Pune Ob-Gyn Society
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CONNECT

The Newsletter ♦ Issue 1, April 2021

OBGY PRACTICE IN DIFFICULT TIMES & RECENT FUTURE

She... The STAR

Sassy ⋆ Talented ⋆ Ageless ⋆ Resilient

Dr Vaishali Korde-Nayak
General Secretary, POGS

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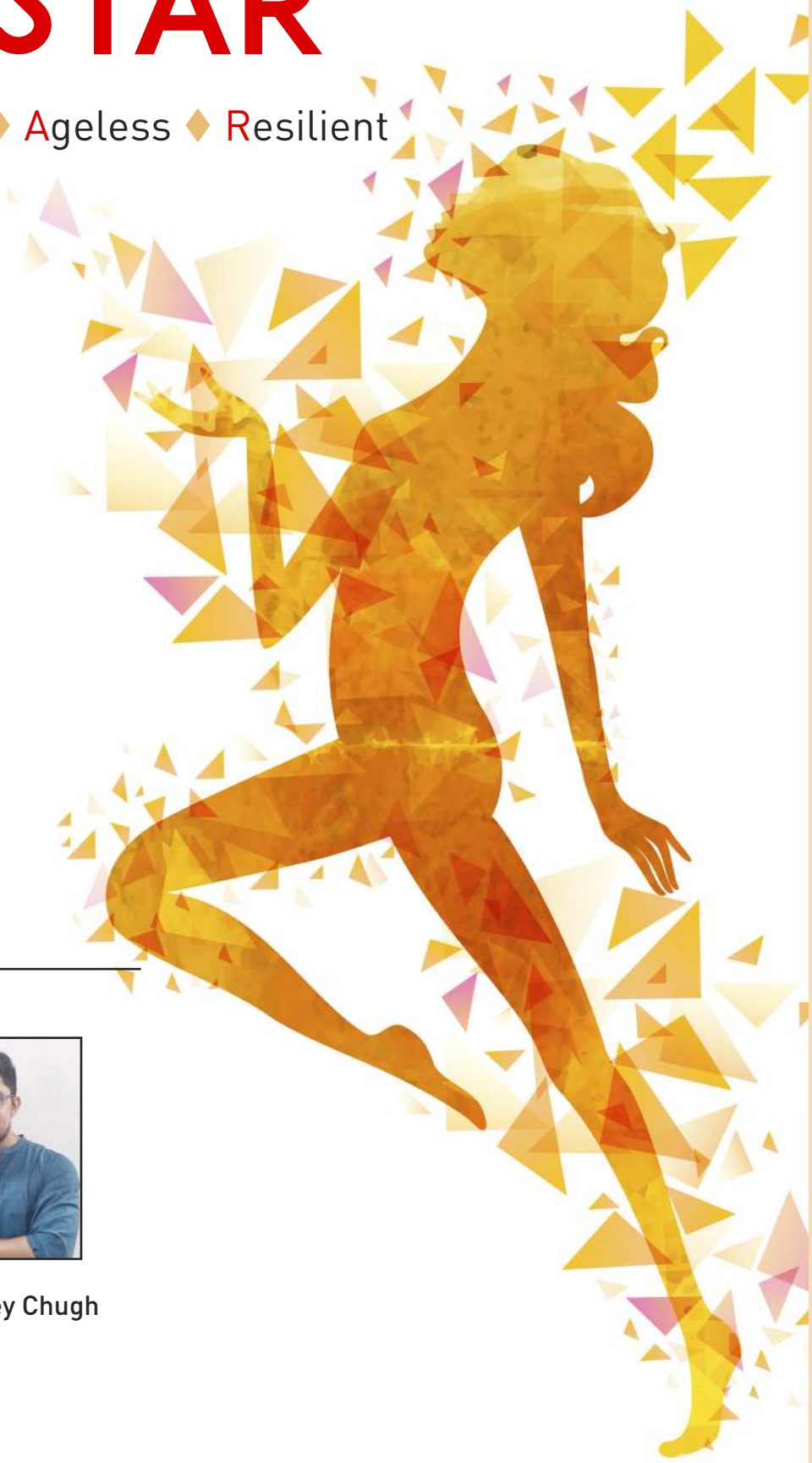
SHE - THE STAR

♦ Sassy ♦ Talented ♦ Ageless ♦ Resilient



EDITORIAL TEAM

Dr Vaishali Biniwale

Dr Sushma Sharma

Dr Amey Chugh

“If people are doubting how far you can go, go so far that you can’t hear them anymore.”

Michele Ruiz

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PRESIDENT'S MESSAGE

"Tough times dont last
TOUGH TEAMS DO!!"

Click here to view Presidential Message

LEADERSHIP
is the **CAPACITY**
to **TRANSLATE**
VISION into
REALITY

Dear POGSians,

As I take over as the President of this vibrant Pune Obstetrics and Gynaecology Society, it gives me great pleasure to present to you a series of monthly educational news bulletins - POGS STAR Connect. **STAR** stands for **S**afety, **T**echnology, **A**dvances and **R**esearch; and our team promises to deliver each of these elements throughout the year, in various forms - Conferences, Workshops, CMEs, Outreach programmes, News Bulletins, Textbooks, and more..

POGS STAR Connect will be released monthly, and shall cover a panorama of topics including high risk obstetrics, breastfeeding, preventive oncology, contraception, infertility, endoscopy, and many more. Each POGS Connect Bulletin will be dedicated to a particular topic, and shall include interesting reads like research and evidence, interviews with inspiring gynaecologists, social activity related to the topic, PG programme, and more.

'When you feel like quitting, think of why you started.'

We are amidst the most serious health, social and economical crisis of recent times, as it is our shared responsibility to be with each other in these testing times. The premiere POGS STAR CONNECT touches upon the medical, social and humane aspect of ObGYn Practice in difficult times. From COVID, to litigation and artificial intelligence.. this news bulletin is sure to interest you and give you food for thought.

Strength of a team is each individual members. I am blessed with the most wonderful team. In the midst of chaos, lies the most grand opportunity - for those who seek it. Times have been tough, but my STAR Brigade is ready to show that they are tougher than the times! Making the most of the situation, team POGS 21-22 shall thrive to leave no stone unturned to make the coming year, a very memorable one.

Happy reading..

DR SUNITA TANDULWADKAR
President, POGS 2021-22

GENERAL SECRETARY'S MESSAGE

Dear Friends,
Namskar & warm greetings from Pune OBGY society.
The New Team of POGS has taken over from 1st April & our theme of the year is **She… The STAR**; She is ***Sassy, Talented, Ageless, Resilient*** …The **STAR.**
I am honoured to serve this prestigious society of Pune, as a General Secretary in this year 2021-22. Under the guidance of President, Dr Sunita Tandulwadlkar, we have a complete academic bonanza planned for the forthcoming year. The POGS calendar will give you the details of the same. Looking forward to work with you all & meet you all soon.
Star connect – a news bulletin, is the way we are going to bring you the Kaleidoscope of OBGY life. Along with Physical health, the mental health is equally important. To touch upon the spiritual aspect, I would like to share with you, the spiritual treasure of Maharashtra, ... 'Manache Shlok'.
Manache Shlok are Hymns addressed to 'the mind' which are composed by one of the greatest saints of Maharashtra, Samarth Ramdas Swami in the 17th century (1608 to 1682). He was also the guiding force of the great Maratha Warrier, Chatrapati Shivaji Maharaj.
These Shlokas (Hymns) are full of the highest spiritual advice. These should be taken as suggestions or recommendations to our mind for being in a healthy, happy and peaceful state. The way we need to clean, exercise and discipline our body, we also need to do the same to our mind.
I will be sharing few shlokas in series, out of 205 total shlokas, which will guide us to keep our mind calm & disciplined during these pandemic crisis & otherwise. I earnestly hope that this reading would help inculcate the simplicity and sincerity in our life which would make our attitude towards self, in particular and others, in general, more equitable.

मना सज्जना भक्तिपंथेचि जावे। (Mana Sajjana Bhakti panthechi jave I)
तरी श्रीहरी पाविजेतो स्वभावे। (Tari Shrihari Pavijeto Swabhave |)
जनी निंद्य ते सर्व सोडूनि द्यावे। (Janee Nindya te sarv soduni dyave |)
जनी वंद्य ते सर्व भावे करावे।। २। (Janee vandya te sarv bhave karave || 2 ||

Oh, my pious mind, follow the path of devotion & Only devotion.
That is the only way to achieve the salvation, the goal of being with GOD himself.
Give up everything considered obnoxious by wise people in the society. It will never bring you peace.
Take care of your behaviour & mould your character in such a manner which is liked, appreciated and most importantly accepted by one and all in the society. || 2 ||
(English translation by Prof Kunte.)
| Jai Shri Ram |

Even during this pandemic, our POGS Team will continue the traditional academic activities with the same vigour. In addition to that POGS Star connect will give us an opportunity to connect with you all every month & share interesting articles.
'Love is nothing but Sharing & Caring' ……let's share & care!

Love
DR VAISHALI KORDE-NAYAK
General Secretary, POGS 2021-22

NEWS BULLETIN CONCEPT

Dear Friends,
"Star Connect" is not just a News Bulletin, it's a connect from heart to heart! We have started this monthly connect which will incorporate varied topics the field of Obstetrics & Gynecology. Every news bulletin will have a different theme!

"Knowledge is only potential power. It becomes power only when, and if, it is organized into definite plans of action, and directed to a definite end."
— Napoleon Hill

Under the visionary leadership of Dr Sunita Tandulwadkar, we will see many innovative ideas taking shape into reality this year! One of these ideas is the "Star Connect News Bulletin". My idea was incorporated, discussed & brought to life by her. I express my sincere gratitude towards her. I also thank all the office bearers & members of Team POGS for their direct & indirect contribution to this News Bulletin
This is an attempt not only to connect with the POGS members, but also to take POGS as a brand & organization on National and International forum in the form of "E-News Bulletin"
It is said that, "Grind while they sleep. Learn while they party. Live as they dream". I'm happy that the Editorial Team has taken huge efforts in compiling this news bulletin.
It will include insights from President & Secretary each month, articles from eminent faculties, members doing extraordinary work & even the post graduates. It will guide us with Inspirational lines from the Interview with Eminent personalities from the field of Obstetrics & Gynecology. It will include social activities done by POGS & it's members. We'll be having a column for post graduates to present their original work which will be a unique aspect of this News Bulletin! Yearly & monthly calendar of POGS will be in the enclosure for easy reference.
I urge all POGS members to share their personal & social achievements with us for us & others to know about the work done by you.
We know that we should take responsibility for our actions, hence I humbly accept any suggestions & criticisms.

Happy Reading!

DR NILESH BALKAWADE
Clinical Secretary, POGS 2021-22

"Success is no accident. It is hard work, perseverance, learning, studying, sacrifice & most of all Love of what you're doing or learning to do"

EDITORIAL TEAM'S MESSAGE

Hello friends.

A warm welcome.
Standing at the brink of this pandemic, we bring to you, the **Star Connect newsletter**, an initiative by POGS, to reach out to every corner of the country. This newsletter aims at bringing out the most recent advances in the field of obstetrics and gynaecology and to provide a platform to share unique case scenarios encountered by different doctors. It also wishes to bring together gynaecologists in different walks of life and make it possible for both the experienced as well as the amateurs to express themselves on a single forum.
Considering the toll that was taken on human equations and interactions in the last year, we owe it to ourselves to make it up this coming year. We look forward to bringing the gynaecology community together on one platform with an exciting line up of conferences, workshops and teaching sessions.
The goal is to unite our community at all levels and create a platform for each and every member to express themselves and create an impact.
Here's looking forward to a better tomorrow with more real and less virtual.

Cheers !

Dr Vaishali Biniwale

Dr Sushma Sharma

Dr Amey Chugh

Dr Ameet Patki

Zindagi-Ek Safar
(Real Life Teachings)

(These pearls are taken from the program conducted by Dr Ameet Patki, "The Living Legends". We're thankful to Dr Ameet Patki & Dr Rustom Soonawala for happily consenting to use the part of this interview to publish)

Click here to view the full episode

Dr Ameet Patki: Today I have the fortune and the honor, to bring to you one of our most royal Obstetricians and Gynecologists. A n obstetrician who has brought a lot of charisma. An obstetrician of the celebrities, of the rich and the famous. A Dhanvantree awardee, a recipient of the Padma Shri but a person who is very humble. A person who has lived through the Second World War and I'm sure he'll have stories to tell us how to get out of this depression and negativity. So let's take a look at his lifestyle. Welcome Dr Rustom Soonawala.
Greetings sir and thank you so much for being with us and taking time to chat with us and tell us and take us through your life. In the greatest meetings that I've had with you I gather you come from very humble beginnings. Your grandfather had ten children- five sons and

Images Courtesy: The Living Legends



five daughters. Of those sons two became solicitors, two became doctors and one was an engineer. You were born to one of the doctors. So tell me how was your childhood, some reminiscences from the past.

Dr Soonawala: Thank you Ameet, for this opportunity to be able to this talk, which I would enjoy since it brings back many memories of the old. We were brought up in a joint family. Our eldest uncle who was a solicitor, supported his younger siblings and paid for their education and everything, because my grandfather was working in the GIP, the great Indian Peninsula railway. At Horda was the headquarters, so he would be travelling by plane, whenever he was on duty, come to Bombay, stay for the day or two and was back to Horda. So my uncle the senior most was responsible for the well-being of the family and we had a huge mansion on the eastern side and
as already mentioned by Ameet, there were ten siblings, two were staying away but eight of us, the siblings were staying in the same mansion. In one room each one had to stay with their own kids and there was a huge big hall, in which we had our dinner and everything and like that for many years and then when the debt settled down and we found it impossible to live in one room with four brothers and with my parents. My parents left, we moved out of the bungalow and moved to the other Parsi colony. The childhood was very vital and the enjoyment that we had playing, because it was always a full of children and you never lacked company and that was my childhood period.

Dr Patki: You finished your 11 standard from the Antonia de Silva school and that was also the time that the Second World War was almost coming to an end but there was disappointment in store for you, one is because you couldn't go to Xavier's College where your two other brothers had gone and you were told to go to Ruiya college which was close to home soon after that you took an admission into Nair Hospital for medical education and you tell me that Nair was a very sporty college and your parents had already instilled a lot of sport activities to you. You all were very good in hockey, football and tennis but there was one sport that you were also not aware that you were good at and that came up in your parsi sports day.

Dr Soonawala: Yeah . We were really lucky. There were house walls, behind there was a triangular huge garden where we could play hockey, football and walk and in front of us was the other Parsi colony's Gymkhana, where there was more sports sports activity, badminton, tennis, more indoor. Now at that time I used to be more involved in badminton, tennis, hockey and football. Those were my favourite games. Cricket-never liked it, it was too slow,waste a whole day waiting and that somehow never attracted me, neither that time, not even now.I find it very boring. Football I like and I watch even now, with great enthusiasm. It's really fun.

Dr Patki: You took part in the All India Olympics in the relay race also, that is some incident I want you to narrate.

Dr Soonawala: From the Parsi sports, then we were in Nayar, so now we started representing in the university competition. For that all the colleges, it was called intercollegiate.So we were representing Nayar and running for the intercollegiate and there also I scored very well. So when it came to inter-varsity, I had represented Bombay and we had the games in Bangalore and it was great travelling by train as a team,a lot of companionship you develop and then from inter-varsity we were practicing, for representing Bombay and at that time there was a Lavi Pinto, he was the fastest man in Asia. At that time, the bet time was 10.8 or 10.9 and if you clock 10.6, you are a champion. My clock time was eleven, point four seconds behind and it was a question of selecting bombay team to represent in the All India Olympics, which was in Jabalpur. There were five of us on the sprinting side and I used to do then only 100 and 200-meter so Lavi Pinto, Benny Fernandez, and Gouda was the third place. The fourth runner got to be selected and that was between me and another, but we both were tie-ing, exactly. But Lavi Pinto was the captain, he said I want doctor to be in the team, when he said, the management put me in the team because, we were really very close and then went to Jabalpur and we had to face Punjab and army teams, all very huge and tough. I was number 3 in the relay. Benny Fernandez was leading, in the foot sprint, then Gouda, and my turn came. I took the baton and I was no.2, an army guy who had just over taken me. While passing the baton to Lavi, he was so jumpy and fast, and believe me, he was literally moving like wind, and he took over the Army guy and we broke the record, in 1952, all India olympics. And then the record was broken in 1982.

Dr Patki: Yes, that just shows that how much of enthusiasm you all had and the power that you all had defeated the Army and the Punjab teams, who we generally feel are much more powerful and have much more strength. You very humbly told me that once you've finished your MBBS and you passed it in the second attempt but luckily your obs and gynaec marks were very good so naturally you went into obstetrics and gynaecology. How was your residency in Nayar Hospital? Can you tell us a little on that?

Dr Soonawala: Back then there was no super-specialization. You either become a physician or a surgeon. The ladies were going into Obs and Gynae. If you did not manage this, you become a dentist and if that was not managed, you go into veterinary. So that was the work order at that time. So my eldest brother became a physician. My second brother became a surgeon and he really did very well in exams and all and I took up obs and gynae and I don't forget it because even at that time I had a inclination towards the safety and the health of the woman because my mother, I used to see the whole day, cooking for us and feed us, and literally both of our parents' lives were centered around the four of us, taking us to gymnasium, boxing, athletics, gymnastics, games, so all the athletic things were due to the support that my parents gave.

Dr Patki: Sir, you were going to Wadia as a registrar and we all know that Wadia was at that time one of the busiest obstetric units. Can you tell us something more on your stint in Wadia?

Dr Soonawala: When I joined Wadia in 1957, no good hospital and KEM was only gynae so all the bad obstetric cases from 20 mile diameter we're all coming to wadia and we were doing about twelve to thirteenthousand deliveries a year. Thousand deliveries a month and 250 deliveries a week and we had a week of emergency and in the 250 deliveries that you have to do in that one week we got every complicated operation to do and that gave tremendous experience in a tremendous room and offsetting the detriment when to do and what to do which is very important in obstetrics, and one more thing which I learned from Wadia at that time septic abortions with so many, so that was the reason that as soon as I started practice, I went into developing termination of pregnancy methods, design day operation making it safer and making it available free of charge free of charge so that nobody will point the finger and say that we are doing it because we can exploit and make more money out of terminating unwanted pregnancies.

Dr Patki: You finished your UK stint and came back to India to practice as an obstetrician and gynaecologist and you tell me it was very very tough to set up a private practice and amongst many people who helped you, you name Dr.Shirodkar, as one person, although you had not worked with him was very very supportive you also narrated one incident and the Bacha nursing home, about a lady who was in prolonged labour. Can you tell us something on that?

Dr Soonawala: When I was back to India we were looking for jobs and there was a job in the UK ,and contacted a friend of mine, so that job was offered to me, I went to meet Dr.Shirodkar and I was very close to him because he was the medical director at FPA and I was also with FPA, so we travel together to Colombo, to Nepal and he was operating and I was operating and giving local with people lectures. So the moment I went and met him, he said Doctor, here you are somebody but there you will be nobody and at that time the difference between an asian and a UK doctor was such that they would select a third grade UK doctor but not select a first grade Asian doctor.

So I immediately got the head and said no to the job I don't regret it all. In the beginning of your practice your approach is all the time, with any patient that comes you would go out of your way to be very gentle, perfect, everything and that time, Breach Candy had maternity that was restricted very very much and I used to do a lot of work at Bacha nursing home. A VIP lady, a top solicitor solicitor on whom I did a normal vaginal delivery and it was a Saturday morning. I went and saw on Saturday afternoon because one had to be visiting more and make sure everything went well and I came home and some day I got a call from the resident doctor and bacha nursing home was very popular at that time and the resident doctor told me that she's really uncooperative and she's not listening to us and shouting at us all the time. We have given her pethidine twice, with pethidine she's a little comfortable but she's complaining of pain. So on Monday first thing in the morning I went to her and saw and I found that as if it was the uterus was full pregnant and it was the bladder, it was retention of urine and moment she saw me, she said 'I'm so glad you've come. I'm telling them that I want to pass urine and they don't listen to

me and I'm trying and trying and it's not coming'. It was a complete retention, so immediately I put a catheter in and I called Fardoon (my brother) because he was a urologist, he said leave the catheter for 48 hours, and we left the catheter for 48 hours. Luckily the couple was very understanding. The message I would like to give is be honest, be loyal to your patient, if you make a mistake, claim it. Of course with a little manipulation but you don't tell a lie. If you tell one lie to hide that lie, a bigger lie, and to hide that lie, another bigger lie and you will be trapped. So be honest, be very candid. It's only when the communication between you and your patients falls or disappears then the litigation is the next event that will happen. This same patient, fully recovered from her bladder distention within 4 weeks and has come back for her second delivery with us.

Dr Patki: It was the same patient put edged you to have your own intrauterine device. Can you tell us a little on the invention of the 'S' or the Soonawala loop?

Dr Soonawala: This particular patient very intelligent as I said, a leading solicitor in Bombay, and we were discussing contraception. At that time freshly returned doctors from UK or US, were given a seven hundred rupee stipend to encourage them to stay in India and not go back. They were called the Scourge offices and at Nayar, I was a research officer for oral contraceptives. They were just introduced and yet to carry out the check ups and it was a ICMR trial. There was a colleagueof mine who was doing a study on the lippe's loop. So while we were discussing, thislady said that she would prefer the loop and not hormones. I agreed.
Then I went to that colleague of mine and asked if I can have a lip's loop for a private patient and I was told 'not at all, it's so dangerous, we might perforate the uterus and I'll get the blame' and I received a lot of hesitancy from his end, and I was upset I'm told you can't put in a loop, after all this education and experience. So very luckily when my two brothers were in London studying, we became very good friends with the Garware brothers, who were famous for introducing plastics into India. When Mr.Chandrakanth Garware's wife was expecting, I was her Obstetrician. We would meet in the evenings, so that evening, when I went with my wife to look for dinner, Garware asked me why I was so grumpy, and I told him how I was refused a loop, that I had promised a patient. He asked what a loop was, and I explained to him that it was a plastic object and the mechanics of a loop. He very humbly told me to come to his factory tomorrow. So I went to the factory and met with the engineers, and decided that if I make a lip's, I might be prosecuted for patents. So, we have made a loop in the shape of an 'S', and they have started to make the moulds, and production has started. So this was a very lucky coincidence.

Dr Patki: They say necessity is the mother of invention, it was very important that you deliver to your patient what you had promised and that was the birth of the 'S' shaped loop, the Soonawala's loop contraception andfamily planning to feel very close to the USAID and the population council and one of the meetings in 1967 at Santiago in Chile, it was destiny that brought together you and Dr.Palmer. Can you tell us something on how this friendship grew and what was the outcome of this friendship?

Dr Soonawala: Dr Palmer was the senior-most french gynecologist and he is considered to be the father of gynecological endoscope. At that time the demand of population control was very high in the country and all over the world. So he had designed a special instrument with which you could block the

tubes, with only copy. In France, the number of cases were so few that he wouldn't do a big tier. So we were sitting side by side in Santiago, and he said 'you're from India', somehow foreigners would get very much excited and ask you more about India. We spoke about our sterilisation camps, where we do about 500 cases over 2-3 days. He asked if I would volunteer and try out his applicator to block the tube. I happily obliged, and he had asked the WHO to send 3 laparoscopes and the other required equipment. The only condition was that I teach people, and not just in Bombay but all over the country. That gave me the opportunity to travel all over India and train doctors, and then the request came to train doctors from Pakistan, Nepal, Thailand, Nigeria, Colombo.
Eventually, we made a team of doctors, called the 'warrior team' and we travelled all over the country, conducting sterilisation camps.

Dr Patki: You also said that 'giving in life gives more happiness than taking in life' and 'knowledge is important to improve the quality of care' I think these were the very reasons why you were happy to share your knowledge, share your experience and that got you so much of goodwill and as you said so much of good karma. We have always known Dr.Soonawala as the high-profile doctor, doctor of the rich and the famous, the doctor who has helped lot of Bollywood actresses to have their babies. Hobnobbing with high-profile people tomy mind was a very fulfilling act but when I spoke to Dr.Soonawala, he said looking after the poor who deserve your care is more fulfilling than looking after the rich who can afford your cost.
I think that has left me speechless, he was always my secret hero and all of us have held him in highesteem but looking at his narrations, looking at his nobility, looking at his humility I think he has gone up two notches.

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The Newsletter ♦ Issue 1, April 2021

Women's Health Crisis in COVID-19 Pandemic

Dr Alpesh Gandhi
President
FOGSI

INTRODUCTION:

The novel coronavirus infection (COVID-19) is a global public health emergency that rapidly and silently took over the world. The first case of coronavirus infection was identified in Wuhan, in the Hubei province of China. By 30th January 2020, the coronavirus disease was declared as a Public Health Emergency of International Concern (PHEIC). On 11th March, it was declared a pandemic by WHO.

Pandemics and global health crises seem to aggravate the state of women's health crisis globally. The world had experienced that during the Ebola and Zika virus outbreak, women did not have autonomy over their sexual and reproductive lives, which was compounded by their inadequate access to health care and insufficient financial resources to travel to hospitals. This led to an estimated 3600 maternal deaths neonatal deaths and still births- equal to the number of deaths directly caused by the Ebola virus.

Emerging evidence suggests that more men than women are dying, probably due to sex-based immunological or gendered differences, such as smoking. However, these are just early assumptions. Current sex-disaggregated data is still incomplete. The State Council Information Office in China suggests that more than 90% of HCW in Hubei province are women, emphasizing the gendered nature of the health workforce and the risk that predominantly female health workers incur. [(1)]

In this article, we take a look at the women's health crisis under the following headings:

- **Maternal Mortality**
- **Abortions and contraception**
- **Antenatal and Intranatal care:**
  - **LSCS**
  - **Vertical transmission**
  - **Preterm deliveries**
  - **Stillbirth**
  - **Vaccinations**
- **STD**
- **Gynaecological surgeries**
- **Psychiatric issues**
  - **Domestic violence**
  - **Gender based violence**
  - **Mental health**

I. MATERNAL MORTALITY:

Initial reports from the United States are consistent with thosefrom China, demonstrating that

approximately 8% of pregnant or postpartum women with COVID-19 have severe disease andapproximately 1% are critically ill.

Hantoushzadeh et al [2] . analyzed 9 pregnant women with severe SARS-CoV-2 infection in Iran; 7 of these patients died(out of 6,486 deaths). Out of the 7 reported maternal fatalities, 5 had no underlying health issues, which suggests that pregnancy could put women at higher risk of consequences from COVID-19.They obtained self-verified familial/household cohort data in all 9 cases, and in each and every instance, maternal outcomes were more severe compared with outcomes of other familial/household members.

Mullins et al. [3] analyzed 32 cases of SARS-CoV-2 in pregnancy, two of whom required intensive care treatment and mechanicalventilation, and of these, one developed multi organ failure.

Elshafeey et al. [4] highlighted in a systematic review in pregnant women with SARS-CoV-2 and found that 17 of 385 SARS-CoV-2-positive pregnant women required intensive care treatment, of whom six required mechanical ventilation, with one reported death. Two maternal deaths out of 2,704 total deaths were confirmed by the Ministry of Health from Mexico, on April 9, 2020.

As of May 7, 2020, out of 125,218 overall cases and 8,536 deaths, Twenty COVID-19 related maternal deaths has been reported byBrazilian Ministry of Health. The mean maternal age was 31.5 (range 20-43) years. Onset of symptoms was reported during pregnancy for 12 cases (60.0%), in the postpartum period for 3 cases (15.0%), during CS for 1 case (5.0%). The data was missing in the remaining 4 cases. (20.0%). In most cases, death occurred in the postpartum period (16/20.-.80.0%). In 3 cases, death occurred in the first half of pregnancy at 13 (2/20.-.10.0%) and 22 (1/20.-.5.0%) weeks. There were 9 pregnant women (45.0%) with no risk factor or no reported comorbidity, 9 had at least one comorbidity or risk factor, and 2 had 2 comorbidities or risk factors. Asthma was found in 5 out of 11 cases with comorbidity (45.5%).[5]

Maternal deaths are reported because of

- Home delivery due to fear of getting COVID-19 infection at hospital
- Refusal of admission of a pregnant woman with labour pain
- During shifting from one hospital to another because of Covid and Non-Covid designation and non-availability of beds in the hospitals.

Patient profile of those who died was seen to have the following features:

- Age > 45 years
- Obesity
- H/O Severe anaemia, Asthma and Other co-morbidities
- Uncontrolled Highgrade fever
- Tachypnoea (>30/min),
- Hypoxia (SpO2 < 93%)
- Imaging showing > 50% lung involvement
- N/L Ratio > 3.13
- Increased IL-6

- Increased D-Dimer
- Increased S. Ferritin

II. Abortions and FP:

As the pandemic spread, many countries implemented tough lockdowns and travel restrictions in a bid to slow transmission. Many private clinics had shut down because of transportrestrictions, provider unavailability, unavailability of staff, less number of patients and a lack of PPE kits. Disruption in supply chain of MA drugs at both chemist outlets and facilities. Although numerous countries have now eased restrictions, the effects on women's health is evident.(6)

The west Africa Ebola virus disease outbreak, had showed that the biggest threat to women's and girls' lives was not the virus itself, but the shutdown of routine health services and fear of infection- that prevented them from going to open health facilities. (6)

UNFPA predicts there could be up to 7 million unintended pregnancies worldwide because of the crisis, with potentially thousands of deaths from unsafe abortion and complicated birthsdue to inadequate access to emergency care.(6)

UNICEF has estimated that in the nine months span dating from when COVID-19 was declared a pandemic, the countries with the highest numbers of forecast births are expected to be

India (20.1 million),
China (13.5 million),
Nigeria (6.4 million),
Pakistan (5 million) and
Indonesia (4 million),

PFI said in its paper, this could result into thousands of unintended pregnancies in each of the 14 countries in Asia- Pacific, and a higher risk of adverse health outcomes for millions of women. The best-case scenario, may be a 20% decline in use of the FP and abortion services. That would lead to 25,493 additional maternal deaths this year. The worst-case scenario – a 50% decline in use of services – would produce 68,422 additional deaths. Of these additional maternal deaths, a considerable proportion would be attributable to reduced access to contraceptive services. (7)

Similarly, Marie Stopes International (MSI), which works in 37 countries, predicts that the closure of their services would result in up to 9·5 million vulnerable women and girls losing access to contraception and safe abortion services in 2020 which could result in nearly 2·7 million unsafe abortions & 11000 pregnancy relateddeaths. (6)

The Foundation for Reproductive Health Services India estimates that lockdowns could lead to an additional 2·3 million unintended pregnancies and over 800000 unsafe abortions, which is the 3rd leading cause of maternal deaths in India. (6)

Almost 3/4th of abortions in India are medical abortions, up to 7 weeks of pregnancy. Ipas has estimated that in India, in usual times, 3.9 million abortions would have taken place in the three-month period of lockdown. Of these, access to 1.85 million abortions or 47% is likely to be compromised due to a combination of factors impacting the health system.

Of the total 1.85 million abortions that are likely to be compromised, nearly 1.5 million or 80% can be

attributed to decreased sales of MA drugs from chemist outlets and 20% can be attributed to reduced access to health facilities. [8]

Implications [8]:
This loss of access to abortion services will result in five possible scenarios:

- Women are able to access abortion, but little delayed.
- Women have to go for surgical abortion instead of their choice of Medical abortion.
- More women have requirement for 2nd trimester abortions instead of 1st trimester.
- If pregnancy crosses 20 weeks – Continuation of unintended unwanted pregnancy.
- Women may resort to unsafe abortions.

This situation adds additional responsibilities on the health system to offer remedial safe options to these women.

Actions taken:
In Australia, the Government expanded telehealth services. Telehealth consultations for early medical abortion have increased by 25% since the pandemic began.
In South Africa, where tele-health services are in place for remote consultations including the dispensing of medical abortion pills. In Ethiopia, the government has approved a pilot scheme for nurses to provide medical abortion in homes in Addis Ababa. In Nepal, changes in national guidelines stipulate that medical abortionscan be delivered outside of health-care facilities. In India, the government has issued telemedicine guidelines that do not ruleout medical abortion. It is imperative to gear up the health system to ensure it can meet the evolving needs of women.
FOGSI published a short-term advisory on 27th March tocontinue essential, time- sensitive health services of Sexual and Reproductive health (SRH). GOI also published an advisory on 13th April, to continue essential services of SRH. The UN Secretary-General has issued a call for continued delivery of sexual and reproductive health services such as access to contraceptiveswithout prescription during the COVID-19 crisis. In March, WHO issued a guidance with an advisory to prioritize services related to reproductive health.

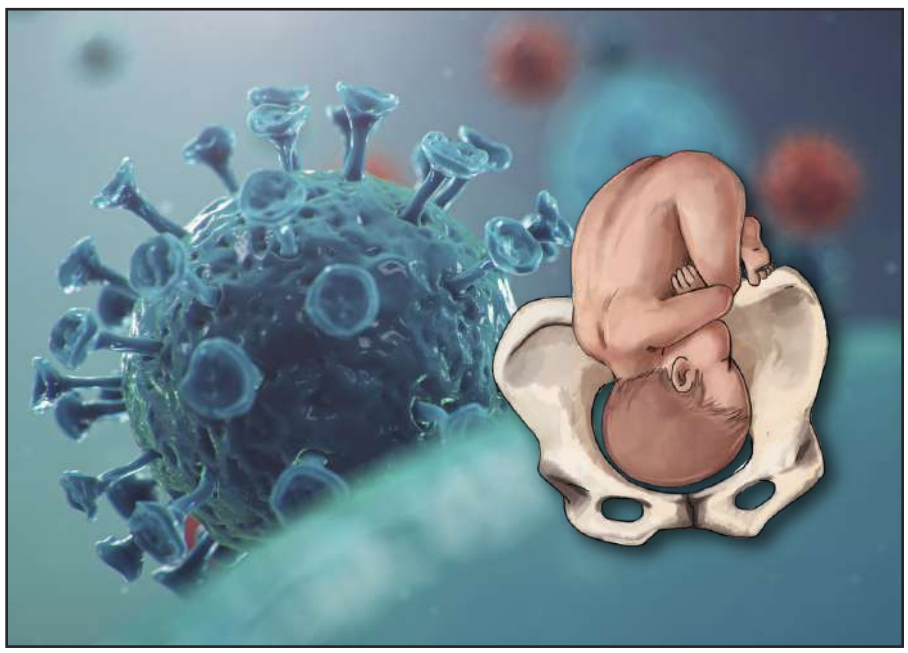
III. Antenatal and Intranatal care:

A. LSCS: In initial reports of pregnancy outcomes from Wuhan China for 118 women diagnosed with COVID-19 over 3.5 months, the authors reported that 93% of women underwent CS. A recent systematic review from Bologna, Italy by *Della Gatta et al.*[9] found that of the 51 women diagnosed with COVID-19, 46 (90.2%) women underwent CS.
In a New York study [10], From March 8, 2020 to April 20, 2020, a total of 1952 pregnant women delivered. Of all the pregnant women analyzed, the median age was 19 years (range, 13–55); 131 of 1952 (6.7%) had been infected with SARS-CoV2 in the third trimester. Of those pregnant women who tested positive for SARS-CoV2, 90 of 131 (68.7%) had term delivery, 41 of 131 (31.3%) had pre-term delivery, and there were no neonatal

deaths. In NYCH+H, only 31.3% of SARS-CoV2 positive women underwent CS, a rate which was the average rate of 31% from previous years. At the start of the pandemic, NYCH+H offered testing to symptomatic patients, then started universal testing by the 2nd week of April. Despiteadoption of universal testing, CS rates did not increase.
In a prospective cohort study of 427 pregnant women hospitalized with confirmed COVID-19 in the UK, 27% delivered preterm and 59% delivered by CS. (11)
In a prospective cohort of 241 pregnant women hospitalized with confirmed COVID-19 in New York City, the singleton preterm birth rate was 15 % and CS was the mode of delivery for 52% of those with severe and 92% of those with critical disease. This emphasize that these data reflect a range of disease severity. (12)

B. Preterm delivery:
In a study that specifically reported outcome by disease severity, 9 of 44 women with severe disease and 13 of the 20 women with critical disease were delivered because of the maternal status while only three deliveries were for fetal status. Birth was preterm in 9 % of women with severe disease & 75 % of those with critical disease.(12)

C. Still Birth:
In a prospective cohort in the UK, the stillbirth rate among infected women was almost three times the national rate (11.5 versus 4.1 per 1000 total births), although these results are negatively skewed because severely ill women often delivered while less severelyill patients with ongoing pregnancies were not counted. Over 95 percent of newborns have been in good condition at birth; neonatal complications have largely been related to preterm birth and toadverse uterine environments resulting from critical maternaldisease. In this study, stillbirths have been higher during the pandemic than prior (9.31 per 1000 births vs 2.38 per 1000 births, p=0.01) though none of mothers were known be infected withSARSCoV2 (13)



Does COVID-19 Cause Stillbirth? (11)
An increase in stillbirths during the pandemic was noted in alarge British hospital, London hospital, but none occurred among women with documented COVID-19.
Investigators assessed rates of stillbirth and preterm deliveryamong 1681 births during the 4 months immediately before February 1, 2020, (prepandemic) compared with 1718 births from February 1 to June 14, 2020, (pandemic). Demographic characteristics in both groups were similar. Stillbirth rates were 1.2% (prepandemic) versus 7% (pandemic; P=0.01).
In this study, all women with stillbirths were asymptomatic. None of the stillbirths occurred in women with COVID-19. The reasons for the large difference in stillbirth incidence after the pandemic's onset remain unclear but may include fewer prenatal visits because of hesitance to visit health care facilities. More data from diverse geographic areas will be more useful.

Vertical Transmission:

The likelihood of newborns acquiring SARS-CoV-2 from infected mothers has raised concerns among families and clinicians worldwide. According to Systematic Reviews and Meta-Analyses, until 23 May 2020, an early-onset neonatal infection was defined as newborns with a positive RT-PCR test within 48 hours of life. Seventeen studies were included, 402 COVID-19-positive mothers delivered 405 newborns, of which 330 newborns underwent early RT-PCR tests. Nine of 330 newborns tested positive for SARS-CoV-2. The average pooled incidence of vertical transmission was 16 per 1000 newborns. Current evidence shows that the risk of vertical transmission of SARS-CoV-2 is low. (14)

In a systematic review of infants born to 936 COVID-19-infected mothers, neonatal viral RNA testing was positive in 27/936 (2.9 percent) nasopharyngeal samples taken within 48 hours of birth, 1/34 cord blood samples, and 2/26 placental samples; in addition. SARS-CoV-2 cell entry is thought to depend on the angiotensin-converting enzyme 2 receptor and serine protease TMPRSS2, which are minimally co-expressed in the placenta. This may account for the infrequent occurrence of placental SARS-CoV-2 infection and fetal transmission.

Most neonatal infections are thought to result from respiratory droplets when neonates are exposed after delivery to mothers or other caregivers with SARS-CoV-2 infection. (15)

D. Vaccinations

A Situational analysis of 670 private paediatric and obstetric facilities in providing services during COVID-19 pandemic in Gujarat, was conducted by FOGSI, IAP and UNICEF. They studied the vaccination services that were being provided across the state during and after lockdown. Half of the facilities

continued routine vaccination services. Almost a tenth (11.3%) of the facilities had suspended the vaccination services, to be resumed later.
The drop in vaccination was observed to be of greater proportionamong obstetricians (18%) as compared to the pediatricians (6.4%). Vaccination was being carried as per schedule in 57.8 % of the facilities. Turn out of beneficiaries was also poor where clinics remained open due to lockdown measures and fears amongwomen.

IV. STD:
The disruption in global supply chains for contraception couldresult in more sexually transmitted infections, including HIV. Natalia Kanem, executive director of the UN population fund, (6) said.
"The risk of sexually transmitted infections, in particular HIV, going in the wrong direction could be catastrophic."

V. Gynaecological Surgeries:

There is a consensus among all national and international surgical societies that all elective surgeries are to be avoided. Onlyemergency life threatening, & selected semi emergency cases should be posted for surgery in order to utilize the staff & resources in a more efficient way. This also protects patients & the frontline HCW from unnecessary viral exposure. Whenever possible, a non-operative management is considered. Alternate management & route of surgery can be considered when possible.

Risks during surgeries:
- The risk of transmission is hugely increased with aerosol generating procedures (AGPs) like laryngoscopy, bronchoscopy and endoscopy.
- There is theoretical possibility of generation of aerosols contaminated with COVID-19 from leaked CO2 and smokegeneration after energy device use.
- Since viral load is very high in respiratory secretions, intubation and extubation poses the maxi mum risk.
- Most OT have positive pressure ventilation which makes the spread of aerosols faster
- The EAES, IAGE in India have advised for RT-PCR test in every patient before surgery.

All these risk and precautions lead to postponing of gynaecological surgeries and changing of the preferred route of surgeries. Women continue to suffer with treatable problems for a longer time.

While dealing with the crisis of COVID-19, we cannot ignore patients with gynecologic emergencies who experience serious consequences. For example, tubal pregnancy, rupture of ovarian pregnancy, cesarean scar pregnancy, spontaneous rupture of ovarian cyst, ovarian tumor pedicle torsion, and trophoblastic tumor rupture cause life-threatening bleeding. The possibility that they might be infected with SARS-CoV-2 cannot be excluded immediately as many countries do not have rapid detection kits for COVID, thus universal precautions is a must.

VI. Psychiatric Issues

A. Domestic Violence:

Violence against women is increasing as it combines with economic and social stresses. [6]
Crowded homes, substance abuse, limited access to services and reduced peer support are exacerbating these conditions. Before the pandemic, it was estimated that 1 in 3 women experiences violence during their lifetimes. Many of these women are now trapped in homes with their abusers. While it is too early for comprehensive data, there are reports of increased violence against women, of upwards of 25% in countries with reporting systems.

In some countries reported cases have doubled. A survey conducted in New South Wales, Australia, revealed that 40 % of frontline workers have reported increased requests for help by survivors during the outbreak. In Canada, the government's COVID-19 response package includes $50 million CAD to support shelters for women facing sexual & other forms of violence. In Australia $150m AUD was earmarked for family violence response. In Mexico a law is being debated to transfer 405 million Mexican pesos to the National Network of Shelters. Domestic violence shelters are deemed essential services and must remain open during the lockdown.
In Antigua and Barbuda, mobile service providers are providing free calls to helplines.
In Spain, instant messaging offers an online chat room that provides immediate psychological support to survivors of violence. In Argentina, pharmacies have been declared safe spaces for victims of abuse to report. In France, grocery stores are housing pop-up-services and 20,000 hotel rooms have been made available to women needing shelter from abusive situations. In Colombia, the Government has guaranteed access to virtual gender-based violence services, including legal & psychosocial advice, police and justice services, including hearings.

B. Gender-based violence:
Kanem [6] added that she was particularly concerned about "the skyrocketing of gender based violence", which she said was a "pandemic within a pandemic. There is also growing anxiety about the increase in gender-based violence, a dramatic surge in cases of violence against girls and women. In Colombia, reports of gender-based violence during lockdown increased by 175% compared with the same period last year, according to Plan International. Gender-based violence has distinguished itself during the pandemic because of the restrictions of contact & movement and people being trapped in abusive situations.

C. Mental Health Crisis:
Physical distancing and stay-at-home measures have had larger implications for women in every sphere of their lives. There has been an exponential increase in:

- Unpaid work with school closures,
- Burden of increased household responsibilities & heightened care needs of family members,
- Single-parent families are facing significant difficulty in supporting themselves,
- Increase in women's vulnerability to domestic violence and partner abuse.
- Economic stress during the outbreak expose them to increased risk of exploitation, violence and abuse.
- Diminished community support.
- Disconnection from social networks & inability to seek temporary refuge outside.

Women are experiencing chronic distress and experiencing various mental health concerns, including depression, anxiety & trauma. Symptoms may include negative self-perception, persistent low /erratic mood, inability to experience pleasure, difficulty with attention/ memory, changes in appetite and sleep, fatigue, bodily pains and thoughts of self-harm and suicide.

Strategies:
Increase awareness and advocacy campaignsWomen helpline number 24 x7 Designate domestic violence shelters as essential services. Designate safe spaces to report abuse (example grocery stores, pharmacies etc), Move services online and create social networks for survivors, Prioritize sexual and reproductive healthcare services, Psychological counselling, support and treatment, Provide Legal aid.

CONCLUSION:
COVID-19 may not be as harmful as not getting healthcare due to fear of getting it. We need to remove the fear of getting covid-19 to prevent women from developing healthcare crises due to not reaching healthcare services. Maternity care is an essential healthcare. Accessibility of good and in-time maternity care is a right of every pregnant women irrespective of covid-19 health crisis. We must consider all pregnant women at risk and provide vaccination, sufficient ANC, intranatal, postpartum and neonatal care to prevent maternal and fetal mortality and morbidity. We must also provide safe and effective care to already affected women. For those women who continue to avoid health systems for fear of COVID-19, the role of the midwife, the role of the community health worker, the role of telemedicine, the ability of someone to receive care at their places where they reside is absolutely essential. Telehealth/ Telemedicine services can improve access. It removes fear of infection and can ease pressure on struggling health systems. Antenatal, delivery, and postnatal care may be the only opportunities women have to access contraception. LARC such as PPIUCD are more effective and reduce the trips.
Self-care family planning methods should be promoted and supplied. We need to anticipate supply chain needs & assure the supply. On a larger scale, we require to recognize the need to include

women in decision making for outbreak preparedness and response for COVID-19.
Most importantly, the global infection rate of medical staff has reached a critical level. Health care workers must be provided adequate PPE, testing & care.

"The Unknown is not what to be afraid of, it's only when the unknown becomes known that one can decide whether to be afraid or not"—Markus Peterson.

Until then considering the above discussion, it is wise to use adequate preventive measures.

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The Newsletter ♦ Issue 1, April 2021

Infertility Management in COVID Era

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COVID first appeared in Wuhan in December 2019. Spreading like a wild fire, it started involving almost all countries of the world.

Over the course of one year, COVID 19 infection has spread to over 109 million cases with over 2.2 million deaths reported worldwide by Feb 2021.

Vaccine brings new hope in the that pandemic can be finally contained.

Being densely populated, India is one of the worst affected countries. After the initial COVID shock, now there is a second wave and the situation is grim. Vaccination is being done on mass basis and India is leading the world as far as vaccination is concerned. Yet, the danger is still looming large.

INFERTILITY & COVID

Reproductive medicine consultants and patients taking fertility treatment are battling an unprecedented viral pandemic. Infertility is a disease and we cannot put to stay the treatment for long.

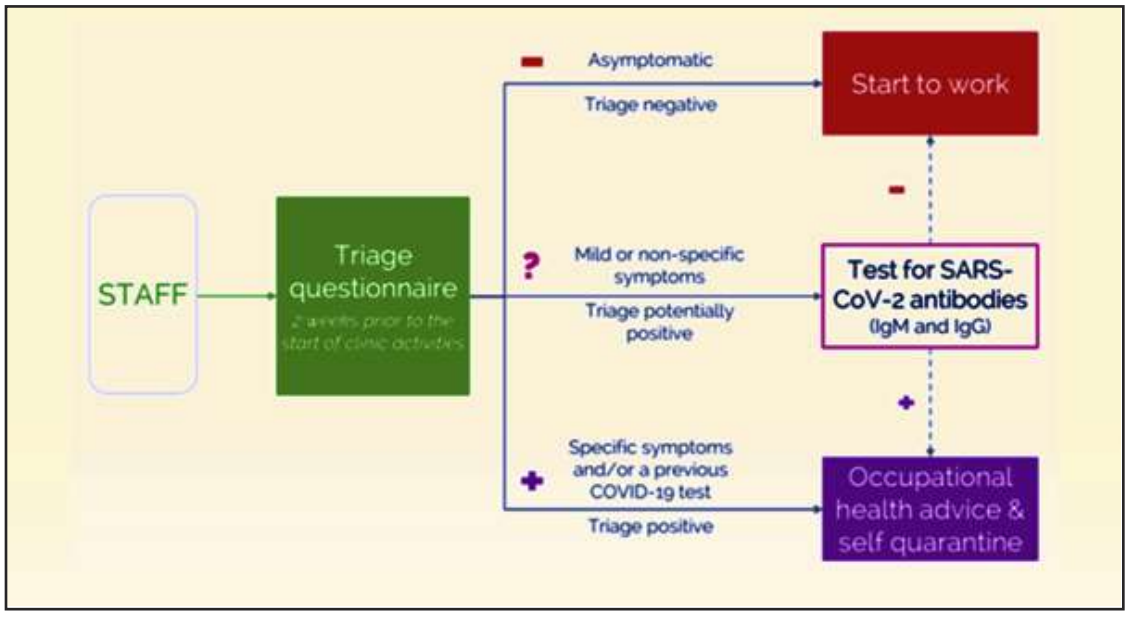
GOALS

Ensure practices with recommendations that guard the health and safety of our patients, staff and the society in general.

- Recognize our social responsibility as an organization.
- To comply with state and national public health recommendations.
- Resumption and continuation of services

Staff triage- we must ensure the safety of staff. Hence staff triage is important. This includes sending questionnaire to staff two weeks before starting treatment. ESHRE provides triage questionnaire which can be used for the staff triage. This includes questions regarding sickness in last 15 days including fever, cough or diarrhea etc. contact tracing and travel history and if COVID positive, then recovery certificate is important.

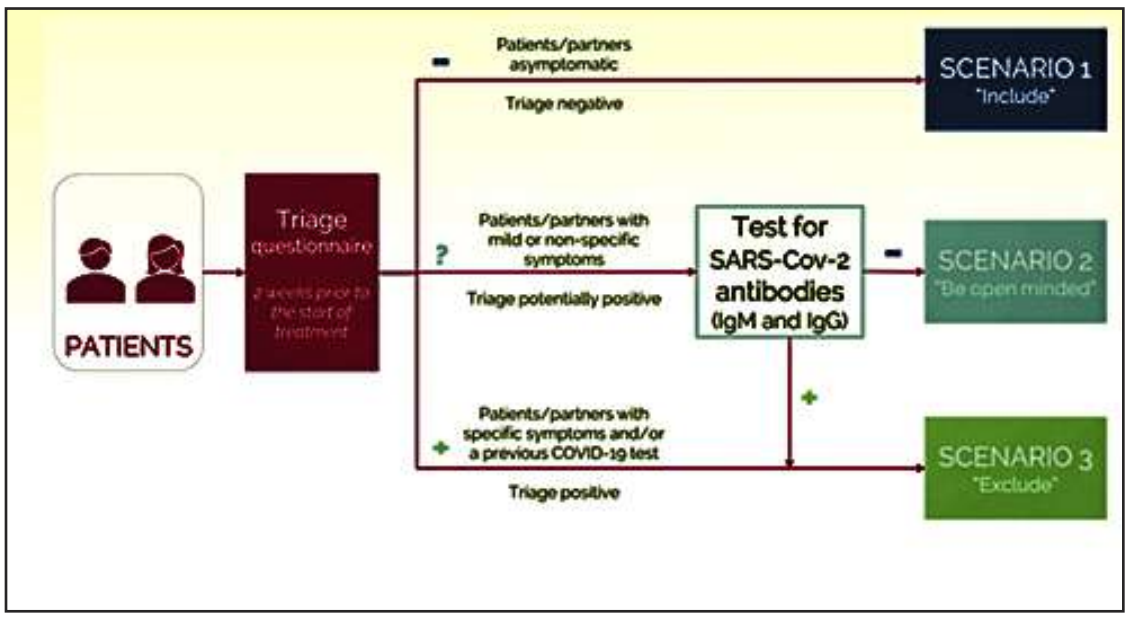
- Divide staff into mini teams with minimum interaction between the teams.
- Advice self-quarantine if positive and encourage testing of the staff. (Fig 1)



Patient triage- Signature of patients with instructions to avoid unnecessary exposure & to respect code of conduct. Start preparations 15 days before actual IVF treatment. Give ART triage questionnaire to the patients asking about history of fever, cough, loss of smell, diarrhea. History of contact with COVID positive patients and travel history are significant.

If diagnosed with COVID then patient must present with recovery certificate from the treating physician.

Take an informed consent of the patient after discussing about the possibility of getting infection during treatment and also about postponing the treatment in case of recent infections. (Fig 2)



Consent and medicolegal implications - ART procedures have been deemed to be elective and hence recommencing IVF, IUI or ovulation induction will need predetermined counselling, agreement and thorough discussion. In addition to routine consent, consent with respect to contracting COVID infection and the need for discontinuation of treatment for the same is essential. All patients should be offered choice to proceed with or postpone the treatment and both preferences should be clearly documented. Patients must be explained about the risk of infection in

pregnancy and its effect on offspring. Patients must sign code of conduct and adhere to it. (Fig 3)

MODEL CONSENT

Name of the fertility clinic

Doctor's Name Date and Time

*** Declaration - ***

In the era of the COVID 19 pandemic, I have approached the fertility clinic to seek fertility treatment, knowing the implications of the said disease in the present scenario.

I have been given the choice of starting, continuing or discontinuing fertility treatment in lieu of the possibility of developing the disease in case I seek treatment and i opt to start or continue the fertility treatment

If I am an asymptomatic carrier or an undiagnosed patient with COVID19, I suspect it may endanger doctors and hospital staff; it is my responsibility to take appropriate precautions and to follow these protocols as well as the code of conduct described by them.

I have been explained that my fertility treatment could be discontinued at any stage if I develop COVID 19 during the course of my treatment and may have to go for freezing of embryos in case my ovum pickup is already done if at all I contract the disease.

I have been explained that there isn't sufficient research about the progression of COVID 19 in pregnancy in case I do get pregnant and contract the disease and its effects on the offspring are not known.

I also know that I may get infected from the hospital or from a doctor, and I will take every precaution to prevent this from happening, but I will not at all hold any doctor or hospital staff accountable if such infection occurs to me or my accompanying person.

I have explained all of the above in my own vernacular language.

Patient Sign/Thumb Impression Doctor's signature

Patient Name:
Mobile No:
Address:

Disinfection and outpatient management at the center- This includes air disinfection, surface disinfection, hand wash and toilet cleaning. Sodium hypochlorite is used for disinfection while soap and sterilium is used for hand cleaning. Use of PPE kit, protective caps ad goggles along with N 95 mask is the key to ensure that health personnel are not infected. (Fig 4)

Area	Equipment	Process	Method
Floor (Clinic area) 	Dust mop,mops No broom Detergent Hot water 1% Na hypochlorite **3 Bucket System**	Sweeping Cleaning Disinfecting	• Use 3 bucket system • Frequently change water • Start from far area of room towards door • Mop with 1% Na hypochlorite after drying • Twice a day
Ceiling Walls	Duster, Small bucket	Damp dusting	Straight line dusting Once a week/or if Case+
Mop 	Hot water Detergent 1% Na hypochlorite		Clean with all in that sequence & dry upside down
Door & knobs	Cloth Mop	Thorough washing	Detergent 1% Na hypochlorite
Chairs/Sitting area			
Spill areas (OT/Pathology area) 	1% Na hypochlorite Hot water Absorbent paper	Blood & body fluid spill care	Wear nonsterile gloves Cover spill with absorbent paper Cover spill with 1% Na hypochlorite for **10-20 min contact time** Clean & discard waste Mop with hot water & detergent
Stethoscope	Alcohol(>65%), Spirit swab	Cleaning	Cleaned before each patient
BP cuffs & covers	Detergent Hot water	Washing	Cuff- wiped with alcohol Cover-Laundering
Thermometer 	Detergent+water Alcohol rub	Cleaning	Clean with water Dry & wipe with alcohol Store in individual holder
Refrigerators	Detergent+water	Cleaning	Empty the fridge

Outpatient management is extremely important as crowding will lead to the spread of infection. Maintaining proper distance, use of compulsory mask and hand wash will help to control the infection.

Tutorials for staff – Information regarding the safety methods and proper methods to avoid contracting infection are extremely important.

Tutorials for patients- we must establish clear communication with patients about changes due to still evolving situation. This involves telecommunication or in person consultation and counselling. We must discuss about the importance of triaging, screening & testing for COVID and minimum visits to the clinic.

Telecommunication & telemedicine- telemedicine has become a new normal in COVID era. This includes calls, video calls, whats app calls, Zoom, Skype and other media platforms. Patient consent, either implied or explicit is necessary prior to teleconsultation. First step in teleconsultation is to quickly assess if emergency care is needed and to guide the patient for referral as appropriate. If no emergency, then you must do the complete assessment of he patient, including all the reports and if appropriate for management then counselling should be done followed by prescription of medicine in list A. (Fig 6)

ACTUAL MANAGEMENT OF PATIENTS DURING COVID ERA –

• Schedule appointments & procedures.
• Number of visits- restrict visits and do telecommunication whenever possible.
• Duration of visits- should be minimum with reduced waiting period.
• Stimulation protocols- should aim at minimizing the risk of OHSS
• GnRH antagonist protocol with agonist trigger is preferred to minimize the risk of hospitalization
• Freeze all policy whenever possible is preferred.
• Preventive measures such as use of antibiotics whenever required.

Operation theatre – Make SOPs for OT procedures. Special training of staff is crucial. Batch IVF and overcrowding should be avoided. Trigger should be given with sufficient time for shifting and cleaning. Limit the number of persons in OT. Trainees should not be allowed. Everyone entering OT should use PPE and patients must wear triple layer mask.

Sanitation- Routine sanitation with 70% alcohol. AHU setting should be changed with more frequency of air changes. Wear PPE 30 minutes before entering OT to reduce VOCs.
Avoid GA as far as possible and try OPU in regional anesthesia.
In case of potential COVID patients, do not start the treatment
Once diagnosed, even if in between the treatment, stop treatment. Treatment can be continued only in emergency situations like OHSS and oncology patients. Proper disinfection of lab and OT is must after the procedure in positive patients.

EMBRYOLOGY LAB –

• There are conflicting results on presence of virus in semen and follicular fluid. Ideal disinfection and the use of PPE kit in the lab is also questionable.
• Restrict entry into the lab. Ask staff members to keep mobile phones outside and clean spectacles etc with disinfectants.
• Always follow shorter shifts. Follow social distancing and frequent hand wash.
• Necessary changes in AHU with frequency of air changes increased to 15/min and outside air intake minimum 20%. Disinfection of lab with overnight use of UV light and negative ion generator. Surface cleaning with oosafe. Or embryosafe. Do not use sodium hypochlorite.
• Semen collection should be preferably home collection with minimum transport time. Con-

tainer to be left inside collection room if in the clinic with wiping of container. Place container in a paper bag and use density gradient for sperm washing.
• Freezing policy should be as per lab and Embryo transfer should be avoided in case of risk of OHSS.
• Use separate cryotanks for all post COVID cases. Use closed system for freezing.

Supply chain and disposables- Centres should work to ensure that the supply chain for all the consumables should be intact.

FAQS DURING COVID ERA

Can we try for conception during pandemic?

COVID 19 can affect any person at any time during treatment as well as pregnancy. However with proper counselling and precautions, pregnancy can be planned.

I have already started treatment for IUI in he form of injections. Can I continue treatment?

Yes, you can continue. However, this is not an emergency procedure hence if possible treatment can be postponed.

I am already under treatment for IVF. Doctor has advised me to go for freezing embryos. Should I freeze or transfer in this cycle?

Freezing of embryos is a good option as it is absolutely safe and the embryos can be thawed and transferred at any later stage.

What about laparoscopy?

Laparoscopy is an operative procedure and most of the times general anaesthesia is given. It involves risk to the patient. However, in case where laparoscopy is must, procedure can be done after pretesting for COVID and under full safety precautions.

I have conceived with fertility treatment and am having severe pain in abdomen. Should I come to the hospital?

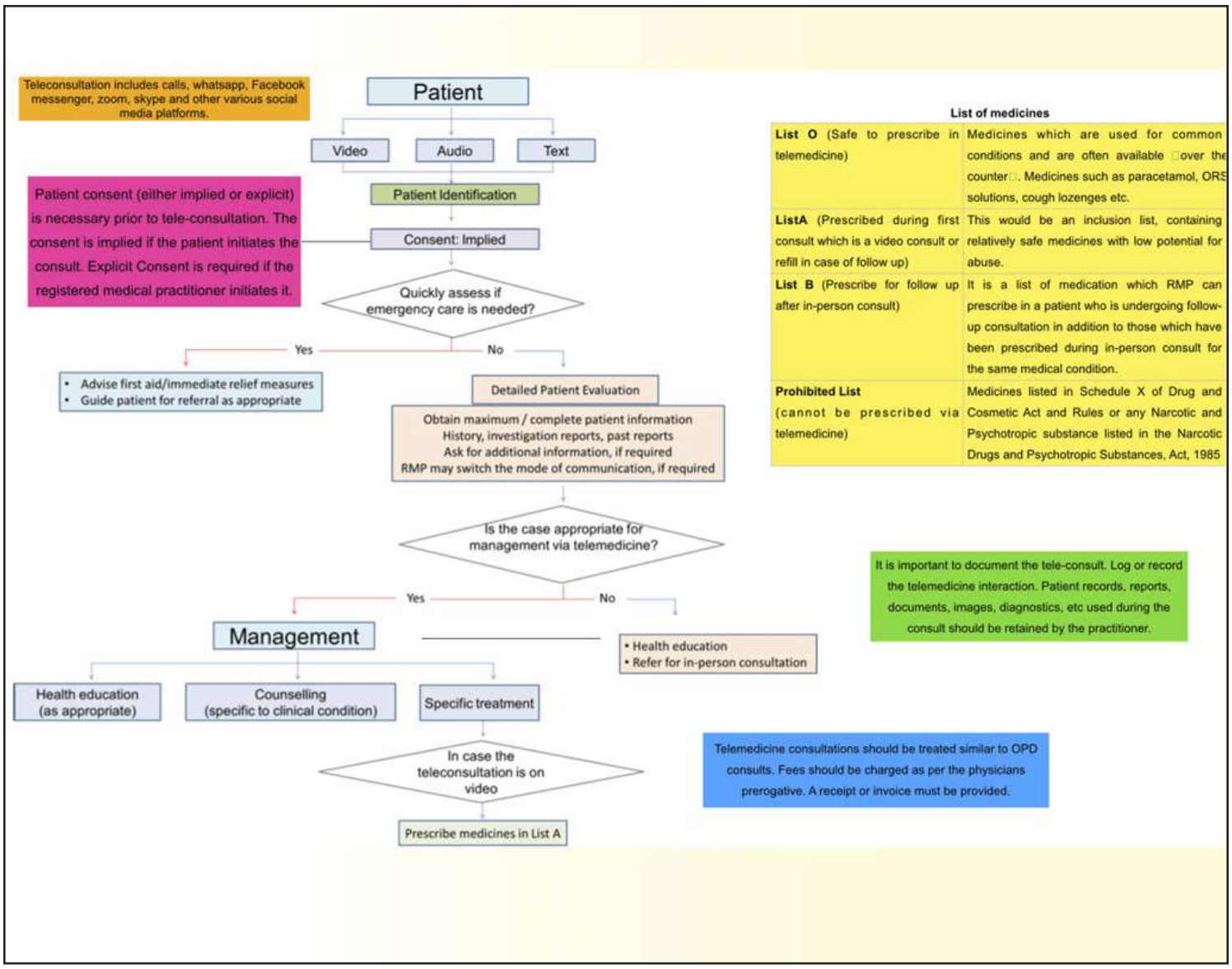
Yes, you must report hospital as soon as possible in case of emergency like pain and bleeding. Teleconsultation is for minor problems or for taking opinion about further treatment.

UPDATES –

Joint IFFS & ESHRE statement on COVID 19 vaccination for pregnant women & those considering pregnancy – Feb 2021

Women who plan to conceive but are not pregnant have following options –

• Defer pregnancy till the effect of virus transmission is substantially reduced.
• Proceed with efforts of conception and seek COVID 19 vaccine as soon as possible.
• Each choice has potential benefits & risks as data regarding vaccination in pregnancy is -safety & efficacy- has not yet emerged. Though small population of women who conceived in initial clinical trials are being closely monitored and limited amount of development and toxicity animal data offer some reassurance regarding the safety of vaccine during pregnancy. The issue of COVID 19 vaccine administration during pregnancy is the most contentious topic. In early 2021 a trend is emerging and more agencies are proposing that pregnant women be offered the vaccine when available.
• The decision to receive or decline the vaccine depends on individual risk and potential recipient's concerns regarding unknown risks of the new vaccine. Knowledge is continuing to evolve



and hence professional advice is strongly recommended.

SUMMARY

COVID is here to stay. In fact, second wave is now gripping the world. Vaccination drive is in full swing. However, vaccinating 130 crore Indian population is a mammoth task and will take time. In such situations, stopping fertility treatment is not an answer. But we must follow special precautions while treating fertility patients. Every center should develop COVID specific documentation to reflect change in their practice. SOPs must be updated. We need to change our working pattern and only thing which is constant is CHANGE.

Inputs from – ESHRE guidelines on ART & COVID 19, CHANGE- AMOGS & MSR booklet on ART & COVID, FOGSI guidelines for COVID-19 in pregnancy, ASRM suggestions on managing patients who are undergoing infertility therapy, Guidelines by British Fertility Society, UK

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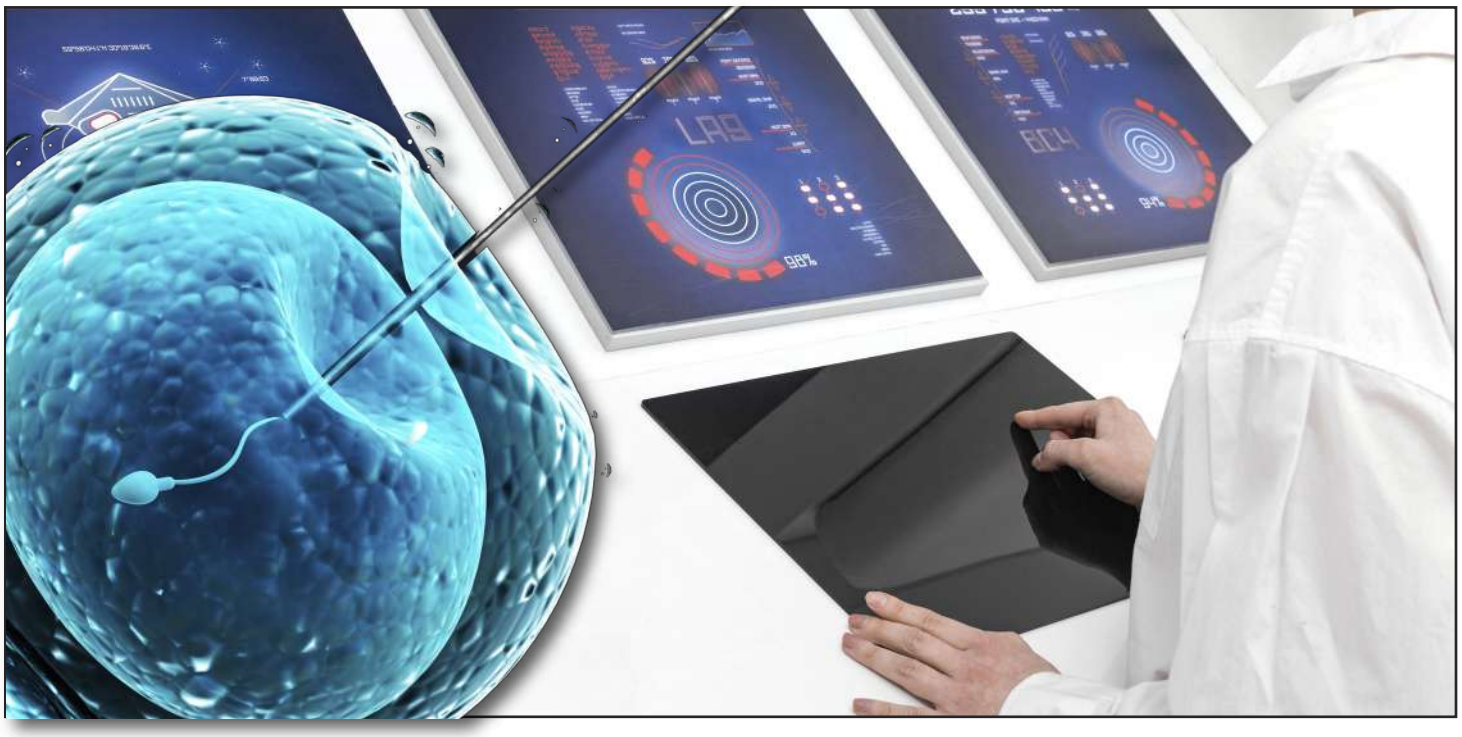
The Newsletter ♦ Issue 1, April 2021

Dr Sunita Tandulwadkar
President, POGS

Artificial Intelligence in Infertility



Already, AI is powering a variety of consumer products, from the Apple voice assistant Siri to product recommendations on Amazon, face recognition on Facebook, and the burgeoning industry of self-driving cars.

Medicine, like other disciplines, has increasingly embraced AI and other digital-age technologies. Recently, the AI virtual doctor ''Babylon'' showed superior results in diagnosing diseases compared to physicians at the Royal College in London.

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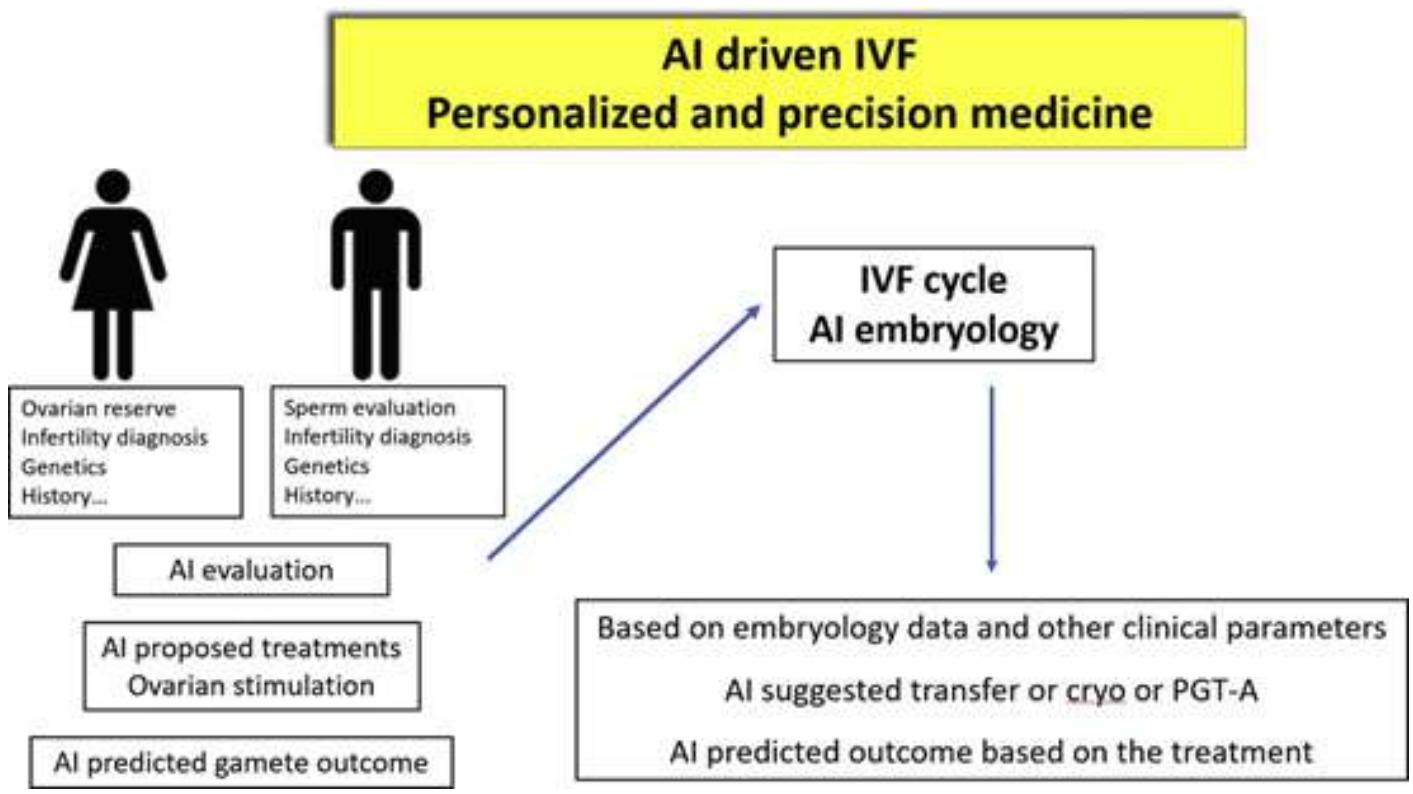

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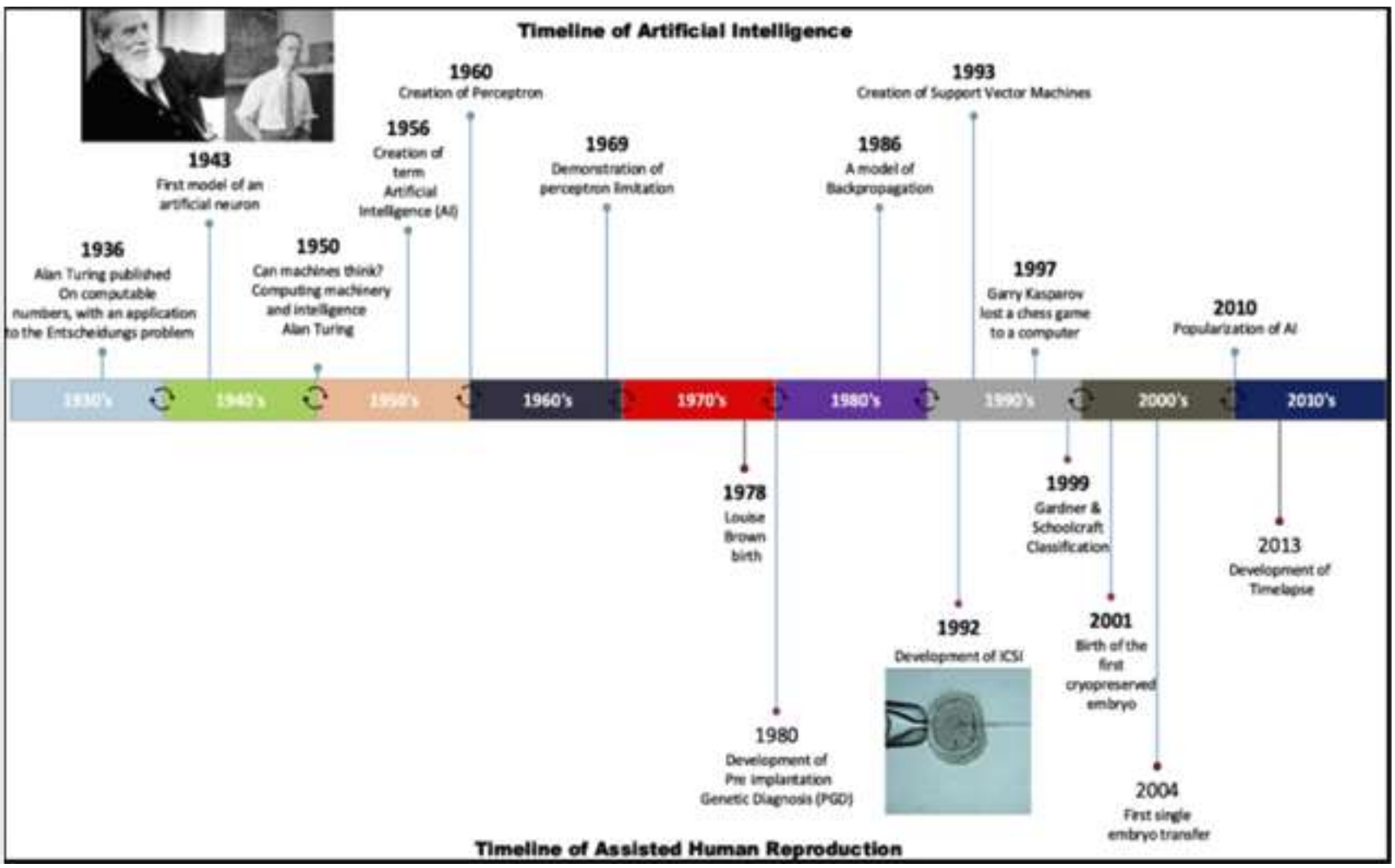
A lot of tools are being developed around the world to use artificial intelligence and machine learning to predict embryo quality. These are extremely helpful in increasing the success rate per embryo transfer.
AI may be useful in analysing vast data sets of patient characteristics with diverse infertility treatment outcomes—all with the goal of providing individualized patient-centred treatment. It may also have potential in third-party reproduction, e.g., it may improve our ability to match egg donors with recipients based on a variety of attributes including facial similarity.

Why does reproductive medicine require AI?
The quality of embryos is the most critical factor for the success of IVF, but there is still a lack in the methods of judging the quality of the eggs, the sperm and the embryos accurately. Embryo selection methods using a single parameter or algorithm have not been identified. Therefore, it is difficult to predict the probability of a successful pregnancy for each patient and to fully understand the cause of each failure. AI-based methods in reproductive medicine may become a solution to current dilemmas.



AI APPLICATIONS IN REPRODUCTIVE MEDICINE

Evaluation and selection of oocytes

The overall success of reproduction, either spontaneously or after ART, is highly dependent upon the quality of oocytes. Currently, the pregnancy rate per retrieved oocyte is estimated at 4.5%. The ideal method of oocyte selection would be non-invasive, inexpensive, and capable of being incorporated into the embryology workflow with minimal impact. ART still has room for improvement, such as the technologies for a more reliable prediction of oocyte quality and more accurate quantification of gamete developmental competence. Besides, applying AI methods to the evaluation of human oocytes that utilizes time-lapse or assesses gene expression through transcriptomics or genomics may have a good development prospect and further benefit ARTs.

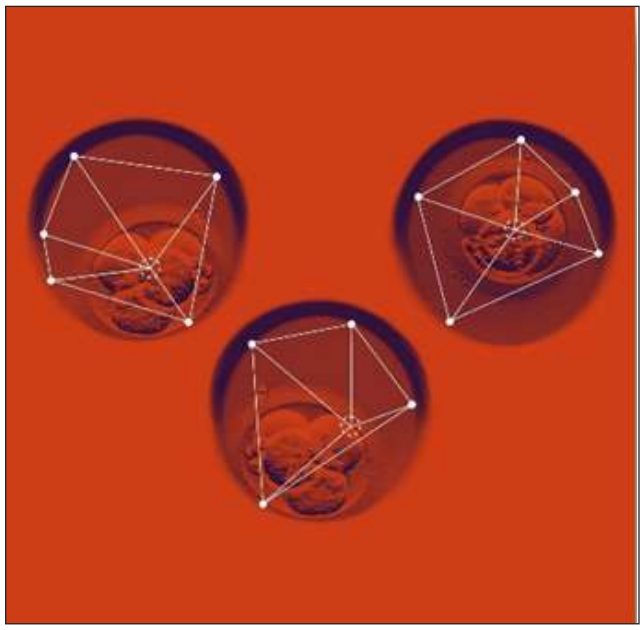
Sperm selection and semen analysis

Semen analysis is the first step in the evaluation of infertile couples. Sperm morphology reflects kinds of anomalies in human semen samples.
Artificial intelligence has also been applied in DNA integrity as well as for sperm selection. A popular sperm analysis method called the CASA integrated a low-level AI.

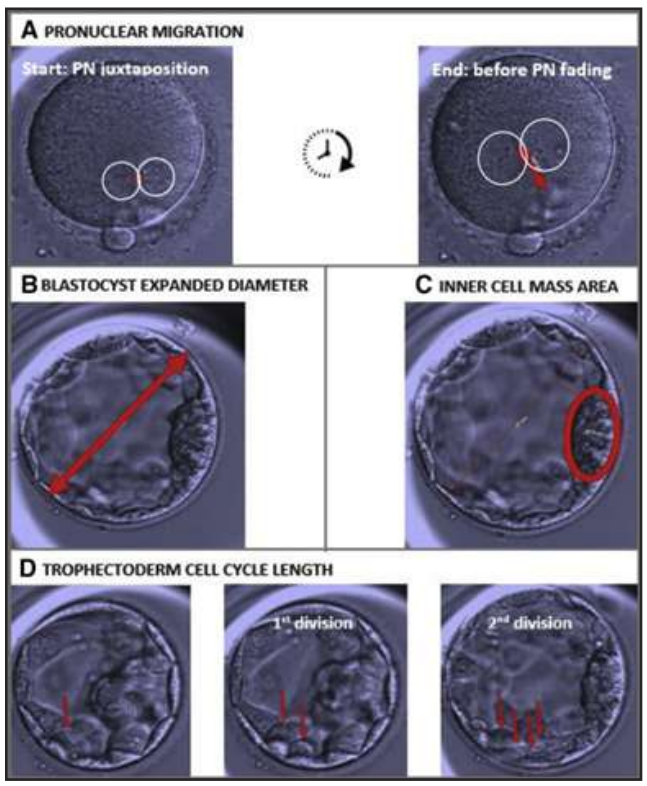
Currently, the computer-aided sperm analysis (CASA) systems are used for research and routine analysis in human or animal. The system can report the motile percentage and kinematic parameters and identify the subpopulations of sperm cells. Due to the inherent lack of objectivity and the difficulty in the manual evaluation of the sperm morphology and the high degree of variation between laboratories, the automatic methods based on image analysis should be developed to gain more objective and precise results.
A major target for clinical AI application is the identification of sperm cells in microsurgical testicular samples of patients with severe male factor infertility, as identifying these ‘‘precious’’ cells typically requires several hours by embryologists. Developing such a system will require a massive number of sperm images for machine training to correctly differentiate sperm from other tissue cells.
The application of AI technologies has gone even further with the development of smartphone-based applications for semen analysis as well as sperm viability and DNA integrity.

Embryo selection

Precise assessment of embryo viability is a prime factor in maximizing pregnancy rate and optimizing



of IVF treatments. In most cases, embryologists select the embryos or oocytes by a non-invasive examination based on visual observation focused on morphology and dynamic development during the blastocyst stage.
The evaluation of embryos is subjective and thus are subject to inter- and intra-observer variation considering the existence of embryo scoring systems and the experience and expertise of the embryologists for the final success rate.
The current focus of AI applications in embryology can be categorized into the following groups: automatic annotation of embryo development (cell stages and cell cycles), embryo grading (mostly in the BL stage), and embryo selection for implantation.
The introduction of automatic morphological analyses of embryos or blastocysts in conjunction with AI is an attractive possibility. *Santos Filho et al. (2012)* proposed a method for image segmentation and classification of human blastocyst images with semi-automatic grading.



During TLM incubation, embryologists can annotate the precise time of each cleavage event.
Automatic annotation systems must comply with the following requirements: they should be fast, accurate, reproducible, and specific (i.e., able to distinguish a cell from a fragment), and they should recognize abnormal cellular developments (i.e., direct unequal cleavages). Additionally, they should include the ability to distinguish morphological features of the embryo (uneven size, vacuoles, granularity, etc.) as well as nuclear abnormalities (multinuclear blastomeres). The ideal system would require that the weight (importance) of each characteristic be properly assigned and calculated. There are different computerized image systems available, such as cell shape extractors, segmentation, cell tracking, and feature extraction, that can be combined with AI systems (mostly with convolutional neural network [CNN] methods).
Most advances in AI embryology have been made in embryo grading, specifically on BLs. The BL stage is particularly suited for grading, as it has been shown to have a significant association with implantation. Unfortunately, there are many grading systems. Even with the universally used ''Gardner'' system, variations and deviations have been quite common. The biggest problem is that this grading system uses a combination of numbers and letters rather than numerical values.

Embryo Selection to Improve Implantation
Selecting the best (most competent) single embryo for transfer is the quintessential goal of all IVF embryologists. Typically, contemporary embryo selection methods rely on morphological assessment, a method that has been reported to be associated with high inter operator variability and inconsistency. Artificial intelligence represents one of the most promising, objective tools for embryo

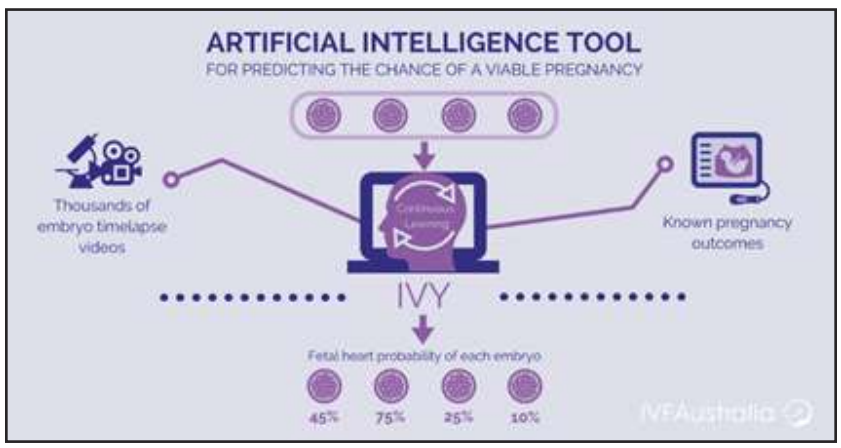
selection and pregnancy prediction. Indeed, some groups as well as emerging AI companies have been focused on applying embryo assessment to predict the likelihood of LB.
Several statistical prediction models have been generated based on morpho kinetic parameters from embryonic TLM data. Morpho kinetic parameters of the embryo are correlated with implantation potential and can be used as predictors of embryo quality. Using TLM parameters, these predictive models, based on a combination of statistical analyses and AI methods, can be used for embryo implantation prediction at the cleavage as well as the BL stages. Another way to assess implantation potential is by evaluating embryo images or videos.
To validate these methodologies, it will be important to use vastly diverse data sets from multiple laboratories for AI training. As importantly, the data analysed should include other clinical parameters, such as age of patient, ovarian reserve, stimulation protocols used, and ovarian response, among others, in an effort to incorporate as many factors as are associated with successful IVF treatment.

AI in the Era of Preimplantation Genetic Testing

Preimplantation genetic testing for aneuploidy (PGT-A) to select euploid embryos for transfer is being increasingly utilized throughout the world. Methodologically, the interpretation of results and reporting relies on human analysis, which can be subjective. Recently, AI was applied to PGT-A (Cooper Surgical PGT ai; https://www.coopergenomics.com) in the form of a machine learning approach for interpretation and reporting of next-generation sequencing results (images) to eliminate operator subjectivity.

PLOIDY PREDICTION

It is widely accepted that embryo biopsy techniques are invasive and can impair embryo development and integrity. Thus, the major focus of contemporary IVF has been the development of techniques that predict ploidy noninvasively. One such screening technique endeavours to perform cell-free DNA analysis on spent embryo culture media.
Other methods, such as AI-based analysis to predict embryo ploidy, are currently being explored. For example, previous studies have shown an association of embryo morphology, BL grading, and BL scores with embryo ploidy, whereby high-quality embryos had a higher likelihood of being euploid. Likewise, TLM studies have described an association between embryo morpho kinetics and embryo ploidy. However, it is important to note that embryo development is probably not affected by single aneuploidies, making these aberrations difficult to predict by image analysis. In contrast, AI appears to identify embryos harbouring complex or chaotic aneuploidies more easily.



Ovary & Uterus

One of the most successful applications of AI in medicine is in imaging, including US. A pivotal step in assessing female factor infertility is the measurement of ovarian reserve by antral follicle count. This manual assessment is known to be associated with high intra- and inter-operator variability. Artificial intelligence–based systems are ideally suited to address this issue by using either two- or three-dimensional images; this system lends itself to AI assessment, which is objective, consistent, and rapid.
The development of such a system would require large training data sets that must teach the computer to differentiate between a follicle and a blood vessel. This system could be applied in AI-as-

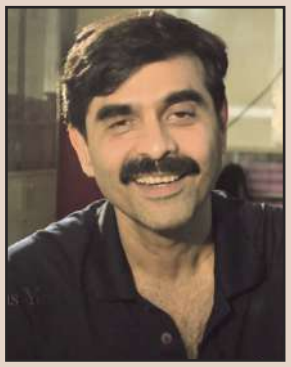
sisted antral follicle count measurements, which are necessary to individualize gonadotropin stimulation protocols.
Another potential AI application in the infertility workup is the evaluation of the endometrium and contour of the uterus. An AI system designed to analyse uterine US images must have the capability to recognize the uterine wall and distinguish it from surrounding tissue.
Artificial intelligence could also be used to identify uterine anomalies and assess endometrial defects. Additionally, AI assessment of the endometrium could be coupled with implantation data to automate endometrial receptivity analysis.

Future directions of AI in Reproductive medicine

AI research has yielded tremendous benefits from the development of massive open datasets that provide high-quality training data.
Significant trends in big data analytics are expected to create high-quality evidence. Ongoing efforts to develop such datasets are likely to present enormous opportunities for further advances in reproductive medicine. AI-assisted diagnosis is the most representative and important application, which can assist doctors in solving complex medical problems and serve as an auxiliary tool for clinical practice.
The IVF laboratory mechanization is also a significant prospect for development. Integrating the new technologies for the non-subjective sperm and embryo selection, oocyte denudation by mechanical removal of cumulus cells, oocyte positioning, fertilization, embryo culture and monitoring of embryo development into an automated device can effectively improve the efficiency and effect of ART. Therefore, the development of AI will benefit more infertility couples.

CONCLUSION

Once adopted, AI's advantages may include lower error rates in performing tasks regardless of the external environment, performing labour-intensive and tedious repetitive tasks, organizing medical records, and logical machine thinking without emotional factors or physical constraints. The challenges of adopting AI include the high initial cost of deployment, the ethics of relying on a machine to replace human decision-making, and the absence of the human connection. It must be emphasized that no supercomputer should replace or substitute human compassion. These challenges are complex and will require careful thought and reflection.
We, however, believe that AI will bring a digital transformation and automatization to the field of reproductive medicine and will ultimately provide great benefits to infertile patients and to society. We envision the role of AI as a tool to serve medical practitioners, which will enhance our diagnostic abilities and increase treatment efficiency. AI will not replace reproductive medicine practitioners and embryologists, but rather will streamline their efforts with the goal of better helping their patients.



Dr Vishwas Yevale

#Social Initiative- Jal Dindi

Projects for river cleaning - People

1. जलकुंभ
2. जलमैत्री
3. जलस्वास्थ्य संस्कार शिबीर
4. जलदिंडी प्रकाशन
5. जलदिंडी ईकोटूर

“चल आज तुला तुझ्या नवीन मित्रांबरोबर खेळायला नेतो” मी माझ्या मुलाला सांगितले. खेळायला अजून दोस्त मिळणार म्हणून तो ही उत्साहाने तयार झाला. मोठेपणच्या माझ्या चौकटीतल्या नजरेबाहेर लहानपणाची चौकस नजर जग कसे वेगळे बघतेय हे जाणून घेण्यास मी ही उत्सुकच असायचो.

आम्ही नदीकाठावरच्या धक्क्यावर आलो. नौका आपली निळी शिडे फडकावत उभी होती. तिथे दुसरे कोणीच नव्हते. कोण बरे आपले नवीन मित्र हा विचार करत तो माझ्या बरोबर नावेत बसला. सुकाणूने नावेची दिशा बदलताच शिडांमध्ये हवा भरली गेली. नाठाळ घोड्यासारखी नाव पाण्यावर उधळली. शिडाच्या दोराला धरून, माझे अनुकरण करत मुलानेही आपले शरीर होडीबाहेर झोकून दिले. वाऱ्याच्या तालाबरोबर नाव लाटांना वेगाने कापायला लागली. बघता बघता नदीचा दुसरा काठ जवळ आला. काठावरच्या झाडांनी पानं सळसळून जणू टाळ्या पिटत नौकेचे स्वागतच केले. मी सुकाणू वळवून नौकेची दिशा बदलली. शीडही वाऱ्याबरोबर नावेच्या डाव्या बाजूला गेले. आम्ही दोघं शिताफीने नावेचा उजव्याबाजूला जावून बसलो आणि शिडाचा दोर पकडून अंग नावेबाहेर झोकून दिले. डोलकाठीच्या दिशेने मुलाची नजर आकाशाकडे गेली. लांब मान आणि पाय असलेले बगळे घिरट्या घालत उडत होते. मुलाकडे बघत स्मित करत मी त्याला विचारले, “ झाली का भेट आपल्या नवीन मित्रांची. आनंदाने लाटा उंचावत पाण्याने खेळायला आपले पटांगण दिले. जमिनीवरची झाडंही पानांनी टाळ्या वाजवत खेळात सामील झाली. वाऱ्याब-रोबर लपंडाव सुरु झाला आणि आपला खेळ वरून आकाश आणि पक्षी बघताहेत. “

नवीन मित्रांची ओळख पटल्याचे स्मित मुलाच्या चेहऱ्यावर पसरले.

“ शहराला पिण्याचे पाणी वर्षभर मिळावे म्हणून हा बंधारा बांधला गेला. आम्ही काही वर्षांपूर्वी ह्या पाण्यात पोहायचो” बालपणात हरवत मी त्याला सांगू लागलो. मी आठवणींत बेसावध आहे हे बघताच वाऱ्याने संधी साधली. जोरात वाहत त्याने नावेचे शीड भरले आणि नाव उलटवून आम्हाला पाण्यात पडण्यासाठी नाव एका बाजूला कलती केली. काळसर पाणी, तरंगत्या प्लास्टिकच्या पिशव्या आणि जलपर्णी, शिवाय कुबटसा वास; माणूस म्हणून जे जे मी वापरून कचरा फेकून देत होतो ते नदीत पाण्यात दिसत होते.

“ मला ह्या घाण पाण्यात पडायची भीती वाटते” मुलाने नाव धाक्याकडे नेण्यासाठी मला विनवले. कशीबशी नाव सावरत मी धक्का गाठला.

ह्या प्रसंगाने माझे ध्यान पाण्याच्या प्रदूषित अवस्थेकडे गेले. नदी आहे म्हणून तिच्या तीरावर गाव, शहर वसले, सभ्यता संस्कृती निर्माण झाली; जीवन आणि समृद्धीही नदीमुळेच. जल म्हणजे जीवन.

जर पिण्यालायक निर्मळ जल नाही राहिले तर कसली बरे संपत्ती, इस्टेट मी माझ्या भावी पिढीसाठी राखून ठेवणार होतो? जल म्हणजेच जीवन. जीवनाचाच वारसा जर भविष्यासाठी राखून ठेवला नाही तर अन्य दुसऱ्या संपत्तीला काय अर्थ. नदीचे प्रदूषण रोखण्यासाठी प्रयत्न अत्यावशकच होते तर. हा माझ्या जिवंत असण्या-नसण्याचाच प्रश्न होता. तो

मग आजचा 'मी' किंवा काही पिढ्यानंतरचा 'मी' का असेना.
शासन, प्रशासन ह्यांचा नदीप्रदूषणाबद्दलच्या गांभीर्याचा अभाव व अनास्था ओळखून आपल्याला एकट्याला काय जमेल, काय करता येईल ते करायचेय. निष्कर्षावर ह्या आलो खरा पण समस्येची व्याप्ती बघून मन कातरले. इथे वैध्यकीय शिक्षण उपयोगात आले. सुरवातीला असाध्य वाटणारी शस्त्रक्रिया एकेक पायरी उरकत, चढत पूर्ण करता येते. वाटले हे ही असाध्य दिसतेय पण प्रयन्त तर करावा. किमान जलपर्णी काढता येईल ती तर काढूया. काही नदीप्रेमी मित्रांना बरोबर घेवून सुट्टीच्या दिवसाला एका परिसराची स्वच्छता केली. खुश होवून आम्ही घरी गेलो. दुसऱ्या दिवसी परतलो तर वरची घाण प्रवाहाबरोबर वहात आली होती. आदल्या दिवसाच्या श्रमावर अक्षरशः पाणी फेरले गेले होते. नदीने शिकवले कि तिची जमिनीच्या सात-बऱ्या सारखी विभागणी करणे शक्य नाही. जमिनीवर कुंपण ठोकून माल-कीहक्काचे घर, शेत, शहरच काय अगदी देश सुद्धा निर्माण होतो, आणि बदलतो ही ! नदी साऱ्या नदीखोर्याला एकत्र गुंफणारी एक अखंड वाहणारी जलधारा आहे. तिला स्वच्छ निर्मळ करण्यासाठी सगळे नदीखोरे एकत्र करावे लागणार होते.
आज विशेषतः शहरवासीयांनी नदीकडे पाठ करून आपले संसार थाटले होते. पुणे शहर ज्या नागझरी नदीतीरावर वसले तिचे नामकरण आम्ही आज मैलापाणी वाहून नेणारा कसबा नाला असे केलेय. नदीची ओळख केवळ नळातून येणारे पाणी इथवरच सीमित राहिलीय. नदीची सद्यस्थिती बधून, तिच्याबद्दल मनात आत्मीयतेचे नाते निर्माण होत प्रत्येकाची बुद्धी 'नदी निष्ठ' होणे गरजेचे आहे. कारण होणाऱ्या प्रत्येक कर्माच्या मागे बुद्धी अतिशय महत्वाची आहे. 'ज्ञानेंद्रिये घेतले मनापुढे ठेवले, मनाने निवाड्यास बुद्धी समोर ठाकले, बुद्धीने कर्मास लावली ही काया, आचारांचा कळस, विचारांच्या पाया." (योगार्थ) हीच प्रत्येक कर्माची एकमेव प्रणाली आहे.
मग 'नदीखोर्याची बुद्धी जलानिष्ठ' कशी बरे करता यावी?
काही कालांतराने एका अद्यावत रुग्णालयात, नामांकित वैद्यकशास्त्रतज्ञांच्या घोळक्यात मला सांगत कि ' मी आता चालले' आईने डोळे मिटले. ते पुन्हा न उघडण्यासाठी. वैध्यकशास्त्राच्या क्षेत्राची तुटपुंजी सीमारेषा मला सुस्पष्ट झाली. वैध्यकशास्त्राने शिकवलेल्या शरीरापलीकडे मला न उमजलेले शरीर सुद्धा आणि अन्य विश्व हे अनंत आहे असे पुसटसे जाणवले. आईच्या अस्थी नदीला अर्पण करताना एकनाथांचा अभंग आठवला, ' पंढरीचा राजा उभा भक्तकाजा, उभारोनी भुजा वाट पाहे.' आईच्या आणि अनेकांच्या अस्थी प्रवाहाबरोबर वाहत जात पांडुरंगाच्या पदस्पर्शाने पावन होतील. मग... मग त्यासाठी आपण अस्थी व्हायची वाट बघायची का ? जिवंत सदेहाने नौकेतून नदीमार्गे प्रवास करत बरोबर ज्ञानेश्वर माउलीच्या पादुका घेवून पंढरी का गाठू नये. ह्या प्रसंगाने 'सकारात्मक स्वास्थ्य, पर्यावरण, संस्कृती, विज्ञान आणि अध्यात्म ह्यांची सांगड घालणारी जलदिंडीची कल्पना सुचली.
जलदिंडीचा विचार असा सुचला खरा आणि तिच्या दोन धारा लक्षात आल्या.
आठशे वर्षांहून ही अधिक काळाची दिंडीची संस्कृती घराघरात आणि मनामनात रुजलेली आहे. ह्या परंपरेचा आधार घेत नदी, पर्यावरण, स्वास्थ्य ह्या भोवती समाजाला जलदिंडीच्या निमित्ताने करत एकत्र आणता येत 'सामाजिक बुद्धी नदीनिष्ठ' करता येणे शक्य होईल बहुदा! शिवाय प्रदूषणाची व्याप्ती ही नदीमार्गाने प्रवास करताना अभ्यासता येईल.

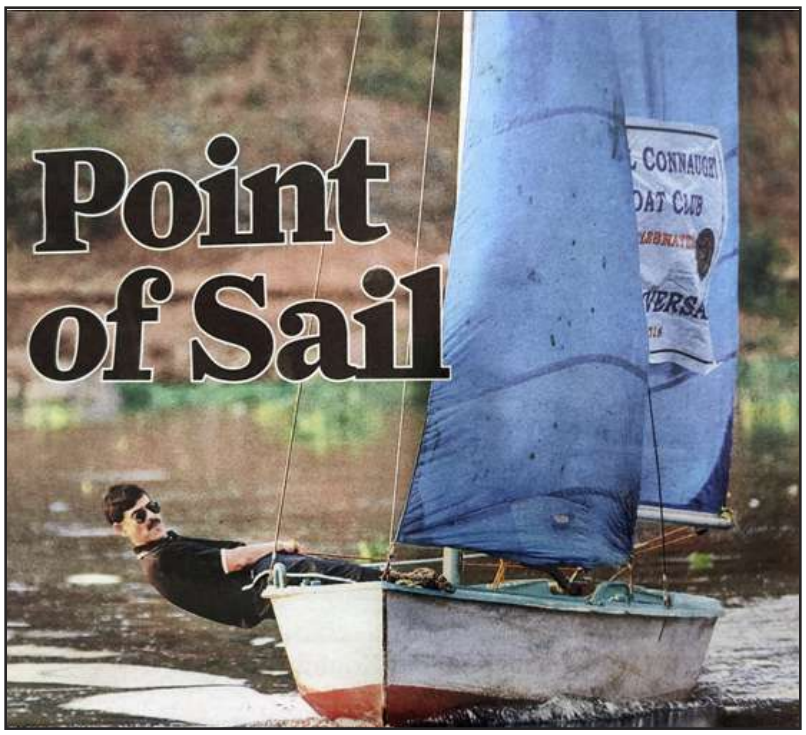
जलदिंडीच्या प्रवासादरम्यान पर्यावरणाच्या अनेक समस्या लक्षात आल्या. नदीचे स्वताचे हक्काचे पाणीच नाही. आम्ही ते धरणांमध्ये अडवून ठेवलेय. नदीत असलेले पाणी आहे घरगुती आणि औद्योगिक मैलापाणी. अधिकांश प्रक्रिया न होता नदीला आलेले. तेच नदीचा वर्षभराचा प्रवाह बनतो. नदीप्रवाहाच्या वरच्या शहरांचे मैलापाणी हे प्रवाहाच्या खालच्या अंगाची गाव, शहरांचे पिण्याचे पाणी होते. ही निश्चितच लाजास्पद बाब आहे. स्वास्थ्यावर हा स्वाभाविकच हा मोठा आघात आहे. संसर्गजन्य रोगांचे नदीप्रदुषण हे कारण आहेच पण अजून अनेक रोगांचे मूळ नदीच्या मलीन होण्यात आहे. पाण्यातले वाढलेले नाईट्रोजेनचे प्रमाण (मलमूत्र आणि रासायनिक खत युरिया इ.) पोटाचे, आतड्यांचे आणि किडनीचे आजार; कर्करोग, यकृत आणि औद्योगिक रसायने ह्यांचे धोकेदायक नाते सर्वमान्य आहेच. नपुसकत्वाला ही नदीचे प्रदूषण कारणीभूत आहे. घरगुती वापरातले डीटरजेंट (झीनो स्टीरोईड) आपल्या स्त्री होर्मोनच्या रासायनिक साम्धर्मामुळे स्त्री आणि पुरुषातही प्रजनन प्रक्रियेस बाधक ठरतेय.

ह्याच मैलापाण्यावर शेती पिकतेय. बहुतेक भाजीपाला पालक, मेथी, वांगी, कोबी, फ्लावर सगळीच, ही जमिनीलगतच उगवतात. सहाजिकच रासायनिक तत्वही तिथेच संकलित होतात. शिवाय दुग्ध आणि कुकुटपालन ह्यांची उत्पादने सुद्धा ह्याच पाण्यावर अवलंबून आहेत. साहजिकच जे प्रदूषण मी नदीत टाकतोय ते पुन्हा अन्नातून परत माझ्या शरीरात येतंय.

प्लास्टिकच्या पिशव्या काठावरच्या झाडांच्या फांद्यांवर अडकतात आणि त्यांना मारून टाकतात. ही झाडे वाहत नदीवरच्या बंधाऱ्याला अडकतात आणि वाढलेल्या प्रवाहात बंधारा फुटतो. नदीकाठ आता वृक्षाविरहित ओसाड झालाय. हजारो एकर सुपीक जमीन वाहून गेलीय. कधी न भरून येण्यासाठी.

वाळूउपस्यामुळे निसर्गाची जलशुद्धीकरणाची क्षमता संपलीय. नदी परिसरातल्या सगळ्या कुपनलिका प्रदूषित झाल्या आहेत. त्यांना ठरवलं तरी स्वच्छ कसं करायचं ? खराब झालेला तलाव नदी कदाचित साफ होईल पण भूगर्भातले पाणी, कुपनलिका कशी स्वच्छ होणार. आजपासून कणभर प्रदूषणही झाले नाही ततरीही हजार वर्षाहून अधिक काळ जाईल त्यासाठी!

जिवंत नदी ही जीवन, संस्कृती आहेच आणि समृद्धी सुद्धा. आज पुणे मुंबई शहरांसाठी धरणांच्या रूपाने नदी अजून जिवंत आहे. तिच्या खालच्या प्रवाहाच्या गावांना ती मृत झालीय. साहजिकच तेथील लोकं शहरांकडे स्तलांतरित



झालीत. ह्या देशांतर्गत स्थलांतरांमुळे नागरी समस्या वाढल्यात. ट्रफिकची समस्या, बकालवस्तीची समस्या, एका विशिष्ट भूभागावर झालेली गर्दी ह्याने महामारी साथीसाठी ही पोषक वातावरण तयार केलय. मूळ शोधले तर बहुदा कोरोनाचा जगभरचा फैलाव ह्याचे मूळ उत्तर सुद्धा नदींचे जगभर झालेले प्रदूषण असे सुद्धा देता येईल. नदीप्रदुषणामुळे ह्या सगळ्यांचा पैशात हिशोब लावायचाय तर नुकसानाचा किती बरे मोठा आकडा होईल?

जलदिंडी आपल्या ध्येयाला अनुसरून गेले १९ वर्ष अखंडित कार्यरत आहे आणि इंद्रायणी भीमा नदीमार्गे आळंदी ते पंढरपूर प्रवास करतेय. जलमैत्री यात्रा, जलस्वस्थ्य शिबिरे, प्रकाशन, वार्षिक अंक, इकोटूर, अश्या कार्यक्रमातून हे कार्य वर्षभर चालू आहे. अजून नऊ नद्यांवर ही हा विचार रूढ झालाय. (पावना, मुठा, घोड, प्रवरा, गोदावरी ई.) मार्गातल्या गावांमध्ये कीर्तन प्रवचन भारुड ह्या पारंपारिक माध्यमातून नदी संवर्धनासाठीचा संदेश वर्षभर होत राहतो. नदीकाठावर गावकऱ्यांच्या सहकार्याने वृक्षारोपण केलं गेलंय. (उदा. वडनेर, गिरवली, राजेगाव, कुंभारगाव. पावना खोरे.) अनेक गावांमध्ये व्यायामशाळांना सामग्री, खेळाचे साहित्य, ग्रंथालयांना पुस्तके वाटण्यात आली आहेत. अनेक संस्था जलदिंडीच्या कार्याशी जोडल्या गेल्या आहेत.

महाराष्ट्र राज्याच्या अभ्यासक्रमात जलसाक्षरता हा विषय आणि जलदिंडी २००८ पासून कार्यानुभव ह्या विषयांतर्गत शिकवला जातोय. गेले ३ वर्ष वर्ग आठवीच्या अभ्यासक्रमात बालभारतीच्या मराठीच्या पाठ्यपुस्तकातून जलदिंडी हा धडा राज्यभर शिकवला जातोय. (पुस्तक: जलदिंडी ची गोष्ट) महाराष्ट्र शासनाने प्रकाशित केलेले ग्रंथ ' महाराष्ट्राची संस्कृती आणि इंग्रजीत 'culture of Maharashtra' ह्यात जलदिंडीचा राज्याची संस्कृती म्हणून उल्लेख केला गेलाय. हे सर्व समाजाची, विशेषता नवीन पिढीची बुद्धी नदीनिष्ठ होण्यासाठी अत्यंत गरजेचे आहे.

राष्ट्रीयस्थरावर जलदिंडीला मानाचे पुरस्कारांनी गौरवले गेलंय. (IWWA तर्फे जलमित्रता पुरस्कार, बा – बापू समितीचा विधायक कार्यकर्ता पुरस्कार, वसुंधरा सन्मान पुरस्कार, जलदिंडी प्रकाशित साहित्याला राज्य शिक्षक संगठना आणि IIM अहमदाबाद ह्यांचे उत्कृष्ट ग्रंथ पुरस्कार.) आंतरराष्ट्रीय स्थरावर जलदिंडीचे मॉडेल जपान सरकारने JICA च्या माध्यमातून 'लेक बिवा' ह्या तलावाच्या रक्षणासाठी लोकसहभाग व्हावा म्हणून अवलंबले आहे.

जलदिंडीचा दुसरा प्रवाह व्यातीगत जीवनात प्रहावीत झालाय. जल म्हणजे जीवन आणि दिंडी ही स्वधर्माची पताका घेवून केलेला जीवनातला प्रवास. स्वधर्म स्वताच्या ओळखीचा, समाजातल्या सामिलकीचा आणि विश्वरुपाच्या नात्याचा. सगुण आईशी तुटलेले नाळ नदी जी समाजाची आई, तिच्या पोटातून प्रवास करत विठाई जगत जननीशी परत जोडण्याचा प्रवास आहे. आईचा धर्म ममतेचा, कुठल्याही औपचारीकते बाहेरचा, जसा की

" तान्ह्याचा टाहो ऐकला, पान्ह्याचा पाझर फुटला, वस्त्राचे कसे भान राहावे, अम्बरानेच मग पदर व्हावे. व्यवहाराचे गणित चुकले, भौतिकाचे लौकिक भंगले. शबरीचे अन बोर चाखले, पंजर चोख विठ्ठल बोले." (नावाडी)

नदी तिचे जीवनदायी जल जो येईल त्यास ओंजळ भरभरून देतेय. जलचर, आकाशात उडणारे, जमिनीवर विहरणारे जीव आणि मला सुद्धा; जणू तिची आम्ही सगळी अपत्येच. तिचे हे ममत्व बघत नदीकाठावरच्या खडकाला ठेच लागली. शूळ मस्तकात गेला. पण खडक मात्र निर्विकार, निश्चल तसाच पडून होता. जाणवले कि सजीवालाच जाणीवा आहेत. निर्जीवाला नाहीत. मग जीवन म्हणजे जाणीवा घेणे. जीवनाची श्रीमंती ही जाणिवांच्या संख्येने भरलेली तिजोरीच आहे तर. भौतिकाच्या लौकिकाचा इथे हिशोबच नाही.

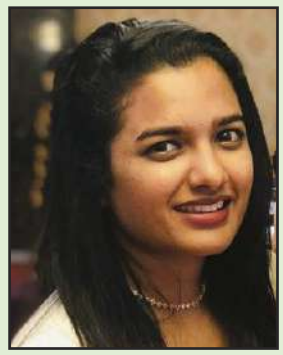
आणि जाणिवांची श्रीमंती किती वाढवता येऊ शकेल,

अहमाचे दंभ विरले, थेंबाशी थेंब जुळले, प्रेमाचे कुंभ भरले चिंब चिंब भिजले.

किरणांचे पुंज उजळले, रंगाचे बीज लोपले, ज्ञानाचे गुंज ऐकले, बिंब पुर्णाचे ओम्कारले,' (उवाच)

ह्याची जाणीव होई पर्यंत बहुदा !

'इति समाप्त '



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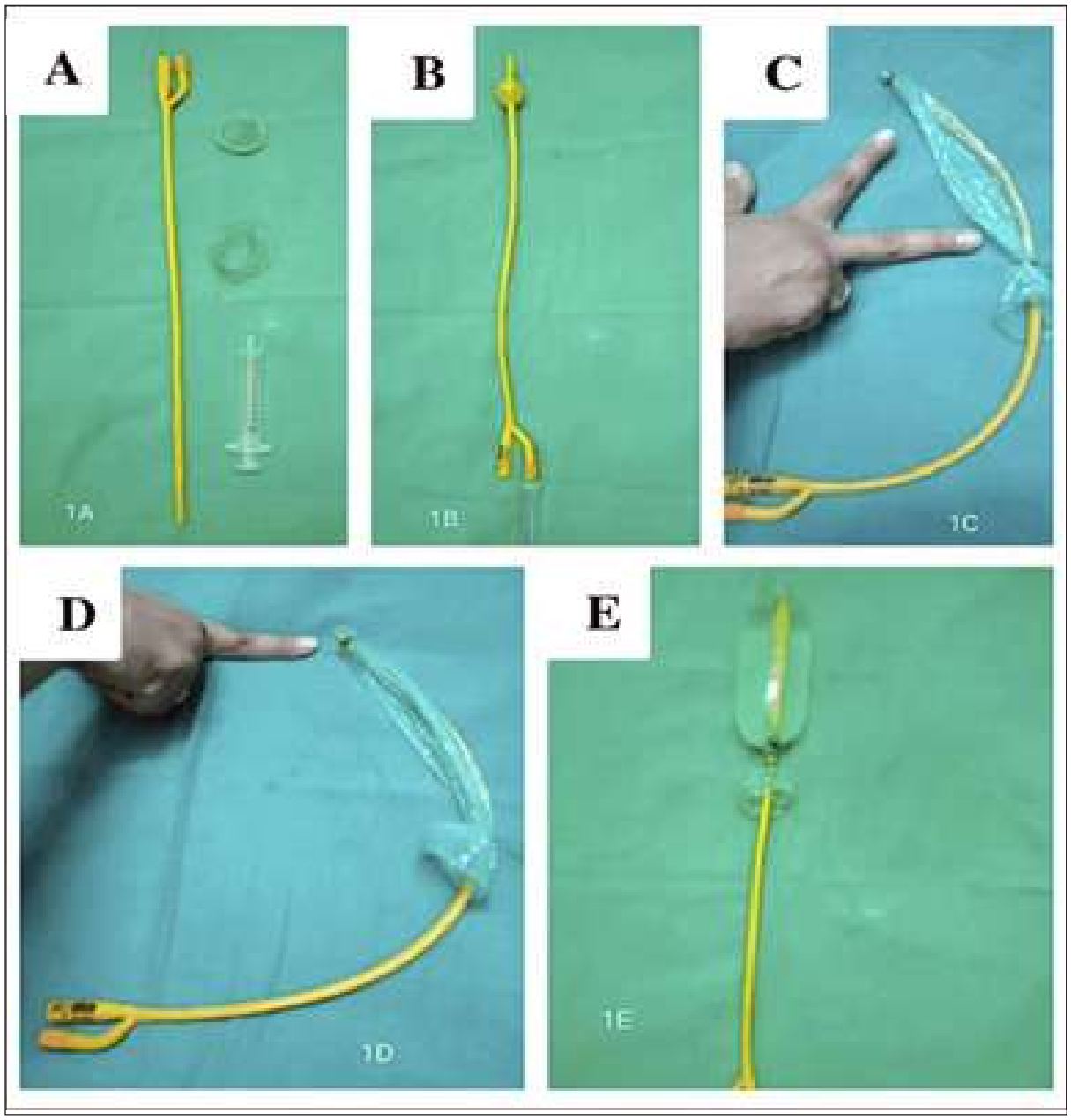
PG SPEAK

Management Of A Case Of Atonic Post Partum Haemorrhage At A Low Resource Setting

ABSTRACT:
Post partum haemorrhage is a major cause of maternal mortality, owing upto 24% of maternal deaths, majority of which occur in a low-resource setting. A step-wise approach to the management of PPH is ideal, in which the initial management consists of administration of uterotonics. In case of failure of response, uterine cavity tamponade can be effective. We present a case of a 34-year-old, G4P3L3, in whom a condom balloon catheter was used to effectively control the bleeding.

CASE REPORT:
A 34-year-old, G4P3L3, at 38 weeks of gestation, came to the primary healthcare centre, in active labour. On examination, she looked pale, with a heart rate of 104/min and BP of 100/70mmHg. Her Hb was 8.5gm%. Shortly after arriving at the centre, a female baby was delivered, and she weighed 2700 grams. Prophylactic dose of 10 IU oxytocin in 500ml RL intravenously and 10IU IM was given immediately after the delivery of the baby. Placenta was delivered in toto by controlled cord traction and uterine cavity evacuated thoroughly.
On examination, the uterus appeared flabby and active bleeding present. Bimanual uterine massage was initiated immediately. A second large bore IV secured and 500ml Ringer's lactate infusion started. Tablet Misoprostol 800mcg inserted per rectally. Bimanual uterine massage was continued for 30 minutes. The uterus was still flabby and the haemorrhage continued.
Her heart rate at this time was 118/min and BP was 90/60mmHg. Her Hb was 7.2gm%. 1 PRBC was transfused.
A condom balloon catheter was created, using a condom and an 18 F Foley's catheter, by inserting the foley's catheter within the condom and tying the mouth of the condom using a silk thread. The catheter was then introduced into the uterine cavity and tamponade created by instilling 300cc of normal saline and vaginal packing done. The bleeding stopped within 10 minutes. The amount of blood loss was approximately 1000ml.
The patient was monitored for hemodynamic status. 30 minutes after introducing the tamponade, her uterus was noted to be well retracted. The tamponade was gradually emptied over 36 hours and no substantial bleeding occurred. The patient was given broad spectrum antibiotics and 1 PRBC and 2 FFP's transfused on post natal day 1. After close monitoring, the patient was discharged on post-natal day 3, with a heart rate of 92/min, BP of 106/70mmHg and Hb 9gm%.
She was asked to follow up 3 days later and it was noted that she was hemodynamically stable, her uterus contract and on ultrasonography, the uterine cavity appeared empty. She had no complications during her follow-up.



Steps of formation of condom catheter. (A): Equipment's used to prepare condom catheter balloon, (B): Inflation of Foley's catheter balloon followed by rupture to create a new port, (C): Picture shows two tied end with thread, (D): Picture shows draining end, (E): Fully formed condom catheter balloon.

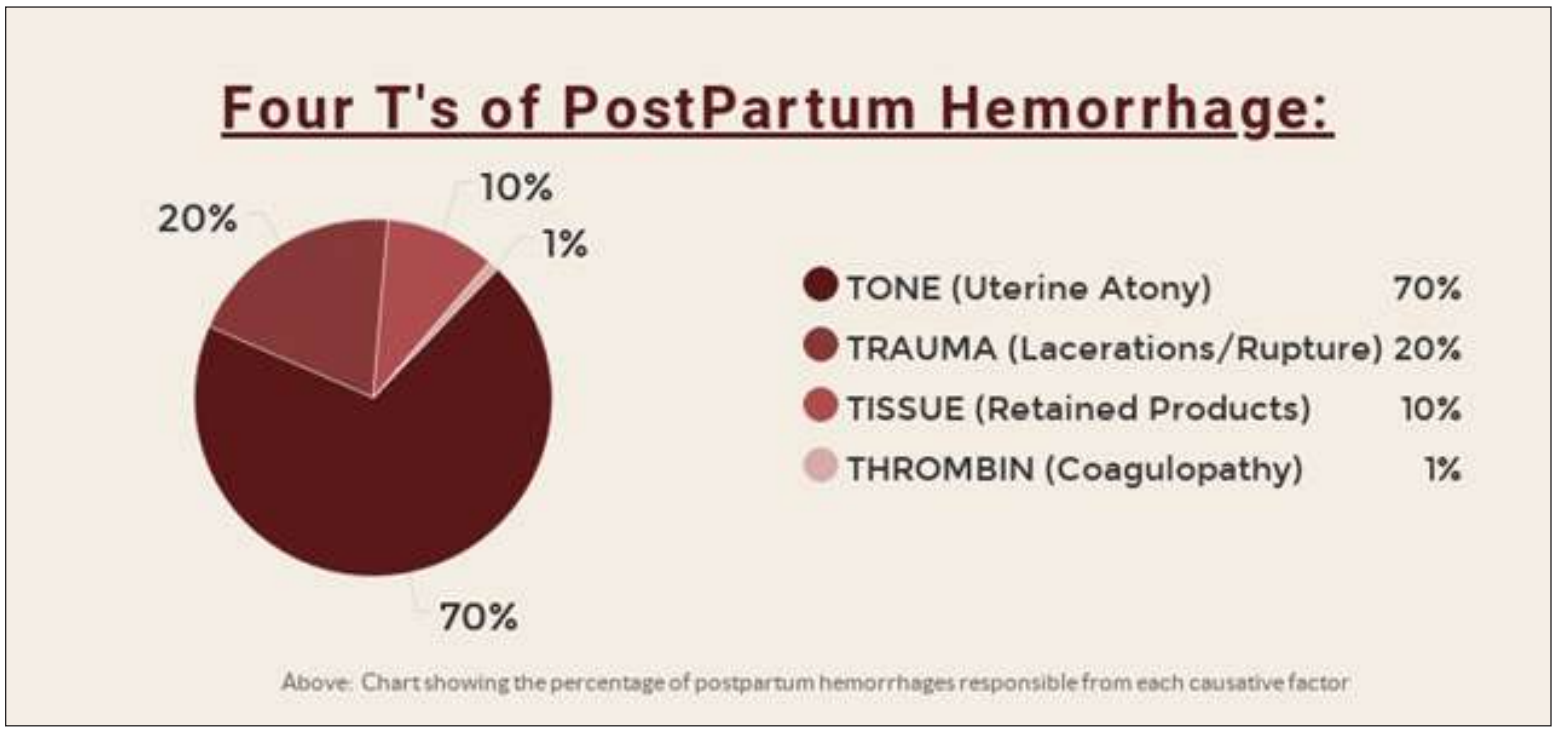
DISCUSSION:

This case report demonstrates the use of a condom balloon catheter, for uterine tamponade for the management of post partum haemorrhage. Uterine tamponade acts by creating an intrauterine pressure that exerts hydrostatic pressure on the capillaries and veins in the uterus, which ultimately stops the bleeding. The use of uterotonics is the preferred primary medical treatment for PPH. In case of failure, surgery is warranted. But, in a low resource setting such as a primary health care centre, where the facility of an operation theatre or ICU is not available, uterine tamponade for the control of post partum haemorrhage is a promising intermediate, that has proven efficacy.

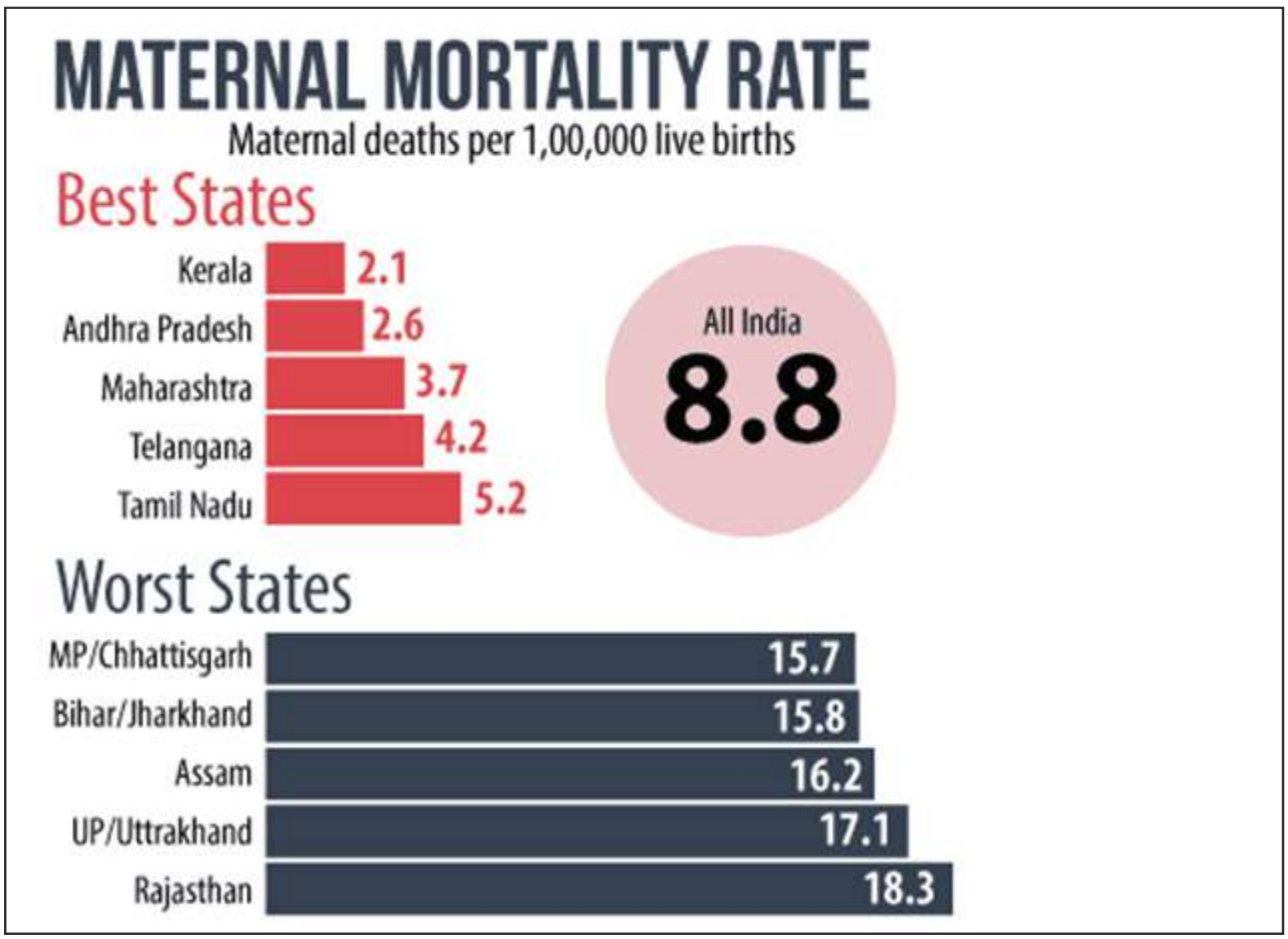
The use of intrauterine balloon catheter should be considered as an alternative method with several advantages including being cost effective, promptly implantable, and sometimes capable of eliminating major surgeries and surgical complications, with successful outcomes.

It is of paramount importance to remember that despite the identification of risk factors, primary PPH occurs unpredictably even in women without any risk factor and in the absence of prompt and effective medical intervention, the mortality risk is high.

Hence, it is necessary to highlight the importance of haemorrhage protocols. To improve outcomes in a healthcare setting.



Above: Chart showing the percentage of postpartum hemorrhages responsible from each causative factor

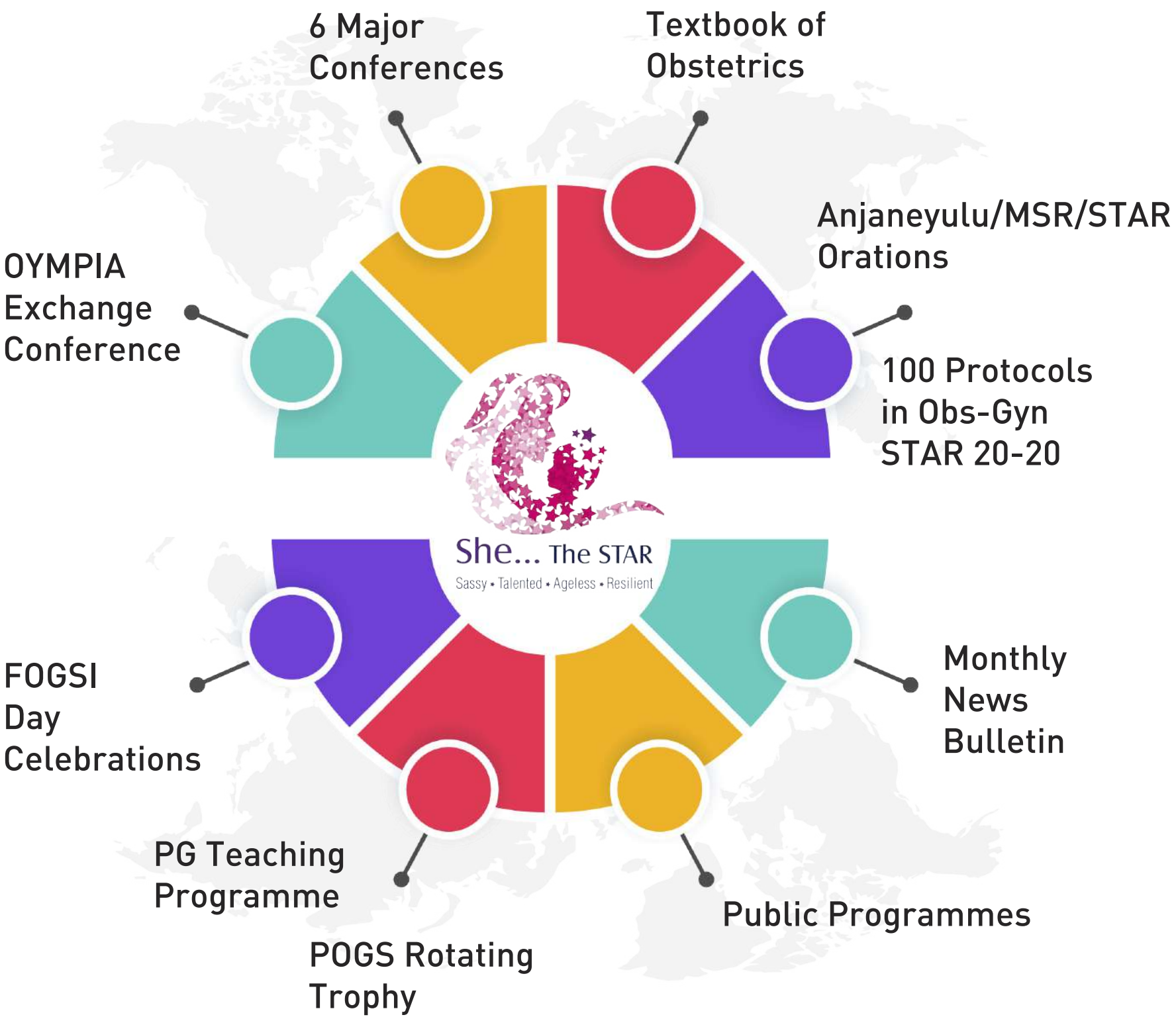


Maternal mortality in our country has significantly come down in many states.
The main cause of which is attributed to Hemorrhage.

OUR THEME THIS YEAR

To see the animated video please click here

CALENDER OF THE YEAR



2021-2022 ACTIVITIES

6 MAJOR CONFERENCES

APRIL 2021

16th - 18th

POGS STAR-OG Global Virtual Conference on **Recent Trends**

JUNE 2021

4th - 6th

POGS- AMOGS Zonal Conference on - **Critical Care Obstetrics**

AUGUST 2021

7th & 8th

POGS-FOGSI IOI -2 International Conferences on **Ovulation Induction**

OCTOBER 2021

22nd - 24th

POGS-FOGSI STAR – LEGAL **National Medicolegal Conference**

DECEMBER 2021

11th & 12th

POGS-ISUOG FETOPANISHAD International **Fetal Medicine Conference**

FEBRUARY 2022

18th - 20th

POGS **Endoscopy Conference**

2021-2022 ACTIVITIES

Jan 2022

Exchange Conference "Olympia" organized by POGS in association with AMOGS and will be endorsed by many more societies from Maharashtra at DY PATIL Stadium, Navi Mumbai.

CONNECT Monthly Newsletter

- POGS Rotating Trophy
- Orations – Anjaneyulu , MSR & STAR Oration
- Social Programmes & Public Awareness
- PG teaching programs once in 3 months
- Text Book of Obstetrics
- STAR 20-20 - A practical book on 100 protocols in OBGY

FOGSI DAY CELEBRATIONS

April 11th FOGSI SAFE DELIVERY DAY
Dr Shubhlaxmi Kurtkoti

June 5th FOGSI INFERTILITY DAY (PLANT A TREE TODAY)
Dr Leena Patankar

July 1st FOGSI GIRL CHILD DAY
Dr Meenakshi Deshpande

Oct 18th FOGSI MENOPAUSE DAY
Dr Parag Biniwale

Nov 7th FOGSI PAP SMEAR DAY – PREVENT CANCER DAY
Dr Harshad Parasnis

PUNE OB-GYN SOCIETY
ESTD. 1953

HOSTED BY PUNE OBSTETRICS
& GYNAECOLOGICAL SOCIETY

AMOGS

ZONAL CONFERENCE OF THE ASSOCIATION OF MAHARASHTRA OBSTETRICS & GYNAECOLOGICAL SOCIETIES

DATES:
16TH, 17TH & 18TH
JULY 2021
VENUE:
HOTEL RITZ
CARLTON, PUNE

AMOGS 2021

She... The STAR

Sassy • Talented • Ageless • Resilient

Dr Pankaj Sarode
Organising Chairperson

Dr Nandita Palshetkar
President, AMOGS

Dr Sunita Tandulwadkar
Organising Chairperson-
President, POGS

Dr Kiran Kurtkoti
Organising Chairperson

PUNE OB-GYN SOCIETY
ESTD. 1953

DATES:
7TH & 8TH AUGUST 2021
VENUE:
JW MARRIOTT, PUNE

POGS-FOGSI

IOI-2

International Conference of Ovulation Induction

EXCEL IN STAR FERTILITY

In Association with Infertility Committee FOGSI

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General Secretary, POGS

Dr Sunita Tandulwadkar
President, POGS
Organising Chairperson

Dr Kundan Ingle
Organising Chairperson
Chair, Infertility Committee
FOGSI

Dr Nilesh Balkawade
Clinical Secretary, POGS

DATES:
22ND - 24TH OCTOBER 2021
VENUE:
JW MARRIOTT, PUNE

POGS STAR LEGAL

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General Secretary, POGS

Dr Sunita Tandulwadkar
President, POGS
Organising Chairperson

Dr Manish Machave
Chairperson Ethics &
Medicolegal Committee
FOGSI
Organising Chairperson

Dr Nilesh Balkawade
Clinical Secretary, POGS

PUNE OB-GYN SOCIETY
ESTD. 1953

DATES:
11TH, 12TH DECEMBER 2021
VENUE:
JW MARRIOTT, PUNE

Fetopanishad

THE FETAL CONGRESS FOR ALL

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HIGHLIGHTS

International Accreditations
Two Parallel Halls
Minus3Nine:
Fetal Medicine for Obstetricians
Fetus+:
Fetal Medicine for Practicing Fetal Medicine Clinicians

Hands-On Fetal Interventions
For Minus3Nine:
Aminocentesis, CVS
For Fetus+:
Fetal Shunt, Radio-Frequency Ablation, Bipolar Cord Coagulation, Laser for TTTS

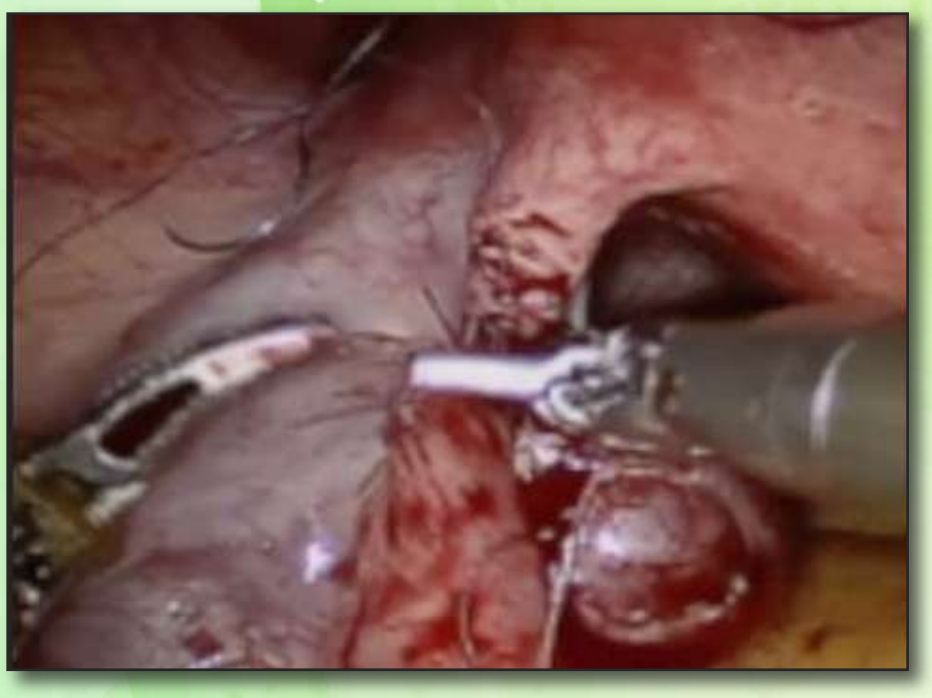
Dr Vaishali Korde-Nayak
General Secretary, POGS

Dr Sunita Tandulwadkar
President, POGS

Dr Pooja Lodha
Conference Director

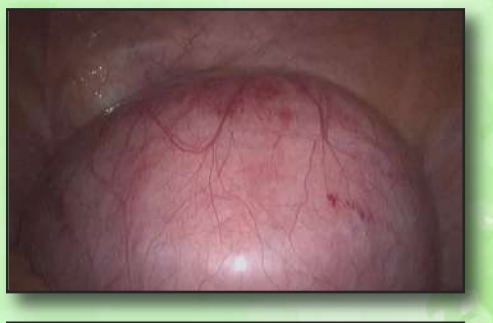
Dr Nilesh Balkawade
Clinical Secretary, POGS

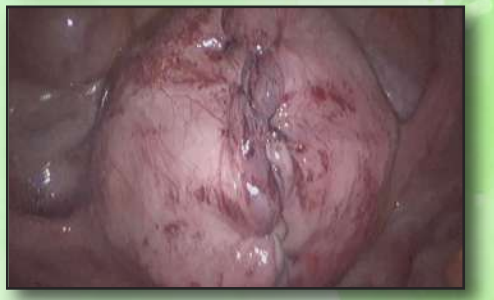
PUNE OB-GYN SOCIETY
ESTD. 1953

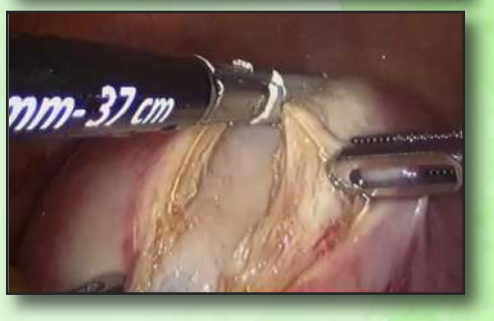


DATES:
18TH, 20TH
FEBRUARY 2022
VENUE:
DR DY PATIL
MEDICAL
COLLEGE, PIMPRI,
PUNE

POGS-Star Endoscopy Conference







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General Secretary, POGS

Dr Kiran Kurtkoti
Organising
Chairperson

Dr Sunita Tandulwadkar
President, POGS

Dr Hemant Deshpande
Organising
Chairperson

Dr Nilesh Balkawade
Clinical Secretary, POGS

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President-Elect


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Vice President


Dr Kundan Ingale
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Clinical Secretary


Dr Laxmikant Behele
Treasurer


Dr Madhav Kankawale
Joint Secretary


Dr Pooja Lodha
Joint Clinical Secretary


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Dr Anita Gavali


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