percentages.

Although everyone in the end seems happy with this, the real losers in the end are at the macro level, in a society where the weak leads and incompetence sits in positions of authority, meting out decisions and directives which are sometimes tinged with personal agenda, the profession ultimately will suffer. Yes, we do have students at highest achievement levels who are really some of the best, but we also have those who shouldn't be there. Will a few bad hats bring shame to the profession?

Therefore as an educator, I believe we should assess our students based on what had been taught. We assess because we want to know how much our pupils have mastered the skills that we have taught them. Giving credit where it deserves. We should not be worry or afraid to fail our students when they deserve even though failing to fail is the greatest challenge for the evaluator.

### **QUOTES OF THE WEEK**

### Change/Choice

"If you don't like how things are, change it! You're not a tree." —Jim Rohn

"The time is always right to do what is right." —Martin Luther King Jr.

"There is nothing wrong with change, if it is in the right direction." —Winston Churchill

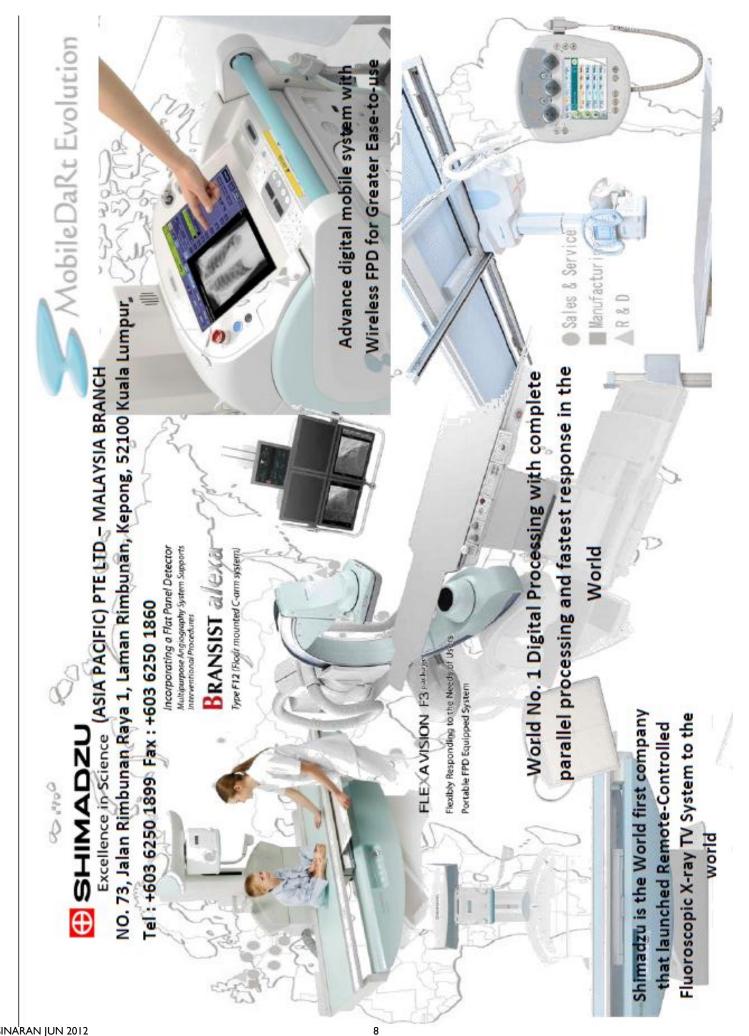
"Losers take chances; winners make choices." -- Denis Waitley

"In a time of rapid change, standing still is the most dangerous course of action." —Brian Tracy

"You must be on top of change or change will be on top of you." —Mark Victor Hansen

"What the caterpillar calls the end, the rest of the world calls a butterfly." —Lao Tzu

"Whatever your present situation, I assure you that you are not your habits. You can replace old patterns of self-defeating behavior with new patterns, new habits of the effectiveness, happiness, and trust-based relationships." —Stephen Covey



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### As WE Sow, So Shall WE HARVEST

BY DENIS WAITLEY

Our true rewards in life will depend on the quality and amount of contribution we make. From the Scriptures to science, to psychology, to business, the documentation is the same. "As we sow, we reap." Life is an unfailing boomerang. What we throw out will come back full circle.

The way we can build self-reliance is to recognize the number of alternative choices we have in a free society. And for every choice we make, there is a consequence of or reward for that decision that we must acknowledge as our responsibility. God's Law of Cause and Effect is forever the ruler.

During debriefing interviews, returning POWs from the wars in which we have fought during the past century said that what they missed most of all was their freedom of choice. There are two primary choices in our lives: to accept conditions as they exist or to accept the responsibility for changing them.

To attain emotional security, each of us must learn to develop two critical capabilities: the ability to live with uncertainty, and the ability to delay immediate gratification in favor of long-range goals. Losers let life happen to them. Winners make it happen for themselves and others. Losers engage in pleasurable activities, with no purpose or result in mind. Losers try to escape from their fears and drudgery with activities that are tension-relieving. Winners are

motivated by their desires toward activities that are goal-achieving.

A number of research studies during the past decade indicate that the happiest, most well-adjusted individuals are those who believe they have a strong measure of control over their lives. They choose more appropriate responses to what occurs and they stand up to inevitable changes and daily setbacks with less apprehension. They learn from their past mistakes, rather than reinforce or repeat them. They spend time taking action in the present, rather than fearing what might happen in the future.

To be self-reliant adults, we need to set some guidelines:

Be different, if it means higher personal and professional standards.

Be different, if it means being more gracious and considerate to others.

Be different, if it means being cleaner, neater and better groomed than the group.

Be different, if it means putting more time and effort into all you do.

And be different, if it means taking the calculated risk. The greatest risk in life is to wait for and depend upon others for your own security. The greatest security is to plan and act, and take the risk that will ultimately ensure your personal freedom and independence.

# WORLD RADIOGRAPY DAY GREETINGS FROM ISSRT

BY DR. MICHAEL D. WARD,



...an international nongovernmental organisation

in Official Relations with the World Health Organisation

Registered Office: 143 Bryn Pinwydden, Cardiff, CF23 7DG, Wales, United Kingdom

Greetings Dear Colleagues,

On behalf of the International Society of Radiographers and Radiological Technologists (ISRRT), I extend to you warm wishes. We are celebrating "World Radiography Day" on November 8, 2012. The theme for this year is "Radiography: Guides the Clinical Pathway" which illustrates the important role that all of us play in our areas of practice. Radiographers have important responsibilities in the diagnosis and treatment of disease as we partner with others in healthcare to care for our patients and their families.

Please give my very best regards to all my colleagues. I wish you much happiness and success.

Sincerely,

Dr. Michael D. Ward, Ph.D., RTR, FASRT

President

International Society of Radiographers and Radiological Technologist

### **REPORT IN SEMINAR -**

### **UPDATES IN RADIOGRAPHY INSTRUMENTATION**

By: Mazli Mohamad Zin

Updates in Radiography Instrumentation Seminar

This seminar was held on the 24th till 26th of November 2011 at the Kolej Sains Kesihatan Bersekutu, Johor Bahru (KSKBJB). It was organized by the Malaysian Society of Radiographers (MSR) with the help of the lecturers and staffs of KSKBJB.

The main objective of this course is to update the participants with radiographic instrumentations of special modalities and also to generate awareness of the importance of adhering to medical legislation. The topics presented by various invited speakers include Current Practice in Medical Legislation, Performance and Reliability of Equipment (Test and Commissioning), Special Modalities such as DEXA, Tomosynthesis, Digital Imaging (CR and DR), Angiographic Equipments, MRI/CT Scan Equipments, Ultrasound and Dental Equipments. The contents of the lectures include the technical specifications and capabilities of the expensive equipments which could be found in the radiology department or perhaps the one that might be

purchased in the future.

Acquiring extra knowledge of these equipments will enable participants to perform certain radiographic examinations with confidence and better skill. The participants are also showcased with knowledge of maintaining those equipments that should be operated at specific approved regulations. As intended by MSR, hopefully this seminar will help the participants to understand and comprehend the concept and knowledge on radiographic instrumentations.

This 3 days course concluded on Saturday afternoon. MSR is grateful to all the speakers for assisting in this seminar by delivering superb lectures and appreciated the feedbacks from the participants. MSR planned to organize more seminars similar to this in view of the low registration fees and also the topics which were included are practical and suitable for majority of the radiographers.



Some of the participants during the seminar





Token of appreciation to the speakers

### IN REMEMBRANCE OF HJ. MOHD REZA HASHIM

By: Chan Lai Kuan

### IN REMEMBRANCE OF HJ. MOHD REZA HASHIM

Tn. Hj. Mohd Reza Hashim was the chief radiographer in diagnostic Imaging department, HKL and the president of the Malaysia Society of Radiographers for many years. He was among the 1st batch of students trained in School of Radiography, HKL by Ministry of Health in 1963 - 1965. He was once a tutor in the School of Radiography and Radiotherapy, Kuala Lumpur in the 1970s. He was the chief radiographer the Diagnostic Imaging Department , Kuala Lumpur Hospital before he retired in 1995. He passed away on 23rd June 2011 at the age of 70+. MSR would like to share with you the condolences sent from President of Singapore Society of Radiographers and Hong Kong Radiological Technologist Association.

I was very sorry to hear about him passing away. I can still remember my first meeting with Tn Hj Mohd Reza was at the MSRC when i was still a student. Subsequently, I had the pleasure of knowing him better when we met at other international conferences years later. As President of the Malaysia Society of Radiographers, TN. HJ MOHD REZA has always been active in the international arena and and was passionate about issues regarding radiography and radiation protection in Malaysia. I am certain he will be sadly missed by all our friends in the radiography profession all over the world

With Deepest Sympathy

Chek Wee President Singapore Society of Radiographers

I am so sorry to hear the news of the loss of TN. HJ MOHD REZA BIN HJ HASHIM.

Mr HASHIM has always been a great pal of all radiographers and radiological technologists in the Asia-Pacific Region. He is also a pronounce radiographer character in the global platform.

My prayers are extended to THE MALAYSIAN SOCIETY OF RADIOGRAPHERS and the family, friends and colleagues of Mr HASHIM.

Apollo Wong Chairman HKRTA

One year has passed and in his departure anniversary, MSR was hoping and trying to find some one to write something in remembrance of his contribution to the Society and also to our profession but in vain. In remembrance of a great leader MSR have found an article written by him many years ago and would like to share with all Malaysian radiographers. There is no editing done on his article. His article showed his vision and also his view of the profession during that time - in the late 1990. Many things had changed and we can see what was written by him such as education reform and phasing off the machine operators have materialized. He is indeed a leader with far sight. MSR can only publish this only article of him to show our respect. However, if any member, radiographers, his x-students, his colleagues, his personal friend who has his photos and would like to share with us his memories, Please do contribute a message or words of remembrance, MSR will be most grateful for your contribution.



### FUTURE EDUCATION FOR RADIOGRAPHERS

By: Tn. Hj. Mohd Reza.

#### INTRODUCTION

The aim of education is to provide a wide spectrum of opportunities throughout the whole range of the abilities of the individual. Education should be openended to allow for future development and achievements; this is especially so in the field of science and technology where changes and advancements occur at such a rapid pace that it coincidently creates from time to time a void of knowledgeable and highly skilled personnel needed to handle the ever-widening field.

Therefore, in the radiographical field too, education should be aimed at the acquisition of knowledge, the stimulation of imagination, sensitivity and ability to response to new concepts, and the utilization of ideas to enable the individuals to progress to areas of specializations which commensurate with the changes and improvements that are occurring around us at the present time and the future. This is to enable radiographers, not only to become competent professionally, but remain in the main stream of process throughout their careers. It will also widen their career prospects and provide more opportunities to progress in life as successful individual in the community, professionally and socially.

This will allow the profession itself to progress matter-of –fact steadily and surely to the apex of excellence. Quality in the profession will enhance productivity amidst self-fulfillment and satisfaction amongst the individuals in the profession.

#### PRESENT STATE OF AFFAIRS

At present, the qualification in both diagnostic and radiation therapy imposes constraints in the career-development of radiographers because of the constrictive nature of its basic level qualification. This has put obstacles to opportunities for further education at institutions of higher learning elsewhere, even the original institutions abroad which had conferred the original qualification in writing to accept and recognize the present qualification, to enable radiographers from this country to further their studies overseas. This has closed doors to opportunities for further education or continuing education. This is no progress; it is retrogression.

It is an irony that at one breath we are flaunting the explosive progress in radiography, whilst at the next; we are encountering discrepancy in the infrastructure of the educational system of this profession itself which is suppressing its growth and expansion. This is, not only a disappointment, but it has a very telling demoralizing effect on the individuals themselves.

### TRANSFORMATION OF THE RADIOGRAPHERS INTO IMAGING AND RADIATION THERAPY SCIENTISTS

Radiography (Diagnostic and Radiation Therapy) has progressed dramatically in the last two decades or so, that it has become a totally new field of science altogether.

SINARAN JUN 2012

By definition, radiography (diagnostic) means "the art of making pictures with x-radiation." Today, it involves drawing, not only with x-radiation, but with sound waves, magnetic fields, radiofrequencies and so on. Today, radiography has cumulatively acquired into its folds, the followings:-

Television fluoroscopy, Computerized Tomography, Ultrasonography, Digital Enhancement Radiography, Radionuclide Imaging, Magnetic Resonance Imaging, Electronic Data Archiving, Litrotripsy, Simulation, Computerized Planning, Brachytherapy, etc. Due to he wider scope of work and responsibilities a new name for the diagnostic radiographer should be Imaging Scientist and the radiation therapy radiographers, Radiation Therapy Scientist.

Amongst other factors in the process of carrying out Diagnostic and Therapeutic procedures on the patients, the radiographer must have a good knowledge of how to handle very ill patients and patients with varying degrees of trauma, mental state and so on.

A qualified radiographer, therefore, should be well-informed in the following subjects:-

- Radiation Science
- Basic Medical Science
- Clinical Medicine
- Ultrasonography
- Pathology
- Behavioral Science
- Radiation Therapy
- Principles of Oncology
- Imaging Process
- Radiopharmacy
- Radiation Physics
- Biological Imaging and Radiation
   Protection
- Computerized Tomography
- Learning Related to dealing with
   Patient
- Mammography

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- Magnetic Resonance Imaging (MRI)
- Human Anatomy and Physiology
- Medical Management and Administration

- Nuclear Medicine
- Simulation
- Computerized Planning
- Mould Works
- Treatment Planning
- Counseling
- Brachytherapy
- Dosimetry
- Cardiac Catheterization Angiography
- Interventional Angiography
- Angioplasty
- Digital Fluoroscopy
- Digital Subtraction
- Evaluation of Image
- Single Photon Emission Computerized Tomography (SPECT)
- Photon Emission Tomography (PET)
- Languages

The wider scope and the need to nurture the ability to analyze and synthesize ideas and knowledge demands a reformation of the education of radiographers towards a degree qualification. A degree is essential for advancement, not only for the individual but also for the profession in general. The course should be designed towards the acquisition of a first degree and/or for those individuals who have done extremely well, graduating with Honours. This should provide opportunities for individuals to proceed towards the Masters Degree, and possibly, for the brilliant individuals, a Doctorate in various specializations or in the teaching line.

#### THE TWINNING APPROACH

In order to open out pathways for the steady progression of achievements towards the pinnacle, a twinning approach should be looked into. There are many universities in the world running degree courses in radiography, namely; in (a) The United States of America, (b) The United kingdom, (c) Australia, (d) lapan and many others.

The twinning approach will provide the sought-for links and communication towards achieving the desired goals and status. In this ever-changing field of profession, international cooperation and exchange are essential to maintain and sustain knowledge and to acquire ideas and experience on up-to-date innovations

#### **SUPPLY AND DEMAND**

There are one hundred and five (105) hospitals with diagnostic imaging departments in the Ministry of health, Malaysia. less than ten (10) of these hospital are able to run a full twenty four-hour (24 hour) shift duty due to the shortage of radiographers. About sixty (60) of these hospitals are run by a single – handed radiographer (a one-man department). The MOH are building about ninety (90) health centres equipped with Diagnostic Imaging facilities in the future.

All in all and basing on the existing MOH Norms for the establishment of radiographers, it is calculated that about one thousand two hundred (1200) radiographers are required to effectively and efficiently man these Imaging Diagnostic Department and facilities.

There are about nine hundred and seventy (970) private hospitals, specialist centres, x-ray centres or clinics with x-ray facilities. Only about twenty five(25) of these centres are manned by radiographers. About thirty five (35) radiographers are employed to manage these hospitals or centres. There are about four hundred (400) Machine Operators (Operators who had received a few weeks of training to do some basic and simple x-ray examinations). They should be phased out and replaced by well-qualified radiographers when they are available.

A rough estimate is that Malaysia needs about two thousand (2000) radiographers to run all the diagnostic imaging departments and facilities that are available in the country. This is a people per radiographer ratio of 9.500:1, which is below the 5000:1 of Japan. About four hundred and sixteen (416) radiographers are employed in the Ministry of health, Malaysia.

#### CONCLUSION

From the foregoing discussion, it can be concluded that there is a demand for more centres or institutions of learning in this field of science and technology. These institutions must cater for whoever is interested to undertake this course in radiography as long as they possess the necessary pre-entry qualifications. The establishments of Faculties of Imaging Science and radiation Therapy in institutions of Higher learning in this country will, not only provide the educational needs of the radiographic profession but, it will also open up avenues for the propagation of this field of Science and technology in this region.



### Latest Information

From 1<sup>st</sup> January 2013, annual membership fees will be increased to RM 120.00 (Decided by MSR members on AGM 31<sup>st</sup> March 2012)

### Special Offer

For members who intend to pay membership fees for five (5) consecutive years have to pay RM 200.00 only (RM 40.00 x 5)

This special offer is valid until 31st December 2012 only.



### Tawaran Istimewa Kepada Semua Ahli MSR (Malaysian Society of Radiographers)

### Maklumat Terkini

Bermula daripada 1 Januari 2013, yuran tahunan keahlian akan ditingkatkan kepada RM 120.00 setahun (Keputusan Ahli Pada AGM 31 Mac 2012)

### Tawaran Istimewa

Bagi ahli yang ingin membayar sekaligus yuran keahlian selama 5 tahun perlu membayar sebanyak RM 200.00( RM 40.00 x 5)sahaja.

Tawaran dibuka sehingga 31 Disember 2012 sahaja.

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