#### December 2020 Issue 7



## AICC RCOG SOUTH ZONE

# Newsletter

## **Dr. Uma Ram** Chairperson

AICCRCOG

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**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 Dear Friends,

In a month's time, a year like no other in our living memories will come to a close. It is hard to believe that for over 8 months, we have largely been home-bound and almost all interactions have become virtual. Our lives have changed in many ways and the stresses have been significant. We have, however, had time to introspect and reprioritise many things as well as rediscover our hobbies and hidden talents. As the world is opening up again, I hope that we are all able to reboot as a better version of ourselves.

In this newsletter, we have two very relevant articles. The first is an update on the living systematic review from the WHO and University of Birmingham. The second is a timely article on Mental models for the obstetrician. We do have our quiz this time with a focus on COVID and the events round up.

We have had three well-received online webinars since September 2020. "Improving fetal outcomes incorporating evidence to practice", "Pregnancy to NCD: opportunities for prevention" with the Pregnancy NCD committee of FIGO, and "PPH management" with the Kerala Federation of Obstetrics and Gynaecology.

As you are aware, the existing committee completes its term in Dec 2020 and the election to the new committee is in process. I would like to thank all the members of the current committee for their engagement and commitment to all the activities of the South Zone. We have been able to have themed workshops, exam teaching, Part 2 and 3 examination and online webinars more recently. The Perinatal Mental health course has been very successful and appreciated by delegates and will be held every 2 months going forward. I thank all of your, the members and fellows of the South Zone for your enthusiastic participation in all activities.

Wishing you all a peaceful and safe December and look forward to meeting everyone in a saner and safer 2021.

Warm regards,

**Dr.Uma Ram** Chairperson, AICC RCOG South Zone

## Effects of COVID-19 on pregnant women and their babies: A living evidence synthesis

The rapid spread of the novel coronavirus SARS-CoV-2 causing coronavirus disease (COVID-19) has raised significant concerns to healthcare professionals, including obstetricians and midwives, who are concerned about the effects of the virus on maternal and perinatal outcomes. Such concern is based on past experiences with the Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS), where pregnant women had high rates of complications (1,2). As the COVID-19 pandemic progressed, the international response to the virus resulted in quarantine, and regional and national lockdown measures. These raised further concerns about the indirect efforts of the pandemic on the pregnant woman and her baby from lack of access to healthcare.

The specific questions on the direct impact of COVID-19 on pregnant and recently pregnant women are as follows: What is the prevalence and presentation of COVID-19 in pregnancy? Are pregnant women at high risk of COVID-19 and its complications than non-pregnant women? Are pregnancy outcomes worse in women with vs without COVID-19? How does COVID-19 affect the babies, and can it be transmitted from mother-to-child?

There has been a rapid increase in the rates of publications during the pandemic (3). But evidence can get outdated quickly due to the evolving nature of the virus and its effects. Novel and dynamic research is needed to provide up-to-date evidence to policymakers and clinicians. Traditional systematic reviews are not equipped to deal with this phenomenon. We need continuous and reliable updates on the care of pregnant women with COVID-19.

At the WHO Collaborating Centre for Global Women's Health at the University of Birmingham, we undertook a living systematic review with international collaborators, by focussing on the above questions (4). A detailed overview can be found on our website:

https://www.birmingham.ac.uk/research/who-collaborating-centre/pregcov/index.aspx

Living systematic reviews are repeated syntheses, involving the addition of relevant new information when it becomes available (5). Our collaborators include the World Health Organization, EPPI-Centre, Cochrane Gynaecology and Fertility Group (CGF), European Centre for Disease Prevention and Control (ECDC), and most recently, the CDC in the US.

On the 1st of September 2020, our findings were published in the British Medical Journal (BMJ) with data from 77 cohort studies (11432 women) (6). Some of the salient findings from our paper are presented below.

**PREVALENCE:** The overall rate of COVID-19 diagnosis in pregnant women attending or admitted to hospital was 10% (95% confidence interval CI, 7% to 14%). This is similar or lower than the general population but may vary according to the region and severity of the pandemic.

**PRESENTATION:** Pregnant women with COVID-19 are less likely to present clinical manifestations such as fever (0.43, 95% CI 0.22 to 0.85) and myalgia (0.48, 95% CI 0.45 to 0.51) when compared to non-pregnant women.

**RISK OF SEVERE:** COVID-19 IN PREGNANCY: Mothers with COVID-19 are at increased odds of being admitted to the intensive care units (1.62, 95% CI 1.33 to 1.96) or needing invasive ventilation (1.88, 95% CI 1.36 to 2.60) compared to non-pregnant reproductive-aged women.

**RISK FACTORS:** Risk factors for developing severe COVID-19 infection in pregnant women include being increasing age (1.78, 95% CI 1.25 to 2.55), high body mass index (2.38, 95% CI 1.67 to 3.39), and having pre-existing conditions such as hypertension (2.0, 95% CI 1.14 to 3.48) or diabetes (2.51, 95% CI 1.31 to 4.80).

**PREGNANCY OUTCOMES:** Pregnant women with COVID-19 have increased odds of experiencing pre-term birth (3.0, 1.15 to 7.85) compared to those without the disease, but this may be from iatrogenic prematurity. One in 4 babies born to mothers with COVID-19 is likely to be admitted to neonatal units. Stillbirths and neonatal mortality rates are very low.

Living systematic reviews are critical in the effort to coordinate evidence and practice in the age of the COVID-19 pandemic. Our living systematic review project aims to continue to deliver continuous robust evidence on the recommendations of care of pregnant women with COVID-19. Further updates with more current evidence and more precise estimates will offer a greater insight into the complexity of the burden faced by the international obstetric community.

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### Mental Models and the Obstetrician

Mental models, to put in simple words, are the representation of how anything works (from Smartphone to complex financial systems). We cannot carry the complexity of the world we inhabit, and hence we simplify it through mental models into easily understandable concepts. This helps us reason, judge and take better decisions. Each field of study has a set of most important principles on which the foundations of that discipline are built on. They form the key mental models which should be incorporated for better decision making.

The quality of thinking and decision making is proportional to the number of good quality mental models we carry in our head. This equates to more tools in our mental toolbox and hence more options to deal with a certain problem. Many of us consider ourselves specialists. Instead of a collection of mental models, we have a few from our field. A psychologist thinks in incentives, an engineer in systems and a mathematician in algorithms. They, as specialists are limited to thinking in one way to solve a problem. By incorporating these three disciplines in our head, we can tackle a problem in a multi-dimensional way. This decreases the blind spots and improves decision quality.

Just carrying few models in our head will not make a difference. Arranging them in a nice latticework is paramount. Learning should take place with this framework in the head and we should make it a lifelong project to acquire more models as we go along.

As doctors, in general, we are limited to our field and resist learning mental models from other unrelated fields. However, there are some general mental models which can be learnt easily such as 'circle of competence', 'map is not the territory', 'first principles thinking', 'thought experiment', 'second order thinking' and 'inversion'.

I would like to highlight a few models with examples:

- **Model of 'Circle of Competence'** teaches us to know the perimeter of things that we know how to perform with high confidence (Eg: Performing an elective caesarean section for a consultant obstetrician). We have to stay within this circle and try to expand it by training. Outside this inner circle lies a dangerous zone wherein "we think we know" and trying to do things here leads to disaster (Eg: Trying to use Kielland's forceps for delivery without proper training).
- **Model of 'First Principles Thinking'.** Unless we understand the basic concepts of 'why' we do certain things we cannot execute high quality care for our patients. An example is not understanding the pathophysiology of preeclampsia and using the textbook prescribed methods for treating. This might lead to missing out on key signs signalling worsening of the condition. This model also highlights the need to impart first principles concepts during the training period with emphasis on understanding 'why' we do rather than 'what and how' we do.
- **Model of 'Compounding'.** This is an important model of the finance world and describes a process by which interest added to fixed sum earns interest and the newly added interest earns more interest and this continues ad infinitum. This is an exponential process and can be applied to non-financial aspects. An example is health of an individual. A regular exercise program and good diet regimen practised on a daily basis leads to better health as the years progress. Another example is learning. Reading 10-20 pages a day has a compounding effect on learning.

• **Model of 'Map is not the territory'**. A map is an imperfect representation of reality. They are reductions of what they represent. They also represent a snapshot of a point of time and hence may depict something that no longer exists. A postpartum haemorrhage (PPH) management algorithm is a map. However, every scenario of PPH rarely behaves as the algorithm suggests (not mentioning the emotions and mental trauma omitted in the guideline). A simulation training program probably narrows this gap by bringing reality closer to a learning mind and in turn circumventing the limitations of just a 'map'.

Having explored a few models in brief, it is important to embark on a journey to learn and internalise more models (Table 1 with hyperlink). 'The more the merrier' aphorism will not be wrong if we build a strong latticework of models to understand the world around us and in turn improve the decision making skills. This will make us better clinicians, better human beings and definitely improve patient care.

Discipline	Psychology	Economics	Statistics	Accounting
Models	<ul> <li>Anchoring</li> <li>Association</li> <li>Authority</li> <li>Availability</li> <li>Commitment and Consistency</li> <li>Contrast Effects</li> <li>Deprival</li> <li>Super Reaction</li> <li>Syndrome</li> <li>Do-Say Some- thing Syndrome</li> <li>Envy and Jealousy</li> <li>Hindsight Bias</li> <li>Ideological bias</li> <li>Incentive Caused Bias</li> <li>Incentives</li> <li>Liking</li> <li>Lollapalooza Effect</li> <li>Man with a hammer syndrome</li> <li>Reciprocation</li> <li>Self Deception and Denial</li> <li>Social Proof</li> <li>Status Quo Bias</li> <li>Stress</li> <li>Use it or lose it</li> </ul>	<ul> <li>Comparative Advantage</li> <li>Diminishing Marginal Utility</li> <li>Marginal Cost</li> <li>Opportunity Cost</li> <li>Prisoner's Dilemma</li> <li>Scarcity</li> <li>Supply and Demand</li> <li>Tragedy of the Commons</li> </ul>	<ul> <li>Bayes Theorem</li> <li>Central Limit Theorem</li> <li>Correlation and Causation</li> <li>How To Lie With Statistics</li> <li>Law of Small Numbers</li> <li>Measures Of Central Tendency</li> <li>Regression Analysis</li> </ul>	<ul> <li>Depreciation</li> <li>Dupont Ratio Analysis</li> <li>Earnings Yield</li> <li>Manias, Panics, and Crashes</li> <li>Mr Market</li> <li>Owner Earnings</li> <li>Return on Invested Capital</li> </ul>

Table 1: Few examples of mental models from other disciplines

#### **Further Reading:**

- Poor Charlie's Almanack: The Wit and Wisdom of Charles T. Munger: Charles T. Munger, Peter D. Kaufman, Warren E. Buffett
- Seeking Wisdom: From Darwin to Munger, 3rd Edition: Peter Bevelin
- A Lesson on Elementary, Worldly Wisdom As It Relates To Investment Management & Business (https://old.ycombinator.com/munger.html)
- https://fs.blog/mental-models/
- https://jamesclear.com/mental-models
- https://www.safalniveshak.com/mental-models/

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#### Quiz

#### **Quiz on COVID infection**

- Current CDC guidance on when to release someone infected with coronavirus from isolation is made on a case-by-case basis and includes meeting which of the following requirements:

   a) The patient is free from fever without the use of fever-reducing medications.
  - a) The patient is nee from lever without the use of lever-reducing medication
  - b) The patient is no longer showing symptoms, including cough.
  - c) The patient has tested negative on at least two consecutive respiratory specimens collected at least 24 hours apart.
  - d) All of the above.
- 2. Can pets transmit COVID?
  - a) YES
  - b) NO
- 3. People with type A blood may be more susceptible to infection.
  - a) YES
  - b) NO
- 4. The FDA has approved the first targeted COVID-19 treatment.
  - a) YES
  - b) NO

### A visit to the countryside of Netherlands

Netherlands in the cold chill of February with its fresh air, flat lands, windmills, wooden houses and canals was indeed a wonderful photography destination.

We covered Zaanse Schans, Giethoorn, Broek in Waterland, Monnickendam, Marken and Volendam.

Before this trip, I had heard about the windmills of Holland but had never really taken a keen interest. This trip was definitely a game changer. Google windmills on the web and **Zaanse Schans** will most likely show up on top. It is an open-air conservation area which hosts many windmills that have actually been transported from their original location and set up here. These windmills can be entered for a small fee. We visited two of them, one that was used for grinding spices and the other for cutting timber. Apart from the windmills, there are craftsman's



workshops. We visited one that makes wooden shoes or clogs as they are called. A pair of huge wooden clogs called klompen, welcome you to the craft house. Zaanse Schans boasts of the traditional architecture of green wooden houses, which are mostly lived in and cannot be visited. It also has a museum and a cheese factory. The best part of this visit, among other things, was the steaming mug of thick hot chocolate we had at one of the outlets. Nothing can be more heavenly on a freezing winter day.

Also known as the Dutch Venice, **Giethoorn** is a fairy tale setting straight out of the novels I used to read in school. Getting to this place on our own was not so convenient and hence we took a day tour from Amsterdam. Giethoorn has countless thatched farms built on small peat islands. These are connected by close to 180 bridges. There are no roads and transport is by flat bottomed boats called punters. There is a mud path for walking along aside the canals. The trip actually included boat rides along the



myriad canals of Giethoorn.



However, we were in for an unpleasant surprise. It was so cold that the canals had frozen over and hence the boat rides were cancelled. We were, instead, given a couple of hours to explore the place by foot. By boat or on foot, this place is so picturesque that in the end not taking a boat ride did not matter. The Gods were certainly on our side this day, painting the sky with clouds in all crazy patterns. The cheese fondue we had for lunch was the perfect icing on the cake.

Just imagine that you are in an unknown country, take a bus to an unknown place, get off at a deserted bus stop and enter a sleepy village with not a soul in sight. This describes **Broek in Waterland**, a place so close to Amsterdam, yet so quiet and charming. Add to this, a chilly frozen morning, when even the mallards and coots on the lake that greeted us, did not want to be woken up. We took a stroll around the cosy village, passing by the trademark church and some traditional houses, some of which have



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been listed as National Heritage sites. Very soon, it was time to get back to the deserted bus stop to catch a bus to our next destination.

A quaint harbour village with a long and rich history is **Monnickendam**. We set out on foot to explore this place. We walked along the quiet streets and realized we were too early in the day, as indicated by the shops that looked like they were in still in two minds, to open or not. Not that it bothered us. The place was equally charming, nevertheless. We went as far as the harbour and on our way back, stopped by at a cosy coffee shop. Sipping hot coffee in front of a vase full of tulips reminded us to make a mental note to come back again in time to catch the famous tulip blooms of Netherlands.



Marken in a small historic fishing village with typical green wooden houses, most of which are built on stilts to counter the varying tides. We walked through the sleepy village, taking time to admire and freeze the Dutch architecture, not just in our camera but



also in our minds, before arriving at the harbour. The harbour was the busiest with a handful of tourists enjoying a cup of coffee, while awaiting the arrival of the Volendam-Marken express boat. The locals were still far and few in between. The express boat which has been in operation since 1930s finally arrived and we got on the boat for the final destination of the day. Nachos and sea gulls kept us company on this short ride.

At **Volendam**, we were greeted by a slew of souvenir shops, bars and cafés and traditional costume shops, making it clear that the heart of the action was in and around the harbour. We strolled around for a couple of hours, soaking in the flavour of the authentic Dutch character. Though we did not come across locals dressed in traditional costume, the sights around the village were equally rewarding. The icicles along the vegetation bordering the bay reminded us of the sub-zero temperatures in which we had traversed the countryside of Netherlands in the last three days. It was time to get back to the city, leaving the magic behind us.



But memories linger on.

#### Getting there

Fly to Amsterdam. With Amsterdam as your base, take a local bus to the places mentioned above. Local bus company EBS runs regular services throughout this area. EBS Waterland buses depart from the IJ waterside upper level bus terminal of Amsterdam Central station. For Giethoorn, a guided tour is best.

#### Author

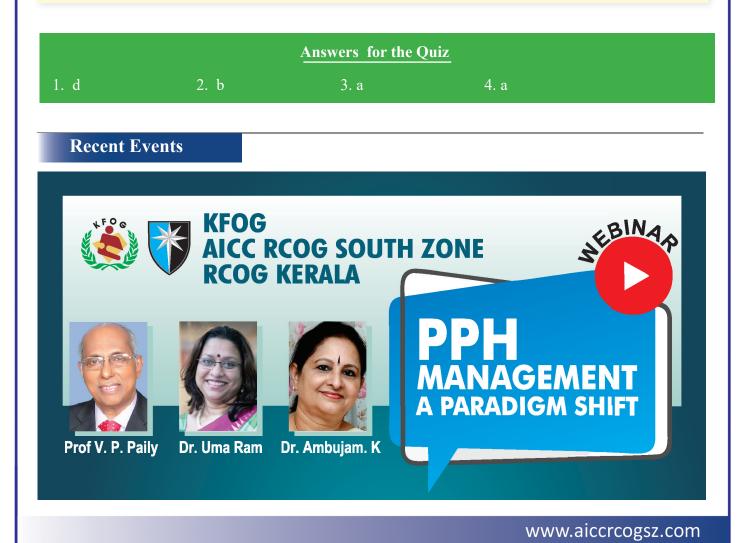
Anitha Mysore, is an avid traveller and a bird enthusiast. She has travelled widely on the job and takes time out during her business trips to explore the culture and heritage of the places in and around her business interest. She has participated extensively in salons for close to three years, having successfully exhibited her work in many countries around the world.

### **DID YOU KNOW ?**

#### First woman to be awarded the RCOG's prestigious Eardley Holland Gold Medal.

The medal – which is only awarded every five years – has been bestowed upon Professor Jane Norman, of Bristol University, for her outstanding contribution to science, practice and the teaching of obstetricians and gynaecologists. In her case, understanding the causes of preterm birth and stillbirth (including pregnancy stressors such as obesity) and developing and testing strategies to reduce the devastating effects of these conditions on women and their babies.

The previous recipients have been the likes of Professor Ian Donald, Professor Sir Norman Jeffcoate, Mr. Steptoe, and recently in 2015- Prof. Kypros Nicolaides.



#### **Recent Events**







Royal College of Obstetricians & Gynaecologists

India South ernational Representative Committee

#### Webinar - Improving Fetal outcomes: Incorporating evidence to practice

#### Thursday September 10, 2020 | 3:30 PM - 5:30 PM IST

The safe delivery of a healthy baby is one of the most important aspects of obstetric care. In many situations, delivery is the only "treatment" option that is available to us. Optimising timing of delivery becomes crucial to minimise perinatal morbidity and mortality in growth restriction and stillbirth prevention. Fetal infection is another aspect of perinatal medicine which poses a challenge both for diagnosis and management.

A lot of work has been done in these areas in the past decade and we as obstetricians need to stay abreast of these advances and understand the rationale behind guidances to provide safe and quality care to the pregnant women under our care. What better way than to hear from experts in the field and understand how to translate evidence to practice.

Join us to listen to two extremely well acclaimed researchers and teachers in an interactive session to have your doubts clarified.

