



The Mumbai Obstetric & Gynaecological Society

MOGS NEWS & VIEWS

Theme : **COMBATING COVID**

Volume 1 - June 2021



PRESIDENT



DR. SARITA BHALERAO

SECRETARY



DR. SUVARNA KHADILKAR

TREASURER



DR. SHAILESH KORE

EDITORS



Dr. Reena Wani



Dr. Priya Vora

CO-EDITORS



Dr. Pradnya Supe



Dr. Rajashri Tayshete

The Mumbai Obstetric & Gynaecological Society

C-114, 1st Flr, D-Wing Entrance, Trade World, Kamala City, Senapati Bapat Marg, Lower Parel (W), Mumbai 400 013.

☎ 90223 61841, 2495 5324 ✉ mogs2012@gmail.com 🌐 www.mogsonline.org



The Mumbai Obstetric & Gynaecological Society

C-114, 1st Flr, D-Wing Entrance, Trade World, Kamala City,
Senapati Bapat Marg, Lower Parel (West), Mumbai 400 013.

☎ 90223 61841, 2495 5324 ✉ mogs2012@gmail.com 🌐 www.mogsonline.org



MOGS MANAGING COMMITTEE MEMBERS 2021-2022

OFFICE BEARERS

PRESIDENT	:	DR.SARITA BHALERAO
IMMEDIATE PAST PRESIDENT	:	DR.RISHMA PAI
SENIOR VICE PRESIDENT	:	DR.NIRANJAN CHAVAN
VICE PRESIDENT	:	DR.ANAHITA CHAUHAN
SECRETARY	:	DR.SUVARNA KHADILKAR
JOINT SECRETARY	:	DR.RAJENDRA SANKPAL
TREASURER	:	DR.SHAILESH KORE
LIBRARIAN	:	DR.GEETHA BALSARKAR
CLINICAL SECRETARY	:	DR.KEDAR GANLA
JOINT CLINICAL SECRETARY	:	DR.SUJATA DALVI

MANAGING COMMITTEE

Dr. Ameya Purandare	Dr. Parikshit Tank	Dr. Komal Chavan
Dr. Reena Wani	Dr. Atul Ganatra	Dr. Priti Vyas
Dr. Pratik Tambe	Dr. Priya Vora	Dr. Ganpat Sawant
Dr. Punit Bhojani	Dr. Vandana Bansal	Dr. Rohan Palshetkar
Dr. Purnima Satoskar	Dr. Raju Sahetya	Dr. Sudha Tandon
Dr. Sanket Pisat	Dr. Mansi Medhekar	Dr. Rajendra Nagarkatti
Dr. Madhuri Mehendale	Dr. Bhumika Kotecha	Dr. Siddhesh Iyer

CO-OPTED MEMBERS

Dr. Mandakini Megh	Dr. Unnati Mamtora	Dr. Gaurav Desai
--------------------	--------------------	------------------

PAST PRESIDENTS

Dr. Nandita Palshetkar	Dr. Bipin Pandit
Dr. Vanita Raut	Dr. Jaydeep Tank

- ❖ Interesting case of the month.
- ❖ Monthly quiz with loads of prizes.
- ❖ Orations & key note addresses.
- ❖ News letters.
- ❖ Get info of all upcoming events & conferences.

Download the "MOGS Connect" app from Play store/App store

Link for Android app

<http://bit.ly/MOGSAndroid>

Link for IOS

<http://bit.ly/MOGSIOS>



PRESIDENT'S ADDRESS

DR. SARITA BHALERAO

President, MOGS 2021-2022

Installation Speech 15-5-2021

Respected Trustees, Past presidents of MOGS, Office bearers, Members of the managing Council & dear friends

I am honoured to be installed as the 68th President of The Mumbai Obstetric and Gynaecological Society and I wish to thank every MOGS member for giving me this wonderful opportunity. I shall endeavour to do my best to fulfil your expectations.

MOGS is an 87 year old organization. It was founded in 1934. Today we have over 2000 members across the city of Mumbai.

I take over this position from Dr. Rishma Pai and I would like to congratulate her for an immensely successful tenure in the most trying circumstances.

I would like to begin by thanking my family as I have received unparalleled support from them.

My father was passionate about Western Classical Music. He took me to concerts and encouraged me to play the piano. Today he would have been very proud of me and I miss him dearly. My mother laid down a career path which I chose to follow. I was lucky to have Dr. Bhalerao and Dr. Mrs. Bhalerao as parents in law. I was introduced to the fascinating world of Marathi theater by them.

My husband Abhay is the backbone of my support. He's also an active Rotarian and an avid traveller. My son Manan is a finance student and daughter Alekha is a medical student. They are tech savvy and always ready to help.

My brother Samir has played rugby for India.

Thank you Ashwini for your guidance and Monali for being the sister I did not have. In my childhood I always wanted to be like my mothers 3 sisters.

The influence of a great teacher can never be erased. I have been fortunate to studied under a galaxy of teachers. My PG guide was Dr. CB Purandare in Wadia Hospital. Dr. Daftary was Dean when I began my residency and Sir was instrumental in making me and my peers present

papers and participate in conferences. Dr. Adi Dastur has been a tremendous inspiration right from my residency days till now. Dr. Jassawalla is an excellent teacher and an able administrator. Dr. Walvekar encouraged me to go to UK and complete my MRCOG. I presented my first paper on hysteroscopy under the guidance of Dr. Nozer Sheriar in Wadia. Dr. Shyam Desai was instrumental in making me take up the position of Quiz committee chairperson FOGSI. Dr. Duru Shah gave me many opportunities to write chapters and articles. Dr. Amar Bhide introduced us to the concept of protocols, guidelines and evidence based medicine. Dr. Kaizad Damania is a fantastic teacher.

In KEM I enjoyed working with Dr. Shirish Sheth and Dr. Usha Krishna. It was a treat to watch Sir doing vaginal surgery. Madam Usha Krishna has been a marvellous mentor. She has inspired and nurtured many of us. Dr. Ajit Virkud is a skilled surgeon and I was fortunate to work with Sir at Bandra Bhabha Hospital.

When I joined Bhatia Hospital in 2003, I began doing endoscopy with Dr. Pranay Shah. Learning from him is a pleasure, his tips and tricks are a treasure. Dr. C.N Purandare has guided and motivated me throughout. Dr. Asha Dalal has always encouraged and supported me.

I have worked with 20 Presidents of MOGS. With Dr. Duru Shah I had my first experience of being a convenor at the Fariyas Hotel, Lonavala. We did many adolescent school health programs.

In Dr. C.N. Purandare's year we started the N.A. Purandare teaching programs for PG students.

Dr. Walvekar and Dr. P. K. Shah encouraged me to organize CMEs. It was a pleasure to comperre inaugurations and valedictories.

Dr. Nayana Dastur encouraged me to join the Menopause Society and I worked closely with Madam on the committee. Dr. Ajit Virkud's year had his stamp of academic brilliance. Dr. Hrishikesh Pai is a leader par excellence. Dr. Gautam Allahbadia brought out some beautiful newsletters.

Dr. Vinita Salvi's year was a perfect blend of academics and social work. Dr. Nozer Sheriar



streamlined the working of the office. In Ashwini's year we did the landmark AICOG which was a mammoth task and a stupendous success. Suchitra and Ameet are my pillars of support. In Dr. Arun Nayak's year we did a collaborative program with the Indian Menopause Society Mumbai Chapter. Nandita is so full of energy it's a challenge to keep up with her. Dr. Vanita Raut has always given me good solid advice. I worked with Dr. Bipin Pandit as Secretary. It was an action packed year. Sir When I didn't know what to do, you came to my rescue.

Jaydeep has been a good friend & is extremely knowledgeable about rules and regulations. Rishma and I have travelled extensively throughout India together. She has fantastic ideas, great initiative and I thoroughly enjoyed my tenure as Joint Secretary FOGSI when Rishma was President.

FOGSI is our parent organization and I am happy to bring you FOGSI-ICOG sessions in our conferences.

Thank you Dr. Alpesh Gandhi for helping us to collaborate. We look forwards to a continued collaboration in Dr. Shanthas year. Thank you Dr. Megh and Parag for giving us ICOG sessions and ICOG points.

I am planning to bring you collaborative sessions with IRC RCOG West zone. My thanks to Dr. Bhaskar Pal who is IRC Chair.

We will also have some combined sessions with AFG and I have discussed with Dr. Urmila Surekha and with Mumbai Menopause Society where Dr. Geetha is president. AMWI is very close to my heart.

I think the best part of this entire professional journey has been the friends that I have made. The outreach programs have given me the chance to interact with MOGS members across the city, right from South Mumbai to Mira-Bhayander.

I am fortunate to have an excellent team. My secretary Dr. Suvarna Khadilkar is a highly experienced person. She has been chief editor of JOGI and also President of the Indian Menopause Society. Dr. Shailesh Kore, our Treasurer is a very hard working and meticulous person. Our Managing council members are dynamic and enthusiastic.

Our Youth council is an essential part of every program. They are the building blocks for the future. I welcome them all and look

forwards to their participation.

Our first conference is Obstetric emergencies. I am delighted that Dr. Alpesh Gandhi, President FOGSI will be our Chief guest at the inauguration and deliver the first oration of the year. I am also delighted that Mrs. Anushka Sharma will be the Guest of Honour. Dr. Pratap Kumar will deliver the MOGS Dr. Usha Krishna oration and Dr. Amar Bhide will deliver the MOGS Dr. Bhanuben Nanavati oration. Prof. Sir Arulkumar, Dr. Patrick O'Brien and Dr. Raneek Thakar have kindly agreed to be on the faculty.

Our next conference is Endo ART 2.0 which will be on June 12 and 13. This conference is in collaboration with IAGE and I am grateful to Dr. Krishnakumar President IAGE for collaborating with MOGS. Dr. Charles Koh will deliver the conference oration.

In July we collaborate with the PCO Society of India and I am delighted to announce that Dr. Duru Shah, Past President MOGS and FOGSI and President PCO Society will deliver the conference oration.

Later this year we collaborate with MOGS for the New vistas in fertility. I am delighted that Dr. Nandita Palshetkar will deliver the MOGS Dr. MY Rawal oration

In December we will have an Oncology meeting and in March we will have the GOLDEN JUBILEE CONFERENCE OF MOGS.

Dr. Reena Wani and Dr. Priya Vora have begun working on the first '**News and Views**' issue on the subject of combatting covid.

I am thankful to our Academic partners-Sun Pharma, Emcure, Zuventus, Torrent, Abbott, Meyer, Eris, Blisson for extending financial support for various activities of MOGS & having faith in us.

Our MOGS Staff form the backbone of MOGS. In spite of the covid situation they remain dedicated. Onference is our conference event manager. I made slides for my first presentation from Makrand, over the years he has evolved into an excellent events company.

I end with a quote from Winnie the Pooh which says 'Don't walk behind me I may not lead. Don't walk in front of me, I may not follow. Just walk beside me and be my friend.'

I invite you all to join me in this wonderful journey. Warm regards,

Dr. Sarita Bhalerao
President, MOGS



SECRETARY'S MESSAGE



DR. SUVARNA S. KHADILKAR

Secretary, MOGS 2021-2022

- Professor and Head of Dept Obgyn, and Consultant Endocrinologist and Gynecologist, Bombay Hospital Institute of Medical Sciences (MUHS Affiliated), Mumbai
- Editor Emeritus, JOGI 2021 onwards
- Treasurer FOGSI, 2018-21
- Secretary, MOGS, 2020

Dear friends,

As I assume office of Secretary of this prestigious organization MOGS, I wish to thank one and all for supporting me for the last 14 years as a Managing Committee Member and five years as office bearer. I believe in sheer hard work. I have thoroughly enjoyed working for MOGS for all these years. I will always treasure the amount of appreciation I received from all of you! This long and strong bonding, with friends like you is a priceless gift for me!

I have had the privilege of observing the work of eighteen illustrious MOGS Presidents very closely, during my tenure in managing committee, and I learnt a lot from each one of them! This year I am looking forward to work with Dr Sarita Bhalerao, President 2021-22. We have planned a lot of academic activities under her presidential theme '**New vistas in womens' health**'. I propose to streamline administrative issues, with focus on efficiency so that the office runs smoothly.

We bring to you our first communication after the new committee was installed on 15-5-2021. I congratulate the Editors Dr. Reena Wani, Dr. Priya Vora, Co-editors, Dr. Pradnya Supe, Dr. Rajshri Tayshete for compiling this newsletter. This issue includes the presidential address, report of all the activities done as well as a calendar of the upcoming events. This issue also features an interview with Past President Dr. Hrishikesh Pai. Very fittingly, it also contains articles on the theme "**Combating Covid**" which, I am sure, you will find very useful in current times.

While the world is currently experiencing one of the most unprecedented periods; humanity has never felt so sad, unfortunate and helpless. I am extremely happy that government has now officially allowed vaccination for lactating women & am eagerly awaiting the government order granting permission to vaccinate pregnant women.

During the last one and half years, all of us are somehow trying to adjust to this new normal. We must thank the almighty for giving us the strength to fight this humbling global crisis and for giving us the capacity, courage and confidence to continue to offer dedicated services to humanity!

We at MOGS will continue to strive for excellence in academic activities, students' education, and womens health despite all the difficulties that may come our way!

Stay positive even when it feels like your whole world is falling apart!!!

Stay safe stay healthy! Thanking you !

Yours sincerely,

Prof Suvarna Khadilkar

Secretary MOGS 2021-22



EDITORS



Dr. Reena Wani



Dr. Priya Vora

FROM THE EDITOR'S DESK

CO-EDITORS



Dr. Pradnya Supe



Dr. Rajshri Tayshete

COVID-19 has continued to 2021, and become a disease associated with unbridled uncertainty with its aetiology and management, for the healthcare systems and health professionals. The treatment of covid 19 is challenging and still under evolution - despite more than a year passing by, there are many unanswered questions. Along with the health challenges, there have been financial and mental health issues faced by many.

"You can't have a better tomorrow if you are thinking about yesterday all the time"

Hence we thought it was appropriate to focus on current situation and challenges to be faced by each one of us. It is with great pride that we bring to you the first newsletter under the auspices of MOGS President, Dr. Sarita Bhalerao & Team 2021-22, focussing on the theme, 'Combating COVID'. This issue comprises four lead articles that cover different aspects of this disease, authored by eminent doctors working in the field. We also share a look into the handover to the incoming team, and offer a glimpse of the plan for the year.

On behalf of MOGS Managing Committee & the editorial team, we would like to thank all the contributors. We hope you enjoy reading the articles and find them useful. Let's use the lockdown period, the "new normal" to reflect on what we can do best in the given circumstances.

Wishing you and your families good health and safety in these difficult times!

Editors

Dr. Reena Wani, Dr. Priya Vora

Co-editors

Dr. Pradnya Supe, Dr. Rajshri Tayshete

Our Comprehensive Product Range

In Infertility associated with PCOS

Metital

Metformin 500 mg SR + Myo-inositol 600 mg Tablets

In IDA during millennial pregnancies

Raricap-M

Ferrous calcium citrate (eq. to elemental iron) 50mg + Folic acid 1mg + Methylcobalamin 15mcg + Pyridoxine 15mg + Zinc 12.5mg + Manganese 0.2mg + Copper 0.2mg + Selenium 60mcg Tablets

For Complete Immunity solution

ZAC-D woman

Zinc 40 mg, Vitamin A 600 mcg, Vitamin C 500 mg, Vitamin D3 1000 IU chewable tablets

For the holistic management of IUGR

FOCII gr

Taurine 1 gm + Lactine 1 gm + Lecithine 1 gm + L-Carnitine 3 gm

Montana | Eris



Report of Emergency Obstetrics Conference



MOGS in collaboration with FOFSI-ICOG and ISOPARB Mumbai Chapter held virtual conference on 'Obstetric Emergencies' on Saturday 15th May and Sunday 16th May, 2021. Dr. Geetha Balsarkar was the office bearer in charge and Dr. Parikshit Tank, Dr. Rajendra Nagarkatti and Dr. Madhuri Mehendale were the conveners. The program was coordinated by Dr. Deepali Kale, Dr. Bhumika Kotecha, Dr. Unnati Mamtara and Dr. Siddesh Iyer.

We received an overwhelming response with total 1012 log in's.

On 15th May program started with AGM and Installation of new team, 2021.

Inauguration of conference was conducted by Dr. Mansi Medhekar. Dr. Alpesh Gandhi, President FOGSI was our chief guest. Anushka Sharma was our Guest of Honour. Anushka Sharma during her conversation with Dr. Nozer Sheriar shared her experience and views about pregnancy during this pandemic. This was followed by MOGS Dr. Dossibai Dadabhoy Oration by Dr. Alpesh Gandhi. He spoke on 'Womens Health Crisis in COVID 19 Pandemic'. This session was chaired by Dr. C.N.Purandare, Dr. Sarita Bhalerao, Dr. Anahita Chauhan. This was followed by Virtual Music Program compered by Dr. Sujata Dalvi and Dr. Bhavini Shah. Audiences enjoyed performance by Dr. Adi Dastur, Dr. Suchitra Pandit, Dr. Bipin Pandit, Dr. Suvarna Khadilkar, Dr. Prashant Mangeshikar, Dr. Shashikant Kamat, Dr. Sudha

Tandon, Dr. Sudeshna Ray, Dr. Suman Bijlani, Dr. Pooja Bandekar and Dr. Amrita Tandon. This program was sponsored by our academic partner Meyer Pharmaceuticals.

On 16th May program started with Real life situation-Interesting cases in three halls simultaneously. We had 26 papers in total judged by 7 judges and each hall had 1st and 2nd prize respectively.

This was followed by panel discussion on 'Preterm labour : Old Problem, New Solutions', moderated by Dr. Geetha Balsarkar and Dr. Priya Vora. Panelist comprised of Dr. Kedar Ganla, Dr. Punit Bhojani, Dr. Vandana Bansal, Dr. Raju Sahetya, Dr. Bhumika Kotecha, Dr. Amish Vora (Neonatologist). Academic partner for this session was Zuentus.

Next panel was 'PPH : Every obstetrician's Nightmare' moderated by Dr. Sujata Dalvi and Dr. Amey Purandare. Experts like Dr. Niranjan Mayadeo, Dr. Arun Nayak, Dr. Asha Dalal, Dr. Madhuri Mehendale and Dr. Gaurav Desai shared their experience and opinion on various real labor room situations. This session was granted by Emcure.

Legendary Dr. Shirish Sheth shared his journey from MOGS to FIGO.

Dr. Kaizad Damania paid his tribute to Late Dr. Ajit Mehta in a very touching way.

This was followed by MOGS Dr. Usha Krishna Oration, in her presence by Dr. Pratap Kumar. He spoke on 'Preventing and Predicting Stillbirths'.



This session was chaired by Dr. Vandana Walvekar, Dr. Suvarna Khadilkar, Dr. Niranjan Chavan.

The ICOG session was chaired by Dr. Mandakini Megh, Dr. P. K. Shah, Dr. Parag Biniwale. We had 3 keynote address by Dr. S. Shanthakumari - Mentoring Next Generation, Dr. Jaydeep Tank- Instrumental vaginal delivery in modern obstetrics and Prof S. Arulkumaran- Postpartum collapse.

Prestigious MOGS Dr. Bhanuben M. Nanavati Golden Jubilee Oration was delivered by Dr. Amar Bhide on Placenta Accreta Spectrum. This session was chaired by Dr. Shyam Desai, Dr. Rajendra Sankpal, Dr. Shailesh Kore.

Next was RCOG session by West Zone India Representative Committee chaired by Dr. Usha Saraiya, Dr. Nandita Palshetkar, Dr. Ameet Patki, Dr. Bhaskar Pal. This comprised of 4 talks - Dr. Patrick O'Brien spoke on 'Fetal Distress in labor', Dr. Suchitra Pandit discussed about 'Difficulties in baby deliveries at Caesarean Section', Dr. Ranee Thakar spoke on 'Postpartum sexual dysfunction' and Dr. Rishma Pai discussed 'Antenatal care : Modification & Management in the Covid Era.

Panel discussion on Hypertensive Disorders in pregnancy was moderated by Dr. Rajendra Nagarkatti and Dr. Komal Chavan. Dr. Girija Wagh, Dr. Reena Wani, Dr. Priti Vyas, Dr. Deepali Kale, Dr. Siddesh Iyer, Dr. Pushkar Shikharkhane (Physician) participated in the discussion as experts. Academic Partner for this session was Sun Pharma.

Last Academic session of the day was a panel discussion on Challenges in the Management of Ectopic Pregnancy moderated by Dr. Parikshit Tank and Dr. Mansi Medhekar. Dr. Sudha Tandon, Dr. Atul Ganatra, Dr. Ganpat Sawant, Dr. Pratik Tambe, Dr. Rohan Palshetkar, Dr. Sanket Pisat, Dr. Unnati Mamtara were the experts in the session. Academic Partner for this session were ABBOTT.

This was followed by a brief valedictory session conducted by Dr. Madhuri Mehendale. Dr. Sarita Bhalerao presented appreciation awards to Dr. Rishma Pai, Dr. Anahita Chauhan and Dr. Rajendra Sankalp for their exemplary work during their MOGS TENURE 2020-21. Dr. Shailesh Kore announced the interesting cases prizes & concluded with the vote of thanks.

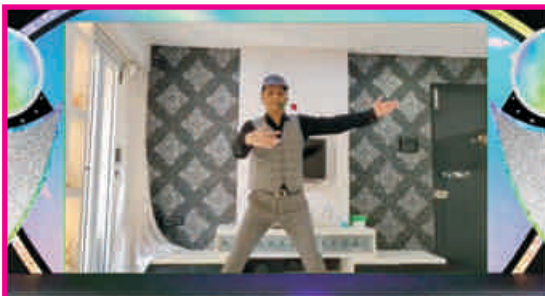
AGM Report

Dr. Anahita Chauhan read the report of the 87th e-Annual General Body Meeting of MOGS, held on 15th May, 2021 proposed by Dr. Raju Sahetya and seconded by Dr. Pratik Tambe. Members elected to Managing council were Dr. Sanket Pisat, Dr. Mansi Medhekar, Dr. Rajendra Nagarkatti, Dr. Purnima Satoskar, Dr. Madhuri Mehendale, Dr. Sudha Tandon, Dr. Bhumika Kotecha Mundhe and Dr. Siddesh Iyer. Dr. Sujata Dalvi was elected unopposed as Jt. Clinical Secretary. Dr. Shailesh Kore was elected as Treasurer and Dr. Anahita Chauhan as Vice president. Dr. Anahita Chauhan thanked all the members of the Managing Council for the fruitful meeting and E-voting.

Condolence was offered to Dr. Ajit Mehta, Dr. Parag Patil, Dr. Champa Nariyani and Dr. Amit Lotlikar who were senior life member of MOGS.

Minutes of the AGBM were unanimously passed. Dr. Rajendra Sankpal presented unaudited income & expenditure account. Dr. Rishma Pai appreciated the services of the Auditors M/s. Ambalal Thakkar and the Honorary Legal Advisor Mr. Amit Kharkhanis for the year 2020-21 and after approval of the incoming president and secretary appointed Auditors and Honorary Legal Advisor for the year 2021 – 2022.

Report of Activities for 2020-21 was presented by Dr. Anahita Chauhan. MOGS Dr. Duru Shah Best Committee Prize and MOGS – Prof Khurshed and Dr. Soonu Sheriar Best Youth Council Member Award were announced. Dr. Shyam Desai, Chairman, Board of Trustees, addressed the audience and commended Dr. Rishma Pai for an excellent year and also congratulated Dr. Sarita Bhalerao for using a virtual platform for her installation. Excellent outgoing President speech was delivered by Dr. Rishma Pai. This was followed by a virtual installation of incoming MOGS President Dr. Sarita Bhalerao and her team. Dr. Sarita Bhalerao then gave her presidential address and outlined her plans for the year. The meeting ended with a vote of thanks by Dr. Suvarna Khadilkar. MOGS e AGM attendees were 140.

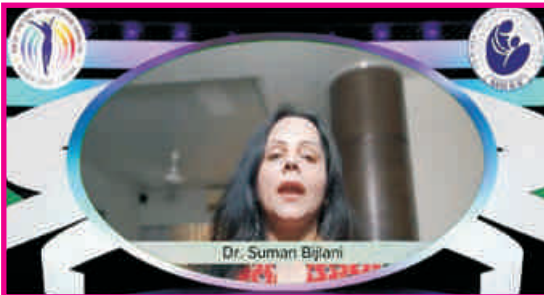




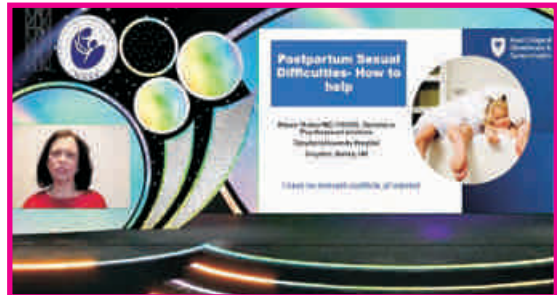
Dr. Pooja Bondekar



Dr. Sucha Tandon

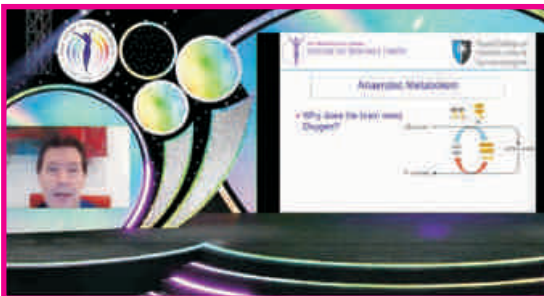


Dr. Sumati Bijani



Postpartum Sexual Difficulties: How to help

After a successful delivery, sometimes Postpartum sexual difficulties may be experienced by the couple. Impact on the couple's life.



Anaemia: Metabolism

Why does the heart need Oxygen?



As healthcare policy makers...

- Provide "evidence-based" healthcare services
- Optimize resource allocation and usage
- Be open to deliver new services

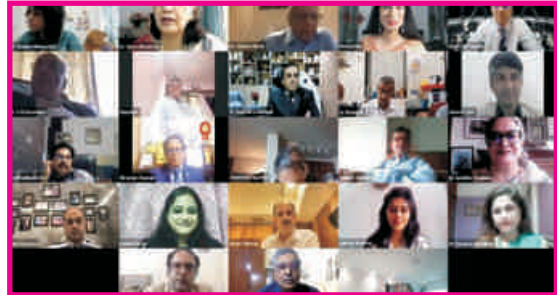


THE INDIAN OBSTETRIC & GYNAECOLOGICAL SOCIETY



JOURNEY FROM BOOKS (M.D.) TO PRACTICE (WORLD)
IT IS VIA PRACTICE (INDIAN OBSTETRIC & GYNAECOLOGICAL SOCIETY)







COVID 19 During Pregnancy- current treatment protocols

Dr. Rajshree Dayanand Katke

Professor & Head Of The Department,
Dept Of OBGY, Grant Govt Medical College &
SIR JJ Group Of Hospitals Mumbai

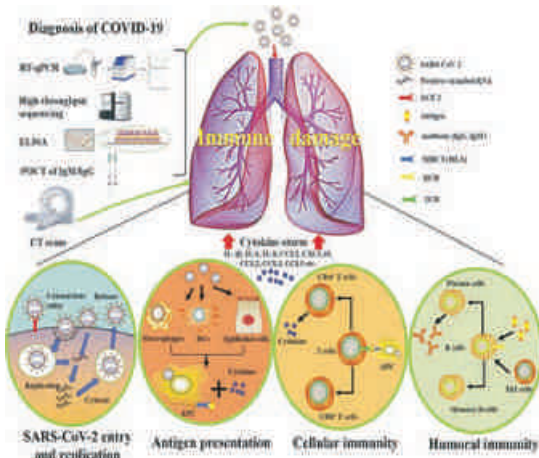
Introduction-

The first case of COVID-19 (coronavirus disease) caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) was notified to the World Health Organization (WHO) on December 31, 2019, from Wuhan, Hubei Province of the People's Republic of China

On January 30, 2020 it was declared as Public Health Emergency of International Concern and on March 11, 2020, COVID 19 was declared as Pandemic by WHO.

Etio-pathogenesis-

It is a Single-stranded 80- to 120-nm-sized, enveloped RNA betacoronavirus with mean incubation period is 5-7 days (range 2-14 days).



A. Antenatal Care During COVID-19 Pandemic

Women should be advised to attend routine antenatal care at the discretion of the maternal care provider at **12, 20, 28 and 36 weeks of gestation**, unless they meet current self-isolation criteria.

Patients should be placed one meter apart in the waiting area.

I trimester- 12 weeks- Screen for medical disorders, Investigations, First dose TT, NT SCAN, biochemical screening.

II TRIMESTER- 18 -20weeks - Congenital anomaly scan, BP, Hb, Urine protein, cervical length, hematinics, calcium, OGTT 24 weeks

• III TRIMESTER –28 weeks - DFKC, mental health, BP, Hb, urine protein, ANTI D Prophylaxis.

• 32-34 weeks Fetal wellbeing, Growth scan, Doppler, Birthing route, Isolation, Tdap vaccine

• Drugs During pregnancy recommendations

• Aspirin – No change in recommendations. Low dose aspirin can be given as medically indicated

• Approach to antenatal women-

• Travelled to another country within 14 days or close contact with a confirmed case of COVID-19



Clinical examination + RT PCR on deep nasopharyngeal or pharyngeal samples



SARS COVID NEGATIVE

STOP MONITORING
Asymptomatic
No isolation rooms
Monitoring at home



SARS CoV positive

Isolation at home for 14 days

USG growth + doppler / 2 weeks

- Symptomatic – fever & temp; 38°C or respiratory symptoms,
- HOSPITALISATION IN A TERTIARY CARE CENTRE
- **Isolated room with prefer negative pressure**
- MATERNAL SURVEILLANCE-T, HR, BP, RR/3-4hrly, High resolution CT OR C XRAY; FETAL SURVEILLANCE, FHS /1X

• PPE for visitors/ health care worker

▶ Intensive Care Unit admission

- ▶ QUICK sequential organ failure assessment score (SOFA SCORE)
- ▶ More than 1 following criteria
 1. Systolic BP < 100 mmHg
 2. Respiratory rate > 22
 3. Glassgow coma scale < 15

• Investigations of Patients with COVID-19 Admitted to Critical Care

- Biochemical investigations-
- CBC - lymphopenia, thrombocytopenia (neutrophil : lymphocyte > 3)
- RBS, LFT, RFT, LDH, PT APTT, d-dimer
- Procalcitonin, ESR, CRP, IL-6
- Ferritin > 500 mcg /L
- Troponins •ABG

• Radiological investigations-

- CXR- Bilateral peripheral opacities , Mostly in lower lobes.
- **Abdominal shielding can be used to protect the foetus as per normal protocols.**
- **Based on CT findings ; CO-RADS score is as follows ;**

CO-RADS*		
Level of suspicion COVID-19 infection		
		CT findings
CO-RADS 1	No	normal or non-infectious abnormalities
CO-RADS 2	Low	abnormalities consistent with infections other than COVID-19
CO-RADS 3	Indeterminate	unclear whether COVID-19 is present
CO-RADS 4	High	abnormalities suspicious for COVID-19
CO-RADS 5	Very high	typical COVID-19
CO-RADS 6	PCR +	

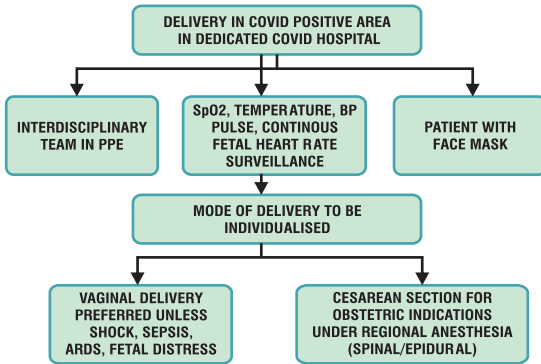
Management of Patients with COVID-19 Admitted to Critical Care

- ▶ Women with severe disease such as tachypnea (respiratory rate of >30/min), hypoxia (SpO₂ ≤ 90%), and pneumonia with >50% lung involvement on computerized scan should be managed at critical care unit.
- ▶ Titrate oxygen to keep **saturations >94%**
- ▶ **Look at respiratory rate every hourly** checking for the rate and trends
If urgent delivery is indicated for foetal reasons, normal delivery should be considered, as long as the maternal condition is stable.
- ▶ The pregnant woman should be kept in left lateral position with judicious intravenous fluid, oxygen therapy when needed, appropriate antibiotic and antiviral therapy, and mechanical ventilation as per patient's requirement

B. Intrapartum Care

Once settled in an isolation room, a full maternal and foetal assessment should be conducted to include:

- ▶ Delivery should preferably be at a tertiary care centre.
- ▶ Maternal vitals including temperature, respiratory rate & oxygen saturations.
- ▶ Electronic foetal monitoring using cardiotocograph (CTG).
- ▶ **Hourly** oxygen saturation during labour.
- ▶ Mode of delivery-There is currently no evidence to favour one mode of birth over another.
- ▶ **Precautions to be taken during caesarean delivery include-**
- ▶ All team – obstetricians , anaesthetists , paediatrician , OT staff to be in PPE
- ▶ Visibility – a challenge
- ▶ Amniotic fluid / blood spill- avoid
- ▶ Cautery use : minimise
- ▶ Delayed cord clamping / skin to skin contact – suspended.



- ▶ All pregnant woman with COVID 19 must be assessed for venous thromboembolism (VTE) risk score, which if present is an indication of starting low molecular weight heparin

General Advice for Obstetric/ Emergency Gynaecology Theatre

- ▶ Elective obstetric procedures (e.g. cervical cerclage or caesarean) should be scheduled at the end of the operating list.
- ▶ Non-elective procedures should be carried out in a second obstetric theatre, where available, allowing time for a full post-operative theatre clean-up as per national health protection guidance.

C. Postnatal Management

- ▶ It is not known whether new-borns with COVID-19 are at increased risk for severe complications. Transmission after birth via contact with infectious respiratory secretions is a concern in the current scenario.

Considerations below for temporary separation:

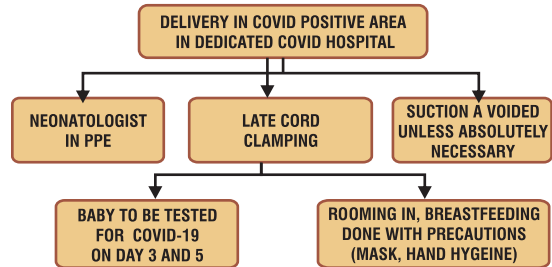
- ▶ The risks and benefits of temporary separation of the mother from her baby should be discussed with the mother by the healthcare team.
- ▶ **If colocation (sometimes referred to as "rooming in")** of the new-born with his/her ill mother in the same hospital room occurs in accordance with the mother's wishes or is unavoidable due to facility limitations, facilities should consider implementing measures to reduce exposure of the new-born to the virus that causes COVID-19

Breastfeeding : During temporary separation, mothers who intend to breastfeed should be encouraged to **express** their breast milk to establish and maintain milk supply.

If possible, a **dedicated breast pump** should be provided. Prior to expressing breast milk, mothers should practice hand hygiene.

This expressed breast milk should be fed to the new-born by a **healthy caregiver**.

Care of a newborn-



Drugs used in management of COVID-19 in pregnancy

Drug	Mechanism of action	Current status
Azithromycin	Bacteriostatic	Azithromycin is assigned as FDA category B
Amoxicillin	Bactericidal	Amoxicillin belongs to FDA category B
Ceftriaxone	Bactericidal	Ceftriaxone belongs to FDA category B
Interferon-I	Blocks replication of virus	IFN type I belongs to class C by FDA
Hydroxy-chloroquine	Prevents pH dependent coronavirus replication, impedes penetration of virus, has immunomodulatory effects	Not designated any FDA category.
Lopinavir/ritonavir	Their combination reduces viral replication	Lopinavir is not designated any FDA category, but ritonavir is included in B category 400 mg –BD for 14 days



Drugs	Description	Can be given in pregnancy
Corticosteroids	Analogues of steroid hormones	yes
Favipiravir	RNA polymerase inhibitor	No (teratogenic)
Convalescent plasma	Polyclonal human antibodies	yes
Tocilizumab	Anti IL 6 monoclonal Ab	yes

ROLE OF PLASMAPHERESIS AND REMDESIVIR

- ▶ Convalescent plasma therapy neutralizes virus directly but is not designated any FDA category
- ▶ Remdesivir decreases viral replication in the host cells by blocking RNA dependent RNA polymerase but is not approved in pregnancy
- ▶ Dose – 200 g iv day 1, f/b 100 mg ODx 4 days with LFT, RF monitoring.
- ▶ **Remdesivir can be given in pregnancy if the benefits outweigh the potential risks.**
- ▶ NSAIDS in covid 19 when clinically indicated, the lowest effective dose is used, ideally for less than 48 hours and guided by gestational age - related potential toxicity. **(ACOG, WHO)**
- ▶ **Steroids -**
- ▶ Indication-those needing oxygen supplementation & ventilatory support **(RECOVERY TRIAL CRITERIA)**
- ▶ RECOVERY trial protocol for pregnancy recommends **prednisolone** 40mg orally once daily, and, in women unable to take oral medicine, hydrocortisone 80mg intravenously twice daily instead of dexamethasone treatment.
- ▶ **For fetal lung maturity,**
- ▶ Prednisolone 6 mg 12 hourly 4 doses f/b for 10 days OR
- ▶ Dexamethasone – 6 mg / daily for 10 days or until discharge (whichever comes first)
- ▶ Recent guidelines from the Royal College of Obstetricians and Gynecologists suggest the use of intravenous hydrocortisone or oral prednisolone in women who are pregnant or breastfeeding.

ROLE OF LOW MOLECULAR WEIGHT HEPARIN -

- ▶ Consider heparin for patients with spo2 – less than 94%
- ▶ Enoxaparin /dalteparin / unfractionated heparin or LMWH (if delivery is not imminent)

	Dose	Weight
Prophylactic	Dalteparin 5000 IU OD	Less than 80 kg
	Enoxaparin 40 mg OD	
	Dalteparin 7500 IU OD	More than 80 kg
	Enoxaparin 60 mg OD	
Therapeutic	Dalteparin 7500 IU BD	Less than 80 kg
	Enoxaparin 1mg/kg OD	
	Dalteparin 1000 IU BD	More than 80 kg
	Enoxaparin 1mg/kg OD	

- ▶ Dose can be decided as per d dimer levels -
- ▶ 40 mg od if < 500
- ▶ 40 mg bd if between 500 – 3000
- ▶ 1mg/kg if more than 3000.
- ▶ Unfractionated heparin, low molecular weight heparin, and warfarin do not accumulate in breast milk and do not induce an anticoagulant effect in the newborn; therefore, they can be used by breastfeeding



individuals with or without COVID-19 who require VTE prophylaxis or treatment

- ▶ If antithrombotic therapy is prescribed during pregnancy prior to a diagnosis of COVID-19, this therapy should be continued
- ▶ For pregnant patients hospitalized for severe COVID-19, prophylactic dose anticoagulation is recommended unless contraindicated.

Role of vitamin D, Zinc and Vit C-

- ▶ Vitamin D, zinc(40 mg OD), B complex & Vit C supplementation is recommended to all women during pregnancy to strengthen the immunity.
- ▶ Low levels of vitamin D are at an increased risk of serious respiratory complications if they develop coronavirus.

References-

1. World Health Organization. Clinical management of severe acute respiratory infection (SARI) when COVID 19 is suspected: Interim guidance V 1.2. Geneva: WHO; 2020.
2. Royal College of Obstetricians & Gynaecologists. Coronavirus (COVID 19) infection and pregnancy.
3. The American College of Obstetricians and Gynecologists. Novel Coronavirus 2019 (COVID 19).
4. ICMR, NIRRH. Guidance for Management of Pregnant Women in COVID 19 Pandemic. Indian Council of Medical Research, National Institute for Research in Reproductive Health.
5. Sharma JB, Sharma E, Sharma S, Singh J. Management of a COVID 19 pregnancy and labour. IOG. 2020; 10: 9-12.
6. FIGO (International Federation Gynecology & Obstetrics) www.figo.org

The Leader in Gynecology

Dedicated

Make HER Win in Every Phase of Life

Infant Child Adolescent Pregnancy Mother Post Menopause

From the makers of

Orofer[®] XT
Tablets
Ferrous Ascorbate equivalent to 100 mg elemental iron + Folic Acid 1.5 mg Tablets
Hb rise... simply unmatched

Pause[®]-MF
Tranexamic Acid 500 mg + Mefenamic Acid 250 mg Tablet
Synergy To Control Blood Loss with Pain

Dydrofem
Dydrogesterone Tablets IP 10 mg
Faith Delivered

Orofer[®] FCM Inj.
Ferri Carbonymallose Injection equivalent to elemental iron 300 mg/10 ml
High Performance... Delivered Conveniently



COVID VACCINATION : FAQs



DR. REENA WANI (MD, FRCOG, FICOG, DNBE, FCPS, DGO, DFP)

Professor & Head of Unit, Obstetrics & Gynecology, HBTMC & Dr. R.N. Cooper Hosp, Mumbai.
Core Committee Member FOGSI Violence against Women Cell 2014-2021
President MBPC, Section Editor TIP, Peer Reviewer JOGI
Chairperson FOGSI Perinatology Committee 2015-2017



Dr. Varun J. Wani (MBBS),

Junior residents (JR2) in Community Medicine,
TNMC & BYL Nair Hospital, Mumbai

Dr. Priya H. Manihar (MBBS)



Health care staff are working in vaccination centres will cater to hundreds of people every day. People have various doubts, apprehensions and queries regarding the Covid-19 vaccination. "Prevention is better than cure"; we have all heard it but to trust a vaccine that has newly come in the market in a short span of time is a challenge for every individual which gives rise to a lot of questions. As the on-duty doctors, we have to be well aware about the vaccine and confidently answer the questions of the public. Some common frequently asked questions (FAQs) with answers are listed below -

Q1. How long should you wait to get tested for COVID-19 after you feel or suspect symptoms?

A. There is no need to wait. If you are experiencing symptoms, get tested right away.

Q2. Which COVID-19 vaccines are licenced in India?

- Covishield® (Astra Zeneca's vaccine manufactured by Serum Institute of India)
- Covaxin® (manufactured by Bharat Biotech Limited)
- Sputnik V (manufactured by Gamaleya Research Center) soon to be available.

Q3. Why is vaccination is not provided to children who are usual target?

A. COVID-19 affects all age groups. Morbidity & mortality is several times higher in adults which is especially seen in those above the age of 50 years. Children usually have asymptomatic or mild infection, without many reports of mortality.

Any new vaccine after initial clearance is first evaluated in older population and then age reduction is done to assess the safety and

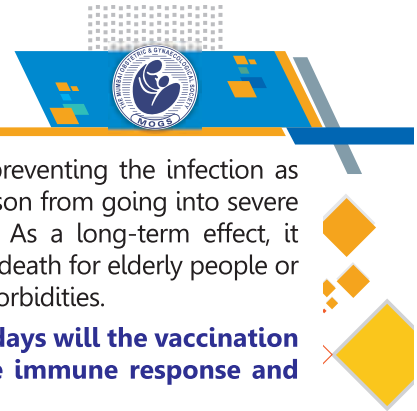
effectiveness in paediatric population. The currently available vaccines have not been fully evaluated in children so far. There are ongoing clinical trials to evaluate the safety and effectiveness of the COVID 19 vaccines in the paediatric age group.

Q4. If I have received vaccine as a health worker, how will my family members receive the vaccine (as they are exposed as well)?

A. The people at highest risk of exposure such as health care and frontline workers will receive the vaccine on priority. These personnel can risk the spread of infection from work to their family members. Other family members will be vaccinated according to the age brackets by the Government of India.

Q5. What is the dose schedule of both the vaccines?

A. As per the permission granted by the Drug Controller General (India), for Covishield the second dose is to be administered 4-6 weeks after the first dose and Covaxin is to be administered in two doses interval of day 0 and day 28. This has subsequently been modified for Covishield. Initially the schedule was modified to



be 4-8 weeks apart; now from May 2021, a gap of 12-16 weeks between doses is suggested.

Q6. Do I have a choice of vaccine I will receive?

A. The vaccine will be supplied to various parts of India as per availability and distribution plan. If there is more than one vaccine available at your vaccination center, you may choose which vaccine to take.

Q7. Do I need to use the mask/other COVID appropriate precautions after receiving the vaccine?

A. Yes, it is absolutely necessary that everyone who has received the COVID vaccine should continue to follow the COVID appropriate behaviour i.e., mask, "२ गज की दूरी" [2 yards/6 feet gap for social distancing], and hand sanitization. This is not only to protect themselves but also for those around to reduce the spread of infection.

Q8. How long I will remain protected after vaccination?

A. Immune response in vaccinated individuals is there but the duration yet to be determined. Hence, continuing the use of masks, handwashing, physical distancing and other COVID-19 appropriate behaviours is strongly recommended.

Q9. Does vaccination protect me against newer strains/mutated virus of SARS-CoV2?

A. The body responds to vaccination by making more than one type of antibodies to virus parts including spike protein. Therefore, all vaccines are expected to provide reasonable amount of protection against the mutated virus as well. Based on the available data the mutations as reported are unlikely to make the vaccine ineffective. However, studies are still being conducted to confirm the same.

Q10. Which vaccine is better between Covishield and Covaxin?

A. There is no head-to-head comparison done between the two vaccines being used in India so one cannot choose one over the another. There is a difference in technology being used; Covishield uses viral vector for spike protein antigen while Covaxin uses killed virus with adjuvants. Both

would work fine in preventing the infection as well as prevent a person from going into severe state of the disease. As a long-term effect, it would be preventing death for elderly people or those who have co-morbidities.

Q11. In how many days will the vaccination create an adequate immune response and protection?

Adequate immune response usually takes 2-3 weeks after completion of the vaccination schedule i.e., after the second dose of COVISHIELD® and COVAXIN®.

Q12. Does this vaccine provide herd immunity?

When an increasing number of people get vaccinated in the community, indirect protection through herd immunity develops. The percentage of people who need to be immune in order to achieve herd immunity varies with each disease. For example, its 95% for measles. However, the proportion of the population that must be vaccinated against COVID-19 to begin inducing herd immunity is not known.

Q13. What are expected immediate and delayed side effects of this vaccine?

A. Covishield®: Some mild symptoms may occur like injection site tenderness, injection site pain, headache, fatigue, myalgia, malaise, pyrexia, chills and arthralgia, nausea. Very rare events of demyelinating disorders have been reported following vaccination with this vaccine but without the causal relationship establishment.

Covaxin®: Some mild symptoms AEFIs may occur like injection site pain, headache, fatigue, fever, body ache, abdominal pain, nausea and vomiting, dizziness-giddiness, tremor, sweating, cold, cough and injection site swelling. No other vaccine-related serious adverse effects have been reported.

Q14. What are the contraindications for this vaccine?

- A. 1. Contraindications
- i. Persons with history of:**
 - Anaphylactic or allergic reaction to a previous dose of COVID-19 vaccine
 - Immediate or delayed-onset anaphylaxis



or allergic reaction to vaccines or injectable therapies, pharmaceutical products, food-items etc.

ii. Pregnancy & Lactation : Pregnant & Lactating women have not been part of any COVID-19 vaccine clinical trial so far. However, recently (May 2021) a circular has stated that all lactating women are eligible for vaccination. FOGSI and other organizations (RCOG, ACOG, SMFM) have supported vaccination for pregnant women with informed consent, especially those who are health care workers or front-line workers.

2. Provisional / temporary contraindications : In these conditions, COVID vaccination is to be deferred for 4-8 weeks after recovery

- Persons having active symptoms of SARS-CoV-2 infection.
- SARS-COV-2 patients who have been given anti-SARS-CoV-2 monoclonal antibodies or convalescent plasma
- Acutely unwell & hospitalized (with or without intensive care) patients due to any illness.

Q15. Which drug should be taken to minimize the adverse effects of this vaccine?

A. In case of minor adverse effects such as injection site pain, tenderness, malaise, pyrexia, etc., paracetamol may be used to alleviate the symptoms.

Q16. Should you avoid alcohol after receiving the COVID19 Vaccine?

A. As per experts, there is no evidence of alcohol impairing the effectiveness of the vaccine. However, alcohol compromises the body's immune system and increases the risk of adverse health outcomes. Tweeting from the official Sputnik V account, Alexander Gintsburg, PhD, advised refraining from alcohol for three days after each injection. Gintsburg added that this guidance applies to all vaccines.

Q17. Claims on social media suggested that covid19 vaccine could affect female fertility. Is it true?

A. Rumours or social media posts suggesting that COVID-19 vaccines could cause infertility are not true and totally baseless. Such rumours

were floated in the past against other vaccines also e.g. polio and measles. None of the available vaccines affects fertility. All vaccines and their constituents are tested first on animals and later in humans to assess if they have any such side effects. Vaccines are authorized for use only after their safety and efficacy is assured.

Q18. What precautions I need to take after receiving the vaccine?

A. Both the vaccines are safe but in case of any discomfort or complaint, ask the beneficiary to visit the nearest health facility and/or call the health worker whose phone number is given in the COWIN SMS received after vaccination. Continuing the use of masks, handwashing, physical distancing and other COVID-19 appropriate behaviours is strongly recommended.

Q19. If I suffer from HTN/DM/CKD/heart disease/lipid disorders etc., can I safely take this vaccine?

A. Overall, the vaccine is safe and efficacious in adults with comorbidity. The maximum benefit of getting the COVID vaccine is for those who have such co-morbidities. However, if you are concerned for any specific reason, please consult your doctor.

Q20. What medications should be avoided before taking COVID-19 vaccine and for how long?

A. Currently, there is no such instruction. One can take one's regular medication uninterruptedly. Just inform the vaccinator about the medicines you consume.

Q21. The Health Ministry has advised caution in vaccinating persons with a history of bleeding or coagulation disorder. How does a person know if he/she has a coagulation disorder? What tests can be conducted?

A. There are a few bleeding disorders like 'haemophilia'. These persons should take the vaccine under the supervision of their treating physician. Patients who are admitted in hospital or ICU and have bleeding problems should delay the vaccination till they are discharged. However, several people with heart and brain



disorders are on blood thinners like aspirin and anti-platelet drugs. They can continue with their medicines and have the vaccines. For them, vaccines are absolutely safe.

Q22. The health advisory also states that those with immunity issues should be cautious about taking the vaccine. What are the markers of 'Immunity issues'?

A. Immune issues are of two types: one, immunosuppression due to any disease such as AIDS, and people on immunosuppressant drugs such as anti-cancer drugs, steroids, etc. Second, immunodeficiency in people who suffers from some defect in the body's protective system such as congenital immunodeficiency.

Currently, available COVID vaccines do not have any live virus and therefore individuals with immune issues can have the vaccine safely. But the vaccine may not be as effective in them. One should inform the vaccinator about the medicines they consume and if they are suffering from any known immune issues. The vaccinator should have a record of one's medical condition.

Q23. I had COVID infection and was treated, why should I receive vaccine?

A. Development of immunity or duration of protection after COVID-19 exposure is not established therefore it is recommended to receive vaccine even after COVID-19 infection. Wait for 4-8 weeks after recovery from COVID symptoms before getting the vaccine.

Q24. Is the vaccine contraindicated in person with chronic diseases?

A. Chronic diseases and morbidities like the Cardiac, neurological, pulmonary, pulmonary, metabolic, renal and malignancies etc. are not contraindicated. In fact, the benefit of COVID vaccines to reduce the risk of severe COVID disease and death is for those who have these co-morbidities.

Q25. Is it important for me to receive the same vaccine during second dose?

A. As the vaccines available are not interchangeable, it is important to receive the second dose of same vaccine as the first one. The COWIN app is also going to help to ensure

that everyone receives the same vaccine.

Q26. Will this require any repeated vaccination or booster dose after the 2nd dose in future?

A. Requirement of booster dose is yet to be determined. Hence, continuing the use of masks, handwashing, physical distancing and other COVID-19 appropriate behaviours is strongly recommended.

Q27. Will I get any certificate that I am vaccinated?

A. Yes, a provisional certificate would be provided after the first dose. This mentions the type of vaccine received as well. On completion of second dose, when you receive the message for completion of schedule it would include a link to download digital certificate of vaccination for COVID-19 vaccination. This certificate can be then be saved in the Digi-locker.

Q28. If after 1st dose of vaccine if I test positive then how long should I wait to take the second shot of vaccine?

A. If you test positive for COVID-19 in between two doses of vaccination, the second dose is to be deferred to 3 months after recovery from illness.

Sources References & Further Reading

1. <https://www.m3india.in/tiny/uj5hxjff> accessed on 20.05.2021
2. https://www.mohfw.gov.in/covid_vaccination/vaccination/faqs.html accessed on 20.05.2021
3. <https://twitter.com/sputnikvaccine/status/1336636436519530496> dated Dec 9, 2020. Accessed on 20.05.2021
4. Challenges & Concerns in Setup of COVID Vaccination Centre : Experience from 2 Centres in Mumbai. Sanjay Panchal, Reena J. Wani, Kinjal Chauhan, Varun Wani, Priya Manihar. The Indian Practitioner, Vol.74 No.4., p18-23. April 2021
5. Gap between two doses of Covishield Vaccine extended from 6-8 weeks to 12-16 weeks based on recommendation of COVID Working Group. Ministry of Health and Family Welfare. PIB Delhi. 2021 May 13. (Release ID: 1718308)
6. The National Expert Group on Vaccine Administration for COVID-19 (NEG-VAC) recommendations, Ministry of Health and Family Welfare. PIB Delhi. 2021 May 19. (Release ID: 1940407)



MENTAL HEALTH IN PANDEMIC



Dr. Ashish Deshpande,
Consultant Psychiatrist,
Centre for Mental Health Advocacy
Research And
Treatment Services (CMHARTS)



Ms. Madhura Soman
Intern-Psychologist,
CMHARTS

Introduction:

The prophetic warning by the Nobel Laureate Joshua Lederberg that “the microbe that felled one child in a distant continent can reach yours today and seed a global pandemic tomorrow” has proved its relevance with the emergence of coronavirus disease 2019. In facing the pandemic, people all over the world showed a great degree of panic and anxiety due to the rapidly increasing number of confirmed cases and deaths across the world, a global shortage of protection resources, and the collapse of medical resources. In India high infectivity of the mutating virus, population density, decades of ignorance of the health care system, chaos in anticipating oxygen demands & complete failure of management vaccination program woefully raising eyebrows about the ‘self-inflicted’ nature of the humungous damage that now we expect, have added to the grave concerns.⁽¹⁾

With all human boastfulness of evolving to ‘Homo Deus’ evaporating in thin air, we have been compelled to implement centuries-old public health measures like shutting down all but essential services, ‘grandmother taught’ covid-appropriate behaviours, self-isolation, and quarantine measures. These measures have caused widespread disruption of both the social fabric and economic activities. One wouldn’t require Nostradamus to predict the negative effects on overall health across the world due to these abrupt changes. There is national and international literature to indicate delayed access to health care in all medical emergencies and progressive illnesses in ‘COVID times’ heralding an increase in the preventable deaths in times to come. Delay in research on life-saving drugs too is likely to add to the non-covid disease burden. The mental

health impact due to sheer uncertainty and threat to lives and livelihoods of self as well as significant others, lifestyle change thrust upon individuals and widening of the vicarious traumatisation due to excessive consumption of internet resources (up 68%), cable news networks (up to 54% from 38%) and news broadcast networks (up 34%) is feared to impact the community resilience and recovery from the crisis in a significant way.⁽²⁾

Mental Health & COVID19 Pandemic

Communities and the individuals within those communities, both, are likely to suffer in times of Public Health Calamity of such proportions. Insecurity, confusion, emotional isolation, and stigma within individuals and economic loss, work and school closures, inadequate resources for medical response, and deficient distribution of necessities within communities are likely to affect their health & coping. These effects may translate into a range of emotional reactions (such as distress or psychiatric conditions), unhealthy behaviours (such as excessive substance use), dropping out of productive mainstream processes (unemployment, Not-in Education-Employment-or-Training children), close space victimisation (such as domestic violence, child abuse, sexual abuse)⁽⁴⁾, open space exploitation (fraudulent behaviour over finances/superstitions) noncompliance with public health directives & law (such as home confinement and vaccination, children/youth/adults at conflict with the law)^(4, 5) in general resilience in people who contract the disease & in the general population. Poverty, illiteracy, pre-existing mental illness, engagement in child labour, weakened support systems and migrant populations add to the possibility of these negative outcomes. People who have already got the infection, or those who are



higher risk of getting it (seniors, immunocompromised, and those receiving care or support in group settings-senior homes, hostels etc) are more vulnerable to psychosocial effects of the pandemic. All mental health conditions including substance use problems by their very nature are likely to aggravate in such circumstances.

With the risk of the disease being less in youth, results of a cross-sectional study exploring perceived stress, anxiety & depression in various age categories amongst 44,992 subscribers who enrolled in the 'Text4Hope' program in Canada came in as a surprise. The report suggested the highest neurotic affection in those aged under 25.

Physician heal thyself!

The risk for anxiety, depression, burnout, insomnia, moral distress, and post-traumatic stress disorder is known in health care workers. The nature of the pandemic and the contingent burden on the healthcare system and lives of health care workers, makes them vulnerable to likely ills of mental health including stress, depression, irritability, insomnia, fear, confusion, anger, frustration, boredom, and stigma associated with quarantine, some of which persisted even after the quarantine was lifted. ⁽⁶⁾

Working women are known to serve dual roles in their families. One as a professional in the domain of their work and the other as a carer in the family. The lockdown and its effects on domestic services has added to the overall burden of expectations from women. Especially in the global health and social care sector, where women comprise 70% of the workforce. Burdened by these obligations, women had reduced academic/ financial productivity relative to men, as evidenced by fewer women being part of the cohort producing new knowledge about the pandemic ⁽⁷⁾. There was a disconnect between the demands of parenting and the expectations of the scientific/ professional communities. Young doctors with equipment and property loans on their heads have been affected by the prioritisation of the COVID19 crisis over other non-emergency clinical work

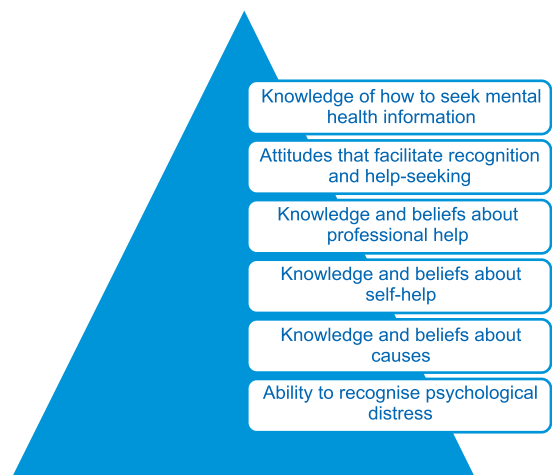
Burnout and other forms of work-related psychological distress in frontline workers as

well as other health care professionals, directly or indirectly associated with the pandemic are an unavoidable reality. Acknowledging this reality would be the first step in destigmatising mental health interventions.

What your mind doesn't know your eyes don't see!

Jorm et al have defined mental health literacy as knowledge and beliefs about mental disorders which aid/ hinder their recognition, management & prevention ⁽⁸⁾ Attitudes that hinder recognition & appropriate help-seeking can be counteracted by information that is readily available in the public domain. What follows is a summary of this information and the decision-making process that it demands.

Figure 1- Components of mental health literacy: Jorm et al ⁽⁸⁾



Lay people are most likely to get knowledge about mental health/wellbeing services from personal experiences of someone with a mental disorder or anecdotal evidence from family or friends, followed by print (newspapers, books, magazines) as well as electronic or internet media. Negative, sensation-seeking depiction in the media/films, lack of adherence to clinical practice guidelines in most of the published 'self-help books' leads to resistance in the utilisation of mental health resources ⁽⁸⁾. Availability of handouts, patient information booklets, a list of credible internet resources, and credible mental health resources in the



community would benefit outcomes in the utilisation of mental health resources.

Reference of a mental health professional is more likely to succeed if it is recommended by a 'trusted' other. A mental health professional who is sensitive to the views of the patient in treatment can achieve 'concordance' - two-way negotiation between patient and the doctor- is more likely to achieve compliance⁽⁸⁾.

Such systematic screening and brief interventions followed by thoughtful referencing increase the high utilisation of mental health services and better outcomes.

A non-mental health professional's mental health toolkit:

The American College of Obstetricians and Gynaecologists and the American Association of Paediatricians⁽⁹⁾ recommend mental health

evaluation of all adolescents stepping into their clinics with a focus on the degree of incapacitation secondary to mental health issues, self-harm behaviours, acting out behaviours, and substance use.

In order that a clinician implements above recommendations he/she should know when and how to initiate a conversation on mental health with their patients. Usually, the best time to engage in such conversation is when the immediate problem for which assistance was sought is relieved. A simple mental health decision-making tree suggested by CDC (Image 1 for adults and Image 2 for youth) would help you understand the severity of the mental health issue. If mild, simple lifestyle advice provided by CDC should suffice along with a question on mental health on follow-up.

	Stress symptoms		
Ask for	Feeling "worried, irritable, nervous, frustrated, angry, numb, scared"		
Look for	Change in "Sleep, interests, desires, energy. Work output, appetite, relationships"		
Notice	Headaches, body aches, skin rashes, stomach problems. Worsening of chronic health problems. Worsening of mental health conditions		
Monitor	Tobacco, alcohol or other substance use		
	Judge severity		
1) Is your mood affected for most of the time of the day for most of the weeks?	Y	N	
2) Are your sleep, appetite, desires affected most of the days of the week?	Y	N	
3) Are the unusual body complaints, rashes disturbing you more often than before?	Y	N	
4) Have your family members observed a change in your consumption of addictive substances over the last few weeks?	Y	N	
5) Have you experienced unusual thoughts of harming or embarrassing or putting yourself at risk?	Y	N	
If the answers to above questions are 'NO' but you still have stress symptoms	If answers to any of the questions is 'YES' then,		
	Suggest		



<ol style="list-style-type: none"> 1) Take breaks from News, disconnect from TV, cell phones, computer screens. 2) Deep breathing/ box breathing, stretch, meditate 3) Eat healthy, have hobbies, learn something new on internet 4) Talk to friends, people whom you trust and express your concerns. 5) Exercise regularly 6) Get plenty of sleep 7) Support others, volunteer, donate taking good care of yourself 8) Avoid excessive tobacco, alcohol or any other psychoactive substance 9) Get vaccinated with COVID19 vaccine 10) Reinforce protection with simple COVID care measures 	<ol style="list-style-type: none"> 1) If client is struggling with coping suggest to reach out to his/her family members, trusted friends or neighbours. 2) Share community resources to help in up keep of daily needs. 3) Do a thorough examination. Talk to the client about his/her 'stress symptoms'. 4) Request consent for mental health screens. 5) Encourage to talk to a mental health professional. 6) Share specific patient education information if available.
---	---

Image 1: Recognising and managing stress symptoms in adults (CDC)

		Stress symptoms	
Ask for	Excessive crying, bedwetting, excessive worries or sadness, withdrawn behaviour	"WIN FANS"	
Look for	Unhealthy eating, sleeping habits, irritability & acting out behaviours in teens, lowered grades, lowered attention & concentration	"SIDE WARS"	
Notice	Headaches, body aches, skin rashes, stomach problems. Worsening of chronic health problems. Worsening of mental health conditions.		
Monitor	Tobacco, alcohol or other substance use		
Judge severity			
1) Is your mood affected for most of the time of the day for most of the weeks?		Y	N
2) Are your sleep, appetite, studies affected most of the days of the week?		Y	N
3) Are the unusual body complaints, rashes disturbing you more often than before?		Y	N
4) Have you been experimenting with substances to feel high or to feel at peace or just to calm you down?		Y	N
5) Have you experienced unusual thoughts of harming or embarrassing or putting yourself at risk?		Y	N
If the answers to above questions are 'NO' but client has concerns about COVID19 .		If answers to any of the questions is 'YES' then,	
Suggest			
<ol style="list-style-type: none"> 1) Tips in table 1. 2) Children feel reassured when the parents are calm. 3) Reassure children about their safety and enumerate the basic COVID care that the house is taking. 4) Say its okay to have such feelings and they should talk about them without any hesitation. 5) Pay attention to what children see or hear on TV or online. Ask them to reduce COVID related screen time. 6) Provide basic information on the virus, vaccine and the COVID appropriate behaviours. 7) Help them structure their day with physical activity, recreational activity, learning activity and self care. 8) Make them practice COVID appropriate behaviours before the school opens. 	<ol style="list-style-type: none"> 1) Do a thorough examination. Talk to the parents about his/her 'stress symptoms'. 2) Share community resources to help in up keep of daily needs. 3) Request consent for mental health screens. 4) Encourage to talk to a mental health professional. 5) Share specific patient education information if available. 6) If you suspect DV, Child abuse or any other social issues, sound the appropriate caregiver/local authorities. 		

Image 2 : Recognising and managing stress symptoms in young population (CDC)

For a minority, moderate to severe problems, as per the above guidelines suicide risk assessment, problem substance use screening in adolescents, and emotional health assessment becomes necessary (Table 1, Image 3 and Image 4). Simple parenting tips recommended by CDC for various



ages also might help in stabilising family dynamics (Image 3 and Image 4). Rather than suggesting, "I think you need a mental health reference.", say, "many people who have had similar problems have benefited from mental health inputs. Would you want me to arrange one for you?" Printed material with credibility and endorsement by a trusted clinician would go a long way in realising a mental health reference. Achieving concordance in knowledgeable decision-making for mental health reference amongst the client and the family is the best way to reduce resistance to care-seeking.

TABLE 1: Scales- PHQ 9

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things.	0	1	2	3
2. Feeling down, depressed or hopeless.	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much.	0	1	2	3
4. Feeling tired or having little energy.	0	1	2	3
5. Poor appetite or over eating	0	1	2	3
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down.	0	1	2	3
7. Trouble concentrating on things such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that others people could have noticed. Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual.	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself.	0	1	2	3
	Add columns			
(Healthcare professional for interpretation of TOTAL, please refer to accompanying scoring card.)	TOTAL			
10. Is your problem affecting your relations or performance at home, school/work?			Y	N

Scoring: A total score of 5 and above and/or a Y answer to Q 9, 10 is Y, mandates an expert opinion.

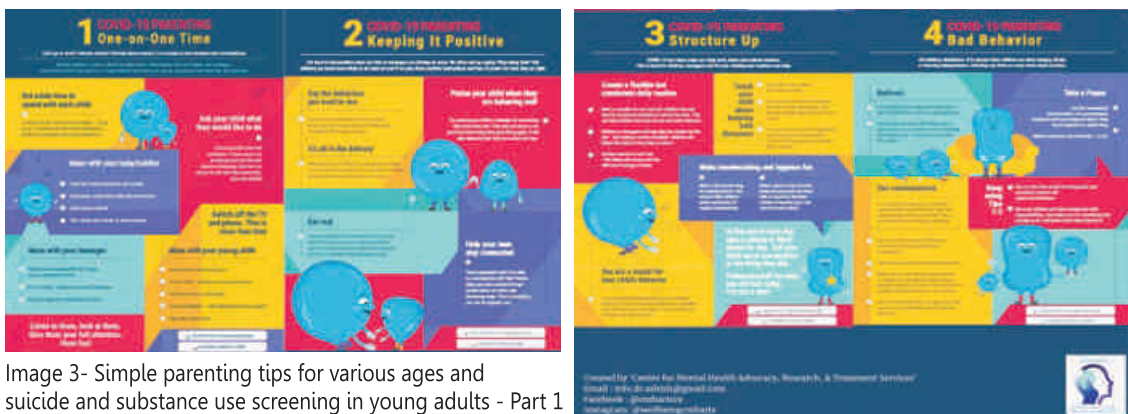


Image 3- Simple parenting tips for various ages and suicide and substance use screening in young adults - Part 1

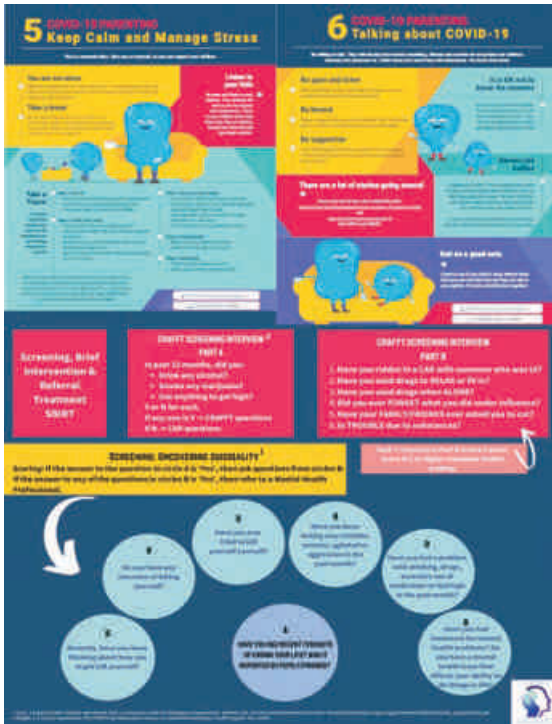


Image 4- Simple parenting tips for various ages and suicide and substance use screening in young adults- Part 2

How can a health worker contribute to mental wellbeing?

Experiences from the EBOLA virus pandemic in sub-Saharan Africa suggest a huge role of the beginning of the educational process on psychological healing and normalising. With documented evidence of high stress in populations below 25, health workers associated with schools in whatever capacity need to insist on Comprehensive School Counselling & Community outreach programs for treating the “COVID in the Mind”!

Postscript

Historically human colonies have responded to such catastrophes in three ways: Redemption, Rioting, and Resilience⁽¹⁰⁾.

Understanding the mental health impact of the COVID19 pandemic by all concerned will possibly lead us to a more resilient response befitting Homo Sapiens rather than regressive ones proximating us to our less evolved predecessors!

References:

- 1) India’s COVID-19 emergency. (2021, May 8). The Lancet, 397(10286), 1683. doi:[https://doi.org/10.1016/S0140-6736\(21\)01052-7](https://doi.org/10.1016/S0140-6736(21)01052-7)
- 2) Pfefferbaum, B. &. (2020). Mental health and the Covid-19 pandemic. New England Journal of Medicine, 383, 510-512. doi:10.1056/NEJMp2008017
- 3) Liu, C., & Liu, Y. (2020). Media Exposure and Anxiety during COVID-19: The Mediation Effect of Media Vicarious Traumatization. International journal of environmental research and public health, 17(13), 4720. <https://doi.org/10.3390/ijerph17134720>
- 4) Robson, D. (2020, June 4). How Covid-19 is changing the world’s children. Retrieved from BBC: <https://www.bbc.com/future/article/20200603-how-covid-19-is-changing-the-worlds-children>
- 5) Nwachukwu, I et al (2020). COVID-19 Pandemic: Age-Related Differences in Measures of Stress, Anxiety and Depression in Canada. International journal of environmental research and public health, 17(17), 6366. <https://doi.org/10.3390/ijerph17176366>
- 6) Mehta, S. M. (2021). COVID-19: a heavy toll on health-care workers. The Lancet Respiratory Medicine, 9(3), 226-228. doi:[https://doi.org/10.1016/S2213-2600\(21\)00068-0](https://doi.org/10.1016/S2213-2600(21)00068-0)
- 7) Pinho-Gomes, A. C. (2020). Where are the women? Gender inequalities in COVID-19 research authorship. BMJ Global Health, 5(7). doi:<http://dx.doi.org/10.1136/bmjgh-2020-002922>
- 8) Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. The British Journal of Psychiatry, 177(5), 396-401. doi:<https://doi.org/10.1192/bjp.177.5.396>
- 9) Galanter et al, Textbook of Substance Use disorders, Fifth edition, American Psychiatric Publishing 2015
- 10) history.com editors. (2020, January 30). Pandemics That Changed History. Retrieved from History: <https://www.history.com/topics/middle-ages/pandemics-timeline>

Appendix 1: Some helplines in India.

- iCall-9152987821;
- National Domestic Violence Helpline- WhatsApp number 7217735372;
- Central Social Welfare Board- 1091/1291
- CHILDLINE-1098 Senior citizens’ helpline- 112,100,1090,1091,1291,14567
- Helpline for Health Care Workers-Dilaasa-IPH- 9324753657
- Samaritans Mumbai 8422984528/29/30
- NIMHANS 080-46110007
- Mpower 1-on-1 MPower minds and Govt of Maharashtra and BMC 1800-1208-20050



COVID-19 Infection in Neonates



* **DR. SUSHMA MALIK,**

MD, IBCLC (Lactation Consultant), Professor and Head, Department of Pediatrics and Neonatology Division, T N Medical College & BYL Nair Hospital, Mumbai - 8.
Email-sushmamalik@gmail.com, Phone-9819065322



* **DR. VINAYA SINGH,**

MD, Fellowship in Neonatology, Assistant Professor, Neonatology Division, Department of Pediatrics, T N Medical College & BYL Nair Hospital, Mumbai-8.
Email-lvinaya36@gmail.com, Phone-8879443652



* **DR. NEHA KUMARI,**

MD, Speciality Medical Officer, Neonatology Division, Department of Pediatrics, T N Medical College & BYL Nair Hospital, Mumbai-8.
Email- drnehajsharma@gmail.com, Phone-7903415522

1. Introduction

The COVID-19 infection, a global pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has taken a devastating toll on public health with widespread transmission. To date it has affected over 160 million people with as many as 3 million deaths. Despite rapidly rising number of cases and resultant deaths, there is still limited data on Neonatal COVID-19 infection. The clinical features, mode of transmission, outcome and management protocols are still unclear. The perinatal period therefore poses unique challenges in the care of mother-baby dyads in terms of prevention of transmission, diagnosis of infection while continuing normal newborn care.

2. Incidence

Neonatal COVID 19 infection is rare and current evidence suggests that the incidence of SARS-CoV-2 positive neonates reported in studies worldwide ranges from 3.9% to 6.48%. The rate of SARS-CoV-2 infection in neonate does not depend on mode of delivery or the method of infant feeding. Fortunately neonatal mortality rate due to COVID-19 is very low and long-term outcomes are largely unknown. As compared to first wave of Covid-19, there has been increase in absolute number of COVID-19 infected neonates in the second wave.

3. Routes of Transmission :

The mechanism of neonatal infection is unclear. As scientific data supporting vertical transmission of COVID-19 to the neonate is sparse, intrapartum care of pregnant women should be guided by her obstetric indication rather than her COVID-19 status.

As the SARS COV-2 test results on placenta, umbilical cord, amniotic fluid, vaginal secretions and breast milk samples have been uniformly negative, vertical transmission seems to be unlikely. Post-natal acquired infection is most likely due to horizontal transmission through respiratory droplets when they are exposed to mothers, other caregivers with COVID-19.

4. Virology and Clinical Manifestations

Coronavirus is an enveloped, positive single-strand RNA virus. It belongs to the Orthocoronavirinae subfamily, as the name, with the characteristic "crown-like" spikes on their surfaces. In the first wave of Covid-19, it was observed that pregnant women were mostly asymptomatic or at less risk of complications. However, with newer changes and mutations found in circulation in the second wave, the risk has increased. The spectrum of COVID-19 disease in neonates varies among studies and reviews. Spectrum can vary from early onset, late onset and multisystem inflammatory syndrome-extremely rare. There has been increase in preterm births especially when pregnant



women acquire the infection in last trimester, contributing to additional risk to the neonate.

5. Newborn Care amidst Pandemic

Place of Delivery & Intrapartum Care:

- There should be a separate labour room and operation theatre for COVID-19 positive pregnant women, with the neonatal resuscitation corner located at least 2 metres away from the delivery table.
- Labour to be managed as per standard obstetric guidelines.

Cord Clamping :

- As trans placental viral transmission has not been clearly demonstrated, delayed cord clamping >1 minutes is recommended for improved maternal and infant health and nutrition outcomes.

Neonatal Resuscitation:

- The resuscitation of neonate should be done in a separate resuscitation corner that is at least 2 metres away from the delivery area [4].
- Neonatal resuscitation should be according to standard NRP 2017 guidelines or standard facility based operating protocol by minimal number of personnel for resuscitation wearing full set of PPE including N-95 mask.

Rooming-In/ Bedding-In & Skin to Skin Contact:

- Zero Separation should be the principle to be followed. Mothers should not be separated from their infants unless the mother is too sick to care for her baby or baby is too sick & requires neonatal intensive care management.
- Early and uninterrupted skin to skin contact (SSC) & rooming-in of the neonates throughout day & night with their mothers should be encouraged & practised as soon as possible after birth [7]. SSC should also be given to stable preterm & low birth weight babies.
- The risk of horizontal transmission is very low. Infection in neonates is mostly asymptomatic or mild as compared to adults. Therefore, continue SSC, as consequences of not breastfeeding and separating mother and child are detrimental both to the neonate and mother.
- Skin to Skin Contact and Kangaroo Mother

Care helps to establish breastfeeding as well as improves thermoregulation, blood glucose control, mother-baby bonding, and decreases the risk of mortality and severe infections among low birth weight babies [7].

- Beyond neonatal period also the positive effects of rooming in, skin to skin contact and infant holding are seen in the form of improved sleep patterns, decrease in behavioural problems in children and better social interaction and IQ.

Breastfeeding Practices and Recommendations:

- As per WHO recommendations, mothers should be encouraged to initiate breastfeeding within the first hour of life and continue exclusive breastfeeding for first six months.
- Breastfeeding is encouraged in all babies irrespective of baby's and mother's COVID status. Counsel mothers / families that the benefits of breastfeeding, far outweigh the potential risk of transmission of infection to the new born.
- While breastfeeding the mother must take utmost precaution for respiratory (including wearing of mask) and hand hygiene and strictly follow the principles of appropriate Infection Protection and Control (IPC) measures.
- If mother is unable to breastfeed the baby due to any reason, then mother's own expressed breast milk (MOM) can be given. The breast milk should be provided safely following the appropriate IPC measures.
- If mother is seriously ill/not available/ expired then give pasteurized donor human milk. If this is not possible, give appropriate breast milk substitutes or infant formula or locally available, unmodified, boiled / top milk animal milk to the baby until mother recovers.
- If the newborn or infant is ill and requires specialist care (such as neonatal unit), arrangements should be made to allow the mother free access to the unit, with appropriate IPC measures. She should continue to breastfeed as breast milk will boost baby's immune system, and will help the baby to fight infections.



Women with COVID-19 can breastfeed if they wish to do so. They should:



Practice respiratory hygiene and wear a mask.



Wash hands before and after touching the baby



Routinely clean and disinfect surfaces



World Health Organization

#COVID19 #CORONAVIRUS

If a woman with COVID-19 is too unwell to breastfeed, she can be supported to safely provide her baby with breastmilk in other ways, including by:



Expressing milk



Relactation



Donor human milk



World Health Organization

#COVID19 #CORONAVIRUS

Kangaroo Mother Care (KMC)

- KMC not only helps to promote and maintain the health and well-being of babies especially low birth weight and preterm ones but also provides comfort to the mother relieves her anxiety in this special situation.
- KMC is prolonged skin to skin contact on mother's chest (minimum of continuous one hour during each session of SSC). KMC also includes breast milk feeding, planned early discharge combined with regular scheduled follow up for growth and development [11]
- The mother or care giver (alternate KMC Provider) providing KMC should wear a mask and follow cough/sneeze hygiene.
- Washing of hands before and after KMC has

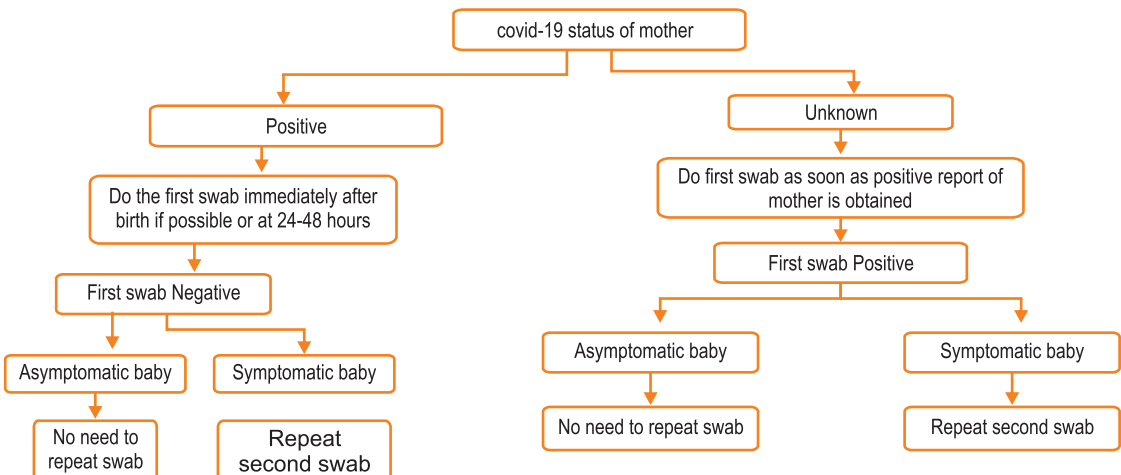
been advised and as long as a regular bath is taken there is no need to clean the chest area with a special disinfectant [8].

- The surfaces around the neonate should be regularly cleaned and disinfected before and after the KMC has been delivered.

Counselling & Support to Mothers

- Provide breastfeeding counselling
- Basic psychosocial support
- Practical feeding support to manage common breastfeeding problems
- Teach IPC measures
- Age appropriate and safe complementary feeds and feeding practices to be introduced after six months of exclusive breastfeeding.

Covid-19 Testing Protocol for Newborn





5. Other investigations:

Investigations in COVID 19 neonates are based on symptoms. Complete blood counts, liver and renal functions tests, coagulation profile and inflammatory markers like CRP, LDH, Ferritin, IL-6 can be performed depending on clinical condition of the baby. X-ray chest is done for all babies having respiratory distress. There is paucity of information about radiological features on X-ray chest and CT chest of COVID-19 positive neonates. Lymphocytopenia, thrombocytopenia, abnormal liver functions, and raised LDH levels have been documented in babies with COVID-19 infection. Current evidence does not recommend any blood or radiological investigations in an asymptomatic COVID-19 positive neonate. [3, 12-14]

6. Infection Prevention and Control (IPC)

Following Infection prevention and control measures should be followed to minimize risk of transmission in postnatal period:

- All healthcare workers involved in the deliveries of COVID-19 positive mothers should use personal protective equipment during aerosol generating procedures and should follow the IPC principles meticulously.
- Mother must follow respiratory (including wearing of mask) and hand hygiene.
- Mother should wash hands (for 20 seconds) with soap and water or with an alcohol-based hand rub before and after touching or feeding your baby.
- Routinely disinfect & clean the surfaces
- Mother's chest only needs to be washed if she has just coughed on it. Otherwise, the breast does not need to be washed before every feeding. Only once a day wash breasts during bath.
- All stable new-borns can be kept in postnatal ward with mothers irrespective of their COVID -19 status as per WHO Clinical management of COVID-19 interim guidance.
- Symptomatic COVID-19 positive neonate can be kept in separate/dedicated cubicle in NICU.
- There needs to be separate teams of health care workers for managing the NON-COVID and COVID sections of the NICU to avoid cross-infection

7. Management of covid-19 Positive neonates:

Place of care

- Stable neonates should be roomed-in with their mothers.
- Symptomatic baby: Admit in isolation / COVID NICU.

Monitoring

- For the neonates admitted in NICU, monitor heart rate, respiratory rate, SpO₂, blood pressure and sugar monitoring

Investigations

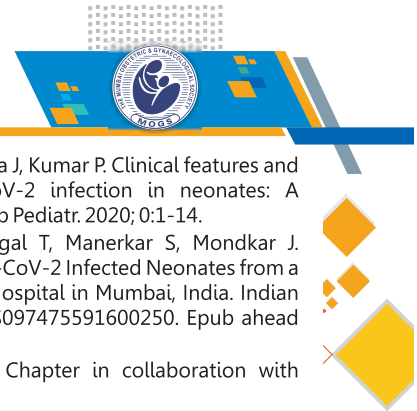
- No special investigations in asymptomatic neonates except X-ray chest in all COVID positive neonates.
- Other investigations: as per the symptoms or morbidities.

Treatment

- Respiratory support- Follow the principles of lung protective strategies
- Neonates with respiratory distress – support with nasal CPAP and is preferred over HHFNC or nasal IMV
- Use an aerosol box if intubation is required. Use disposable laryngoscope blades if available [4].
- A bacterial/ viral filter must be fitted in expiratory limb in ventilated babies
- No extra or specific medicine has been recommended for neonates exposed to COVID 19.
- Antivirals/hydroxychloroquine are not recommended in symptomatic newborns.
- Adjunctive therapy in form of corticosteroids and IVIG is recently recommended only to newborns having multisystem inflammatory syndrome, similar to pediatrics protocol. Role of other antivirals and Remdesvir in neonates are controversial.

8. Immunization of Newborns

- Routine immunization policy is followed for healthy neonates born to suspect / COVID positive mothers. Birth dose of BCG, OPV and Hepatitis B irrespective of COVID status [1].
- Immunisation should be completed before discharge from the hospital in neonates with suspected/ proven infection.



9. Discharge Criteria:

- **Asymptomatic baby:** Discharge irrespective of their COVID status along with the mother. If mother is unstable, then discharge the baby early at 48-72 hours of life to a healthy competent relative after educating about all due precautions & neonatal care if possible.
- **Mild or Moderately symptomatic babies:** Discharge when symptoms resolve for at least for three days prior to discharge and no need to repeat test prior to discharge.
- **Severe Symptomatic babies :** Discharge when symptoms resolve for at least for three days prior to discharge. Repeat the test prior to discharge

Conclusion:

COVID-19 infection in neonates is mostly asymptomatic or mild in nature and very few have severe illness and multisystem inflammatory syndrome requiring NICU admission. All neonates born to mothers with suspected or confirmed COVID-19 infection must be tested irrespective of whether they are symptomatic or not. More rigid and widespread testing of COVID-19 infected asymptomatic neonates will reduce the risk of transmission from the neonate to family members and caretakers. Benefits of breastfeeding in reducing morbidity and mortality and the protective effects of early skin-to-skin care and kangaroo mother care far outweigh the risks of viral transmission [16] & therefore these practices should be promoted. The increasing severity risk of new mutants of covid-19 on maternal health during pregnancy is now a reason for encouraging their vaccination, though data supporting this are limited.

Acknowledgement : We wish to acknowledge and thank the Dean of our institute, Dr Ramesh Bharmal, for giving permission to publish this chapter.

References:

1. Chawla D, Chirila D, Dalwai S, Deorari AK, Ganatra A, Gandhi A, Kabra NS, Kumar P, Mittal P, Parekh BJ, Sankar MJ. Perinatal-Neonatal Management of COVID-19 Infection-Guidelines of the Federation of Obstetric & Gynaecological Societies of India (FOGSI), National Neonatology Forum of India (NNF), and Indian Academy of Pediatrics (IAP). Indian pediatrics. 2020 Jun; 57 (6):536-48.
2. Dhir SK, Kumar J, Meena J, Kumar P. Clinical features and outcome of SARS-CoV-2 infection in neonates: A systematic review. J Trop Pediatr. 2020; 0:1-14.
3. Kalamdani P, Kalathingal T, Manerkar S, Mondkar J. Clinical Profile of SARS-CoV-2 Infected Neonates from a Tertiary Government Hospital in Mumbai, India. Indian Pediatr. 2020 Oct 12: S097475591600250. Epub ahead of print.
4. NNF Karnataka State Chapter in collaboration with UNICEF, HFO.
5. Centres for Disease Control and Prevention. Evaluation and Management Considerations for Neonates at Risk for COVID-19 [Internet]. USA: US Department of Health and Human Services; [updated October 23, 2020, cited December 5, 2020]. Available from:<https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-newborns.html>
6. De Rose DU, Piersigilli F, Ronchetti MP, Santisi A, Bersani I, Dotta A, et al. Novel coronavirus disease (COVID-19) in newborns and infants: what we know so far. Ital J Pediatr 2020;46:56.
7. World Health Organization. (2020). Clinical management of COVID-19: interim guidance, 27 May 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332196>. License:CC BY-NC-SA 3.0 IGO
8. World Health Organization. (2020). Breastfeeding and COVID-19: scientific brief, 23 June 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332639>.
9. World Health Organization. (2020). Frequently asked questions : breastfeeding and COVID-19 : for health care workers, 12 May 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332719>.
10. COVID-19 and Breastfeeding Information Update-BPNI, 4 May 2020. <https://www.bpni.org/wp-content/uploads/2020/05/Update-on-COVID-19-and-Breastfeeding.pdf>
11. Kangaroo Mother Care Foundation: Newsletter; Volume XIV, April-June 2020. <https://www.kmcfoundationindia.org/KMCNewsletterApril-June2020.pdf>
12. Pereira A, Cruz-Melguizo S, Adrien M, et al. Clinical course of coronavirus disease-2019 in pregnancy. Acta Obstet Gynecol Scand 2020; 99:839-47.
13. Ferrazzi E, Frigerio L, Savasi V, et al. Vaginal delivery in SARS-CoV-2-infected pregnant women in Northern Italy: a retrospective analysis. BJOG 2020; 127(9): 1116-1121.
14. American Academy of Pediatrics (AAP), Section on Neonatal Perinatal Medicine. National registry for surveillance and epidemiology of perinatal COVID-19 infection. Accessed 5 Sep, 2020. Available from: <https://twitter.com/AAPneonatal/status/1301301988454535168/photo/1>
15. World Health Organization. (2020). Breastfeeding and COVID-19: scientific brief, 23 June 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332639>
16. World Health Organization. (2020). Clinical management of COVID-19: interim guidance, 27 May 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/332196>. License: CC BY-NC-SA 3.0 IGO



INTERVIEW WITH DR. HRISHIKESH PAI, PAST PRESIDENT MOGS

By : Dr. Sarita Bhalerao
Dr. Pradnya Supe



Dr. Hrishikesh Pai is a pioneer of IVF. He was President of MOGS in 2008-2009. Under his dynamic leadership, MOGS hosted the mammoth AICOG in 2013. He will take over as FOGSI President in 2022. He has received several prestigious awards, latest being the Economic times award for exemplary achievements in IVF.

What made you choose medicine as your profession?

I was a below average student in school. My sister enrolled me for the 7th standard Maharashtra state scholarship exam in which I performed well with flying colours. That is when I was identified as a bright student. When I went to Jaihind College, I became aware of the environment around me, I scored extremely well in my prelims, secured 100/100 in mathematics and wanted to take up Engineering for a short while. My father told me do what you want. Because of him being in KEM, I was exposed to the environment of the medical college and that's what made me take the decision of taking up medicine.

What made you choose IVF as a specialization?

When I was a lecturer, my boss was Dr. Indira Hinduja. So that was how I was exposed to IVF. So after working as lecturer for few years, I applied to various centres in USA and Australia. I went to Melbourne, where the first IVF baby of Australia and 3rd IVF baby of the world was born. Dr. Johnson was an excellent boss under whom I learnt the reins of IVF. I had no money at the time and I used to learn IVF techniques during the day and assist Emergency Caesarean sections in the night. I spent 1 year in Melbourne learning IVF where my roots in IVF were established.

Tell us about your journey from MOGS to FOGSI.

In 1986, I was Lecturer under Dr. Rawal in Nair Hospital. One day in OPD I asked him whether I should contest for MOGS elections and he was very encouraging. When I was in KEM I had lost the election for Class representative badly. That made me realise that it is important to lose an election to make people understand you are interested and that you exist! I stood for MOGS elections where I was the youngest contestant and I won with the highest votes. When you stand for the first time in an election and you lose, it doesn't matter because nobody knows who you are. Losing in an election should be considered as a stepping stone. But election and performance are two different things. It depends on relationships and on how people look at you as leader. Competent professionals are always poor leaders. Leadership is a job in itself. I do feel that due to my leadership roles my practice has suffered, but I have enjoyed myself thoroughly. It is extremely important to enjoy what you are doing. It is more important to focus not on the endpoint; but on the journey as a whole.

What are your plans as the FOGSI president 2022-2023?

In FOGSI there are mainly four parts. The academics, the fellowships/teaching part, the social work and the commercial part. Currently there is no dearth of academics. I want all my FOGSI family to have their own space to develop and grow and I want to give all of them the platform and due credit. But this COVID pandemic has really been bad for the residents impairing their knowledge and learning. I would like to focus on more training programmes for the residents. Also this year the economy has taken a beating due to the pandemic. So many of our colleagues have gone bankrupt, they have lost family members. So my main goal is to focus on internal building of COVID



trauma both physical as well as mental. I also plan to start the Nari Swasthya Abhiyan 2.0, the programme which Rishma had initiated I want to take it ahead and also integrate COVID management into it. I am also into the Manyata programme and I want to take it ahead as well. I want to support Dr. Shanthakumari in her efforts during the next year as well. I feel we need to look at approach to the various workshops and upgrade them as well. My goal for my year is "CONSOLIDATION, CONTINUATION AND COMMUNICATION". I am aware that I will need to do a lot of hybrid work during my year, so all of us need to change and relearn with times. We all have to evolve ourselves, we cannot be static anymore.

What message would you like to give residents who are now going to be gynaecologists after working in this pandemic?

We will have to give them free education. I plan to give them all learning modules, all workshops free of cost. We should be able to give them a placement for super speciality in private practice. I would like to train them under endoscopists and IVF specialists associated with FOGSI free of any charge. Most of the learning today is after postgraduation. These residents should also definitely consider going abroad as well for further education.

What about the private practitioners who have faced financial losses in the pandemic?

For them I plan to create a fund for especially senior obstetricians, which instead of giving to a third party should be given to our members who really need them. This fund should also extend to poor patients as well.

Any message you would like to give our MOGS members in the current pandemic?

It has been a difficult time for all. Elective work has stopped, people have learnt to live without doctors, they are fearful of coming out. Medical Fraternity has suffered due to all this. The earnings of all these people are going to be reduced over the next 5 years. So we need to adjust to the new normal. We need to adapt to the current scenario. Our next 10 years of growth is going to be curtailed. We shouldn't compare our growth to pre covid, but our reference point, our new origin should be the year 2020. And we should evolve from 2020 onwards. So next 5 years we need to be positive, look ahead, be ambitious and just enjoy the moment.

MOGS is a lovely organisation and Dr. Sarita Bhalerao is a lovely and amazing person who will do an excellent job in running the organisation. I wish her all the best for all her endeavours for this next year.

MOGS 2021-2022 Forthcoming Events

12th & 13th June : Endo ART conference

18th June : E CME on RPL speaker Dr Hrishikesh Pai

19th June : E CME on Managing Menopause Matters

24th June : New Vistas in ART

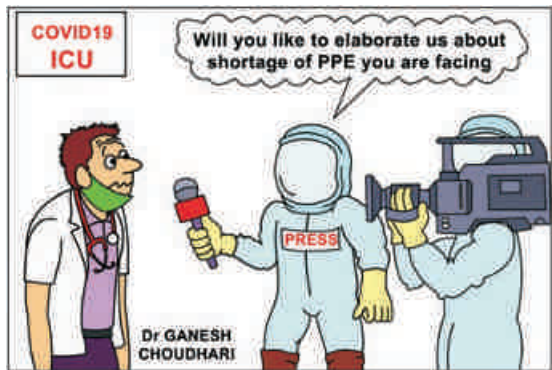
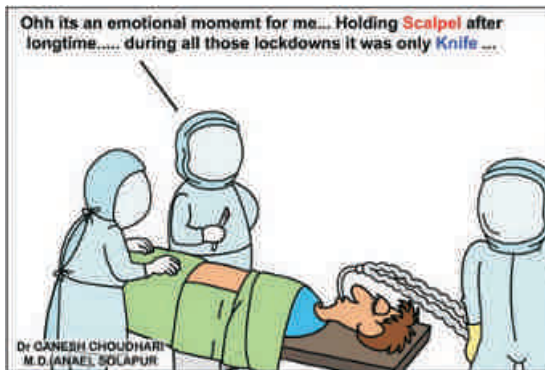
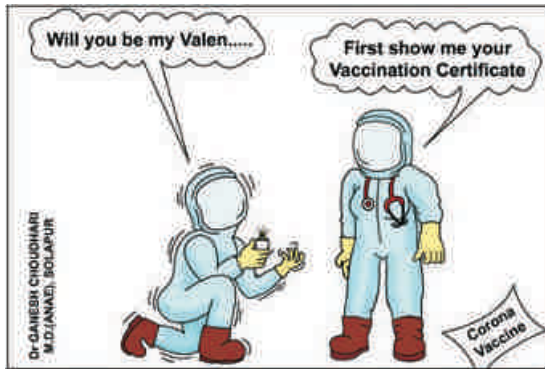
26th June : New Vistas - Fetal Medicine

1st July : Doctors Day Program

25th July : Challenges in the Management of PCOS



MEDICAL HUMOR



DR. GANESH CHOUDHARI

MBBS from KEM HOSPITAL, MD ANAESTHESIA from SRRMC, AMBEJOGAI

Ex Assistant Professor at VNGMC, SOLAPUR

Currently Consultant Anaesthesiologist at SMSSR (Shri Markendeya Solapur Sahakari Rugnalaya), Solapur

Started Drawing Medical cartoons during 2nd MBBS (2003) Started uploading cartoons on Social Media in 2013 Formed Cartoon page on Facebook called "Laughing DOSES" At present more than 1,13,000 Doctors form all over the World are following it. Also formed website www.laughingdoses.com Published "Laughing Doses" book Launched App "Laughing Doses" on Android.

Invited for Exhibiting Cartoons & giving lecture on Cartoons at many conferences & medical colleges.



With best compliments from

Letroz

Letrozole 2.5 mg tab



Susten Cap

Natural Micronised Progesterone 100 mg/ 200 mg/
300 mg/ 400 mg SLDS Capsule



Susten SR

Sustained Release Natural Micronised Progesterone 400 mg/300 mg/200 mg Tablets



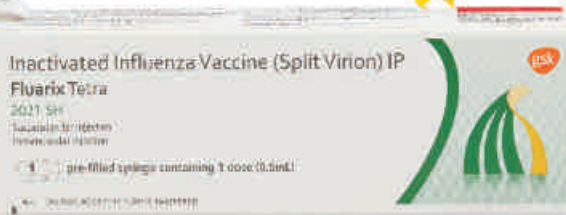


Fluarix Tetra

Inactivated Influenza Vaccine (Split Virion) IP

World's first inactivated Quadrivalent Influenza Vaccine¹

NEW
SH 2021
STRAINS²



Safety information: Most frequently reported local adverse reaction after vaccination: Injection site pain (15.6% to 40.3%).
References: 1. US CDC. Prevention and control of seasonal influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices – United States, 2019–2014. *MMWR*. 2019; 68: 1–43. Available at: <https://www.cdc.gov/mmwr/pdf/nr6207.pdf>. (Accessed Mar 2021). 2. Fluarix Tetra PI. Version FLX-T_PL_IN_2020_02 dated 20-Nov-2020. 3. Recommended composition of influenza virus vaccines for use in the 2021 southern hemisphere influenza season, WHO, available at https://www.who.int/influenza/vaccines/virus/recommendations/2021_southern/ (Accessed Mar 2021).

Active ingredients: Each 0.5 ml contains influenza virus (inactivated, split) of the following strains: A/Victoria/2570/2019 (11N1) pdm09 – like strain (A/Meduna/2570/2019, IVI-215) 15 mcg; A/Hong Kong/479/2019 (H3N2) – like strain (A/Hongkong/067/2019, NB-121) 15 mcg; B/Washington/02/2019 – like strain (B/Washington/02/2019, wild type) 15 mcg; B/Phuket/357/2013 (like strain) (B/Phuket/3079/2013, wild type) 15 mcg. This vaccine complies with the WHO recommended strains (Southern Hemisphere) for the season 2021/2022. FLUARIX-TETRA meets the WHO requirements for biological substances and influenza vaccines and the European Pharmacopoeia requirements for influenza vaccines. Therapeutic indication: It is indicated for active immunization of children from age group 6 months to adults up to 64 years of age for the prevention of influenza disease caused by the two influenza A virus subtypes and the two influenza B virus types contained in the vaccine. Posology: Adults: 0.5 ml. Pediatric Population: Children from 6 months onwards: 0.5 ml. For children aged < 6 years, who have not previously been vaccinated against influenza, a second dose should be given after an interval of at least 4 weeks. Children less than 6 months: the safety and efficacy of vaccine in children less than 6 months have not been established. Method of administration: Immunization should be carried out by intramuscular injection. Contraindications: Hypersensitivity to the active substances or to any of the excipients or to any component that may be present as traces such as eggs (ovalbumin, chicken proteins), formaldehyde, gentamicin sulphate and sodium deoxycholate. Postpone in acute severe febrile illness or infection. Special warnings and precautions: It is a good clinical practice to precede vaccination by a review of the medical history (especially about previous vaccination and possible occurrence of undesirable events) and a clinical examination. As with all injectable vaccines, appropriate medical treatment and supervision should always be readily available in case of an anaphylactic event following the administration of the vaccine. Antibody response in patients with endogenous or iatrogenic immunosuppression may be insufficient. Vaccine is not effective against all possible strains of influenza virus. Vaccine is intended to provide protection against those strains of virus from which the vaccine is prepared and to closely related strains. As with any vaccine, a protective immune response may not be elicited in all vaccines. **UNDER NO CIRCUMSTANCES IT SHOULD BE ADMINISTERED INTRAVASCULARLY.** As with other vaccines when administered intramuscularly, it should be given with caution to individuals with thrombocytopenia or any congenital disorder since bleeding may occur following an intramuscular administration. Syncope (fainting) can occur following, or even before, any vaccination especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic movements. During recovery, it is important that procedures are in place to avoid injury from faints. Interaction with other medicinal products and other forms of interaction: Can be concomitantly administered with pneumococcal polysaccharide vaccines in subjects aged 50 years and above. It to be given at the same time as another injectable vaccine, the vaccines should always be administered at different injection sites. The frequency of injection site pain reported in subjects vaccinated concomitantly with FLUARIX-TETRA and 23-valent pneumococcal polysaccharide vaccine (PPV23) is like that observed with PPV23 alone, and higher compared to FLUARIX-TETRA alone. Following influenza vaccination, false positive results in serology tests using the ELISA method to detect antibodies against HIV-1, Hepatitis C and especially H1N1 have been observed. The Western Blot technique disproves the false positive ELISA test results. The transient false positive reactions could be due to the IgM response by the vaccine. Pregnancy and lactation: Inactivated influenza vaccines can be used in all stages of pregnancy. Larger datasets on safety are available for the second and third trimester, compared with the first trimester; however, data from worldwide use of inactivated influenza vaccines do not indicate any adverse foetal and maternal outcomes attributable to the vaccine. Breast-feeding: May be used during breast-feeding. Effects on ability to drive and use machines: Has no or negligible influence on the ability to drive and use machines. Undesirable effects/Adverse reactions: Clinical trial data for 6 different age groups: a) Adults ≥18 years: Very common (≥1/10) myalgia, injection site pain, fatigue. Common (≥1/100 to <1/10) headache, nausea, vomiting, abdominal pain, itching, arthralgia, injection site redness, injection site swelling, shivering, fever, induration. Uncommon (≥1/1,000 to <1/100) dizziness, injection site haematoma, injection site pruritis. b) Children 6 to <66 months: Very common (≥1/10) loss of appetite, irritability, fussiness, injection site pain, injection site redness. Common (≥1/100 to <1/10) fever ≥38°C, injection site swelling. Uncommon (≥1/1,000 to <1/100) not reported but applicable. c) Children 3 to <6 years: Very common (≥1/10) irritability, fussiness, injection site pain, injection site redness, injection site swelling. Common (≥1/100 to <1/10) loss of appetite, dizziness, fever ≥38°C, injection site induration. Uncommon (≥1/1,000 to <1/100) rash, injection site pruritis, d) Children and adolescents 6 to <18 years: Very common (≥1/10) myalgia, itching, injection site pain, injection site redness, injection site swelling. Common (≥1/100 to <1/10) headache, nausea, vomiting, diarrhea, abdominal pain, arthralgia, fever ≥38°C, shivering, injection site induration. Uncommon (≥1/1,000 to <1/100) rash, injection pruritis. Version: FLX/T/PI/IN/2021.01 dated 20-Feb-2021. Registered medical product name: Fluarix Tetra. Website: <http://india.pharma.gsk.com/en/products/preparing-information-for-full-product-information>. Please report adverse events with any GSK product to the company at india.pharmacovigilance@gsk.com