



International Webinar

“Simplified and Applied Pharmacology for Nurse Practitioners”



Organized by:

MGM NEW BOMBAY COLLEGE OF NURSING

MGM INSTITUTE OF HEALTH SCIENCES

(Deemed University u/s 3 of UGC Act, 1956)

Grade ‘A’ Accredited by NAAC

on

20th & 21st April 2021

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Report of International Webinar
Simplified and Applied Pharmacology for Nurse Practitioners
Dated - 20-4-2021 & 21-4-2021.

AIM

The webinar focuses to enlighten the basic & advanced Pharmacology for the Nurse Practitioners to manage critically ill patients in collaboration with health care team

OBJECTIVES

- To introduce the basics of pharmacokinetics & pharmacodynamics
- To enhance clinical skills in managing emerging diseases
- To enforce the working capability based on standing orders in Critical Care Units
- To discuss on updates of medical management in critical conditions
- To discuss on safe handling of narcotic drugs
- To highlight on simulation-based training in clinical pharmacology

Participants

Total 1389 participants registered Internationally and Nationally. There were Nurse Practitioners, NPCC students, M.Sc. Nursing Students and teaching faculty of various colleges and Hospitals.

Proceedings

First Day Report on 20-4-2021.

The Programme started by the moderator, Dr. Mrs. Sindhu Thomas, Assistant Professor at 10.00 AM with a warm welcome to all the Panelists and the participants who were present virtually on the first day of the webinar. The welcome address was delivered by Dr. R. Ponchitra, Professor and Vice Principal at the inaugural session.

Dr. Shashank Dalvi, Hon. Vice Chancellor, MGMIHS welcomed Dr. T. Dileep Kumar, President, Indian Nursing Council, New Delhi and addressed the participants with his key note address. He emphasized on the importance of Pharmacology and Pharmacokinetics at the critical care settings for Nurse Practitioners.

Dr. T. Dileep Kumar, President. Indian Nursing Council in his address highlighted the key role of Nursing Professionals in the current COVID-19 Pandemic situation. The nursing frontline warriors made the humanity to understand its significance. He also said that, to make the Nursing Profession more visible the INC started Nurse Practitioner Programme in 2017 in India. It is in an infancy stage when compared to the Western Countries like USA, UK.... etc. He said that there are two pioneer institutes in Maharashtra who started the NPCC Programme in India; one among them is MGM New Bombay College of Nursing, Kamothe, Navi Mumbai. Nurse Practitioners need to work hard to demonstrate their skills in providing outstanding care to their patients. He also proposed for the future implementation of Doctor of Nurse Practitioner Programme which is in the pipeline.

Opening of the theme was unfolded by Dr. Prabha. K. Dasila, Professor and Director, MGM New Bombay College of Nursing gave a brief description of starting Nurse Practitioner Programme at MGM New Bombay College of Nursing. She appreciated the team efforts of dedicated doctors as Core Committee members who are actively involved in shaping the Nurse Practitioner Programme at MGM. Dr. Dasila also informed regarding various SOP's prepared for NP's working in the critical care areas of MGM. She emphasized on the role of Nurse Practitioners in administering drugs to critically ill patients and importance of acquiring in-depth knowledge on drugs in order to avoid medication errors which is a major adverse event in the hospitals. The Inaugural session concluded at 10.35 A.M.

Session 1: Introduction to Pharmacology delivered by Dr. Santosh Gursale, Assistant Professor, Department of Pharmacology who gave a detailed description on the Origin of drugs, introduction to drugs, definition of the drug, Drug information sources, Nature and source of drugs and drug nomenclature. He also explained a detailed description on pharmacokinetics and pharmacodynamics.

Session 2: Leadership in Management of Medications in ICU by Ms. Jasmine Emmanuel, Nurse Practitioner from Chicago (USA) who spoke various roles and responsibilities of Nurse Practitioners in Critical Care. She emphasized that Nurse do Prescribe the drugs as per the SOP'S of each Organization. The primary role in critical care unit is regard to electrolyte replacement is the first priority. She discussed about various drugs used in Surgical ICU like Opiods, Narcotic pain management, Non-narcotic pain management, vasopressors, Cardiac drugs etc. She enlightened about the vital role of NP'S in the Critical Care Unit in USA.

She concluded the session by quoting, Nurses are at heart of a world -class, patient centered standard of care. Day in and Day out, they go the extra mile to make a lasting differences in the lives of the patients and their families.

Session 3: Emerging Diseases: A discussion of New and Upcoming Infections by Dr. Sagar Sinha, Professor from Department of Emergency Medicine, MGM Medical College & Hospital, Kamothe. He has given a detailed explanation of various infectious diseases which has emerged in the past and as we are facing today is COVID 19 is very miniature, when we compare with the other past infectious diseases which has emerged.

He discussed various institutional SOP'S used for the treatment of respiratory illness as the principles are the same. Newly emerging, reemerging, resurging and deliberately emerging diseases which includes Bioterrorism was discussed. Environment, animal and Vectors are responsible for the emerging Infectious disease.

He concluded by saying that we need to be prepared for any disaster which is due to Microbial host and lack of judicious use of appropriate drugs.

Session 4: Medication safety in Administration of drugs in Critical Care Units by Dr. (Lt. Gen) K.R. Salgotra, Hospital Director of MGM Medical College& Hospital, Kamothe. He said medication error is one of the major adverse events considering patient safety. He said in USA as per the statistics from research studies 25 lakh people die every year due to medication error and in India 50 lakh people die every year.

Dr. Salgotra discussed on various contributing factors of medication errors and explained in detail how can the prescribing go wrong due to inadequate knowledge about drug indication and contraindications, not considering individual patient factors such as allergies, co-morbidities, wrong patient, dose, time, route, inadequate communication, documentation and mathematical error etc. He highlighted on Look-alike and sound -a-like medications. He concluded the session by saying medications need to be wisely and correctly used which can prevent human suffering and unnecessary financial cost.

Session 5: Reflections from Novice Nurse Practitioner Mrs. Sreedevi P.S who is an Alumni Nurse Practitioner of MGMNBCON and presently working as Nurse Practitioner in Critical Care unit of MGM Medical College & Hospital Kamothe Navi Mumbai. She recalled Nursing Profession in the past, present and future. She reflected her own journey as a staff nurse, senior staff nurse and today as a full-fledged Nurse Practitioner at MGM Medical College Hospital since one year. She described about the experiences acquired during two years of Nurse Practitioner Programme from 2017-2019 which was an intensive training in the critical care units, learning by observation and doing advanced

procedures under the preceptor ship of intensivists, senior residents as well as junior residents was remarkable which helped them to acquire competence and confidence in doing advanced procedures independently. She extended her heartfelt thanks to the management for starting such an outstanding competency based Nursing Programme.

Conclusion of the session was done by Mrs. Susan Jacob, Professor MGM New Bombay College of Nursing by 1.05 -1.15 p.m.

Second Day Report on 21-4-2021.

The programme started at 9.50 A.M and was moderated by Mrs. Ferganzia Jubilson, Assistant Professor MGM New Bombay College of Nursing, Kamothe.

Dr. Prabha. K. Dasila, Professor and Director, MGM New Bombay College of Nursing gave a warm welcome to all the panelist and participants.

Session 1: Role of Nurse Practitioner in administering drugs in Critical Care was delivered by Mrs. Sheelamma Thomas, Nurse Practitioner in GastroenterologyUSA, explained about her personal Development and experience as a Nurse Practitioner in Gastroenterology for the past 10 years. She emphasized on the duties and responsibilities of Nurse Practitioner which includes conducting basic examination, advanced assessment, doing advanced procedures, making critical decision making in the critical care etc.

She discussed common medications used in the critical care, various role of Nurse Practitioner like monitoring of patients like change in vital signs, fluid balance, alertness or orientation, side effect and desired effect of medication and monitoring injection site. She briefed about various protocols for drug administration, drug - drug interactions etc. She concluded the discussion about colorectal screening which is of paramount importance for people aged above 45 years old is made mandatory to prevent Colorectal cancer in USA to reduce the risk of Colorectal cancer.

Session 2: A Pharmacological Update in the Management of MI Dr. Shilpa Kadam, Professor in Dept of Cardiology MGM Medical College Hospital explained that the heart disease is the biggest killer in India. She explained about various causes of leading cardiac risk factors, types of MI, MINOCA etc.

She discussed about golden hour of MI, routine treatment for a patient with MI which includes first priority is Oxygenation, Nitroglycerine and Morphine Sulphate. She discussed on various fibrinolytic agents, Beta blockers, Use of Low molecular weight Heparin used in MI.

Session 3: Safe Opioids Administration: How, When and When Not to Administer? Dr. Jacob Jesurun Professor & HOD, Dept. of Pharmacology Believer's Church Medical College Hospital, Kerala highlighted on the topic. He discussed in detail about various types of opioids used in Critical Care, Mechanism of action of Opioids, and its contraindications and complications. He summarized that opioids are used in severe pain, cough suppression and diarrhoea and highlighted 10 tips on safe opioid administration.

Session 4: Novel Anticoagulants was dealt by Dr. Pradeep Jadhav Professor, Dept. of Pharmacology, MGM Medical College, Kamothe Navi Mumbai. He discussed on the properties of an ideal anticoagulant and emphasized mainly on four novel anticoagulants including apixaban, dabigatran, rivaroxaban and edoxaban which are used as an alternative to warfarin which is used for high risk patients. He explained its advantages and disadvantages, drug interactions and complications.

Session 5 : Trends in Pharmacovigilance in the era of COVID 19 Pandemic Dr. Deepanjana Dass Assistant Professor, Dept. of Pharmacology, MGM Medical College, Navi Mumbai elaborated on the topic where, she highlighted the meaning of pharmacovigilance which is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug related problems. She stressed on the main focus of pharmacovigilance is on Adverse drug reactions, drug toxicity and highlighted on the key areas of pharmacovigilance which includes National drug policy, Drug regulation, Clinical Practice, Public health Programme and Benefits from dedicated Pharmacovigilance resources. She Concluded by explaining six biggest trends in pharmacovigilance which consists of role of pharmacovigilance in the pandemic of this magnitude, Artificial intelligence in adverse Drug Reaction processing in the era of COVID19 Pandemic, Machine Learning Algorithm used in drug safety and ensure administering drugs, New challenges in drug safety, monitoring the safety of biological medicines and gene therapy.

Session 6 : End of Life Care: Pain and Symptom Management was delivered by Dr. Suchet Avanti, Assistant Professor, Dept. of Emergency Medicine, MGM Medical College & Hospital, Kamothe, Navi Mumbai. He stressed on Pain management, discussed about the use of opioids on pain management. He discussed on the importance of palliative sedation on Palliative care and hospice care. He also stressed on the Basics of Pain Management by using pain scale, WHO pain ladder etc.

Session 7 : Simulation Based Training: Application in Clinical Pharmacology was dealt by Dr. Vishwas Sathe Professor, Department of Anaesthesia, MGM Medical College & Hospital, Navi Mumbai. He discussed on Simulation as a method of training and highlighted the role of simulation in health professional education, He concluded that simulation has significant potential to address the challenges in today's provision of clinical pharmacology education, especially with new directives for social distancing and limitations for in- personal engagement.

Conclusion of the session was done by Mrs. Susan Jacob, Professor, MGM New Bombay College of Nursing, Kamothe by 1.05 pm -1.15 p.m.

Valedictory function was done by Mrs. Sarika Nair Tutor, MGM New Bombay College of Nursing, Kamothe by 1.15 pm to 1.30 p.m.



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5th Floor, MGM Educational Campus, Plot No. 1 & 2,
Sector-1, Kamothe, Navi Mumbai – 410 209.

National Webinar on - “Simplified and Applied Pharmacology for Nurse Practitioners”

20th April 2021 and 21st April 2021

Day 1 Scientific Programme -: 20th April 2021

Time	Event	Topic	Resource Person
10.00 – 10.35 am	Inauguration Ceremony and Key Note Address		
10.35 – 11.05 am	Session - 1	Introduction to Pharmacology	Dr. Santosh Gursale Professor Dept. of Pharmacology MGM Medical College Hospital, Kamothe
11:05 – 11:35 am	Session - 2	Leadership in management of medications in ICU	Ms. Jasmine Emmanuel Nurse Practitioner Edward Hines, Jr. VA Hospital Chicago
11.35 – 12.05 pm.	Session - 3	Emerging Infectious Disease: A discussion of New and Upcoming Infections.	Dr. Sagar Sinha Assistant Professor Dept. of Emergency Medicine MGM Medical College Hospital, Kamothe
12.05- 12.35 p.m.	Session - 4	Medication Safety in Administration of Drugs Critical Care units..	Dr. (Lt. Gen) K.R. Salgotra Hospital Director, MGM Medical College Hospital, Kamothe
12.35 – 1.05 p.m.	Session - 5	Reflections from Novice Nurse Practitioners	Mrs. Sreedevi P.S. Nurse Practitioner, Critical Care, MGM Medical College Hospital, Navi Mumbai
1.05 -1.15 p.m.	Conclusion summary: Day 1 Mrs. Susan Jacob , Professor, MGMNBCON		

Moderator :- Dr. Sindhu Thomas, Assistant Professor, MGMNBCON



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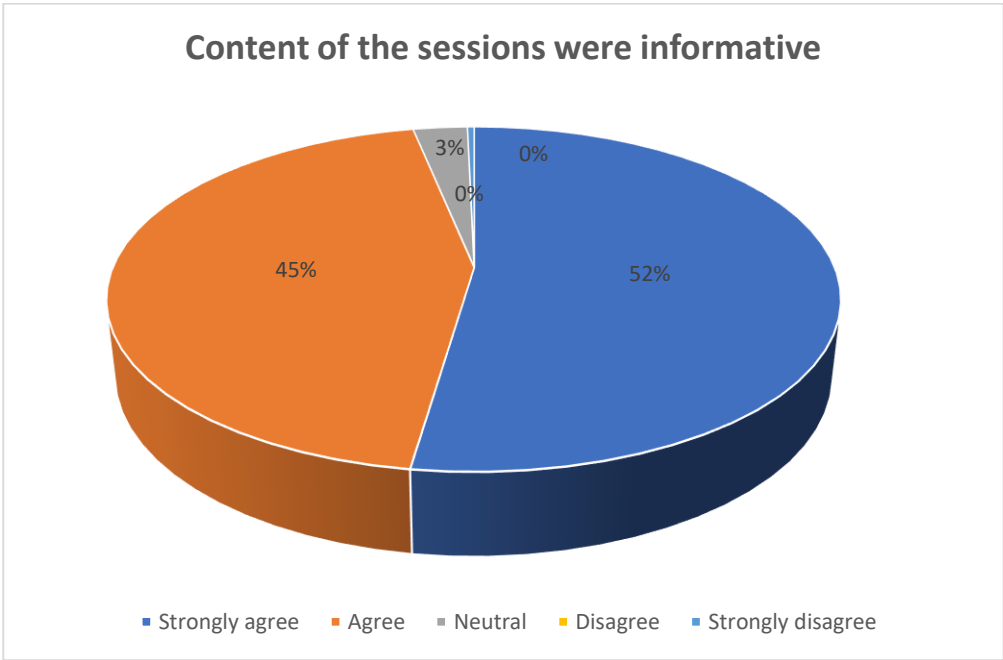
Day 2 Scientific Programme:- 21st April 2021

Time	Event	Topic	Resource Person
9.30 -10.00 am	Session- 1	Role of Nurse Practitioner in administering drugs in Critical Care	Mrs. Sheelamma Thomas (NP) North well system Physicians partner, Gastroenterology
10.00 -10.30 am	Session -2	A Pharmacological Update in the Management of MI.	Dr. Shilpa Kadam Professor, Dept. of Cardiology MGM Medical College Hospital, Kamothe
10.30 -11.00 am	Session -3	Safe Opioid Administration: How, When and When Not to Administer?	Dr. Jacob Jesurun Professor & HOD Dept. of Pharmacology Believer's Church Medical College Hospital, Kerala.
11.00 – 11.30 am	Session - 4	Novel Anticoagulants	Dr. Pradeep Jadhav Professor, Dept. of Pharmacology MGM Medical College Hospital, Kamothe
11.30 -12.00 pm	Session -5	Trends in Pharmacovigilance in the era of COVID-19 Pandemic.	Dr. Deepanjana Das Assistant Professor Dept. of Pharmacology MGM Medical College Hospital, Kamothe
12.00 -12.30 pm	Session -6	End of Life Care: Pain and Symptom Management	Dr. Suchit Avanti Assistant Professor Dept. of Emergency Medicine MGM Medical College Hospital, Kamothe
12.30 -1.00 pm	Session -7	Simulation Based Training : Application in Clinical Pharmacology	Dr. Vishwas Sathe Professor, Dept. of Anesthesia MGM Medical College Hospital, Kamothe
1.00 - 1.15 pm	Conclusion summary : Day 2 Mrs. Susan Jacob, Professor, MGMNBCON		
1.15 - 2.10 pm	Valedictory Function : Mrs. Sarika Nair, Tutor, MGMNBCON		

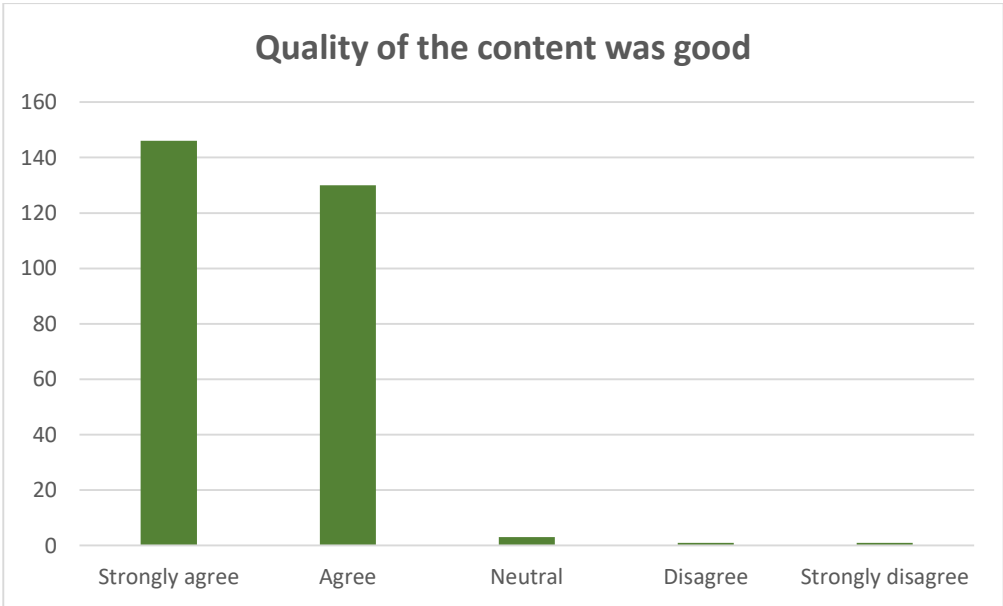
Moderator :- Mrs. Ferganzia Jubilson, Assistant Professor, MGMNBCON

Feed Back Analysis

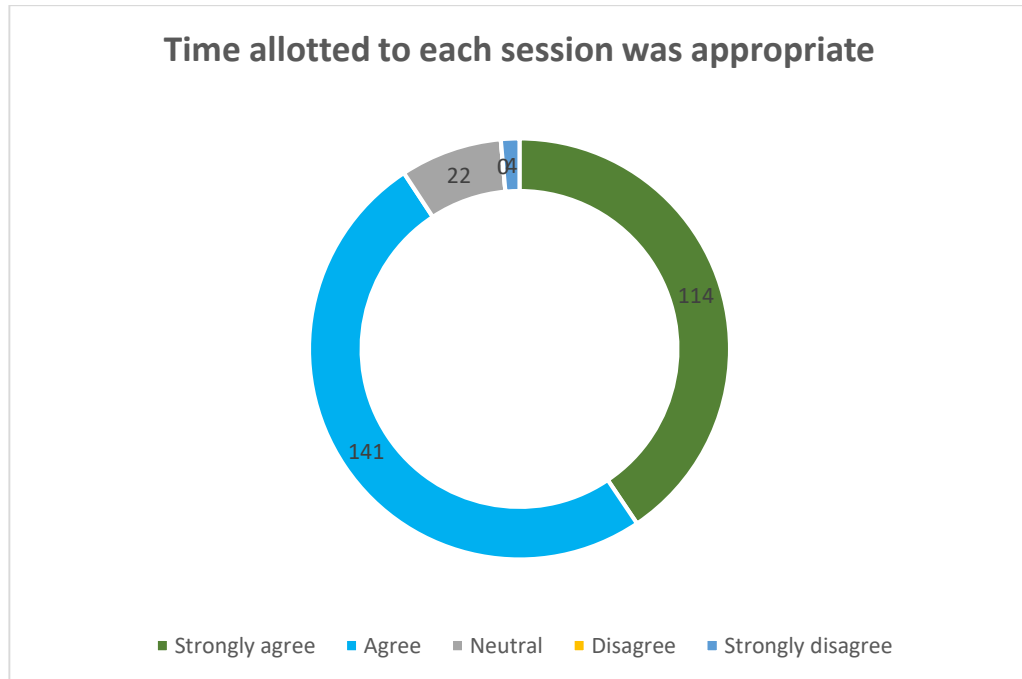
The Webinar was attended by 1368 participants. Feedback was obtain from 260 participants. The feedback was obtain on a 5 point Likert scale, with highest score (5) indicating as strongly agree and lowest score (1) strongly disagree.



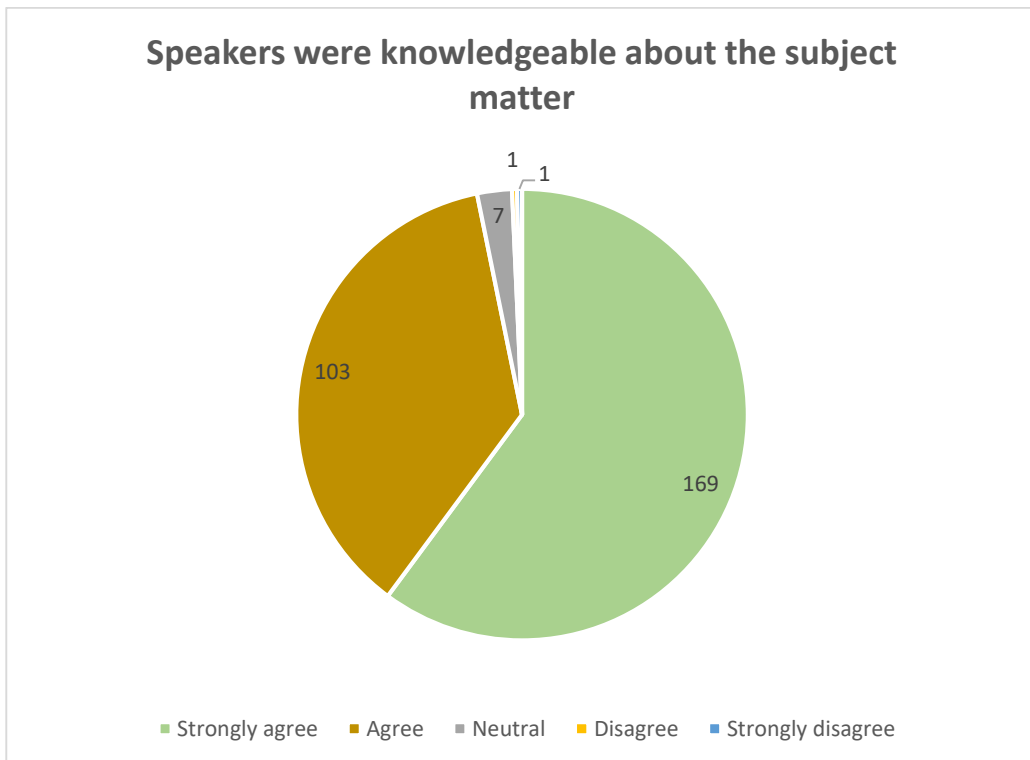
Majority of participants (45%) strongly agreed regarding the content of the session were informative.



Majority of participants (140) strongly agreed related to the quality of the content was good



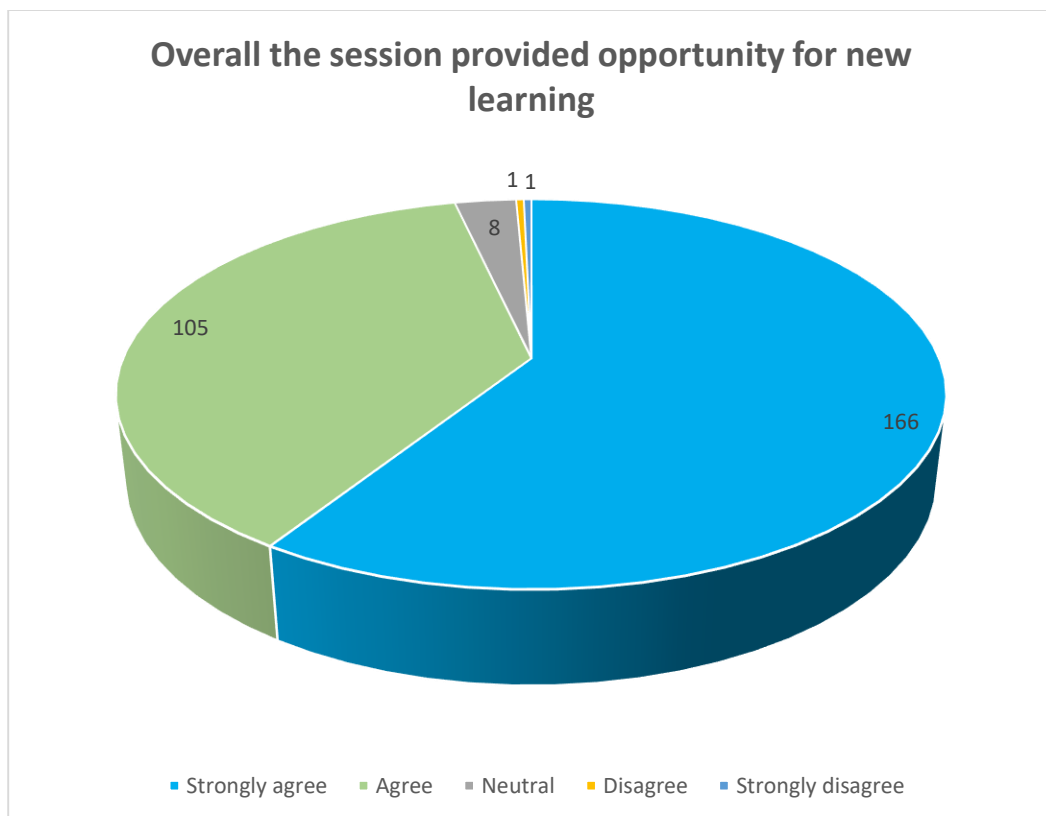
Majority of participants (141) agreed the time allotment given to each session was appropriate.



Majority of participants (169) strongly agreed Speakers were knowledgeable about the subject matter.



Majority of participants (156) strongly agreed with the experience shared by the experts will be useful for the practice.



Majority of participants (166) strongly agreed regarding over all session provided opportunity for new Learning.

Day 1 20th April 2021

Medication safety in administration of drugs in critical care units

Dr. KR Salgotra

Ms. Jasmine Emmanuel
NP, Adult and Gerontology Acute Care Nurse Practitioner, Edward Elias, Jr. VA Hospital, Chicago

- BSc (N) Bharathi Vidyapeeth's college of nursing, Pune University
- AGACNP, Walden University, Minneapolis
- 22 years of critical care RN experience [ER, Recovery and SICU]
- Since 2010, NP in SICU
- She has done ACLS/BLS training by AHA
- She has also completed Critical Care Registered Nurse certification (CCRN) by American Association of Critical Care Nurses (AACN)
- Certification for Adult and Gerontology Acute Care Nurse Practitioners (AGACNP) by American Nurses Credentialing Center (ANCC).

INTRODUCTION TO PHARMACOLOGY

Dr. Santosh C. Gursale
Professor
Dept. of Pharmacology
MGM Medical College, Kamothe, Navi Mumbai, Maharashtra, India

2. Dr. Santosh Gu...

INTERNATIONAL WEBINAR
Simplified and Applied Pharmacology for Nurses

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MGM IHS

INTERNATIONAL WEBINAR

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Simplified and Applied Pharmacology for Nurses

18. Dr. Sindhu T...

5. Ms. Sreedevi PS

Dr. Sagar Sinha
Consultant Internist & Physician
Head & Professor, Emergency Medicine, MGMIMS

- MBBS, MD (General Medicine), DNB (General Medicine), FNB (Critical Care), EDC (European Diploma in Intensive Care)
- Faculty, Committee member: Project Nodal Officer in MGMIMS
- Awarded with Distinctions [MBBS], twice in CRITICARE & a Championship Award
- He has 24 collaborative works
- 28 faculty appearances at various conferences
- 9 publications: 1 international, 3 national, 4 chapters, 1 proceedings book (as editor)
- AHA Instructor (BLS/ACLS), Trainer in Smartphone & Technology in Medicine

Day 2 21st April 2021

Opioid Analgesics

- Compounds derived from Opium.
- **Opium**- A dark brown, resinous material obtained from poppy (*Papaver somniferum*) capsule.
- Used for **medicinal and recreational purposes dates** back to thousands of years.

From Om Prakash to All Panelists

INTERNATIONAL WEBINAR

Simplified and Applied Pharmacology for

Participants: 15 Dr. Prabha..., 14 Dr. Vishwa..., 16 Dr. Ponchitra R., 18 Dr. Sindhu T...

Mrs. Sheelamma Thomas (NP)
North well system Physicians partner, Gastroenterology.

- 2017 - Present: Adult Nurse Practitioner Gastroenterology Physician Partner, NY
- 2014 - 2017: Adult Nurse Practitioner In-Patient Medicine Attending Directive Service, NY
- 2013 - 2014: Adult Nurse Practitioner Out Comes Management & Heart failure Program - North Shore University Hospital Manhasset, NY
- 2011-2012: Adult Nurse Practitioner in Nephrology, NY
- 2008 - 2011: Adult Nurse Practitioner in Gastroenterology and Hepatology, NY
- Registered Critical Care Nurse 1991 - 2008 New Hyde Park, NY
- Registered Nurse 1986 - 1996 Deep Dale General Hospital, Little Neck, NY
- BSN in Pediatrics 1985 - 1987, Indore, (MP) India

Awards: Clinical Ladder Level RN III in 2008
Center of Excellence Award for Outstanding Practice in 2006

Dr. Deepanjana Das
Assistant Professor, Dept of Pharmacology, MGM Medical College, Navi Mumbai.

- Doctor of Philosophy, Substance abuse and Medical Pharmacology.
- Master of Science Medical Pharmacology.
- Post Graduate diploma in Clinical, Research and Quality Assurance
- UK based Certificate Course on Drugs and Alcohol Awareness
- Award for academic excellence in M.Sc. Medical, Manipal University
- Top Rank Holder of Post Graduate M.Sc. Medical Degree (Batch 2009) under KMC, Manipal University.
- Several National and International Publications with paper presentations in National Conferences to the credit.
- Experienced in QA Audit by WHO and FDA in pharmaceutical set-ups

16 Dr. Ponchitra R, 9 Dr. Shilpa Kad..., 15 Dr. Prabha K..., 8 Ms. Sheelamm...

SIMULATION BASED TRAINING: APPLICATION IN CLINICAL PHARMACOLOGY

PROF. VISHWAS SATHE MD
DEPARTMENT OF ANAESTHESIOLOGY (CARDIAC ANAESTHESIA UNIT)
MGM MEDICAL COLLEGE & HOSPITAL
NAVI MUMBAI