

D-Rev's COVID-19 ECHO Clinic for Pediatricians and Neonatologists

Preparing pediatricians and neonatologists to meet the demand for intensive respiratory care during the COVID-19 pandemic

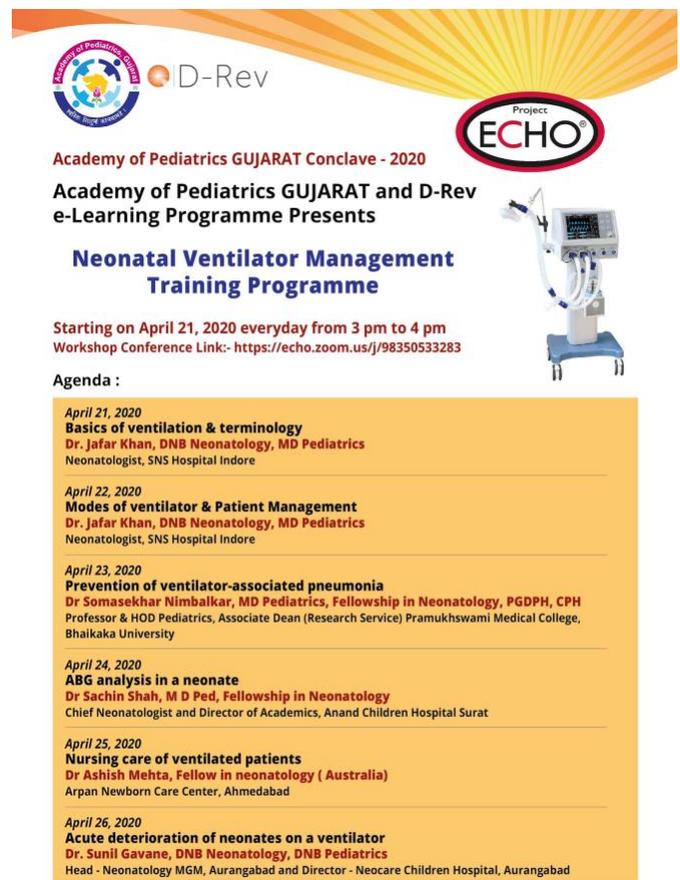
PROBLEM

As novel coronavirus COVID-19 continues to spread, government hospitals in India have closed neonatology wards and reassigned pediatricians and neonatologists to treat the onslaught of patients requiring critical respiratory care. However, most of these specialists have little or no experience treating adult patients in respiratory distress. Due to time and resource constraints, physicians are forced to make life-or-death treatment decisions for COVID-19 patients with inadequate or no additional training. Reassigned physicians require fast, community-specific training on ventilator operation and alternative respiratory therapies, as well as management of adult patients, in order to effectively treat COVID patients and meet the call of this pandemic.

D-REV'S SOLUTION

D-Rev currently runs the world's only newborn health-focused ECHO teletraining program to increase the capacity of clinicians and improve the quality of care provided to newborn patients in India. At the request of past D-Rev ECHO participants, D-Rev will use the proven [ECHO model](#) and conduct collaborative teletraining clinics for pediatricians and neonatologists who have been reassigned to treat COVID-19 patients, and foster a knowledge-sharing network to support them through this pandemic. D-Rev's network of local medical experts, such as respirologists and pulmonologists, lead sessions, and participating physicians will be grouped by region to ensure that ECHO clinic content is contextually relevant. Participating physicians will gain a better understanding of ventilator usage, and will be better equipped to make decisions on the best treatment for patients when equipment is scarce and time is critical. Topics covered will include:

- Neonatal ventilator principles and patient management
- Differences between managing neonate and adult respiratory therapy
- Safe applications of neonatal ventilators on adult patients
- Best practices for adult patient management
- Prevention of infection and viral spread (e.g. ventilator associated pneumonia)
- Prevention and management of negative outcomes that may present during treatment



The poster features the D-Rev logo and the Project ECHO logo. It includes the following text:

Academy of Pediatrics GUJARAT Conclave - 2020
Academy of Pediatrics GUJARAT and D-Rev e-Learning Programme Presents
Neonatal Ventilator Management Training Programme

Starting on April 21, 2020 everyday from 3 pm to 4 pm
 Workshop Conference Link:- <https://echo.zoom.us/j/98350533283>

Agenda :

- April 21, 2020**
Basics of ventilation & terminology
 Dr. Jafar Khan, DNB Neonatology, MD Pediatrics
 Neonatologist, SNS Hospital Indore
- April 22, 2020**
Modes of ventilator & Patient Management
 Dr. Jafar Khan, DNB Neonatology, MD Pediatrics
 Neonatologist, SNS Hospital Indore
- April 23, 2020**
Prevention of ventilator-associated pneumonia
 Dr Somasekhar Nimbalkar, MD Pediatrics, Fellowship in Neonatology, PGDPH, CPH
 Professor & HOD Pediatrics, Associate Dean (Research Service) Pramukhswami Medical College, Bhaikaka University
- April 24, 2020**
ABG analysis in a neonate
 Dr Sachin Shah, M D Ped, Fellowship in Neonatology
 Chief Neonatologist and Director of Academics, Anand Children Hospital Surat
- April 25, 2020**
Nursing care of ventilated patients
 Dr Ashish Mehta, Fellow in neonatology (Australia)
 Arpan Newborn Care Center, Ahmedabad
- April 26, 2020**
Acute deterioration of neonates on a ventilator
 Dr. Sunil Gavane, DNB Neonatology, DNB Pediatrics
 Head - Neonatology MGM, Aurangabad and Director - Neocare Children Hospital, Aurangabad

D-Rev's mission has always been to improve newborn patient outcomes in India regardless of where they live. This initiative is being launched to equip the neonatologists and pediatricians with the basic knowledge of ventilators and patient management on a ventilator.

ECHO clinics are held entirely online via Zoom, making them easy to implement while complying with shelter in place orders. Physicians then continue to share knowledge and recommendations with their virtual community through the free chat app, WhatsApp. With increased knowledge and confidence, doctors will be more willing and able to treat patients in respiratory distress, leading to better outcomes for patients, hospitals, and communities.

IMPACT	India	East Africa	Southeast Asia	Total
Clinics	20	6 ₁	14 ₂	40
Neonatologists and pediatricians trained₃	2,000	300	1,400	4,700
Resulting patients treated₄	280,000	42,000	196,000	428,000
Total impact (people)	952,000	147,000	607,600	1,706,600

D-Rev currently runs the world’s only newborn health-focused ECHO teletraining program, and is therefore positioned to scale the COVID-19 ECHO Clinic immediately. A pilot COVID Clinic is currently running in the Indian states of Uttar Pradesh, Madhya Pradesh, and Chhattisgarh. State chapters of the India Association of Pediatrics (IAP) have asked D-Rev to hold ECHO clinics in Gujarat and West Bengal. We are also in discussions with the national IAP office to scale throughout India, targeting regions within the country expecting the highest influx of COVID-19 patients.

ECHO sessions are led by local subject matter experts, physicians who have different specialties and locally-relevant training. With proper funding and support, D-Rev will expand the COVID-19 Response ECHO model to East Africa and Southeast Asia, where the virus is expected to surge in the coming months.

SUPPORT REQUEST

We seek philanthropic partners to help us build the capacity of our global medical community to respond to COVID-19. Specifically we require:

- \$250k to support scaling our ECHO clinics throughout India
- an additional \$250k to start clinics in East Africa and Southeast Asia

If you are interested in supporting this project or you know an individual or foundation that is aligned with our work, please contact Shelly Helgeson, Senior Manager of Development & Partnerships, (+1)937-441-5471, shelgeson@d-rev.org

1 2 ECHO teleclinics x 3 countries (Kenya, Uganda, India)

2 2 ECHO teleclinics x7 Southeast Asian countries

3 India: 100 physicians per ECHO session x 20 ECHO sessions, East Africa: 50 physicians per ECHO session x 6 ECHO sessions, Southeast Asia: 100 physicians per ECHO session x 14 ECHO sessions

4 # of physicians participating x 10 unique patients treated per day x 14 days of reassignment