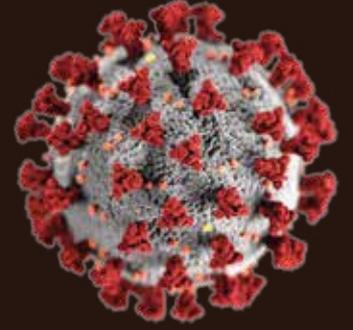




A Tale of Two Variants

In this issue, experts at Ramaiah discuss how different the Omicron variant of Covid-19 from the Delta variant and the difference in treatment protocol and precautions are taken. They also talk about about pregnant women, child care, preparedness and infrastructure in the context of the latest surge.



How did you face the challenge of omicron in the advent of the 3rd wave?

For the 3rd wave, there were two things to note. Firstly, when the infectivity is high, the number of cases is also high, however the number of admissions was less because Omicron was not as infective to the lungs as the Delta variant. Secondly, we were better prepared in terms of infrastructure, manpower and equipment.

There were certain handicaps in this wave such as the new batch of residents were yet to get admitted. Also, a large number of healthcare workers were infected in this wave. Since the admissions were low compared to the last wave, we were able to tide over the crisis. The quarantine period was less, so many people returned to work. We successfully managed this wave.

How did you coordinate between authorities and Hospitals?

Those Government processes in technology support continue between SAST, Arogya Karnataka and other state government-run agencies including BBMP where lack of coordination is still rampant. No one seems to take responsibility. Since the numbers affected in the last wave came down, they have reduced the allotment to BBMP beds, but have not reduced the number of ICU patients. The numbers should be proportionate. They have kept the number of ICU and Ventilator beds to themselves; we can't run the system like that. We have raised this issue on several occasions at various forums, but not much support or reply has been forthcoming.

Dr Harish K
Associate Dean
Ramaiah Medical College & Hospital



RAMAIAH

December 2021 - January 2022

Omicron and beyond

As the third wave of COVID19 receded, leaving behind a large segment of the population passing through the trials and tribulations, the campus witnessed several activities indicating the return to the new normal. While the issues related to vaccinations and treatment challenges remained fairly sorted, the resumption of offline activities in education and patient care were quite limited.

The administrators and the clinicians provided strategic inputs for organizing the services and ensuring minimal disruption to teaching and learning as well as patient care on the campus. The faculty organized and participated in several online webinars providing valuable information on the Omicron variant and its management. Some of the excerpts from the Ramaiah Medical College doctors are shared in this issue.

Several continued education and awareness programs were conducted on the campus. The institution conducted a vaccination awareness program in the rural field areas of Devanahalli to support the ongoing vaccination drive and address the issues of vaccine hesitancy among the general population. This was critical to ensure all the eligible citizens get vaccinated and the surge of covid is contained at the population level. The Department of Medicine conducted a training program on management of low-sugar levels focusing on the judicious use of insulin.

Our resident doctors from the departments of cardiology, general surgery, ophthalmology, OBG, and paediatrics received awards for their presentations at state and national conferences.

The institution is keenly working on improving the research activities on campus. The Division of Research and Patents along with the Medical Education Unit conducted a training program on sensitizing interns towards the interpretation of journal articles and conducted a grants writing workshop for the faculty.

Efforts are underway to adapt to the new normal and provide ICT tools for training health care professionals. The institution launched an online course "Geriatric Care- Essential Practical training for Nurses" through S.H.A.R.P.E.N based platform developed by the RICPHI team.

We hope the year ushers more positive vibes and will take us towards healthier and wiser bastions.

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Dr Anil Kumar
 Prof. & Head
 Dept. of Medicine, Ramaiah Medical College & Hospital

What were the Symptoms of Omicron?

The symptoms of Omicron were milder compared to the Delta variant. Upper respiratory system, Itchy throat, cold-like symptoms with a runny nose, body ache and fever that may last just for one or two days unlike in the previous surge where the fever was for a longer time. Omicron infection also has symptoms of backache and pain in the legs with generalized body aches and cramps. Generally, these symptoms will reduce within three or four days compared to the delta that lasted longer. These symptoms are seen in the BA1 type of Omicron. In Denmark and the UK, the BA2 variant is reported for which we have to wait on the kind of symptoms for that variant.

How harsh is it be on patients?

It depends on the patient. If the patient is immune-compromised, elderly, above 60, has hypertension, obesity, Kidney ailments or other comorbidities, they need to be hospitalized and monitored. For young people with good immunity, the symptoms and the effects are very mild. Most

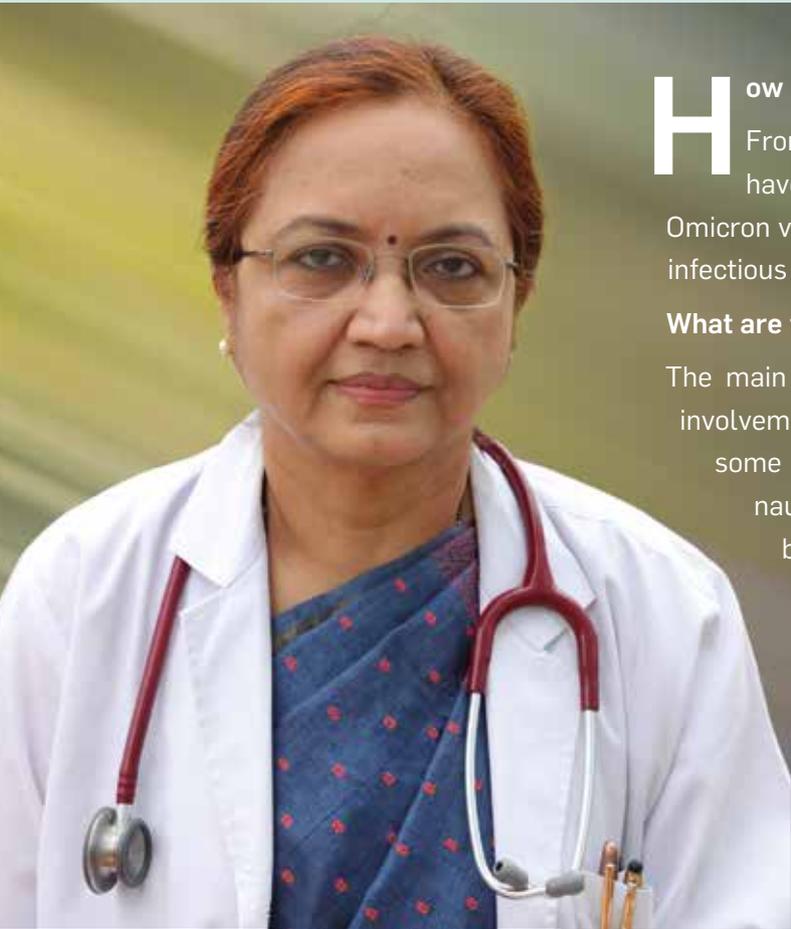
importantly, vaccinated persons have very mild symptoms. So, the harshness depends on the victim's immunity or lack of it.

What type of treatment protocol was in place for the 3rd wave?

In the last wave, we experienced a shortage of manpower, shortage of Oxygen, very sick and serious patients even before they got hospitalized, but this time we saw very few emergencies and the requirement for oxygen beds. It was as low as 2%. There wasn't a huge demand for oxygen like in the last wave but, the unique thing about this surge was that we were prepared with good manpower and meticulous planning. Since the R Zero is very high, we saw a large number of infections among health staff, consultants, postgraduates, not only here, but, across the country. The backbone of fighting the virus were infected. We thus paid greater emphasis on protecting health care workers by properly rationing them, keeping good numbers in reserve, and providing them with proper PPE kits. This was so that situation of shortage of health care workers and oxygen would not arise.

Do you anticipate a larger impact of this variant on the people?

The impact of this variant on the people of any new variant might be the long term effect, where even WHO declared this as the "Variant of concern" and spreading very fast. Though we are seeing very mild cases, there are yet to be studies conducted to understand post-Covid complications can be caused to the brain or the heart. It's impact on children also needs a deeper look and understanding. These important concerns can't be brushed off and need time and proper studies of this variant and its impact on the population.



Dr Gayathri
 Prof. & Head
 Dept. of Respiratory Medicine
 Ramaiah Medical College & Hospital

How serious is the Omicron, the new Covid variant?

From the time the Covid virus started spreading many variants have emerged as the virus continues to mutate. The new Omicron variant is easily transmissible and spreads fast, in fact more infectious than the Delta variant.

What are the respiratory issues in the surge?

The main symptoms of omicron variant is upper respiratory track involvement, like fever, sore throat, runny nose and severe body ache; some unusual development is diarrhea and abdominal cramps, nausea and loss of appetite. Few cases also have cough and breathlessness.

Special care needs to be taken by persons with comorbidities in whom fever persists for more than three days or who present with breathlessness. They have to monitor temperature and oxygen saturation and keep in touch with their doctor.

How to tackle the situation?

The main protection is wearing the N95 Mask which continues to be the most important safety measure. If you come across an infected patient then you will have to isolate yourself completely and monitor yourself for any of the above-mentioned symptoms. In the third wave, the standard prevention remained as Masking, Distancing, getting Vaccinated, Hand Washing and Good ventilation which are also known as Covid Appropriate Behaviours. If you are eligible, then you can also get the Booster Dose that can greatly reduce the chance of infection and hospitalization. Avoid indoor gatherings and be very careful with people without masks to mitigate the spread.

In the last wave, the governments, both state and centre, who were caught unawares by the surge, kept on changing guidelines very often. So, what is the scene now?

This time they have very confusing announcements on lockdowns and other measures that are changing now and then. This changing of goalpost tactics is bound to continue, but, this is also an evolving situation, we can't blame the government as yet. On the other hand, the authorities need

to be very practical when it comes to the role played by private hospitals and government hospitals. Even in this wave, the government-run hospitals hardly have any ICU cases and most of such serious cases are dumped on private hospitals. It's not right. Though the Central Government had a greater say in the last wave, this time they have decentralized and have given more powers to the state and the Central Government only issues guidelines.



Dr Sujani B. K
 Prof. & Head
 Dept. of OBG, Ramaiah Medical College & Hospital

How will this third wave affect women in general and pregnant women in particular?

The third wave peaked suddenly, and thankfully we did pass through a second wave that taught good lessons and we were all ready for it. Since most pregnant women were asymptomatic, we went ahead with normal deliveries unlike in the second wave where at the slightest hint of Covid infection we would opt for Caesarean as we had very little time to monitor and wait for the symptoms to come down. So most of the cases we are attending now, we are trying normal delivery even if the mother has tested positive. Only when they come to labour and test positive and with symptoms, that we resort to more tests and results before delivering. This will no away affect the baby or the health of the mother and we go ahead with the delivery.

For the last six months we have always encouraged pregnant women to get themselves vaccinated, only a small number were hesitant. Most pregnant women were vaccinated and no major complications have been reported.

Your team managed the second wave successfully, what were the challenges and risks in the third wave?

The major issue in the second wave was the lack of manpower and infrastructure. We didn't know where to operate or deliver, we did not know how to shift the baby and find a suitable place. Because of that experience, in the third wave, we had designated labour rooms, OTs, round the clock specialists, anaesthetists and paediatricians in place. We are fortunate that we did not have major complications or challenges like we faced in the second wave.

What are the tips and safety precautions for pregnant women?

First and foremost is wearing a mask, N95 in particular; even if you are vaccinated. Second, do your regular breathing exercises as prescribed. It is crucial that you do not attend any large gatherings. Be careful about rituals like baby showers, and ensure not too many people are invited and to always wear a mask. We don't immediately test women who come to us after attending large gatherings. We first observe for any symptoms. In some cases, when we tested after a few days, the infection was long gone without any symptoms.

Don't worry too much about Omicron! We are all ready and prepared to assist. Most importantly, if the mother tests positive it does not affect the new-borns unlike in infections like Hepatitis or any other viral infection. The paediatrician will confirm whether the child is affected or not, but it is rare and a lot of studies are being done on that. Even if the baby is not infected, the mother and baby are in isolation anyway.



Covid-19 vaccination trail Awareness programme in Krishna College at Devanahalli. Dr Shalini Pradeep, Professor, Dept. of Community Medicine, Dr Tharanath, Asst. Professor, Dept. of General Medicine are seen in the picture.



Dr Anusha Aynala third year Ophthalmology postgraduate student won the Best Paper Award in Ocular Surface in the recently conducted State conference - Karnataka Ophthalmic society conference 2021 held between 10-12 December 2021. Topic: Relationship between

intensity-modulated radiotherapy for buccal mucosal tumours and dry eye. Chief author Dr. Thanuja G. Pradeep, Associate Professor, Ophthalmology Presenting author - Dr.Anusha Aynala, Chief author Dr.Thanuja G.Pradeep, Associate Professor, Ophthalmology

Cardio Resident Dr Dhanachand Singh got a prize for his poster at the Endocrinology conference ESICON 2021 for his collaborative work with the endocrinology department on Acromegaly

Paediatric first-year resident Dr. Charitha was awarded the first prize in an oral paper presentation on Associated Factors in Adolescent Prediabetes in the National Adolescent Conference - Adolescon 2021.

Paediatric first-year resident Dr. Deepti was awarded the second prize in oral paper presentation on Blood Levels of Heavy Metals in Adolescents in the National Adolescent Conference - Adolescon 2021.

Final year postgraduate student, Dr. Monica N, Department of General Surgery at the annual national conference ASICON 2021 held at New Delhi (virtual) – won the 2nd prize for a poster presentation titled "Delayed presentation of colonic perforation in a patient with chronic pancreatitis: A diagnostic dilemma", was moderated by Dr. Srikantaiah H C, Associate Professor, Dept. of General Surgery.



Dr. Prerana Anadure, Final year OBG Post Graduate received 3rd prize in the KSOGA state conference held at Davangere between 17th and 19th December, 2021 in paper presentation. The topic was - A case series of placenta accreta at tertiary care hospitals. It was done under the guidance of Dr Manjula NV, Associate Prof, OBG and Dr Sujani, Prof & HOD, OBG





Dr. Jeffrey A Loeb, Prof and Head, Dept. of Neurology & Rehabilitation, University of Illinois, Chicago, addressed the postgraduate students of Departments of General Medicine, Paediatrics, Emergency Medicine, Neurology & Neurosurgery on 15th December 2021 at Ramaiah Memorial Hospital.



Dr. Somashekar A. R., Prof. & Head, Paediatrics, Ramaiah Medical College was the Faculty for the first Respicon AP held at Rajahmundry. He spoke on group management, panellists for NTEP and GINA guidelines 2021.



Dr. Karunakara B.P., Professor & Paediatric Intensivist has been elected as Vice President of Indian Academy of Paediatrics, Karnataka state branch for the year 2022. He continues as President of IAP Respiratory chapter, Karnataka for 2022



Dr. G. Balamurugan, Registrar, RINER was invited as a resource person for a webinar organized by MNR CoN, MNR Higher Education & Research Academy (MNR-HERA), Sangareddy, Telangana on 23rd October 2021. He spoke on the "Role of Nurses in Promotion of Mental Health in an Unequal World".



Dr Sampangi Ramaiah, Dept. of Radio Diagnosis was awarded the IRIA President Appreciation Award for excellent work.



Dr. Shabari Girishan of the Dept. of Neuro Surgery has been selected for the PhD program at the Indian Institute of Science for his project on rehabilitative aspects of fine motor movements of the hand.



Lecture on "The Pandemic, Global Growth and Global Equity Market: Is there a disconnect?" was delivered by Dr.Partha Ray, Director, NIBM, Pune. It was organized by the School of Social Sciences, Ramaiah University of Applied Sciences on 4th December 2021 at the Council Room at Ramaiah Medical College



Department of Radio Diagnosis, Ramaiah Medical College & Hospitals in association with the Indian Radiological & Imaging Association conducted a CME on Foetal Cardiac Imaging - An Update on 19th December 2021 at Ramaiah Medical College. Dr. Umesh is seen in the picture.



ಕನ್ನಡ ಅಭಿವೃದ್ಧಿ ಪ್ರಾಧಿಕಾರ ದಿನಾಂಕ 3-12-21 ರಂದು ಆಯೋಜಿಸಿದ್ದ 'ವೈದ್ಯಕೀಯ ವಲಯದಲ್ಲಿ ಕನ್ನಡ ಕಾರ್ಯಾಗಾರ' ದಲ್ಲಿ ರಾಮಯ್ಯ ಆಸ್ಪತ್ರೆಯ ಮಕ್ಕಳ ವಿಭಾಗದ ಪ್ರಾಧ್ಯಾಪಕರು ಹಾಗೂ ಮುಖ್ಯಸ್ಥರಾದ ಡಾ. ಅ ರಾ ಸೋಮಶೇಖರ ಅವರು 'ಕನ್ನಡದಲ್ಲಿ ಆರೋಗ್ಯ ಮಾಹಿತಿ' ಬಗ್ಗೆ ವಿಷಯ ಮಂಡನೆ ಮಾಡಿದರು.

Ramaiah Medical College & Hospital launched an online course (S.H.A.R.P.E.N based platform) developed by Dr Nayanjeet and team from RICPHI titled "Geriatric Care- Essential Practical training for Nurses on 4th January 2022. It was launched by Dr Medha Y. Rao, Principal and Dean, RMC and practising Geriatrician supported by Geriatric Department & Nursing Supervisors Ms Lissy John and Ms Lysamma Mathew. The program was coordinated by Dr Shalini Pradeep, Community Medicine, RMC

Department of Paediatrics, Ramaiah Medical College coordinated along with Aniketana Foundation and charitable society the Annual Dharmasasta Sri Ayappa temple health screening activities held at Sri Rampuram Ayappa temple clinical premises on 24th December 2021.



Sleep Disorder Breathing Consequences

Sleep-disordered breathing encompasses obstructive sleep apnoea (OSA), sleep-related hypoventilation and hypoxemia and central sleep apnoea. OSA is the most common form of sleep-disordered breathing. It is grossly underdiagnosed and highly prevalent. Most studies demonstrated a frequency between 1% and 4% but overall prevalence of obstructive sleep apnoea syndrome (OSAS) ranged from 0.1% to 13%. Moderate to severe OSA, as defined by an apnoea-hypopnea index (AHI) greater than or equal to 15, has been found in up to 50% of men and 25% of women in the middle-aged population. There are multiple factors responsible for rise in the prevalence of OSA. One of the important being rising incidence of obesity. Over the past 30 years, obesity levels have risen dramatically, partly explaining the increase in OSA prevalence.

Early diagnosis is the key

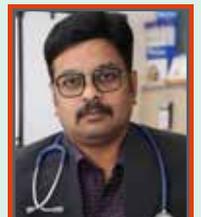
OSA may have multifaceted presentations, with vague symptoms. OSA is usually associated with episodes in which patient stops breathing during sleep — which would be reported by observer person gasping for air during sleep, awakening with a dry mouth, morning headache, difficulty staying asleep (insomnia), excessive daytime sleepiness (hypersomnia), difficulty paying attention while awake and Irritability. The adverse medical and psychosocial consequences of OSA and other sleep-related breathing disorders are considerable. Undiagnosed or untreated sleep apnoea can lead to serious complications such as heart attack, glaucoma, diabetes, cancer, and cognitive and behavioural disorders. OSA may lead to complications like pulmonary hypertension, neurocognitive effects, decreased quality of life, motor vehicle accidents, childhood growth interruption, pregnancy-induced hypertension, foetal growth retardation, and disruption of the patients' bed-partners' sleep quality.

Evaluation and management

Diagnosis of sleep disordered breathing could pose a challenge, however tools and investigative modalities like polysomnography have come a long way in reaching

appropriate diagnosis and devising a treatment plan. Polysomnography or sleep study, is a comprehensive test used to diagnose sleep disorders. Polysomnography records multiple parameters like brain waves (EEG), blood oxygen levels (SpO₂), heart rate and breathing, as well as eyes (EOG) and leg movements during the study. Polysomnography may be done at a sleep disorders unit within a hospital or at a sleep centre. Ideally it is performed at night, polysomnography is occasionally done during the day to accommodate shift workers who habitually sleep during the day. In addition to helping diagnose sleep disorders, polysomnography may be used to help initiate or adjust the treatment plan if patient is already been diagnosed with a sleep disorder. Sleep study can also be done at home. Home sleep apnoea testing uses a limited number of sensors to focus primarily on diagnosing OSA. Sleep study can either be done as a full night study or split night study. In Full night study diagnostic sleep study and continuous positive air pressure (CPAP) titration are done on two separate nights. Split night study means where diagnostic study is performed in initial first half of the night showing evident apnoea and hypopneas. Thereafter, in second half of same night CPAP titration is done

Management of OSA involves lifestyle modification like weight reduction, regular exercise, smoking cessation, avoiding beverages and regularising sleep pattern. Breathing devices such as CPAP machines which provide positive airway pressure are, however, mainstay of sleep apnoea treatment. Patient may require the overnight support of CPAP device for months or years or sometimes for lifetime. Regular monitoring of adherence to device therapy and monitoring of AHI and titration of CPAP parameters yield better clinical outcomes.



Dr. Prasanna Kumar T

Associate Professor

Dept. of Respiratory Medicine

Ramaiah Medical College and Hospitals

Paramitas to Counter Fear of COVID-19

This is a frequent question I have been asked across the spectrum of doctors from interns to postgraduates to senior faculty. It is but a natural reaction to the bombarding on social media, TV channels and by peer groups. Fear manifests in many ways

- 1) Some are paralyzed and become hermits confined to their chambers
- 2) Some people are so scared that they make their colleagues stand at a distance and take updates
- 3) A student who has just entered under graduation demands CT etc, though he has mild symptoms
- 4) A resident close to me goes incognito and stops communicating
- 5) A VIP goes and gets admitted for a mild infection when not required
- 6) Another VIP just demands a particular cocktail be given and he is discharged by the afternoon though it is not advised by any scientific body
- 7) A large body of students show what is known as passive dissent and start seeing through you without acknowledgement
- 8) Some students send their parents who say that their ward is incapable of any activity despite many consultations and medications
- 9) Us seniors behaving as though covid is a common cold and saying there is no problem and to come to work as soon as possible
- 10) False bravado across the spectrum of health care workers who don't wear masks properly, eat-in confined rooms together and meet in closed spaces.

All this would sort of agitate me. But when I analysed the root cause of the

problem, it appeared that it was fear manifesting in various ways. This fear may be justified or not justified, but fear is fear and makes you behave abnormally. Fear is an emotion that gnaws you from inside and reduces productivity.

I was thinking of ways to tackle this emotion personally and also among my colleagues and juniors and that led me to the 6 paramitas of Mahayana Buddhism.

- 1) **Wisdom** - The balanced knowledge about the illness that it is neither a common cold nor will everybody get it to the other extreme of I will die of it. The truth is somewhere in between. This decides how much care you take of yourself and others. Wearing an N95 mask, avoiding closed space meetings, frequent hand washing, using appropriate PPE, following government guidelines, segregation of covid cases in one area and getting vaccinated is wisdom
- 2) **Morality** - Giving evidence-based care, valuing every life, knowing our capacity, assigning work to the person who is supposed to do it. This involves everything from giving good PPEs to providing proper infrastructure.
- 3) **Patience** - This is a very important paramita. It includes lending an ear to hear the problems, understanding the concerns of the patients in wards and caregivers, listening to all the stakeholders, and compassionate speech and proper body language while talking to either your peers or juniors.

- 4) **Energy** - This involves constant vigilance about protecting yourself, your patients and society at large by using protective measures, constant interaction with stakeholders, constant updating of knowledge regarding treatment and guidelines. It also includes daily physical exercise, pranayama, attention to one's diet and taking prescribed medications regularly.
- 5) **Meditation** - Contemplation and being realistic. Trying to understand others, not trying to bulldoze but trying to reach a consensus which is the basic tenet of evidence-based medicine. The final realization is that we are not gods and there is a higher power, and to act according to our conscience.
- 6) **Generosity** - This not only involves financial but also many other ways. A simple gesture such as enquiring about the quality of food and timely intervention are also generosity. Finally, we must understand that all of us are in this together, fighting a common enemy.

This is not a sermon but my musings at the end of a covid day. Most religions believe that there is a divinity within us. There may be more meaning and more depth in each one of us which can support us in times of extreme pain and misery. The Buddha in you needs to be awakened.



Dr. Anilkumar
Prof. & Head
Dept. of Medicine

Ramaiah Medical College & Hospital

Christmas & New Year celebrations at Ramaiah Hospitals



Ramaiah Hospital Health Care Workers Wishes everyone Covid Free - 2022