

CHALLENGES AND CHANGES IN SERVICE DELIVERY AMONG RADIOGRAPHERS DURING THE COVID-19 CRISIS

Imaging is essential in assessing the severity and progression of COVID-19. When imaging is concern, the radiographers play a vital role in performing and producing optimum image quality to support clinical decision making in the diagnosis, management and treatment of COVID-19 patients.

As radiographers are one of the first line of health professionals that require frequent contact with confirmed positive patients or suspected infected patients presenting with respiratory symptoms during the process of examination (typically chest X-ray or CT chest), they are more exposed to infected persons. This has naturally heightened the radiographers' anxiety level. More so with information and control strategies regularly evolving as new information on the virus becomes known.

The radiographers from one of the largest teaching hospitals in the country are not left behind from the challenges of the global pandemic of COVID-19. In the Department of Biomedical Imaging, University of Malaya Medical Centre (UMMC), Kuala Lumpur (KL), a COVID-19 Task Force team was formed in the wake of the global pandemic to look into new challenges and changes in the service delivery. In terms of preparing our staff to face the new situation, changes were administered in regards to work processes, management of human resources (divided into teams in anticipation of accidental exposures to COVID-19 patients and the need to undergo quarantine processes, if necessary) and handling of imaging equipment (e.g. prior preparation and post examination decontamination process). Besides that, several stimulation sessions on donning and doffing Personal Protective Equipment (PPE) and handling of COVID-19 patients were conducted, reminders on hand hygiene compliances disseminated and preparedness on crisis management was organised, should the need arise.



Stimulation of donning and doffing PPE



Stimulation of handling COVID-19 patients



Preparation for scanning



Decontamination in process

During the first wave of the pandemic, in the true spirit of *#KitaJagaKita* saw many radiographers being innovative in preparing the PPEs (e.g. head covers, gowns, shoe covers & etc.) from non-woven fabric and diligently taking turns applying their sewing skills. In addition to this, self-made face shields from easily reproducible items such as strings, sponges and clear plastic sheathes were prepared creatively to ensure sufficient stock was available to carry out their duties safely and confidently during these precarious times.



PPEs being prepared by radiographers

Self-made face shields

During the early phase of the pandemic, there were marked increase in the request of mobile radiography examinations at designated COVID-19 wards and emergency areas as to avoid possible transmission during patient transfer to imaging department. As part of the new workflow, the Radiographers would decontaminate the mobile equipment and shower after handling the COVID-19 patients.



The COVID-19 pandemic is evolving continuously. What is certain is that imaging will continue to play a pivotal role in supporting clinical decision-making. Therefore, having a positive mind set is important. Radiographers, as frontline staff, should be familiar with the key challenges related to imaging patients with COVID-19. This is essential so that they can fulfil their role in ensuring patient safety, patient care and optimise image quality as a tool for more accurate diagnosis.



Most importantly, radiographers should be aware of ways to keep themselves safe and well during this unprecedented situation by adhering to the new normal (e.g. social distancing, hand hygiene compliance & etc.), using the right PPE and ensuring all their workspaces are adequately decontaminated to minimise the risk of further infection.



In summary, three key learnings during this COVID-19 pandemic are, it's important to work as a team, essential to have a positive mindset and "Together with great **TEAMWORK** and **POSITIVE MINDSET**...**ANYTHING IS POSSIBLE!**"



With that, we would like to take this opportunity to express our gratitude to all those who have donated essential items during this challenging time to show their support. Thank you very much! Your generosity and kindness are much appreciated!

The fight for COVID-19 is not over yet! We can win this together! Here from the Department of Biomedical Imaging, UMMC, KL our journey continues...!

Signing off:

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