



# AICC RCOG SOUTH ZONE

## News Letter

### **Dr Lakshmi S**

Fellow representative & Treasurer

### **Dr S Mayadevi S Kurup**

Fellow representative

### **Dr Pranathi Reddy**

Fellow representative

### **Dr Aruna Muralidhar**

Co-opted Fellow Representative

### **Dr Sumana Manohar**

Co-opted Fellow Representative

### **Dr Chinmayee Ratha**

Member Representative  
& Secretary

### **Dr Georgy Joy Eralil**

Member Representative

### **Dr Prasanth P**

Member Representative

### **Dr Shameema KV**

Member Representative

### **From the Chairperson's Desk – Dr Uma Ram**

#### **Dear Friends**

Hope you all are staying safe as we face the challenges that the pandemic and lockdown have brought on. Pandemics do have a gendered impact and women seem to be more affected by many issues around a pandemic: loss of access to health care, financial limitations, loss of choice, increased work load and domestic abuse to name a few. Obstetricians around the world have been a major group of frontline workers who have had to continue to provide care for women through the pandemic. As OB/GYNs, we need to be conscious and aware of the many problems we need to address, with our patients, our colleagues and staff, as we ourselves balance work and home.

In this newsletter, we are delighted to bring you an article from the President RCOG, Mr Eddie Morris along with one from the President FOGSI and the team that has worked to put out the FOGSI guidance. We have added an article on the importance of fitness and mindfulness for personal wellness. While we are all stuck within our homes and work, we bring you a short article on the elusive Snow leopard from the transhimalayan mountains of Ladakh.

Wishing everyone good health and cheer.

## DID YOU KNOW ?

### **RCOG Museum**

The RCOG Museum is unique in the UK with its focus on women's health care.

The Museum collections have grown through gifts and acquisitions since the foundation of the College, and now include the complementary collection of the Royal College of Midwives.

The world famous Chamberlen forceps came to the RCOG in 1957, a gift from the Royal Society of Medicine, and are displayed on the 1st floor of the College. These 16th-17th century instruments were used in secret by the Chamberlens for over a century before their application became widespread. Their discovery in 1813, in an attic trapdoor at the family's old house, allowed people to finally see the original designs of what became a ubiquitous tool in obstetrics.



# Human Factors In Obstetric Practice

The International ergonomic association defined human factors(HF) as “The scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance”. This discipline is now recognised as an essential part of all industries in today’s world, where the purpose is to optimise productivity as well as human well-being.

HF is increasingly becoming essential part of the healthcare system. The aim of introducing human factors in the healthcare system is to: -

1. Enhance well being by improving health and safety of patients, their family and the staff.
2. Staff work on tasks that are well understood and is within their scope and individual capabilities. This in turn should improve performances with great accuracy, reliability, improve safety and quality, higher productivity and reduce harm.

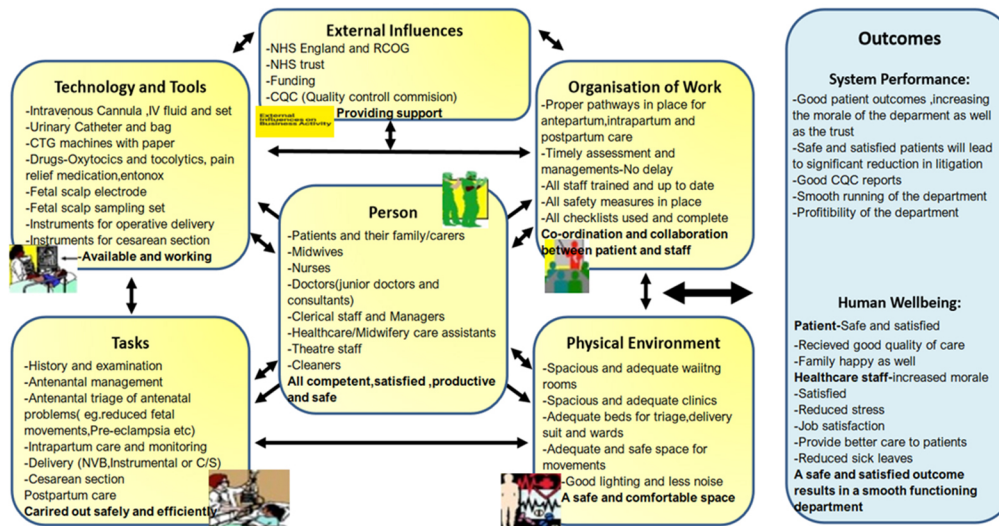
## Systems and design in Human factors

Obstetrics is a very busy and at times a chaotic speciality which extensively relies on human-human and human-technology interaction. It is important that the workplace system is designed to make sure these interactions result in a safe environment for the patients and a productive one for health care professionals. An essential element of human factors is to design a workspace system that suits the needs of the humans working and benefiting it rather than the humans adjusting to the system.

In obstetrics, there is a lot of scope of miscue and paucity in patient care. This does not stem from the solitary actions of individuals but from conflicting, incomplete, or suboptimal systems of which they are a part and with which they interact. In 2006, Carayon et al. introduced “Systems Engineering Initiative for Patient Safety (SEIPS) model, which shows of work system and patient safety”, which produced a framework for understanding the structures, processes and outcomes in health care and their relationships, can be used toward a safe and effective work environment. The components of this model are:

1. Work system or structure comprising of the persons involved, the organisation they work in, technologies and tools used, the tasks they carry out and the environment they work in.
2. Process as in the care process as well as other processes in the system such as information flow, purchasing, maintenance, cleaning etc.
3. Outcomes which can be divided into further 2 categories:
  - a. Patient outcomes
  - b. Employee and organisational outcomes

The interaction and dependency of various components amongst each other can help us clearly understand the obstetrics systems as well as areas that need improvement or change to better the outcomes. The following is the SEIPS model, shows the components in detail, their interaction as well as outcomes of an ideal obstetrics unit.



## Human factors that contribute to patient safety

It is important to know that there are some components of human factors that are important in the day to day practice of obstetrics and are vital to patient safety. Amongst many of them, the two most important components are:

**1. Situational Awareness**-Situational awareness can be defined as "the perception of elements in the environment within a volume of time and space, the comprehension of their meaning and the projection of their status in the near future". When working within obstetrics we often work in high-risk environments, most commonly on the delivery suite or operating theatre. Transitions between risk-low and high-risk care can be quick, and adverse outcomes can occur seemingly without warning. It is therefore important that as healthcare professionals working within such environments, we understand and develop cognitive skills including situational awareness, which are essential for safe patient care.

In 2015, 921 eligible babies were reported to the RCOG, "Each baby counts" programme of which, 13% were intrapartum stillbirths, 16% early neonatal deaths and 71% severe brain injuries. It was found that in 44% of these tragedies, a lack of situational awareness was a contributory factor. Unfortunately, in the 2019 "Each baby counts" progress report the situation was unchanged. It was reported that in 2017, 12% were intrapartum stillbirths, 13% early neonatal deaths and 75% severe brain injuries. Human factors contributed as the third most common cause amongst 9 other causes and situational awareness was the chief cause under this category at 51%. The RCOG training has introduced human factors as an essential part of training.

In the delivery suite, where the dynamics are changing very fast, it is important that a 'helicopter view', an oversight of activity is maintained. This is usually performed by a senior member of the team (Consultant, senior registrar or the co-ordinator midwife), with an aim to prevent important information being overlooked, ensure new information is being acknowledged and allowing anticipation of future problems. It is important that this individual is not engaged in a complex technical task, and if they become so, that they hand over situational awareness to another team member.

A very common example of loss of situational awareness is while conducting an operative vaginal delivery. It is very common for an obstetrician to be task focused on delivering the baby vaginally. The loss of time, increased number of pulls and lack of "helicopter view", all contribute to a disastrous outcome.

Stress and fatigue can be crucial contributors to loss of situational awareness. Hence, it is important that if an obstetrician is facing either of these, they should ask for help early as it effects the quality of care. The first part of situational awareness is perception. During our everyday practice we encounter multiple forms of information and communication written, electronic, verbal and non-verbal. Situational awareness can be augmented by improving the quality of information we supply to decision makers – by keeping clear, quality records and using structured handover tools for communication.

**2. Communication** –This is an important factor for providing safe and effective care. Effective communication methods create a well-understood plan of care, which can greatly reduce the chances of error and, consequently, patient harm.

The 2019 “Each baby counts” progress report suggests that team communication issues contributed in 49% of cases. The two themes that were found to be contributory to the loss of communication were handover and emergency communication protocol.

The SBAR (situation, background, assessment and recommendation) is a tool which was adapted from the United States military for use in healthcare by Leonard et al(2004). The tool is designed to be a structured form of communication to allow for sharing of concise and focused information. SBAR is comprised of four prompts, allowing healthcare professionals to communicate effectively and assertively with the aim of reducing the likelihood of error or repetition, with the right level of detail communicated. This tool can be used in any setting – from inpatients to outpatients, routine to emergency scenarios, in person or over the telephone.

The following is an example of the SBAR tool used for handover of intrapartum (red) and postnatal (blue) patients.

**Clinical Guideline for the Management of: Handover of Care**

**Appendix 1**

Date and Time Situation		BR+ score	
<b>S</b>	Parity	Gestation	BMI
	Obstetric History		
<b>B</b>	Medical History/Alerts		Allergies
	Medication/Risk Factors		
<b>A</b>	MEOWS Bladder care		
	Fetal Wellbeing Birth plan?		
<b>R</b>	What is the plan?		
	Midwife 1	Midwife 2	
Signature		Signature	

Receiver to complete and then repeat back key information to ensure understanding

Date and Time Situation		BR+ score	
<b>S</b>	Parity	Gestation	BMI
	Obstetric History		
<b>B</b>	Delivery details		Allergies
	Medication/Risk Factors		
<b>A</b>	MEOWS Bladder care		
	PN issue Neonatal issues		
<b>R</b>	What is the plan?		
	Midwife 1	Midwife 2	
Signature		Signature	

Receiver to complete and then repeat back key information to ensure understanding

It is very important that before each handover, all the team members introduce themselves and their roles. Each patient is handed over using the SBAR tool or any other structured communication tool that imparts important information. The staff status and workload is to be shared at handover so that the incoming team can plan their shift. It is also suggested that the handover should be multidisciplinary including doctors, midwives and anaesthetists. The handover should be clearly led without any distractions.

Human factors is a vast entity that has many more components. It emphasizes interactions between people and their environment that contribute to performance, safety and health, and quality of working life, and the goods or services produced.

#### About the Author

**Vrinda Arora**, Clinical Fellow, Norfolk and Norwich University Hospital and Foundation Trust

**Edward Prosser-Snelling**, Consultant Gynaecologist, Norfolk and Norwich University Hospital and Foundation Trust

**Edward Morris, (President RCOG)** Consultant Gynaecologist, Norfolk and Norwich University Hospital and Foundation Trust

# Private Sector Maternity Services during the COVID-19 pandemic

There has been an unprecedented change in our way of life and work since the COVID-19 pandemic has begun a few months ago. The relatively unknown nature of the pathogen and its characteristics has added to the upheaval caused by the sheer volume of the infected individuals that the world has witnessed and is expecting to see. Every country has its mechanisms and infrastructure into which the healthcare response has to be integrated. The continuity of ongoing care for time sensitive health matters such as maternity care is essential.

## Organization of healthcare facilities

At the outset, it is essential to recognize the infrastructure requirements for COVID or non-COVID healthcare maternity services facilities. They are outlined in the table below.

	<b>COVID MATERNITY HOSPITAL IN PRIVATE SECTOR</b>	<b>NON-COVID MATERNITY HOSPITAL IN PRIVATE SECTOR</b>
Typical set up in private sector	Large multispecialty hospitals.	Small to medium single speciality (maternity care) hospitals or nursing homes.
Infrastructure	Separate building with multiple entry and exit facilities, multiple staircases or elevators where some of these can be kept separate for suspect or confirmed cases. Separate dedicated Labour Room and Operation Theatre.	Part of a building where there is a single entry or exit and segregation is not possible. Separate dedicated Labour Room and Operation Theatre are not possible.
Medical facilities	Equipped to manage maternity care and medical issues related to the infection.	Equipped to manage maternity care and has back-up facilities for emergencies.
Personal Protective Equipment	Should have facilities similar to a Dedicated COVID Hospital (DCH). Should have adequate stock of various levels of PPE to cater to the requirements of treating large numbers of suspected or infected patients.	Should have stock enough to cover for a few cases for rendering first aid or emergency treatment for suspected or confirmed cases before they are referred or if they are not in a state to be referred.

COVID facilities would further be designated to represent various levels of healthcare with the fever clinics and COVID Care Centres (CCC) at the bottom and facilities expanding to the Dedicated COVID Health Centres (DCHC) and Dedicated COVID Hospitals (DCH). (1)(2) The DCH is the site where labour and delivery will be managed for suspected or confirmed COVID positive women.

In the private sector, large multispecialty hospitals can be organized according to the guidance given for the public sector as facilities, infrastructure and finances are feasible.

However, this does not hold true for the small to medium sized private healthcare facility which is usually a doctor-owned and operated, single specialty (maternity care) facility. Most of such establishments should continue to function as non-COVID hospitals. In India, a significant proportion of maternity care is provided by the private sector and it needs to continue to provide services so that the public healthcare infrastructure does not get overburdened.

### **The Testing Conundrum**

As per the ICMR, the criteria for testing non-pregnant persons are applicable to pregnant women.(3)It is essentially meant for acute respiratory illness with exposure, travel, contact or a HCWor requiring hospitalization. Asymptomatic individuals should be tested between 5 to 14 days of exposure to a known contact. Symptomatic individuals with influenza like illness from hotspots should be tested by RT-PCR(within 7 days) or serology (after 7 days). In addition, there are some special criteria for testing with regards to pregnancy.Pregnant women residing in cluster/containment areas or in large migration gatherings/evacuees centre from hotpost districts presenting in labour or likely to deliver in next 5 days should be tested even if asymptomatic.(4)

There is no recommendation for testing every pregnant woman.At present, universal testing is not feasible, even for a special category such as pregnant women. Besides considerations of cost, the RT-PCR test has a high false negative rate. A detailed critique of universal testing in India is available.(5)

### **Checklist tool to identify suspected cases**

In the absence of universal testing, the primary issue remains identification of infected pregnant women. In the absence of a reliable, fast and feasible serology test, a checklist tool is useful.(6)The checklist tool should be used in advance of a patient's physical visit. It should be administered remotely by telemedicine pathways, ideally. For walk-in patients, it can be administered telephonically with the patient waiting outside the facility or at the latest, in the waiting area. If the pregnant woman falls into the group which needs testing, she should be considered as a suspect case until the test report is obtained in the negative. If there is a suspicion, the patient should be directed to a COVID hospital for further care and management. Referral pathways should be established and every private sector non-COVID maternity hospital should be mapped to a private sector COVID hospital providing maternity care as well as having linkages to a public sector COVID hospital for the same.

### **COVID-19 SCREENING CHECKLIST TOOL**

- Do you have fever?
- Do you have features of respiratory disease (runny nose, altered smell sensation, blocked nose, cough, sore throat, difficulty in breathing or feeling breathless)?
- Have you travelled abroad in the last 14 days?
- Have you travelled from anywhere outside your locality in the last 14 days? If yes, was this area a hotspot?
- Do you have household or close and direct contact with a person who meets the above two criteria of travel?
- Do you have household or close and direct contact with a person who is confirmed to have COVID-19 infection or who is suspected and undergoing testing?
- Do you reside in a hotspot/containment area/cluster/with migrants/with evacuees from such areas?
- Are you a healthcare provider who has been to work in the last 14 days?
- Have you been hospitalized in the last 14 days?

### **Triage in non-COVID maternity hospitals to reduce transmission risk**

Triage is a vital tool in this aspect. A segregated triage area has to be established outside or as close to the entry gate of the hospital. Triage should include use of the checklist tool, remote temperature screening and a finger oxygen pulse oximeter. The triage criteria should also be applied to the attendant with the patient. An isolation area also needs to be created to take care for the woman with suspected or confirmed who presents with an emergency and there is no time to transfer her to a COVID hospital. In case the isolation area is used, it should be disinfected with sodium hypochlorite and fumigated.

### **Administrative aspects:**

- Only one attendant should accompany the woman and the same person should stay with her for the duration of the admission.
- Visitors should be prohibited entry. This minimizes the traffic to the hospital.
- There should not be any health camps, health education seminars or hospital gatherings or medical representative visits.
- In case of a suspected or confirmed case being admitted to a Non-COVID hospital, notification has to be made to the local health authority.
- By far and large, local health authorities have now agreed that hospitals will not be sealed in the circumstances of a suspected or confirmed COVID case being treated or admitted there as it will result in a marked reduction in facilities from sealing and also from the fear that the premises will be sealed, earning it disrepute.

### **Telemedicine during the pandemic**

Telemedicine has been permitted by the Medical Council of India at the present time.(7)(8) Below are some pointers towards safe telemedicine practice. Various forms of telemedicine can be practiced including a telephone call, various video or audio media or specialized platforms. It is preferable to provide first consultations by video format to build a rapport. Prescriptions should be provided in a standard format.

### **Routine Antenatal Care during the pandemic**

#### **Antenatal Care Visits**

Following the principles of social distancing, it is advisable to minimize the number of antenatal in-person visits. There is a minimum level of antenatal care and investigations which are necessary. For the low risk of asymptomatic and uninfected woman, at present, the recommended strategy for antenatal care is to conduct antenatal care visits by phone or video call supplemented with home blood pressure monitoring. Some visits may be deferred. Questions, counselling and minor ailments can be addressed remotely.(9)(10)An ultrasound is advised at 12-13 weeks and at 18-22 weeks. Pregnancy visits can be timed with these sonographies. The next visit can be at about 30 to 32 weeks. Vaccinations and antenatal profile (blood and other investigations) can be planned during these visits. Growth scans in the last trimester are advised or performed only if indicated. Women are advised to note fetal movements every day. For women who have high risk factors, the pattern of visits and investigations will have to be individualized.

#### **Providing Antenatal Care**

Some useful practices to follow in providing antenatal care are outlined below to enhance safety and ensure smooth functioning of the clinic.

- Appointments should be scheduled to avoid waiting time and exposure. The woman should be screened with the checklist tool on the telephone.
- The patient should make the visit alone or at the most, with one attendant.
- The patient and attendant should follow hand hygiene and mask use.

- The doctor should wear appropriate PPE (uniform, scrubs or apron with surgical cap, mask – 3-layer or N95 preferably) while examining every patient.
- The consulting room should be kept free from clutter and have the minimum amount of furniture necessary. The furniture should be hard surfaced to facilitate cleaning.
- The patient examination table can have disposable covers where possible.
- The number of fomites (mobile phones, electronic devices, pens, measuring tapes, stethoscopes and BP apparatus) should be kept to a minimum and frequently sanitized.
- Avoid handling paper, files and reports that the patient brings. It can be seen with the patient holding them or by photographs.
- The consulting room should be cleaned regularly. At the end of the clinic, the examination table should be disinfected. The room may be fumigated at the end of the day.

### **Routine Labour Care during the pandemic**

For the woman who is not infected and with no suspicion (no positive response on the checklist tool), care should proceed as usual practice. A subgroup of women who are present in labour within an asymptomatic state and who have infection will always remain undetectable. Even if universal testing before or in labour is attempted; a large proportion will not be diagnosed.(11) It is believed that the risk of such women transmitting infection, especially with procedures where aerosol is not generated, is very low. Typically, procedures during labour and delivery, such as examinations, rupture of membranes, regional analgesia and anaesthesia, instrumental delivery or caesarean section do not generate respiratory aerosol. Therefore, for women with no suspicion or diagnosis, standard precautions and added respiratory protection PPE (N95 mask with a three-ply mask on top, surgical cap and face shield) should be adequate.

All women who are admitted to a non-COVID hospital should be additionally monitored for respiratory features. The following features could indicate an undiagnosed COVID-19 infection which requires intensive care. This would be a rare event, which should not be missed.

- respiratory rate > 30 breaths/min;
- oxygen saturation < or = 93% at a rest;
- arterial partial pressure of oxygen (PaO<sub>2</sub>)/oxygen concentration (FiO<sub>2</sub>) < 300 mm Hg
- patients with > 50% lesions progression within 24 to 48 hours in lung imaging

### **Labour Triage for women with COVID-19 infection**

A protocol should be in place in every maternity unit to receive pregnant women in labour or suspected labour with confirmed or suspected COVID-19 infection. The outline of the arrangements for healthcare facilities has been mentioned in an earlier section. The same principles should be followed. The following aspects should be borne in mind while planning for this triage process.(12)

- The woman should call in advance to alert the maternity unit about her arrival whenever this is possible. This will give some time to the healthcare workers to prepare in triage and don the PPE.
- The woman should use private transport or an ambulance when possible to reach the maternity unit.
- She should be met with appropriately donned PPE at reception itself.
- Reception and triage in the same room as to be used for admission in labour and delivery. This should be a room with negative pressure. But it is not available everywhere.
- Keep the room free from any unnecessary items (decorations, extra chairs, etc) which could act as infected fomites later.
- There should be a restriction on the number of attendants allowed with the woman. There should be a restriction on the entry and exit of non-essential staff into the room. The companion of the woman should be treated as infected and all precautions should be taken.



## **Management of Labour and Delivery in women with COVID-19 infection**

In all circumstances, maternity care providers should continue to provide client-centred, respectful skilled care and support. Birth attendants should be limited to one named contact. There should be adequate counselling of the mother about the infection.

Separate delivery room and operation theatres are required for management of suspected or confirmed COVID-19 mothers. Resources required include space, equipment, supplies and trained healthcare providers for delivery, caesarean section and neonatal resuscitation. Depending on the clinical picture and severity of the condition, a multispeciality team may be involved in caring for the pregnant woman in labour. The anaesthetist and neonatologist should be informed of such a woman presenting in labour.

Timing of delivery should not be altered on the basis of COVID-19 infection. The presence of infection is not an indication to induce labour or deliver the woman. The exception to this would be the critically ill pregnant woman where delivery may be indicated to relieve the extra metabolic and pulmonary load. However, the possible benefits of this need to be weighed against the possible risks of worsening the systemic status with a surgical intervention. Such a decision has to be guided by individual circumstances including the degree of clinical stability, gestational age, available infrastructure and the couple's wishes.

In labour, monitoring should include the periodic evaluation of the respiratory status with a watch for symptoms of difficulty or shortness of breath, respiratory rate, pulse rate and oxygen saturation on pulseoximetry pulse oximetry. If there is a deterioration of these features, intensive care measures would be required including ventilation.

As such, the pregnant woman with COVID-19 infection can be allowed to labour and indications for interventions should follow standard obstetric practice. A prolonged labour may be detrimental to the general condition of a woman who has systemic illness. There could be further maternal deterioration. Prolonged oxytocin infusion and volume overload should be avoided. With every examination and contact, healthcare workers should be mindful of adequate protective gear. An intravenous access should be established and fluids should be restricted in labour. It may be prudent to offer continuous electronic fetal monitoring in labour for women with COVID-19 infection wherever such facilities are available. The second stage of labour should be cut short to prevent maternal exhaustion and reducing maternal efforts, in case where there is respiratory involvement by the infection.

At present, pregnant women have almost universally delivered by caesarean section when they present in labour with COVID-19 infection. There is no proven scientific rationale for this. It could reflect local preference and practices (13). Operating with PPE gear can be a formidable task as has been described from some personal experiences.

If a woman with COVID-19 infection has respiratory features, and has PPH, carboprost should be avoided. Methylergometrine can be used with caution. Oxytocin, misoprostol and tranexamic acid can be used as usual.

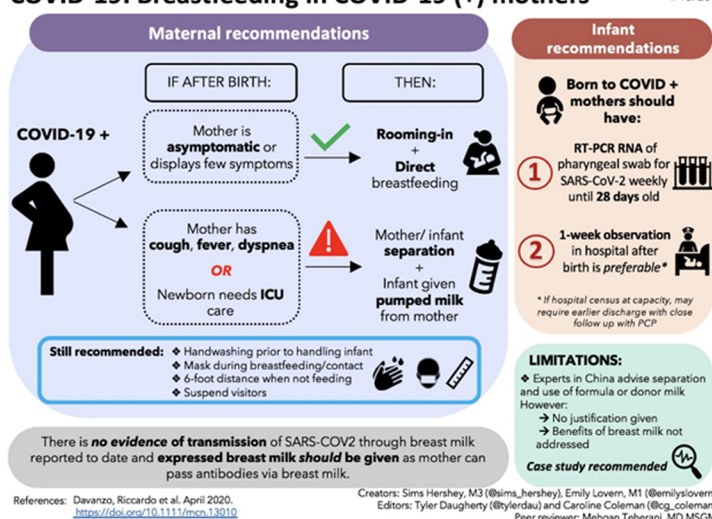
## **Breastfeeding and the COVID-19 infected mother**

As present knowledge stands, there is no evidence that COVID-19 is secreted in breast milk. As breast milk is the best source of nutrition and general immunity for the infant, WHO encourages it.(14)The main risk for infants of breastfeeding is the close contact with the mother, who is also likely to share infective airborne droplets. Precautions should be taken to limit spread to the baby by keeping the baby bay at a distance of at least one metre, hand hygiene and mask use.

The infographic below illustrates the above points and is an useful learning and training tool.(15)

## COVID-19: Breastfeeding in COVID-19 (+) mothers

4/15/20



## Bibliography

1. **Ministry of Health and Family Welfare, Government of India.** Enabling Delivery of Essential Health Services during the COVID 19 Outbreak: Guidance Note. [Online] April 02, 2020. [Cited: April 20,2020.]
2. **Ministry of Health & Family Welfare Directorate General of Health Services EMR Division.** Guidance document on appropriate management of suspect/confirmed cases of COVID-19. [Online] April 7, 2020. [Cited: April 20, 2020.]
3. **Indian Council for Medical Research Department of Health Research.** Strategy for COVID-19 Testing in India Version 4. [Online] April 09, 2020. [Cited: April 22, 2020.]
4. **Ministry of Health and Family Welfare Department of Health Research.** Strategy for COVID-19 testing for pregnant women in India Version 1. [Online] April 20, 2020. [Cited: April 22, 2020.]
5. **PD, Tank.** Testing issues for COVID-19 in pregnancy. [Twitter] April 17, 2020.
6. **Gandhi A, Ganatra A, Tank PD for Federation of Obstetric and Gynaecological Societies of India (FOGSI).** Good Clinical Practice Recommendations for COVID-19 infection with Pregnancy. [Online] April 28, 2020. [Cited: May 02, 2020.]
7. **Medical Council of India.** [Online] [Cited: March 28, 2020.]
8. **Board of Governors of the National Medical Commission for NITI Aayog and Ministry of Health and Family Welfare, Government of India.** Telemedicine Practice Guidelines. [Online] March 25, 2020. [Cited: April 20, 2020.]
9. **COVID19 (nCorona) Virus Outbreak Control and Prevention State Cell.** COVID-19 Advisory for Pregnancy and Labour Management. Health and Family Welfare Department, Government of Kerala. [Online] March 24, 2020. [Cited: March 28, 2020.]
10. Global interim guidance on coronavirus disease 2019 (COVID-19) during pregnancy and puerperium from FIGO and allied partners: Information for healthcare professionals. **Poon LC, Yang H, Kapur A et al.** s.l. : Int J Gynecol Obstetrics.
11. Detection of SARS-CoV-2 in Different Types of Clinical Specimens. **Wang W, Xu Y, Gao R et al.** March 11, s.l. : JAMA.
12. **Royal College of Obstetricians & Gynaecologists.** Coronavirus (COVID-19) Infection in Pregnancy Version 8. [Online] April 17, 2020. [Cited: April 20, 2020.]
13. Pregnancy and Perinatal Outcomes of Women With Coronavirus Disease (COVID-19) Pneumonia: A Preliminary Analysis. **Dehan Liu, Lin Li, Xin Wu, et al.** s.l. : American Journal of Roentgenology , Vols. 1-6. 10.2214/AJR.20.23072.
14. **World Health Organization.** Q&A on COVID-19, pregnancy, childbirth and breastfeeding. [Online] March 18, 2020. [Cited: April 20, 2020.]
15. **Heshey S (Sims\_Heshey), Lovern E (emilyslovern), Daugherty T (tylerdau), Coleman C (cg\_coleman), Teherani M.** Covid 19: Breastfeeding in COVID-19 (+) Mothers. Emory Internal Medicine Residency: COVID-19 Visual Series. [Twitter] April 15, 2020.

## About the Author

**Dr. Parikshit Tank,** Joint Treasurer (FOGSI 2020-21)

**Dr. Atul Ganatra,** Vice President (FOGSI 2020-21)

**Dr. Alpesh Gandhi,** President (FOGSI 2020-21)

## Unlock Your Potential From Home In Lockdown

We are in an unprecedented situation, which is changing our way of life drastically and might continue for at least next few months. The changes in your and the family members' work are disturbing the rhythm of daily routine, established over the years. Apart from financial repercussions, this situation will have a particularly disturbing effect on our wellness. Of the myriad effects of this situation, let's discuss the aspects of Lifestyle modifications, which is my area of work. Being doctors, all of you are well versed with physiology, and effects of inactivity, inadequate rest, improper eating etc. So we will avoid discussing the obvious, and dive down to the relevant aspect. Being urban dwellers, we always are in danger of joining a high-risk group of physical inactivity, which WHO and other studies are highlighting repeatedly. The human body and the majority of its functional abilities are designed for an active style, and the lack of activity is leading to many NCDs, which in turn are leading cause of deaths worldwide. If we reflect on our daily routine, we will be surprised to find that we hardly meet the 150 minutes a week of moderate physical activity recommended WHO. The lockdown is further reducing our chances of being active.

Let's start with energy expenditure aspect, being doctors you are well aware of the total energy expenditure (TEE or TDEE), which is a combination of:

- Resting Metabolic Rate (RMR)
- Non-Exercise Activity Thermogenesis (NEAT)
- Thermic Effect of Food (TEF)
- Exercise Activity Thermogenesis (EAT)

Out of these, the lockdown will affect the first three directly or indirectly leading to a reduction in the calorie deficit or even lead to a calorie surplus. Firstly, as we are spending a longer time at home, there is a drastic reduction in NEAT, for example, spending less energy for a commute (if at all), lesser rounds to check patients, much lesser time for operations and procedures etc. Secondly, those who are regularly exercising, as opportunities for exercises have diminished, there is an acute reduction in your EAT. Lastly, as we are in lockdown for about a month, chances of muscle wasting is more leading to lesser RMR. So in this lockdown scenario, how to maintain the calorie deficit? Of course, the obvious, and quickest solution can be consuming fewer calories, but this is a partial solution and not an ideal one. The better solution will be to work on increasing the Exercise Activity Thermogenesis (EAT) and also restore the NEAT levels, to avoid calorie surplus. To achieve this calories balance we will need a well-planned exercise regimen. Let's start with understanding an exercise regimen and how it is structured. Any exercise regimen should aim to achieve comprehensive fitness, which is a multifaceted concept. Fitness latest definition covers many components but as we are not considering sports specific fitness, let's consider the old definition of 5 components, which include Stamina, Strength, Stability, Suppleness and Speed. But the main challenge remains is how do we work on all these components during these restrictions. Now let's look at a possible way to work on these components while stuck at home.

**Stamina or Cardiovascular fitness:** The typical workout types for this aspect of fitness are running, cycling, Zumba, aerobics, spinning etc. In the current scenario, the alternatives can be running on a treadmill or cycling on a stationary cycle, if you have one at home. You also can run around your house or on the terrace if there is space. Note of caution, doing numerous rounds in a small area requires perseverance. Though difficult it is not impossible, in a situation like this individuals have managed to run, the marathon distance of 42km in their balconies. Last three weeks, I have been covering about 12 to 15 km in the basement parking of my apartment.

parking of my apartment. As the basement is of 280 meters, 15 km takes 54 rounds, and that can be quite a daunting task. The trick is to deceive your mind in calculating fewer repetitions. So, instead of 54 repetitions, I calculate 11 repetitions of a set of 5 rounds or sometimes, I try to target 100 minutes. You can try these tricks that worked for me and you also can devise your strategy to deceive your mind. Another exercise for building stamina that also will work on building the strength of your thigh, calf and glutes muscles is going up and down the stairs, you can mix it up with skipping, to give relief to legs in between the tiring repetition. The third type of exercise to build your stamina can be to participate in an online Zumba or aerobics session. Here the difficulty might be to follow the moves if you are attempting it for the first time, but you just keep on doing as much as you can, and gradually you will be able to follow all the moves. Typically do this stamina building activity for 25 to 40 minutes for sufficient benefits, but if you are attempting it for the first time, start with 15 - 20 minutes and gradually increase the duration to 40 minutes.

**Strength training:** For this aspect, the exercises involve moving of weight against gravity and typically done in the gym with specialised machines or with free weights. Some of you might be reluctant to do these exercises, for various reasons, and might not have done these till date. But these are important for the health of your musculoskeletal system, and for slowing the ageing process. So if you haven't tried them so far, lockdown can be a good start point, and those who do these regularly, don't let the lockdown stop you. Practising these exercises at home can be a challenge, as we are used to the machines and weights. However, if you use your creativity, you can find many things at home, which you can use replacement for free weights. Here are a few examples, a partially filled bucket, bottles filled with water or sand, a backpack loaded with heavy items like books, detergent liquid bottles, packets of grains etc. or even a small plant pots etc. Another useful piece of equipment is a Thera band (or any strong stretchable runner object like the rubber tube inside a cycle tyre). You can keep one end of this Thera band and pull the other end providing your muscles the required the resistance. Now that we addressed the issue of weights, the next challenge will be the exercises, for this, you can use these and other online resources. <https://exrx.net/Weight-Training> or <https://musclewiki.org/>

Muscle group	Exercise
Pecks	Push ups
	Bench press
Lats	Bar hanging
	Pull ups
	Chin ups
Shoulders	Front press
Quads	Squats ( restrict to half Squats only)
	Step ups - small bench without & with weights
	Lunges –without & with weights
Hamstring	Leg curls
Calf	Calf raises
Arms	Biceps curls
	Triceps Extensions

We should do a whole body exercise, however, typically we exercise the upper body muscles, and neglect the lower body. So make an effort to include lower body exercises in equal measure. If you are doing strength work for the first time, you can start all these exercises using your body weight, for example - Push-ups, hanging on a bar for 40 seconds and gradually start doing pull-ups, squats and calf raises etc. The popular perception is Yoga don't work on the strength-building.

**Speed:** This aspect of fitness is central to sports performance, but for day-to-day activities as well we need some speed, and we can obtain it by the various exercises mentioned earlier. But you can add some easy exercise like 3-4 repetitions of climbing the stairs very fast or a shuffle run for 30 seconds in your living room etc. to induce some speed impetus in your routine activities.

Here are some overarching suggestions for your exercises regimen. First, do a specific type of exercise only on the alternate day allowing your body to recoup from the stress of exercises, the next day. Secondly, mix up exercise types, as each type works on a specific aspect of fitness. For example, you can do stamina related exercises and strength training on alternate days. Also, five days of exercises and two days of rest in a week is sufficient for the basic level of fitness. The third important aspect is to keep yourself hydrated before, during and after the exercises, so keep on sipping water. Lastly, during the lockdown, motivation is running low so, please incorporate variety in your exercise routine to keep things interesting.

**Increase in NEAT:** The exercise regime will take care of the increase in the EAT but we can do some small tweaks to our day to day activities to increase the NEAT. Here are some suggestions, while working on a computer, writing or even watching TV try to stand instead of seating that will burn more calories. Another suggestion is to keep walking while talking on mobile or reading a newspaper. Avoid the use of a lift, this also, of course, will help reduce virus exposure. So keep on finding small opportunities for being active during your day.

Apart from the fitness fundamentals, here are a couple of tips to help you to tide over this lockdown. Firstly, create a goal for yourself to achieve during the lockdown, as it will keep you focused and consistent in your fitness journey. The goals can be simple for example, keeping weight constant during a lockdown or completing 60 stories without a break or achieve 3 minutes of toe touching without bending at knee etc. And to conclude, the second tip is borrowed from the astronauts as they are experts of living in solitude. In a recent interview, an astronaut revealed the key to surviving an extended period in a small enclosure in space, is adherence to a predefined schedule, of for all daily activities, exercises, and nutrition. The astronauts have similar challenges as doctors, you can't get ill and keep your performance levels at peak levels for an extended period, despite many restrictions. So this simple and invaluable, advice will help you all to tide over this monotony of lockdown. Hope, my humble experiences in lifestyle modifications will help you to be in excellent health so that you can keep treating your patients even in these difficult times.

#### About the Author

##### ***Pramod Deshpande***

Endurance running Coach, Jayanagar Jaguars ( largest running group of India) A runner since 1973, Coach Pramod is national level sprinter and ultra marathoner. With coaching experience that includes national level competitive athletes in the 80's and more than 1500 runners in the last 3 years, his coaching philosophy remains simple: To care about and connect with an athletes in order to bring out

# The Trans-Himalayan Big Cat Story

As we sipped on hot chai in the Snow leopard lodge lost in the panoramic views of the mountains around us Stanzin came running in and informed us that a yak had been attacked by a snow leopard in a neighbouring village. Without asking any questions we picked our cameras up and rushed to the spot. We were accompanied by Norbu, one of Ladakh's best spotters. He explained that the snow leopard had made a failed attempt and left the animal injured by the side of the road. He was very sure the leopard would be back to finish what it started. We reached the spot and saw the injured yak standing helplessly. Norbu and Stanzin began looking for clues to help locate the cat. The first signs were - a splattering of blood on the rocks with a set of large pugmarks leading towards the ridge. It felt like a scene straight out of a crime novel. The two spotters had a quick chat in and instructed us to wait on the opposite slope, beyond the Yak. We sat there with our binoculars and cameras while the spotters scanned the slopes. The winds were picking up and the last golden light painted the mountains in front of us. After what seemed like a long wait, we suddenly heard Stanzin yell "Shan!!". It was the magic word we had all been waiting for. We scrambled to the scopes and looked through them. A majestic male snow leopard was sitting at the top of a cliff. It was the most exciting moment of our lives. We could see its icy grey eyes looking into the distance. It was the most regal animal I had ever seen. We watched the cat effortlessly walk the edge of the skyline and finally curl up into a ball and fall asleep. It blended in so perfectly that it felt like it was never there at all. The sun began to set and as we were wrapping up, a car drove up next to the yak. Three concerned ladies inspected its wounds and slowly ushered the poor animal back to its village.



### About the Author

#### Faiza Mookerjee

Faiza's passion for wildlife and travel started at a very young age. She started her career as a dive master in the Andamans and later spent her time guiding wilderness groups in central India and the Himalayas. She is based out of her homestay in the tiger lands of Kanha.

## UPDATES

We had a webinar on perinatal mental health which specifically addressed the concerns during the pandemic of mental health issues. It was a very interactive webinar where after two lectures there was a Q&A session with possible ways to address them.



### Perinatal Mental Health and COVID 19: What can Obstetricians do?

Webinar organised by AICC RCOG SZ

#### Why this webinar?

The COVID Pandemic has increased anxiety in women who are pregnant and new mothers not just due to the disease but due to disruption of normal antenatal care. What is the fall out of this? How do we respond to this important issue?

#### Who is it for?

Obstetricians, Midwives, Psychologists and Psychiatrists

Join us on **Thursday 9<sup>th</sup> April 3-4 pm** to listen to our experienced faculty address this important issue

Link: <https://global.gotomeeting.com/join/318161173>

Coordinated by  
Dr Uma Ram & Dr Lakshmi Shanmugasundaram  
AICC RCOG SZ



**Dr Preethi Chandra**  
Professor of Psychiatry at NIMHANS Bangalore, working in the field of perinatal psychiatry since 1994. She has a wealth of experience and special research interest in the areas of Pre-pregnancy and Pre-conception counselling to mothers with mental health problems



**Dr Ashlesha Bagadia**  
A Perinatal psychiatrist and family psychotherapist with extensive experience across three continents. She works at The Green Oak Institute in Bangalore and is an external researcher at department of Perinatal psychiatry NIMHANS

## EXAMS

- The College has made the decision to cancel the July 2020 Part 1 & 2 exam, and will be postponing it until Saturday 26th and Sunday 27th September 2020. Candidates will be notified about their transfer to the new exam dates.
- Part 3 dates are yet to be confirmed. However we need to follow the college website as changes could be made based on how things change in different countries.