

Report



National Webinar

‘Management of Children with COVID 19’



Organized by:

**Department of Maternal and Child Health Nursing,
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

17th & 18th June 2021



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MGM NEW BOMBAY COLLEGE OF NURSING

5th Floor, MGM Educational Campus, Plot No. 1& 2, Sector-1

Kamothe, Navi Mumbai – 410 209

Report of the National Webinar

Management of children with COVID 19

17.06.2021 & 18.06.2021.

AIM

The webinar focuses to create awareness regarding the management of Children with COVID 19 Infection.

OBJECTIVES

1. To have an understanding about the preparations required for COVID 19 management in children
2. To identify various degrees of severity in children with COVID 19
3. To recognize the psychological issues in children with COVID 19
4. To enhance the knowledge and skills in managing critically ill children with COVID 19

PARTICIPANTS

Total 800 participants registered. There were B.Sc Nursing students, Post Basic B.Sc. Nursing students, M.Sc. Nursing students, NPCC students, staff nurses and teaching faculties from various colleges and hospitals all over India



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National Webinar

'Management of children with COVID 19'

17th June 2021 and 18th June 2021

Day 1- Scientific Programme:- 17th June 2021

TIME	SESSION TITLE	RESOURCE PERSONS
DAY 1: 17.06.2021		
02.00 – 02.10 PM	Introduction to COVID 19 in children	<i>Dr. Vijay Kamale, Professor &HOD, Dept of Pediatrics, MGM Hospital, Kamothe</i>
02.10 – 2.40 PM	Mild Covid	<i>Dr Jeetendra Gavhnae , Professor & PICU In-charge , Dept of Pediatrics, MGM hospital, Kamothe</i>
02.40 – 03.00 PM	Moderate Covid	<i>Dr. Revathi N, Associate Professor, Dept of Pediatrics MGM Hospital Kamothe</i>
03.00 – 03.20 PM	Severe Covid	<i>Dr. Suhas Kharche, Assistant Professor, Dept of Pediatrics, MGM Hospital, Kamothe.</i>
03.20 – 03.30 PM	Psychological issues	<i>Dr Vijay Kamale, Professor & HOD, Dept of Pediatrics MGM Hospital, Kamothe.</i>
03.30 – 03.45 PM	Question and Answer	
03.45 – 03.50 PM	Vote of thanks	<i>Mrs. Anna Hima Thomas, Assistant Professor, MGMNBCON</i>

Moderator: Mrs. Anna Hima Thomas, Assistant Professor, MGMNBCON



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Day 2 Scientific Programme:- 18th June 2021

DAY 2: 18.06.2021		
02.00 – 02.05 PM	Preparation for management of children with COVID 19	<i>Dr. Vijay Kamale, Professor & HOD, Dept of Pediatrics MGM Hospital, Kamothe.</i>
02.05 – 02.25 PM	Devices and Equipments	<i>Dr. Suhas Kharche, Assistant Professor, Dept of Pediatrics, MGM Hospital, Kamothe.</i>
02.25 – 02.45 PM	Common drugs and fluid Calculations	<i>Dr. Prakruthi K.D, Assistant Professor, Dept of Pediatrics, MGM Hospital, Kamothe</i>
02.45 – 03.05 PM	Nutritional Management in COVID 19	<i>Dr. Sindhu Thomas, Assistant Professor, MGMNBCON</i>
03.05 – 03.25 PM	Nursing management of critically ill children with COVID 19	<i>Dr. Padmaja Dhawale, Associate Professor, MGMNBCON & Nursing Superintendent, MGM Hospital, Kamothe</i>
03.25 – 03.45 PM	Resuscitation in COVID 19 child and Measures	<i>Dr. Amol M, Assistant Professor Dr. Krishna B, Senior Resident Dr. Priyanka A, Senior Resident Dept of Pediatrics, MGM Hospital, Kamothe</i>
03.45 – 04.05 PM	Question and Answer	
04.05 – 04.20 PM	Concluding remark	<i>Mrs. Preethi M Mathew, Associate Professor, MGMNBCON</i>
04.20 – 04.25 PM	Vote of Thanks	<i>Ms. Dipali Pingale, Tutor, MGMNBCON</i>

Moderator: Ms. Dipali Pingale, Tutor, MGMNBCON



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Webinar on

Management of children with COVID 19

Dated – 17.06.2021 & 18.06.2021

Proceedings

Day One- 17.06.2021.

The programme started by the moderator, Mrs. Anna Hima Thomas, Assistant Professor, MGM New Bombay college of Nursing at 2 PM 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 Mrs. Preethi Maria Mathew, Associate Professor, MGM New Bombay college of Nursing at the inaugural session.

Opening of the theme was unfolded by Dr (Mrs). Prabha K Dasila, Director and Principal, MGM New Bombay College of Nursing, by giving a brief description about the Management of children with COVID 19. He appreciated the team efforts of dedicated doctors and nurses who are actively involved in the management of COVID at MGM Hospital, Kamothe. She reminded everyone to have the same participation for managing the children too in COVID 19. She also expressed her concern about the third wave of COVID 19 which is expected to target the children thus by emphasizing the importance of this webinar

Unfolding the theme

Good afternoon

Hon. Vice Chancellor- Dr Shashank Dalvi

Hon. Medical Director- Dr. S.N Kadam

Hon. Pro- Vice Chancellor- Dr. NN Kadam

Dr. Vijay Kamale, HOD, Department of pediatrics

Dr. Jithendra Gavhnae

Dr. Revathi N

Dr. Suhas Kharche

At the opening of this webinar, I would like to express my most profound gratitude to our management for their support in organizing this webinar

Its my proud privilege to introduce the theme of the webinar organized by Department of Maternal and Child Health Nursing, MGM New Bombay college of Nursing in collaboration with Department of Pediatrics, MGM Hospital Navi Mumbai.

I am delighted to acknowledge the presence of all the resource persons from our own MGM hospital, Navi Mumbai, Dr. Vijay Kamale, Dr. Jithendra Gavhnae, Dr. Revathi N, Dr. Suhas Kharche, Dr. Prakruthi, Dr. Sindhu Thomas, Dr. Padmaja Dhawale, Dr Amol M, Dr. Krishna B and Dr. Priyanka A.

The COVID-19 pandemic has had a catastrophic effect on global health. The substantial rise in international numbers, however necessitates early planning in consideration of a rise in Pediatric cases. So it is mandatory to reorganize and prepare tertiary care hospitals for the management of children with COVID 19. This webinar will enlighten the health care professionals information regarding the management of critically ill children with COVID 19.

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention

So far, data suggests that children under the age of 18 years represent about 8.5% of reported cases, with relatively few deaths compared to other age groups and usually mild disease. However, cases of critical illness have been reported. As with adults, pre-existing medical conditions have been suggested as a risk factor for severe disease and intensive care admission in children. As children generally have milder illness and fewer symptoms, cases may sometimes go unnoticed. Importantly, early data from studies suggest that infection rates among teenagers may be higher than in younger children.

WHO is bringing the world's scientists and global health professionals together to accelerate the research and development process, and develop new norms and standards to contain the spread of the coronavirus pandemic and help care for those affected.

Theme: Management of children with COVID 19

Day 1- Moderator: Mrs. Anna Hima Thomas, Assistant Professor, MGM New Bombay college of Nursing

Session 1- Introduction to COVID 19 in children: **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Session 2- Mild COVID, **Dr Jithendra Gavhnae**, Professor and PICU In charge, Department of Pediatrics, MGM Hospital, Kamothe

Session 3- Moderate COVID, **Dr. Revathi N**, Associate Professor, Department of Pediatrics, MGM Hospital, Kamothe

Session 4- Severe COVID, **Dr. Suhas Kharche**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Session 5- Psychological issues of children during COVID 19 Pandemic, **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Question and answer session

Conclusion Summary Day 1- **Mrs. Preethi M Mathew**, Associate Professor, MGM New Bombay College of Nursing

Day 2- Moderator, Ms. Dipali Pingale, Tutor, MGM New Bombay college of Nursing

Session 1- Preparation for the management of children with Covid 19, **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Session 2- Devices and equipments used in the management of children with COVID 19, **Dr. Suhas Kharche**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Session 3- Common drugs and fluid calculations for children- **Dr Prakruthi K.D**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Session 4- Nutritional management of children with COVID 19, Dr. Sindhu Thomas, Assistant Professor, MGM New Bombay college of Nursing

Session 5- Resuscitation in COVID 19 child and measures, **Dr. Amol M**, Assistant Professor, **Dr. Priyanka A**, Senior Resident, Department of Pediatrics, MGM Hospital, Kamothe

Question and answer

Concluding remark- Mrs. Preethi M. Mathew, Associate Professor, MGM New Bombay College of Nursing

Valedictory- Mrs. Anna Hima Thomas

I hope the deliberations from distinguished speakers will provide fruitful experience to the participants

Thank you

Scientific sessions- Day one- 17.06.2021

Session 1: Preparation for the management of children with Covid 19, **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Dr. Vijay Kamale have given a clear picture about the management of children in COVID 19 pandemic. He emphasized that a small proportion of symptomatic children (10-20%) may need hospitalization for Covid infection and 1-3% of symptomatic children may have severe illness and may require intensive care admission. The incubation period for covid infection in children may be from 2- 14 days. He showed his concern about the most serious complication of covid 19 infection in children, that is MISC. He anticipated about the emergence of third wave of the infection from September to October 2021.

Session 2: Mild COVID, **Dr Jithendra Gavhnae**, Professor and PICU In charge, Department of Pediatrics, MGM Hospital, Kamothe

Dr Jithendra Gavhnae started with a note about the third wave preparation of covid 19 by the health care professionals. He gave an idea about the Pediatric covid 19 Field training workshop done by the Government of Maharashtra Task Force for pediatric covid 19 constituted by the Hon. Chief Minister of Maharashtra, Shri Uddhav Thackeray. He categorized the Covid 19 in children into Acute covid illness and Multisystem inflammatory syndrome of children with covid 19. The he moved on to his topic, management of children with Mild covid. Home care management is recommended for children with Mild covid and need to teach the parents about the Red flag signs like Persistent fever > 3 days, decrease urine output, lethargy, drowsiness, rapid breathing, Rashes and convulsions. The child with mild covid can be full normal diet with continued breastfeeding. No antibiotics and no investigations are recommended. Warm saline gargles can be provided to older children.

Session 3: Moderate COVID, **Dr. Revathi N**, Associate Professor, Department of Pediatrics, MGM Hospital, Kamothe

Dr. Revathi N had given a clear picture about the management of Moderate Covid19 in children. She started the session with the discussion of various case scenarios on moderate covid in children. The child with moderate covid will be admitted in the pediatric ward. Necessary investigations should be done. The investigation should include CBC, CRP,SGPT, Serum Albumin, Serum creatinine and X ray chest. The child should be monitored regularly. TPR 4 hourly, BP 8 hourly and SPO₂ 2 hourly. Supportive care for the child includes hydration, nutrition and antimicrobials (Ceftriaxone 75-100 mg/kg/day). We need to continue with the treatment of comorbidities, if any. The Spo₂ level between 90-94% should be manages with oxygen therapy, awake proning technique, IV Dexamethasone 0.15 mg/kg/dose. The discharge criteria are as follows: No fever for more than 3 days, 10 days from onset of the symptoms, defer vaccination after 4 weeks, ensure completion of routine vaccines. If Spo₂ is less than 90%/ severe pneumonia/evidence of shock/ refractive convulsions are the criteria for transferring the child to HDU/PICU.

Session 4- Severe COVID, **Dr. Suhas Kharche**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Dr. Suhas Kharche started with the session by enumerating and explaining the line of treatment for managing children with severe covid 19. Children need to be admitted in PICU/HDU. CBC, RFT, LFT, CRP, Procal D-Dimer, Lactate, ECG and chest xay are the first line investigations to rule out the complications and severity of covid. Optimize oxygen level and if needed High flow nasal cannula, CPAP, NIV and invasive ventilation can be opted as per the condition of the child. Consider prone positioning, restrictive fluid therapy. The drug of choice are IV steroids, Remdesivir, Enoxaparin and Antimicrobials. Explained the whole concept with various case scenarios. He had a detailed explanation about the identification criteria for Multisystem inflammatory syndrome in children as a complication of COVID 19. The criteria are as follows: Fever> 3 days, uticular rashes, bilateral non purulent

conjunctivitis, red lips, inflammation of hands and feet, BCG scar reactivation, acute GI symptoms, H/O Covid or close contact with covid in previous 5 months. MISC can be presented in the form of Febrile inflammatory syndrome, Kawasaki disease like presentation and shock with MODS.

Session 5- Psychological issues of children during COVID 19 Pandemic, **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Dr. Vijay Kamale insisted all the health care professionals to teach the parents to watch for the psychological ill effects of covid 19 pandemic as well as due to the lock down in children. The various behavioural changes that we can expect from children are irritability, anger, frustration, wants to cling to the mother all the time, Regressive behaviours like thumb sucking, bedwetting etc, Change in diet pattern and episodes of crying spells. It is the responsibility of the health care members to provide advice to all the parents, the ways to manage the psychological health of children during the pandemic. We should encourage the parents to spend valuable time with the kids, listen to them patiently, involve the children in daily chores and to appreciate their work. Doctors should make sure that the psychological health of children are taken care of during consultation either through online or offline.

Scientific sessions- Day Two- 18.06.2021.

The programme started at 2.00 P.M and was moderated by Ms. Dipali Pingale, Tutor, 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 panelists and the participants.

Session 1- Preparation for the management of children with Covid 19, **Dr Vijay Kamale**, Professor and HOD, Department of Pediatrics, MGM Hospital, Kamothe

Dr. Vijay Kamale gave a brief description about the sessions planned for Day 2. He expressed the expectations about the third wave of Covid 19, which is expected to affect nearly 20% of the population. We are expecting probably three admissions per day for the third wave. It is our responsibility to prepare the pediatric department of our hospital in order to receive the expected number of pediatric patients. Our hospital is planning for 70 bedded pediatric unit for Covid affected children. Out of 70 beds, 30 beds will be allotted for Intensive care unit and for HDU. Remaining 40 beds to provide moderate care to pediatric population with Covid 19.

Session 2- Devices and equipments used in the management of children with COVID 19, **Dr. Suhas Kharche**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Dr Suhas Kharche shared his knowledge regarding various devices and equipments used in managing the children in critical care units and in the wards. The equipments and devices used in children are entirely different from that of adults specially on its size. The devices and equipments are mainly categorized in to Airway and resuscitation equipments, Respiratory support devices, Temperature regulating devices and Monitoring devices. Airway devices includes oral airway, endotracheal tube and laryngeal mask airway. Resuscitation equipments consists of AMBU Bag, face mask and laryngoscope. Respiratory devices are divided into High flow nasal cannula and Non invasive ventilation mask. Temperature regulating devices includes Warm water Blankets, IV fluid warmers and Heat moist exchangers.

Session 3- Common drugs and fluid calculations for children- **Dr Prakruthi K.D**, Assistant Professor, Department of Pediatrics, MGM Hospital, Kamothe

Dr Prakruthi K.D elaborated about common drugs and fluid calculations in Pediatrics. She laid the importance of drug and fluid calculations when taking care of a child. She mentioned that the drug dosages will be recommended on the basis of Body weight in kilograms and Body surface area. She clearly explained about the units of measurements and its conversion which is the first step of drug calculation. She also discussed about various formulas for calculating the drugs and fluid based on the prescribed dosages for children. Each topic was followed by various examples for the easy understanding of the students. She explained about the commonly used drugs in children and its dosages. Paracetamol- 10-15 mg/kg/dose, Amoxicillin- 25-50 mg/kg/day, Cetirizine- > 6 months to 2 year- 2.5 mg, 2-5 years- 5 mg, 5-12 years- 5-10 mg. Pediatric drip set and infusion pump are the devices used to administer the fluids and drugs.

Session 4- Nutritional management of children with COVID 19, **Dr. Sindhu Thomas**, Assistant Professor, MGM New Bombay college of Nursing

Dr Sindhu Thomas shared her knowledge on the nutritional management of child during Covid 19. She laid down the importance of breast feeding and proper complementary feeding practices as a preventive factor for Covid 19 infection. If a mother is covid positive and the baby is covid negative, the mother can breast feed the infant by maintaining proper respiratory etiquettes. Rooming in can be practiced between the baby and the mother with 6 feet distance. Mother should wear mask properly. Watch for

the signs of infection in the child often. Expressed breast milk is also a best option If the mother is covid positive. All recommended Infant and young child feeding practices remain the same based on the global guidelines. Principles of complementary feeding also remains the same in case if the mother is infected. High calorie and high protein diet is recommended for the child who is covid positive. The mother should watch for the red flag signs during the home care management. Childhood obesity is also a concern during the covid lock down. Parents should create opportunities for the children for any kind of physical activities for their children during the lock down.

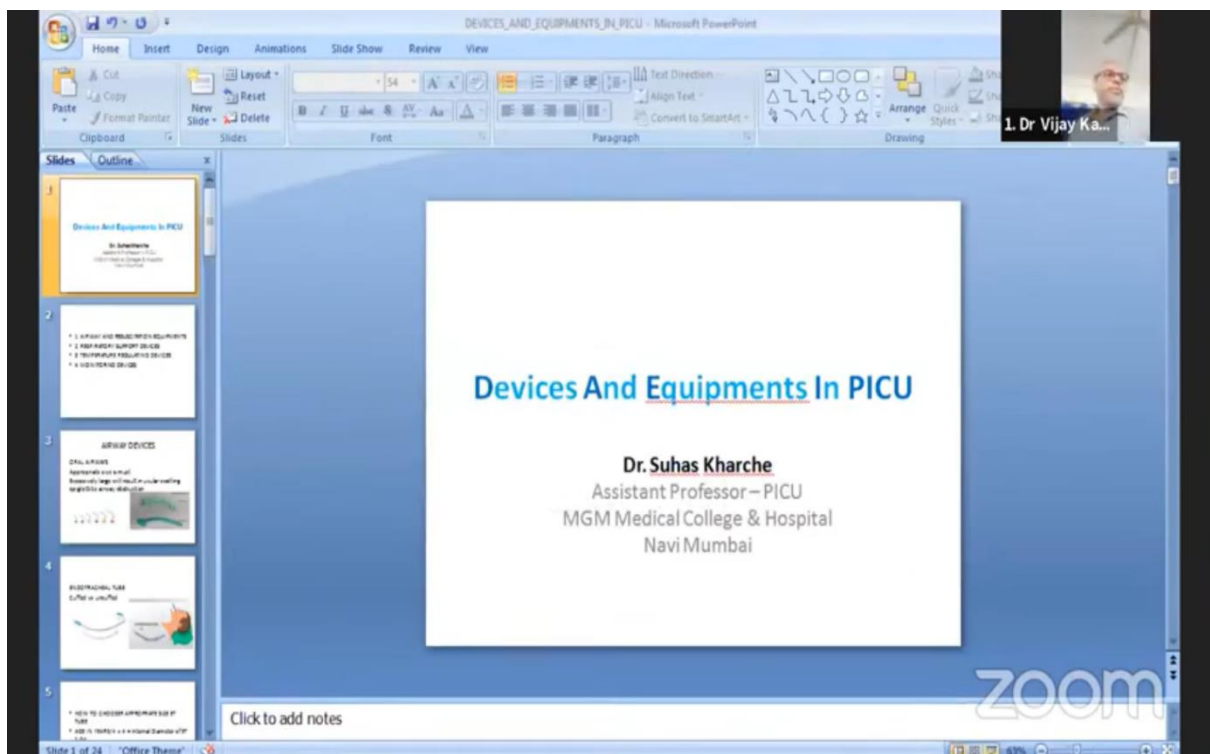
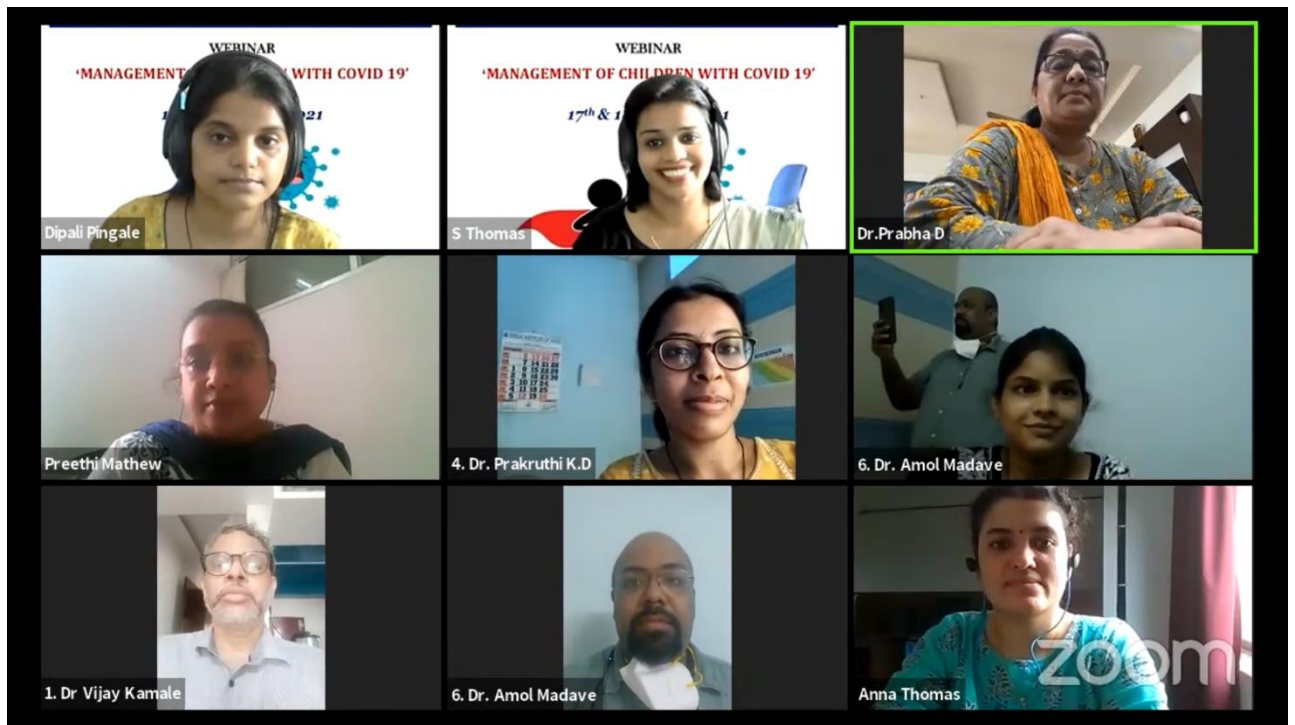
Session 5- Nursing management of critically ill children with COVID 19 infection, **Dr Padmaja Dhawale**, Associate Professor, MGM New Bombay College of Nursing, Kamothe

Dr. Padmaja Dhawale focussed about the family centered nursing care during the management of critically ill child with Covid 19 infection. Parent education and assurance is a key element in the nursing care. Mild covid will be treated at home. Home care management measures should be explained to the parents including the respiratory etiquettes. Complete and continuous nursing care is required for children with moderate to severe illness and is admitted in ICU. ICU unit should be well equipped with adequate doctors, nurses and also with necessary devices and equipments. Soon after admitting the child to ICU, a quick physical assessment is mandatory after collecting thorough history from the parents, which is followed by a systemic examination. Continuous monitoring and the respiratory care are the paramount of the nursing care of the child in ICU. Fluid and electrolyte balance, bowel and bladder care, dressing and wound care, neuromuscular care, promotes comfort and reassurance are also the various aspects involved in the nursing care.

Session 6- Resuscitation in COVID 19 child and measures, **Dr. Amol M**, Assistant Professor, **Dr. Priyanka A**, Senior Resident, Department of Pediatrics, MGM Hospital, Kamothe.

Dr Amol and Dr Priyanka explained very well about the procedure for resuscitating the children with Covid 19. Resuscitation in covid 19 possess a significant risk for health care workers due to aerosol generation. Ten recommendations on the general principles for resuscitation to be followed during Covid 19 pandemic. They discussed about Prone CPR, equipment selections and the various drugs used in resuscitation of children.







AIRWAY DEVICES



ORAL AIRWAYS

Appropriate size is must

Excessively large will result in uvular swelling
epiglottitis airway obstruction



50:52 / 3:25:52



Neonates & Infants

- No vertical transmission documented in COVID.
- [Amniotic fluid from 6 mothers positive for COVID-19 and cord blood and throat swabs from their neonates who were delivered by caesarean section all tested negative for the COVID-19 virus by RT-PCR]
- Breastmilk samples from the mothers after the first lactation were also all negative for the COVID-19 virus



WHO-Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected: Interim guidance-13Mar2020

Press Esc to exit full screen

S Thomas

Video player