

### **Radiological Society of Pakistan in war against COVID-19**

Around the last week of Feb 2020, I was asked a question, whether Radiological Society of Pakistan (RSP) would have a role to play at National level in containing Covid-19 epidemic in China and now beginning to spread outside China territory. It did not even cross my mind then that this corona virus would actually spread to Pakistan and that too not directly from China, but via other countries. Now it seem like a thing of the past, though it only arrived in Pakistan a few months ago. In Pakistan the Covid-19 case diagnostic testing, quarantining and documenting started in the same week with an average lag time of about 6 weeks behind the rest of the western world.

RSP realised early, by first week of March, that it had to start a formal drive in war against Covid 19. The executive council meeting of RSP was convened and a thought provoking on-line session was held which welded a strong support in favour of urgently doing something with concrete mind set for awareness, education and protection of our radiology community and their families against Covid epidemic. By this time there were no National guidelines; National Institute of Health (NIH) was kick starting along with National Disaster Management Authority (NDMA) to take this epidemic seriously and National command and operation centre (NCOC) did not even exist. First recorded Covid 19 case entry by NIH is dated 10<sup>th</sup> March, 2020. In the meanwhile, few of the Hospitals and in particular Radiology departments in Pakistan had developed their own departmental standard operating procedures and or hospital based guidelines.

RSP then officially took up the task of developing nationwide guidelines for Covid-19 related practice in radiology, infection control and use of personal protective equipment (PPE) for every radiology health care worker (HCW). Three separate committees were set up for these essential tasks including the distribution of PPE s at the national level with deliverance of these PPE s down to all district level in all the five provincial zones. These guidelines were on display on our website <https://www.radiology.pakistan.org.pk> for everyone, especially the RSP members by 3<sup>rd</sup> week of March. The highlight of these guidelines was to embed the proposed use of imaging in covid-19 treatment pathways, based on initial Wuhan experience and evidence from China. These proposed RSP guidelines were different from the NIH guidelines adopted at national level, published on its website on 2<sup>nd</sup> April, 2020. The NIH guidelines had not considered any role of imaging, whether X-Ray or computed tomography (CT scan) in management of Covid-19 related infectious disease pathway, it has since then not changed. In the meanwhile, by mid-March, the disease was upgraded from an endemic to a pandemic stage by world health organisation (WHO). At that moment Pakistan had nearly 3000 confirmed Covid-19 cases and 45 recorded deaths with very limited testing facility.

Most of the radiology facilities were geared up with SOP s to face this war on covid-19 by initial weeks of April, though most of us had not yet come across a diagnosed on incidentally undiagnosed case in our services. We continued to educate our community through the webinars involving National and international speakers from Wuhan and western countries. The disinfection process and protection of HCW was further consolidated by producing information videos and audios in different regional languages using a very simple format for our carers to comprehend and apply easily. These were updated practically every fortnight, given the evolving global experiences in managing this infection. The recurring distribution of PPE s by RSP matured quite promptly, given the keen engagement of the entire RSP executive council team in fund raising, collecting donations, establishing resource

requirements, establishing key connectivity at district level and beyond and above all smooth distribution of these items. This has continued since early April with replenishments sent regularly. A global access spread sheet was developed for all active councillors and joint secretaries to keep each other and the central office of RSP updated at all times. Additionally, activity on our website was much more robust, continuously updating data and information for members to access with an objective to make this site a single source for all relevant information.

This exercise was quite exhaustive for all the RSP executive council members engaged continuously in multiple chores, besides the psychological stress in general related to ever increasing number of Covid-19 cases and number of deaths, particularly of the HCW s. It was difficult to maintain the same level of mental and physical engagement as Radiologist began to frequently witness the positive imaging of these Covid-19 patients around mid-May. At the time of writing this editorial the official number of Covid-19 patients in Pakistan is now more than China, despite low level of testing, not truly reflective of true figures of disease prevalence in community. The province of Sindh has listed the largest number of PCR positive patients, even though Punjab has the largest population base of >120 million, again undermining the true figure of disease prevalence in community.

As of early June 2020 the status of this pandemic is worsening by the day as the figures begin to surge. The officially confirmed number of Covid-19 cases will soon be beyond 100,000 and deaths around 2000 as our testing facilities increase gradually. This rapidly increasing number is hugely burdening the medical health facilities and HCW with ever increasing number of physician / radiologists being infected along with rising mortality figures. The work related physiological stress is consequently resulting in paucity of available radiology facilities. Most of the private radiology centres, which continued to provide services during this pandemic are now opting to shut down completely or providing limited services. The public hospital radiology services, which were already limited, have further restricted, given the reluctance of the junior doctors to provide services requiring physical personal contact.

I for see a worsening Covid-19 related national situation in the forthcoming weeks, while we approach the peak of graph of positive cases in Pakistan. However, we clearly have crossed the threshold of our resource limitation in beginning of June 2020, also gravely stressing the radiology services in this country. The incoherence at national level in general and limitation of political leadership to clearly steer our rudderless change in policies are reflective of present state of affairs. We as radiology community simply need to do the best in the present circumstances and manage both the physical and psychological challenges as best as we can. RSP will continue to strive and support its community in this war against Covid-19.

**Dr. Najam Uddin**

*President Radiological Society of Pakistan*