



**AMOGS**

**Infertility  
Committee**



# CHANGE

CORONA HANDLING BY ALL  
INFERTILITY GROUP EXPERTS



**Editors**

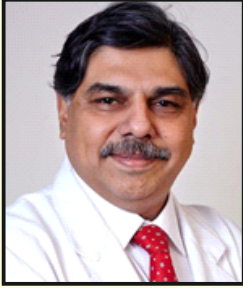
**Dr Chaitanya Shembekar**

**Dr Nilesh Balkawade**

**Dr Rohan Palshetkar**

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Past Secretary General FOGSI



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## From the AMOGS President's Desk

Dear AMOGSians

The theme of AMOGS this year is “We for Stree”. I would like to thank every AMOGSian who is helping in making every woman Safer Stronger and Smarter. Through various academic and social programs AMOGS aims to uplift the quality of care that is given to every woman who comes to us. It brings me immense pleasure to present to you AMOGS CHANGE by the AMOGS Infertility Committee

Infertility is a condition which affects a lot of women and is a cause of distress for the couple. However due to this pandemic, infertility treatment has taken a bit of a backseat. AMOGS CHANGE is a way to help all of you to get a quick insight into the way you can resume infertility practice while ensuring the safety of your doctors, staff and patients.

I hope this module helps you to ensure better practices during this pandemic and helps you in your goal towards the upliftment of women's health.

I would like to thank the editors Dr. Chaitanya Shembekar, Dr. Nilesh Balkawde and Dr. Rohan Palshetkar for compiling this module. I would also like to thank all the contributors for taking the time out to ensure this module was released in a quick and timely manner. I hope this module helps all the AMOGSians in their practice

**Dr. Nandita Palshetkar**

President AMOGS

## From the MSR Chairperson's Desk

It gives me immense pleasure to write forward as Chairperson of Maharashtra Chapter of ISAR for guideline for commencing ART centre in the period of Covid Pandemic . The novel Corona virus pandemic has created major challenges in the health care system all over the world. AMOGS in association with MSR has come up with these guidelines helping health professionals to continue their services and protecting themselves and their patients.

Lockdown was declared by government on 23rd March and only emergency services were allowed. So most assisted conception units stopped working and only emergency services of fertility preservation continued. Now slowly lockdown is getting relaxed and non-essential services are permitted. ART centres are now considering resuming their services.

In today's new reality, there is need to make few changes in practices to protect patients and healthcare professionals. Along with them, there is need to protect gametes and embryos as well. Our ART specialists from Maharashtra had come together to give concise guideline that ART professionals should follow in post-lockdown period. I hope these guidelines will help ART centres to resume work.

**Dr Sunita Tandulwadkar**

Chairperson

MSR 2018 - 2020



## EDITORIAL

Once the storm is over, you won't remember how you managed to survive and when you come out of the storm, you won't be the same person who walked in.

The COVID 19 pandemic is affecting life of every person on Earth. Like it or not, Covid is here to stay. The prolonged lockdown of health services providing fertility treatment is detrimental to the society as a whole. Given the number of babies born every year out of ART, we need to restart the fertility practices at some point in time. According to WHO, infertility is a disease and needs to be treated. In line with local regulations, fertility clinics can be restarted in phased manner.

Though fertility preservation in cancer patients is always an emergency, advanced maternal age, diminished ovarian reserve and severe oligospermia are equally important and need timely intervention. The psychological impact of delay and postponement of treatment also needs to be addressed.

However, COVID 19 era has changed the way we look at the world and ART treatment is no exception. Change is the only thing which is constant and we need to change according to the circumstances. We need to adapt to the changing scenario and vigilance is must for safe practice so as to minimize the risk to patients as well as staff.

With this concept in mind, AMOGS Infertility Committee has already come out with recommendations for safe ART practices which were released on 16<sup>th</sup> April 2020. With phase wise easing of curbs and curfews, we need to restart our fertility services, "CHANGE" is one such attempt to highlight on all the topics related to COVID 19 and resumption of fertility clinics in a concise, diagrammatic and ready reference format. Experts in the field of fertility from Maharashtra along with young and enthusiastic fertility specialists have contributed in making this come true. This booklet is brought to you by Infertility Committee AMOGS in association with Maharashtra chapter of ISAR. The concept is a brain child of AMOGS President Dr Nandita Palshetkar.

We are thankful to Dr Hrishikesh Pai, Past Secretary General FOGSI, Dr Sunita Tandulwadkar, Chairperson MSR, Dr Arun Nayak, Secretary AMOGS, Dr Amit Patki, Secretary MSR and Dr. Padmarekhajirge, Past Secretary MSR for their encouragement and guidance.

Recommencing ART treatment and further time to time evaluation and adaptations will depend on the rules, regulations and guidelines formulated by Central, State Government and local authorities. The role of Government guidelines in deciding future directions regarding treatment plan is extremely crucial.

When your world comes crashing down, you have a chance to do something you couldn't have done before, rise up!

"In order to rise from its own ashes, a phoenix must first burn."

We hope that you find this booklet useful for your day to day practice.

Happy learning!

**Dr Chaitanya Shembekar**

**Dr Nilesh Balkawade**

**Dr Rohan Palshetkar**

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# 01. Why should we change our 'Practice'?

Dr Chaitanya Shembekar | Dr Nilesh Balkawade | Dr Parul Sharma Saoji

"Every dark cloud has a Silver Lining"

Moment by moment we've to find our way forward.....

COVID-19 will reshape our world. We don't yet know when the crisis will end. But we can be sure that by the time it does, our world will look very different. How different will depend on what "CHANGE" we make today!!

The question is do we need a change in our practice? Like they say "When the music changes, so does the dance" so the Answer is definitely yes, following which we have circumambient questions – why do we need this change??

**Only thing which is constant is – Change!!**

**Why?** - Unless we change, we cannot survive.

**What?** - Our Practices.

**How?** - By adapting to the special and unprecedented situation.

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, amidst the risk of SARS-CoV-2/COVID-19 infection.

With the passage of time, an increasing number of

patients whose care has been delayed are now in a situation that has become more urgent. Living and operating in a society where COVID-19 exists is becoming a reality & will remain a factor to be managed.

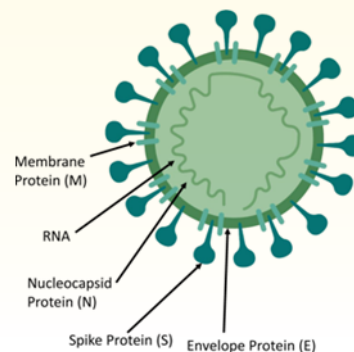
Risk Assessment (Benefits > Risk) - Individual risk assessment to be done

Goals

- Ensure practices with recommendations that guard the health and safety of our patients, staff & whole society
- Recognize our social responsibility, as an organization and as a community of health care providers and experts.
- To comply with state & national public health recommendations.

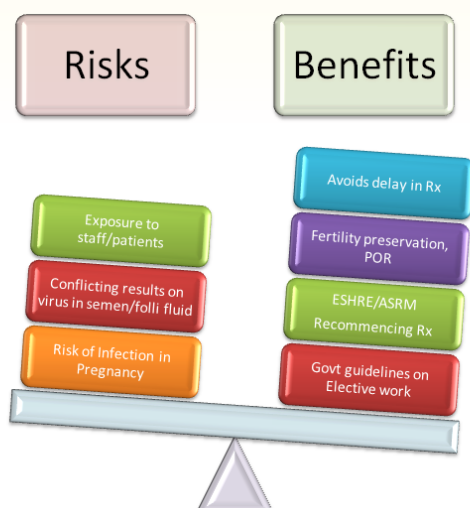
**Disclaimer:** Please be aware that this is very much an evolving situation and this guideline is the most updated information at this point of time.

## Corona virus (SARS-CoV-2) Infection



Structural Protein	Function of Protein
Nucleocapsid Protein (N)	• Bound to RNA genome to make up nucleocapsid
Spike Protein (S)	• Critical for binding of host cell receptors to facilitate entry of host cell
Envelope Protein (E)	• Interacts with M to form viral envelope
Membrane Protein (M)	• Central organiser of CoV assembly • Determines shape of viral envelope

It has been noted that some CoVs do not need to have the full ensemble of structural proteins to make virions, highlighting that certain proteins may be dispensable or compensated by the function of non-structural proteins.





**What is coronavirus disease 2019 (COVID-19)?**

Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China in late 2019.

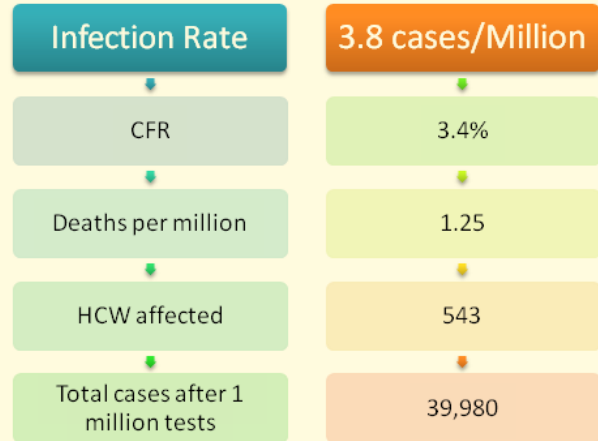
The first case of COVID-19 in the India was reported on January 30, 2020

The infection spreads through person to person contact by droplets, fomites or faeces.

Diagnosis: RT-PCR, Antibody testing-IgM/IgG

Information: Overwhelming information is available on Coronavirus infection. We need to take care while interpreting it & forming SOP's. The World Health Organization (WHO) publishes a daily international situation report with an additional Situation Dashboard illustrating information by individual countries.

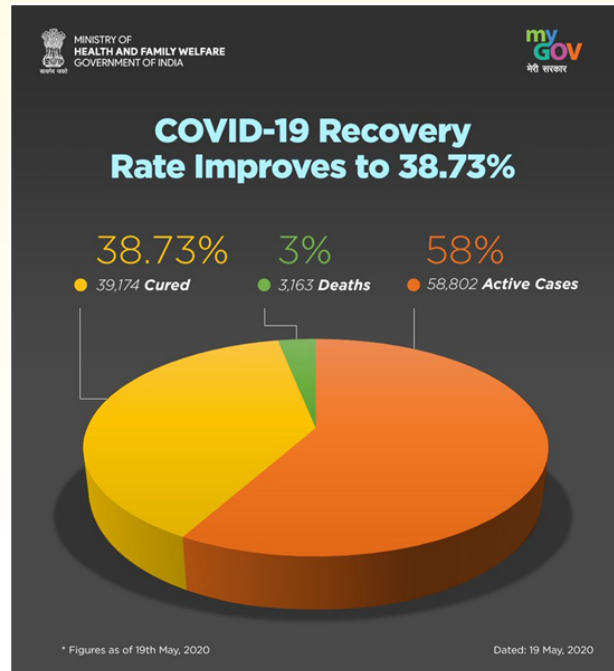
**Situation in India (First week of May)**

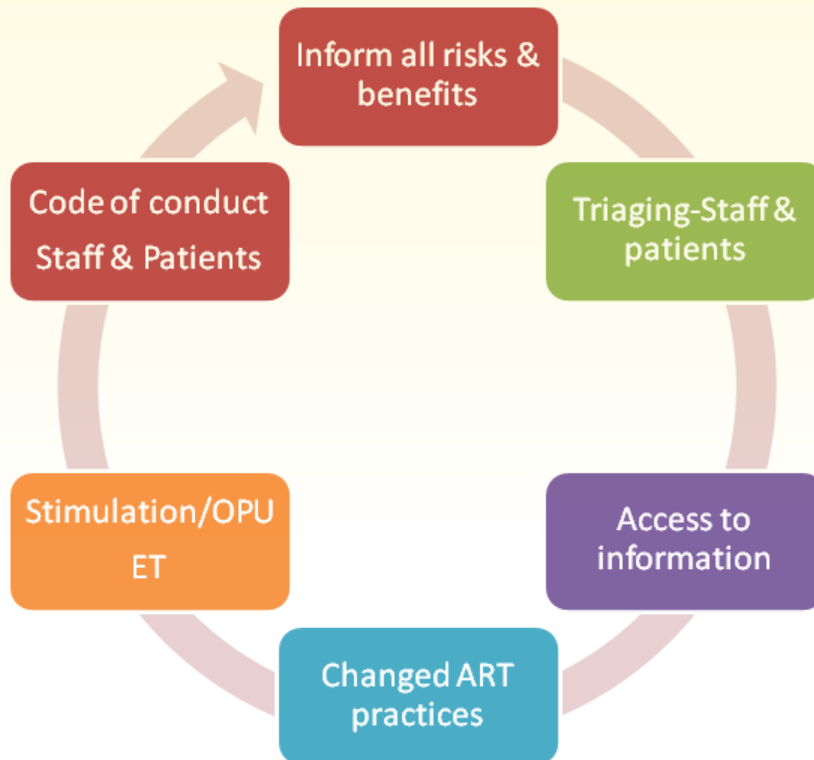
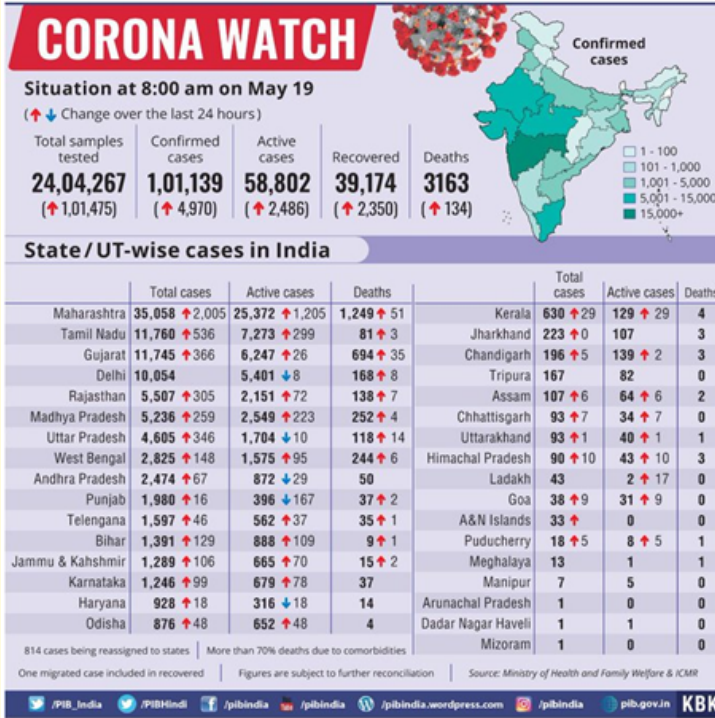


As the number of cases is increasing, we need to adapt ourselves & our practice in these changing times! That's why it is necessary to CHANGE our Fertility Practice as we can't wait more to start our consultations.

Government of India Updates as on 19th May 2020-

**How to analyze constantly changing information?**





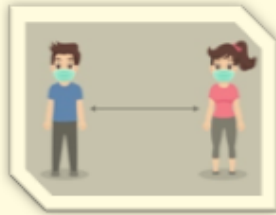
ESHRE on Recommending ART treatments, states that as SARS-CoV-2/COVID-19 infection is decreasing, all ART treatments can be restarted for any clinical indication, in line with local regulations.

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## PRINCIPLES OF RECOMMENCING TREATMENT



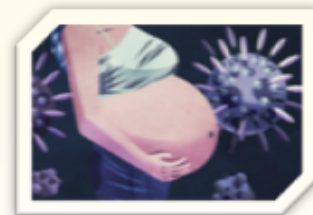
Minimize person to person interaction

Teleconsultation



Changed behavior in OPD, OT, ET

Patient counseling- No significant rise in risk in Pregnancy



Prioritise the patients

Fertility Preservation

Chemotherapy

POR

Advancing age

**Guideline Basis:** As Triaging of patients & staff is important, while formulating these guidelines triaging is important as regards to:



**Basis of Guidelines for Changing Fertility Practice**

Summary of Updates	
30 <sup>st</sup> Jan	First Case of India in Kerala
4 <sup>th</sup> Feb	Kerala Govt. declared Corona as state calamity
11 <sup>th</sup> Feb	WHO proposed an official name of the virus: COVID-19
18 <sup>th</sup> Feb	WHO provided 21 countries with the PPE
11 <sup>th</sup> March	WHO declared COVID-19 as a pandemic
12 <sup>th</sup> March	First death was reported in India due to COVID-19
14 <sup>th</sup> March	India declared COVID-19 a notified disaster
17 <sup>th</sup> March	<a href="#">ASRM Issues New Guidance on Fertility Care During COVID-19 Pandemic: Calls for Suspension of Most Treatments</a>
19 <sup>th</sup> March	ESHRE statement on pregnancy and conception. All fertility patients should <u>avoid becoming pregnant</u> at this time
22 <sup>nd</sup> March	India observed Janta Curfew for a day.
23 <sup>rd</sup> March	ESHRE Annual meeting 2020 cancelled
24 <sup>th</sup> March	Prime Minister announced 21-day lockdown in India
28 <sup>th</sup> March	India made its first COVID-19 test kit
13 <sup>th</sup> April	ASRM Patient Management and Clinical Recommendations During the Coronavirus (COVID-19) Pandemic
14 <sup>th</sup> April	Lockdown 2.0 starts till May 3
17 <sup>th</sup> April	A statement from ESHRE for phase 1. ESHRE advises that ART should not be started at present. AMOGS came with first recommendations regarding ART treatment
23 <sup>rd</sup> April	A statement from ESHRE for phase 2 - Guidance on recommencing ART treatments. All ART treatments can be restarted for any clinical indication
24 <sup>th</sup> April	ASRM Patient Management and Clinical Recommendations During The Coronavirus (COVID-19) Pandemic



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## Points to Remember

- The impact of delay on patient prognosis due to medical factors, such as age, ovarian reserve or endometriosis.
- The number of patient visits required (e.g. treatments that are associated with the fewest visits may be prioritized first).
- The impact of treatment delay on the mental and emotional well-being of patients.
- The impact of delay on patient ability to pursue or access treatment due to insurance coverage or employment status.
- Patient & Staff well being

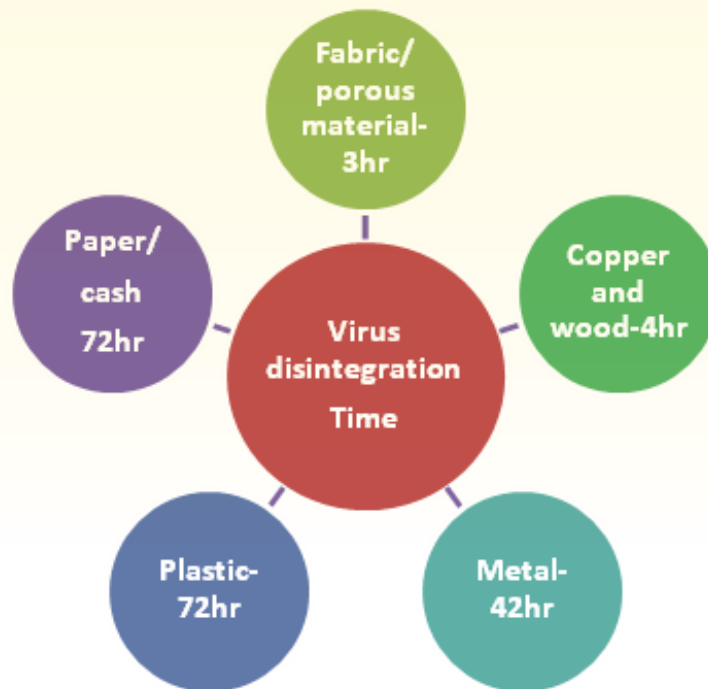
## 02. Disinfection at the Center

Dr Amit Patki | Dr Kundan Ingle | Dr Kalpana Jetha

The main stay of restarting Fertility services is to ensure treatment to those who are waiting since long, poor ovarian reserve patients, fertility preservation for cancer and so on! Important aspect of recommending treatment is prevention of transmission of Covid 19 Virus infection to and by the patient as well as health care worker.

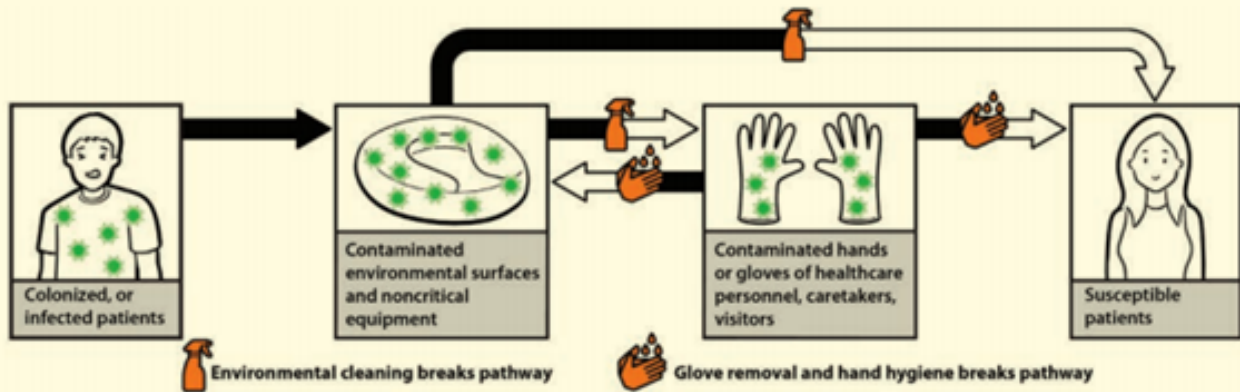


Covid-19: Primary modes of Transmission & Disinfection methods

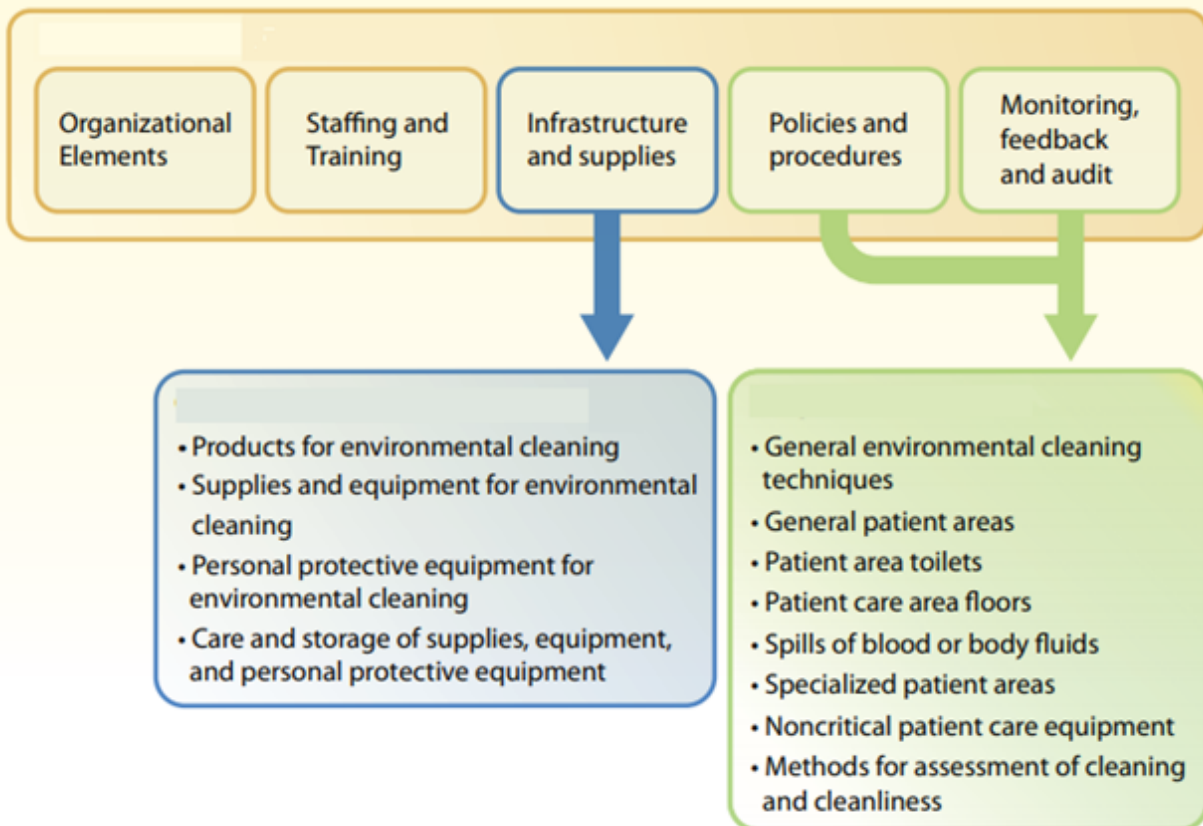


Disintegration time of covid virus in different articles:




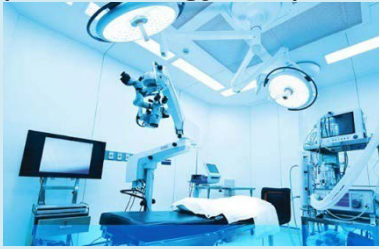

**Figure 1. Contact transmission pathway showing role of environmental surfaces, role of environmental cleaning, and hand hygiene in breaking the chain of transmission**



CDC on Environmental Hygiene



Cleaning Checklists----Cleaning Logs-----Job Aids(Pictures/videos)


Area	Equipment	Process	Method
<b>Floor (Clinic area)</b> 	Dust mop, mops No broom Detergent Hot water 1% Na hypochlorite <b>3 Bucket System</b>	Sweeping Cleaning Disinfecting	<ul style="list-style-type: none"> <li>Use 3 bucket system</li> <li>Frequently change water</li> <li>Start from far area of room towards door</li> <li>Mop with 1% Na hypochlorite after drying</li> <li>Twice a day</li> </ul>
<b>Ceiling Walls</b>	Duster, Small bucket	Damp dusting	Straight line dusting Once a week/or if Case+
<b>Mop</b>  	Hot water Detergent 1% Na hypochlorite		Clean with all in that sequence & dry upside down
<b>Door &amp; knobs</b>	Cloth Mop	Thorough washing	Detergent 1% Na hypochlorite
<b>Chairs/Sitting area</b>			
<b>Spill areas (OT/Pathology area)</b> 	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 <b>10-20 min contact time</b> Clean & discard waste Mop with hot water & detergent
<b>Stethoscope</b>	Alcohol(>65%), Spirit swab	Cleaning	Cleaned before each patient
<b>BP cuffs &amp; covers</b>	Detergent Hot water	Washing	Cuff- wiped with alcohol Cover-Laundering
<b>Thermometer</b> 	Detergent+water Alcohol rub	Cleaning	Clean with water Dry & wipe with alcohol Store in individual holder
<b>Refrigerators</b>	Detergent+water	Cleaning	Empty the fridge





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	Absorbent paper	Weekly	Dry & Defrost Clean weekly
<b>Staircase Railing &amp; lifts</b> 	Detergent Hot water 1% Na hypochlorite <b>3 Bucket System</b>	Cleaning Disinfecting	Damp dusting with water, detergent, 1% Na hypochlorite every 2 hours (modified according to person movement)
<b>Mirror,glass</b>	Detergent Hot water Damp cloth wiper	Cleaning	Use warm water followed by detergent, damp cloth wiper followed by dry cleaning
<b>Stainless steel sink</b>	Powder cleanser, Detergent Wiper	Cleaning	Wet the sink Sprinkle powder cleanser Spread with wiper Flush with plain water
<b>Telephone</b>	Warm water Detergent Or alcohol	Cleaning	Damp dusting Special attention to mouth & ear piece-dry
<b>Light switches</b> 	Damp cloth (not wet) Warm water Detergent	Cleaning	Clean with damp cloth & detergent
<b>Curtains</b>	Water Mild soap solution	Cleaning	Clean with water & soap
<b>White clothes</b>	1% Na hypochlorite	Washing	Wash in running water Soak in 1% Na hypochlorite for 20 min Wear PPE
<b>Toilet/commode</b>	1% Na hypochlorite Soap powder Long handle brush	Cleaning (After use by every patient)	Scrub with recommended disinfectants Outside- use nylon scrubber
<b>Taps</b>	Nylon scrubber & soap powder		Wet & scrub with soap powder
<b>Laparoscopy Instruments</b>	Cidex NS 1% Na hypochlorite Mineral water	Cleaning Disinfection	Before procedure Cidex f/b NS Post procedure Running water---1% Na hypochlorite for 10 min--- mineral water—Dry

			
<b>General Instruments</b>	Autoclave 1% Na hypochlorite	Cleaning Disinfection	Autoclave—procedure— water clean—1% Na hypochlorite for 10min— water—dry--autoclave
<b>Scan rooms</b>	UV light		Approx 15 -30 min is sufficient
<b>OPU room</b>	1% hypochlorite solution	Cleaning	Surface clean OT table, floor, equipment, instruments
<b>IVF lab</b>	Oosafe preferred	Cleaning	Details described later
<b>AIR disinfection</b>  	UV light Filters Ionizers	Air cleaning	Placed in a restricted area Eg- Ionizer from Scitech, Pune for 1000 sq feet area
<b>Hand Hygiene</b>	70% alcohol	Disinfection	On arrival at center After using Toilet






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**How should you wash a COVID-19 patient's clothes?**

To wash clothes, towels and bed linen of a suspected or confirmed COVID-19 patient, you should:

-  Wash the Patient's clothes, towels and bed linens separately
-  If possible, wear heavy-duty gloves before handling them
-  Never carry soiled bed linen against your body
-  Wash and disinfect linen: machine wash at 60-90°C with laundry detergent
-  Do not forget to wash your hands at the end of the process

Source: World Health Organization

#### References :

1. <https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-RLS-H.pdf>
2. ESHRE guidelines on recommending ART in COVID
3. British fertility society guidelines for care of fertility patients during COVID pandemic.

## 03. Staff Triage

Dr Nandita Palshetkar | Dr Rishma Pai | Dr Umesh Sawarkar

As we all know, the COVID 19 pandemic is stabilising. With this we also need to restart ART treatment. However, vigilance and measured steps must be taken for safe practice and to minimise the risks related to COVID 19 positive patients or staff during treatment.

“In order to rise from its own ashes, a phoenix first must burn.”

And in this difficult situation we all need to rise again.

### Shall we take signature of staff so that they respect code of conduct?

- All staff members will be instructed to avoid unnecessary exposure (both at work and in private).
- Each service will prepare compulsory instructions for staff
- Attendance at work will be tied to respecting the signed Code of Conduct
- Activities that are not allowed will be clearly detailed (“Expose yourself less” principle)
- Restricted social life and interactions
- Staff members should sign regularly that they are well and have respected the Code or inform the centre's Person Responsible of any infringements of the Code of Conduct previously signed.

### How many days before actual IVF should we start preparations?

15 days – 2 weeks start preparations. Send questionnaire to and staff. Then only recruit patients and resume duties of staff. ESHRE provides triage questionnaire for staff which can be used for triage of staff.

### ART Triage Questionnaire for staff

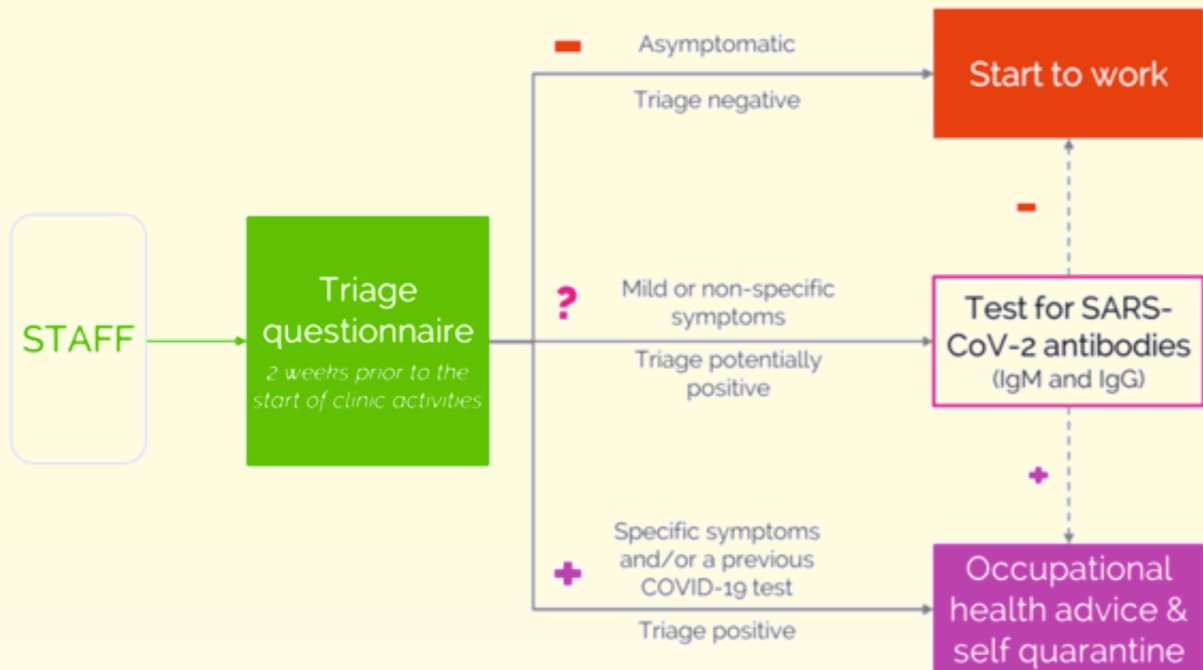
#### Have you been sick in the last two weeks?

1. Do you have fever (over 37,5°C)?
2. Are you coughing at present?
3. Do you have a sore throat?
4. Have you lost your sense of smell or taste?
5. Have you been in contact with somebody who has any of these symptoms?
6. Have you travelled to an area at high risk for COVID-19, nationally or internationally?
7. Do you work in a hospital/nursing home or healthcare facility?
8. Have you been in contact with somebody who has COVID-19?
9. Have you been you diagnosed with COVID-19?
10. Do you live in a household with somebody who has been diagnosed with COVID-19 infection or has COVID-19 symptoms (fever, cough, loss of smell)?
11. If you have been COVID-19 positive and recovered, do you have certified medical evidence of clearance?

#### What is triage procedure for staff and how does it help in decision making?

1. Triage information about health condition and lifestyle of staff two weeks before restarting IVF lab and recruitment.
2. Staff, suspected of infection should undergo testing for COVID 19. If required do additional testing as per guidelines.
3. Positive test staff should undergo further treatment and should not resume duties.
4. Symptomatic staff should undergo testing and should not resume work until symptoms subside and testing is negative.
5. Routine contact tracing as per guidelines if the staff is positive for COVID 19 test.
6. Subdivide staff into mini teams with minimum interaction between teams.





**Summary of staff triage**

Reference:

1. ESHRE guidelines on recommencing ART in COVID
2. British fertility society guidelines for care of fertility patients during COVID pandemic.
3. ASRM guidelines for COVID 19 and fertility

## 04. Patient Triage

Dr Rajendrasingh Pardesi | Dr Arun Nayak | Dr Sujata Dalvi | Dr Paresh Gandecha

Infertility is a disease and thus needs treatment. However, vigilance and measured steps must be taken for safe practice and to minimise the risks related to COVID 19 positive patients during treatment.

### Shall we take signature of patients so that they respect code of conduct?

- All patients will be instructed to avoid unnecessary exposure (both at work and in private).
- Each service will prepare compulsory instructions for patients.
- Starting treatment will be tied to respecting the signed Code of Conduct
- Activities that are not allowed will be clearly detailed (“Expose yourself less” principle)
- Restricted social life and interactions
- Patients should sign regularly that they are well and have respected the Code.

### How many days before actual IVF should we start preparations?

15 days before recruitment start preparations.

ESHRE provides triage questionnaire which can be used for triage of patients.

### ART Triage Questionnaire for patients

#### Have you been sick in the last two weeks?

1. Do you have fever (over 37,5°C)?
2. Are you coughing at present?
3. Do you have a sore throat?
4. Have you lost your sense of smell or taste?
5. Have you been in contact with somebody who has any of these symptoms?
6. Have you travelled to an area at high risk for COVID-19, nationally or internationally?
7. Do you work in a hospital/nursing home or healthcare facility?

8. Have you been in contact with somebody who has COVID-19?

9. Have you been you diagnosed with COVID-19?

10. Do you live in a household with somebody who has been diagnosed with COVID-19 infection or has COVID-19 symptoms (fever, cough, loss of smell)?

11. If you have been COVID-19 positive and recovered, do you have certified medical evidence of clearance ?

12. Do you have a severe medical condition like diabetes, respiratory disease, chronic kidney disease, etc.?

### Before we start treatment, should we take informed consent of all patients?

We must offer a choice to proceed or postpone T/t

We must take consent accordingly.

Information is the key- Inform about COVID and its effects

Inform about risk during treatment

Inform about code of conduct

Take informed consent before we start treatment

### Triage for patients-Procedure for patients

1. All patients planning to start treatment should have a triage questionnaire (paper, email or phone) two weeks before commencing treatment.

2. A preliminary triage of both partners should be performed two weeks before starting the ART treatment.

3. A further triage of both partners should be performed during ovarian stimulation.

Triage should be performed according to the same procedures used for staff members. Both partners should undergo triage. Patients, suspected of infection after triage should get regular SARS-CoV-2 IgM/ IgG testing or equivalent tests. Additional testing can be considered in line with national recommendations and/or availability of tests.

5. All patients with a previous confirmed COVID-19



## 05. Consent and Medicolegal Implications for ART Consultants (in changed times)

Dr Kiran Kurtkoti | Dr Sadhana Patwardhan | Dr Shraddha Patil

The new era of the covid-19 pandemic has definitely changed the world socially, economically, mentally and medicolegally as well.

**1. Assisted reproductive technology procedures have been deemed to be elective and hence recommending the IVF, IUI and ovulation induction will need predetermined counseling, agreement and thorough discussions -**

- A thorough discussion of the disease, its symptoms and complications with each patient
- Counseling with respect to the risk mitigation policies to be followed
- Consent prior to starting every ART procedure in addition to the routine consents with respect to contracting COVID-19 and the need for discontinuation of treatment in case of the same.
- All patients should be offered a choice to proceed with or postpone their
- ART treatment. In both cases patient preference should be clearly
- documented. (ESHRE recommendation)
- Patients must be explained about the risk of covid 19 in pregnancy and about the lack of research with respect to its effects on the offspring
- Patients must sign a code of conduct and adhere to it.

### 2. THE ROLE OF TELEMEDICINE

Telemedicine will emerge largely with respect to reducing patient visits and for organizing patient appointments in order to avoid crowding at the

clinics.

-The patient needs to consent whether to have a consultation by telephone or video conference.

-This consent can be obtained verbally at the time of the consultation and recorded in the medical records.

-if need be informed financial consent can be given verbally and documented in the medical records or confirmed in by an email agreement.

### 3. CODE OF CONDUCT

The staff should be preferably divided in small teams and each one should have compulsory written and signed instructions.

Activities that are not allowed should be clearly defined.

Restricted social life and interactions to be followed.

Patients and staff members should sign regularly that they are well and have respected the Code.

### 4. FORMAL RISK ASSESSMENT

- identifying and categorizing the predictable risks associated with
- each procedure the fertility clinic plans to offer.
- a documented risk mitigation strategy should be in place for the operation of the clinic as a whole
- a documented risk mitigation plan should be in place for each procedure.
- the fertility clinic should consider reinitiating a limited number of services initially in lieu of community spread of the disease.

## SUMMARY

- a. Telemedicine & paid consultation to reduce centre visits. (Declaration & consent before Teleconsultation)
- b. Read & report truthfully the triage questionnaire. (To be declared & signed)
- c. Tutorials on the use of personal protective equipment (PPE). Document tutorial use with Photograph & video.
- d. Continuation of social distancing and avoidance of unnecessary human physical contact. ( Document social distancing at Reception & other areas with Photographs)
- e. All possible investigations of self & spouse which are related to COVID 19- PCR before start of treatment & before ovum pick-up. (Separate consent for testing)
- f. Accept that treatment can be discontinued if the patient encounters a high-risk situation.



## 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:

## 06. Tutorials for Patients -- Information to be shared & expectation from patient

Dr Padmarekha Jirge | Dr Veena Panat | Dr Milind Patil

COVID – 19 pandemic has brought all fertility treatments to a standstill across the globe. However, international and national organizations recognize the impossibility of withholding treatment indefinitely and are working towards advisories for a planned re-opening of fertility services.

Hospitals have had an opportunity to incorporate the essentials in the COVID era – social distancing, suitable PPE depending on the work area, triaging of patients, etc. Hence, it is now prudent to direct efforts towards patient preparedness to resume abruptly interrupted fertility treatments.

### **General steps to address the anxieties of patients:**

**Communication:** Establish clear communication with patients about changes due to a still evolving situation. This involves telecommunication or in-person consultation when indicated and safe. Communicate clearly the flow of events during hospital visit to minimise unnecessary movements and waiting within hospital.

**Telemedicine:** Increase awareness amongst patients about telemedicine platform. As most couples seeking fertility treatments are healthy and without co-morbidities, teleconsultation works in their favour.

**Triaging:** Introduce them to the concept of triaging during hospital visits. Provide this information before they step into hospital by telephonic discussion, WA messages and emails. This minimises any apprehensions and misunderstanding.

**In-person consultations:** Educate in advance that attendants may not be allowed or the number may be strictly limited. Encourage them to pen down their questions beforehand so that consultation is effective yet not prolonged.

**Counseling:** Social distancing and face masks can make the interaction seem impersonal. It is important to reassure them that social distancing is not necessarily emotional distancing.

**Reiterate** the importance of Minimum visits, triaging, screening and testing for COVID when necessary in their own interest.

### **Specific treatment related advice:**

Ovulation induction – In couples who have undergone previous OI safely, teleconsultation and prescribing of 1-2 more cycles without visits to hospital can be considered.

Investigations such as hormonal assays, semen analysis, HSG can be directed to the suitable laboratories followed by teleconsultation.

Laparoscopy – Current evidence suggests Gynecological laparoscopy has a low risk of transmission of COVID (RCOG). Selectively, those women without obvious need for bowel surgery can be considered for laparoscopy, incorporating triaging, testing if indicated and appropriate PPE for the surgical team. An effective prior telecommunication and sharing of the information via email is important.

For those who visit hospital for IUI / IVF, counsel regarding the following:

COVID era norms of social distancing to be maintained by couple for two weeks prior to starting treatment.

If any suggestive symptoms, test as per the national protocol.

If screen negative, initiate stimulation with consent for treatment cancellation if either of the couple test positive during ovarian stimulation.

In areas with high density of cases, testing prior to oocyte retrieval is prudent; in areas with no access to testing, triage based decisions will be taken, with application of universal precautions.

Decision about embryo transfer would then be based on clinical scenario.

Appraising the couples of the above is an important step forward towards re-opening of fertility services or couples in need of the same.

### KEYPOINTS

- Counselling and planning with the patient so that “she” becomes part of the strategy.
- Patient education on COVID 19 risk and prevention is an essential step prior to accepting treatment.
- Social distancing, masks, hand washing to emphasised repeatedly
- Agreement on postponing treatment following the “code of conduct” as per local authorities.
- Importance of telemedicine to be emphasised.

#### GENERAL COUNSELLING FOR INFERTILITY



SARS COVID 19 COUNSELLING



HEALTH CONCERNS OF ALL – PATIENT, HCW, STAFF



CLOSE EMOTIONAL NETWORK IN VIRTUAL SPACE



PREGNANCY AND COVID 19 – NOT UNDERSTOOD  
WELL - TO BE EXPLAINED



TRIAGE OF QUESTIONAIRE



VIRTUAL CLASSROOM OF PATIENT



NEW ART CYCLE AFTER LOCAL AUTHORITIES  
DECLARE PANDEMIC HAS STABILISED



AT ANY GIVEN TIME, AS AN EMERGENCY, ALL  
TREATMENT MAY BE STOPPED - (to be explained to  
patient.)

## 07. Tutorials on the use of personal protective equipment (PPE) - Donning & Doffing

Dr Sushma Deshmukh | Dr Sangita Tajpuriya | Dr Shilpi Sud | Dr Prerna Shinde

### Introduction

The world is in trouble due to new viral pandemic, COVID-19 (Corona virus Disease-2019). It has a high virulence and sustained surface viability. Within a short span it has spread quickly due to rapid community transmission and infection rate is exponential. Primary transmission is believed to occur through respiratory droplets from coughing and sneezing and contagion requires close proximity (less than 6 feet distance) between individuals. Covid-19 is more contagious than flu. And it has 10-15 times greater mortality than flu.

The treating doctors and health workers are at high risk while dealing the cases of covid-19. So certain guidelines are issued on rational use of PPE (Personal Protection Equipments). Various types of PPE are recommended for dealing with mild, moderate risk patients. It contains triple layered medical mask, latex examination gloves, goggles, N-95 mask, face shield. But in patients with high risk category full complement of PPE (N-95 mask, coverall, goggles, Nitrile examination gloves, shoe cover) is needed.

PPE in the setting of a fertility clinic

Setting	Context – as described www.gov.uk <sup>1</sup>	Areas in the fertility clinic workplace	Gloves - disposable	Plastic apron - disposable	Fluid-resistant coverall or gown - disposable	Fluid resistant surgical mask	FFP respirator	Eye/face protection	
Fertility Centres – see guidance on triage. This should minimise the chance of “confirmed or possible cases” entering the Centre therefore reducing risk.	Social distancing – where 2m distance possible	Waiting areas Clinical consultation				YES Sessional use <sup>2</sup>			
	Working in reception/communal area and unable to maintain 2 metres social distance	Reception/admin staff check in etc Consultation				YES Sessional use <sup>2</sup>			OR ensure appropriate physical screen protection <sup>3</sup>
	Working in an inpatient area with possible or confirmed case(s) (not within 2 metres)	Day case theatre Other clinical zone – not direct patient care: Clinic support Chaperone Showing men to semen production room Assisting direct patient care procedures				YES Sessional use			

	Direct patient care – possible or confirmed case(s) (within 2 metres)	Undertaking clinical examination, venepuncture, ultrasound scanning, IUI, embryo transfer etc.	YES – single use <sup>2</sup>	YES – single use		YES – sessional use		YES – sessional use	
	Operating theatre with possible or confirmed case(s) – no aerosol generating procedures <sup>3</sup>	Undertaking procedures in conscious sedation/local anaesthetic theatre area	YES – single use	YES – single use	Consider – depending on procedure and setting and normal protocol	YES – single or sessional use		YES – sessional use	
		Associated staff – runner etc	YES – single use	YES – single use		YES – sessional use		YES – sessional use	
	Performing a single aerosol generating procedure on a possible or confirmed case in any setting outside a higher risk acute care area <sup>4</sup>	GA or heavy sedation procedures where AGP a risk	YES – single use		YES – single use		YES	YES – single use/ reuse with cleaning	
		Working in diagnostic Andrology laboratory <sup>7</sup>	YES Sessional use			YES Sessional use		YES – sessional use	
		Working in Clinical Embryology laboratory	YES – single use			YES – sessional use		YES – sessional use	

It is very important to follow strict principles of donning and doffing. While using PPE follow standard precautions all the time.

### Donning PPE

1. There is a general rule to be followed, while donning a PPE as more than one method is available.
2. Call for HELP – Yes donning a PPE requires help, it is a friendly procedure done with the help of your colleague's help and supervision.
3. Collect all the PPE gadgets and first confirm the size.
4. Hand hygiene and follow the Donning basics.
5. Donning basics
  - a. Don before entering the work area.
  - b. Avoid touching your face.
  - c. Avoid touching undue surface areas.
  - d. Be comfortable in your PPE and change it when you feel it is contaminated or torn.

### 6. SEQUENCE OF DONNING PPE1:

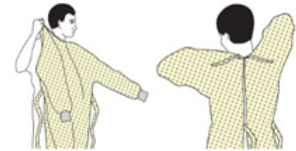
- a. Put on Gown.
- b. Put on Mask, covering nose, mouth and chin.
- c. Put on goggles and face shield.
- d. Gloves properly fitted and covering the cuffs of Gown.

#### SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

##### 1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



##### 2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



##### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



##### 4. GLOVES

- Extend to cover wrist of isolation gown



#### USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene






## Doffing of PPE


Doffing is an important step to minimize the risk of disease transmission. It is essential to understand all the steps of doffing protocol as given by CDC


**HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)**  
**EXAMPLE 1**


There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door.** Remove PPE in the following sequence:

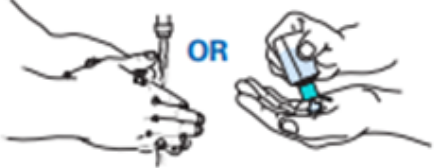
- 1. GLOVES**

  - Outside of gloves are contaminated!
  - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
  - Hold removed glove in gloved hand
  - Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
  - Discard gloves in a waste container
- 2. GOGGLES OR FACE SHIELD**


  - Outside of goggles or face shield are contaminated!
  - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Remove goggles or face shield from the back by lifting head band or ear pieces
  - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container
- 3. GOWN**

  - Gown front and sleeves are contaminated!
  - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
  - Pull gown away from neck and shoulders, touching inside of gown only
  - Turn gown inside out
  - Fold or roll into a bundle and discard in a waste container
- 4. MASK OR RESPIRATOR**

  - Front of mask/respirator is contaminated — DO NOT TOUCH!
  - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
  - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
  - Discard in a waste container
- 5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE**



**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE**



## HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

### 1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



### 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

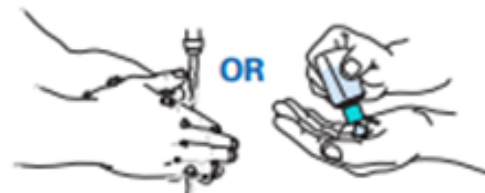


### 3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



### 4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS  
BECOME CONTAMINATED AND IMMEDIATELY AFTER  
REMOVING ALL PPE



When gloves are removed first, hands only need to touch uncontaminated gown surfaces, usually behind the neck and back of the shoulders. The gown is then stripped off the body and neck, by balling or rolling (front and sleeves) in contaminated surfaces. Nevertheless, this is hard to do, without contaminating the hand. Therefore, the best way of doffing a discarded gown and gloves is to sever the neck ties by removing the upper front portion of the gown with the hands still gloved, balling or rolling in the contaminated surfaces and taking the gloves out inside while the hands are taken out of the gown's sleeves. The gown and gloves can then be placed together in a disposal receptacle.

#### **Conclusion-**

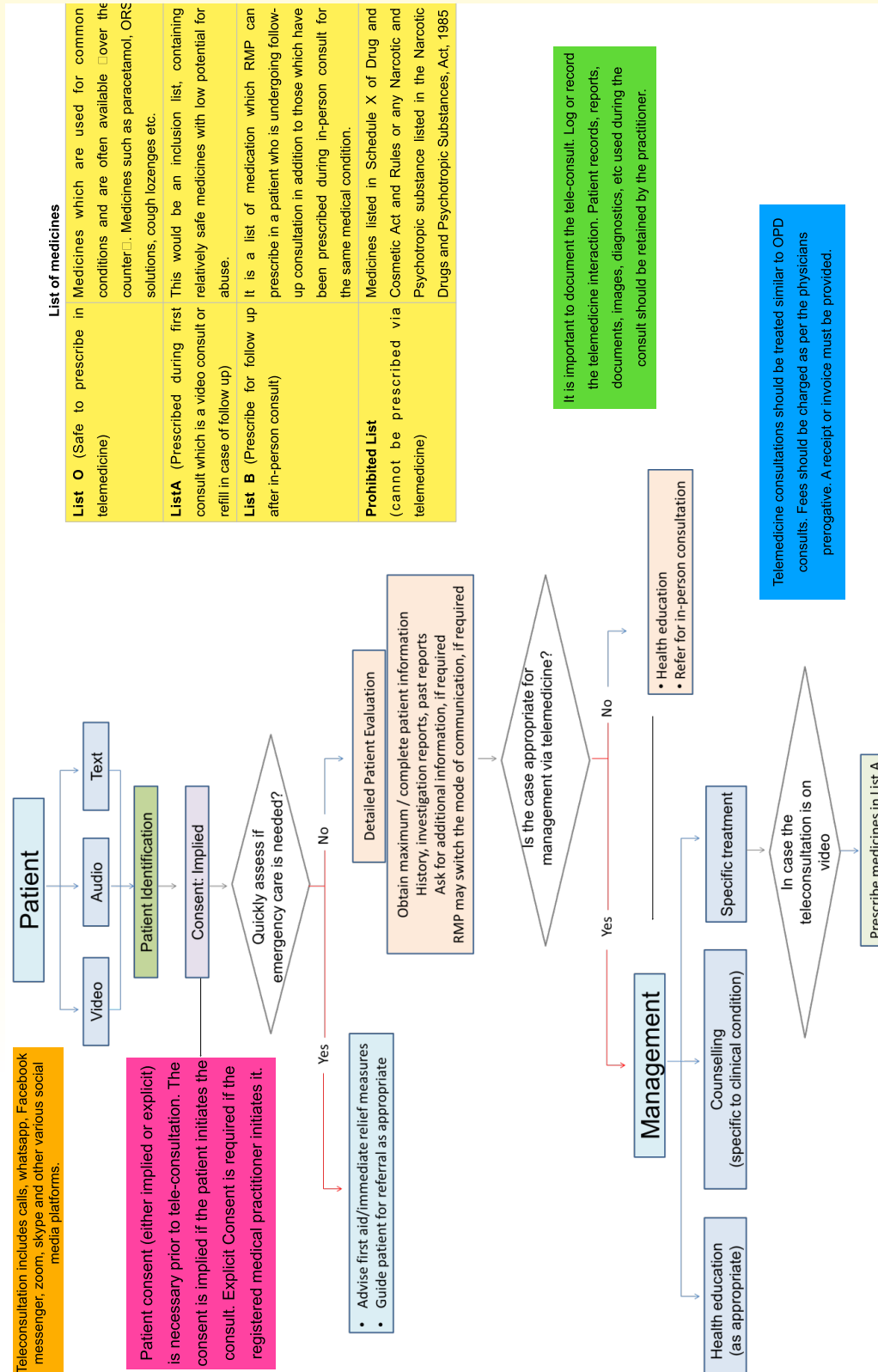
Donning and Doffing is an integral part for the health workers to protect themselves and to deal with the Covid-19 pandemic.

#### **References:**

1. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. <http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/Isolation2007.pdf>
2. Association of Reproductive and Clinical scientists

## 08. TELEMEDICINE IN INFERTILITY

Dr.Rohan Palshetkar | Dr. Amrita Tandon | Dr. Aditi Tandon





## 09. DUTIES OF STAFF IN THE POST COVID SCENARIO

Dr Laxmi Shrikhande | Dr Amogh Chimote | Dr Balasaheb Khadbade | Dr Varsha Baste

### Introduction

The COVID 19 has certainly changed the entire world and has almost brought it to a standstill. Even then we as health care providers are undeterred and continue to provide service to the needy in this period of lock down. We as infertility consultants will be in a dilemma about starting regular practice and services after the lock down has ended as the entire hospital staff and the patients will still be under the risk of being infected. This primary concern can be dealt easily if your staff is well versed with all the practices of preventing the infection and ensuring smooth running of the centre once the lock down has ended and the situation comes back to near normal. The following practices are to be followed by the members of your staff in order for smooth running of the centre.

### 1. SECURITY GUARD( first point of contact)

1. To wear mask( preferably n95) and protective face shield/ or eye wear at all times
2. Use a non-contact infra-red thermometer to take the temperature of the patient and the relative.
3. Screening of the patient using checklist( appendix a)
4. Limiting the number of relatives inside the hospital to 1
5. Make sure every person who enters applies alcoholic hand sanitizer.
6. No entry for anyone in the hospital without mask

### 2. RECEPTION

1. Change Into hospital clothes (keep outside clothes separately)
2. Wear mask (N95/triple ply) and gloves.
3. Clean the reception with 70% alcohol spray before manning the station.
4. Clean computer and paraphernalia with 70 % alcohol spray before starting the day and before leaving the duty.

5. Avoid cash transaction as much as possible( card/ cheque payment)
6. Avoid crowding of patients and relatives at the reception
7. Ask the patients and their relatives to sit on alternate chairs( minimum 1 meter away)
8. Play an infomercial film about maintaining hygiene and how to prevent spread of infection on the tv/ hospital display
9. Manage timing and appointment of the patient such that there is no crowding of the patients in the waiting room

### C. HOUSE KEEPING STAFF

1. Change Into hospital clothes(keep outside clothes separately and avoid saree)
2. Wear mask (N95/triple ply) ,cap, face shield , Heavy duty gloves for waste handling (latex examination gloves in other cases)
3. Clean every 3 hourly frequently touched surface with 70% alcohol spray and floors with sodium hypochlorite(1:100) solution.
4. Wash all hospital clothes only after soaking in soap and froth for 30 min.
5. Handle all hospital waste with care.
6. Disposing of PPE in separate bags (red colour) after spraying sodium hypochlorite solution over it.
7. To clean the sonography table with 70% alcohol /sodium hypochlorite after each scan.
8. Embryology/ andrology/IVF OT: Surface cleaning by Quaternary ammonium salts (1 % solution)

### D. NURSING STAFF

1. Change Into hospital clothes/ scrubs (keep outside clothes separately)
2. Wear mask (N95/triple ply) cap, latex examination gloves.
3. Disposable apron whenever in close proximity of patients.



4. Only one patient to be attended at one time for injections.
5. To use disposal sheets during sonography and change it after each patient.
6. Fumigation of injection room once a day
7. Make sure the patient and the relatives are wearing mask at all times.
8. Cleaning hands with alcoholic sanitizer after tending to one patient

#### Administrative staff

Form 2 teams right from front desk to IVF lab staff.

Let 1 team work for first 15 days. Give break to this team and let another team work for 2nd half of the month.

In case any staff gets infected that team will go for quarantine and other team will continue working. This way your continuity of treatment will not be affected

#### Lab Staff

They should be well versed with the safety protocols though they are not coming with the direct contact of the patient.

They should take all the precautions to reduce exposure to follicular fluid and sperm.

Safe disposal of fluids in individual closed containers, as quickly as possible is highly recommended.

Good laboratory practice principles should be followed at all times.

#### Appendix A

## कोरोना ट्राइएज प्रश्नावली

1. क्या आप पिछले दो हफ्तों में बीमार हुए हैं?
2. क्या आपको बुखार है (37,5 ° C से अधिक)?
3. क्या आपक्या आपको खांसी है?
4. क्या आपके गले में खराश है?
5. क्या आप गंध या स्वाद की अपनी भावना खो चुके हैं?
6. क्या आप किसी ऐसे व्यक्ति के संपर्क में हैं जिनके पास इनमें से कोई है लक्षण?
7. क्या आपने राष्ट्रीय या COVID -19 के लिए उच्च जोखिम वाले क्षेत्र की यात्रा की है अंतरराष्ट्रीय स्तर पर?
8. क्या आप अस्पताल / नर्सिंग होम या हेल्थकेयर सुविधा में काम करते हैं?
9. क्या आप किसी ऐसे व्यक्ति के संपर्क में हैं, जिसको COVID-19 है?
10. क्या आप किसी ऐसे व्यक्ति के साथ घर में रहते हैं जिसका निदान किया गया है COVID-19 संक्रमण या COVID-19 लक्षण (बुखार, खांसी )?
11. क्या आपको मधुमेह, सांस की बीमारी जैसी गंभीर बीमारी है, क्रोनिक किडनी रोग, आदि? (इस सवाल का उपयोग करते समय छोड़ दिया जा सकता है)

## 10. Ultrasound in ART in Covid Scenario

Dr Manjiri Velsangkar | Dr Darshana Pawar | Dr Jhelam Deshmukh

As we combat the global pandemic of Novel Corona Virus infection/COVID 19 disease, certain guidelines or good practice recommendations are necessary in the field of ART. ASRM as well as ESHRE and several regulatory bodies have laid down their policies regarding COVID and ART. Most of the organisations have come to a consensus of deferring elective ART IUI, OPU as well as fresh /frozen embryo transfers till the curve of pandemic is completely flattened. However certain exceptional situations like patients who need to start the cycle in view of fertility preservation pre oncotherapy, Patients with grossly diminished ovarian reserve will have to be taken up for IUI, IVF cycles. Sonography in

ART is a significant step in decision making as well as in management of ART cycles.

Hence the following recommendations for performing ultrasounds in ART cycles. There are no clear recommendations regarding the same and we are in a pursuit to understand the concerns arising out of scans and their repercussions on the patient as well as staff health.

Though COVID has symptoms such as cough, fever, anosmia and flu like symptoms, the virus is known to mutate and hence history forms an essential component of the sonography team as well prior to performing the scans.

### KEY FACTORS

#### Appointment system



### RECOMMENDATIONS

1. Patients for scans must be triaged at the front desk level /appointment system itself.
2. Ask for symptoms like fever, sore throat, anosmia, headache, H/O Travel, close contact quarantined.
3. If positive history, patient be directed through the telemedicine department to the fever OPD's, observed, isolated and tested as per ICMR criteria as per local regulatory authority COVID 19 recommendations. Such patients are deferred for any further ART Rx.
4. Asymptomatic patients be given appointments spaced at least 10 mins apart to minimise crowd during scans.
5. Respect Time of appointment
6. Each patient for scan must be encouraged for wearing three layer protective mask, face gear if possible and told to restrict the number of accompanying persons to none or only one if possible.

#### Positive History (PPE should be used according to categories)

- Travel should include a detailed itinerary, transit locations and date of return
- Occupation
- Exposure to a test positive case
- Living/visiting- a known positive cluster
- Declaration and written informed consent

#### No Of Visits

The number of Scan visits be restricted to minimum 2 or 3

1. AFC / follicular phase one scan
2. Deciding timing of trigger
3. Luteal phase scans ( if required )

Other than mandatory 2 to 3 visits, patients be encouraged to resort to telephonic consultations and be scanned only if suspected OHSS, or emergencies.

### Pre Scan Consent



- Each centre must display its COVID policy at the waiting area and preferable patients be seated min 3 ft apart. Relevant consents regarding the possibility of risk related to Covid transmission be taken and patient to be taken for scan only after documented consent. Patient need to adhere to CODE OF CONDUCT of the ART unit with respect to COVID 19 policy .
- Each patient must be encouraged for hand wash prior to scan and hand sanitiser to be used.
- Patient must be taken for scans on plastic Macintosh sheets which must be properly sterilised by 1% hypochlorite application in between two patients /disposable sterile drapes.

### Personnel

- Dividing the entire ART team into micro teams is beneficial.
- Preferably the scanning room be staffed by a single person with PPE, mask, face shield/cover and use of latex/disposable sterile gloves after every patient
- Effective triage as well as Rotating duties of staff is necessary for personnel management for smooth functioning of the unit as well as to prevent unnecessary exposure of the entire unit .
- If any staff in scanning room faces any symptoms or is tested positive, she be self quarantined and regulatory authorities be informed.

### Disinfection



- Sonography room must be disinfected by 1 % hypochlorite solution for mopping the floor, couch.
- Chairs and tables if any must be metallic and should be mopped with hypochlorite solution repeatedly as well as before commencement and closure of the room
- Sonography machine used for ART related procedures be cleaned regularly after every scan with oosafe which is known to combat COVID virus .Hypochlorite may stain and coat the machine posing risk of VOC s in labs and room.
- Probe hygiene must be done regularly in between scans and cleaned with OOSAFE and sterile probe covers be used.
- 70% Alcohol, Ammonia, 10% Bleach, Clorox, standard dilute Cidex, Protexwipes. (As approved by vendor)
- Disposal of probe covers/condoms be properly done using sterile gloves, face shield and recommended PPE in Red coloured bio waste Bags.
- At the end of all scans, room be thoroughly mopped with hypochlorite , all surfaces be cleaned, room be locked till next usage.
- Role of UV lights during non working hours in the sonography room is advisable.

### Sonologist



The ART consultant performing sonography must take adequate universal precautions.

Mandatory protection includes

1. N 95 face mask
2. Face shield
3. Coverall areas (cap, gloves and surgical gown)
4. Goggles/Eye Protection
5. Disposable non latex sterile gloves .

Scanning performed with one hand on the transducer and with the other hand in contact with the keyboard to avoid contamination of Keyboard

After the scan, thorough cleaning of the gel bottle and all touched surfaces should be performed using a low-level disinfectant (LLD)

Frequent cleaning of transvaginal transducer is not required unless there is breach in probe cover.

### Cancellation policy



Cancellation policy of the unit must be displayed as well as communicated to each patient .

1. In view of COVID like symptoms, scanning must be cancelled which may include cancellation of the entire cycle till testing is done.
2. Triage of patients and staff be regularly done and cycles be cancelled in case of COVID positive reports.
3. If staff gets a positive report, quarantine policy as well as arrangements be clearly displayed and discussed with the staff.

### Concerns



There are certain concerns about the aerosol spread due to air conditioning systems in sonography rooms.

Rearrangement of sonography room, waiting room

Spacious well ventilated rooms should be used for sonography purpose

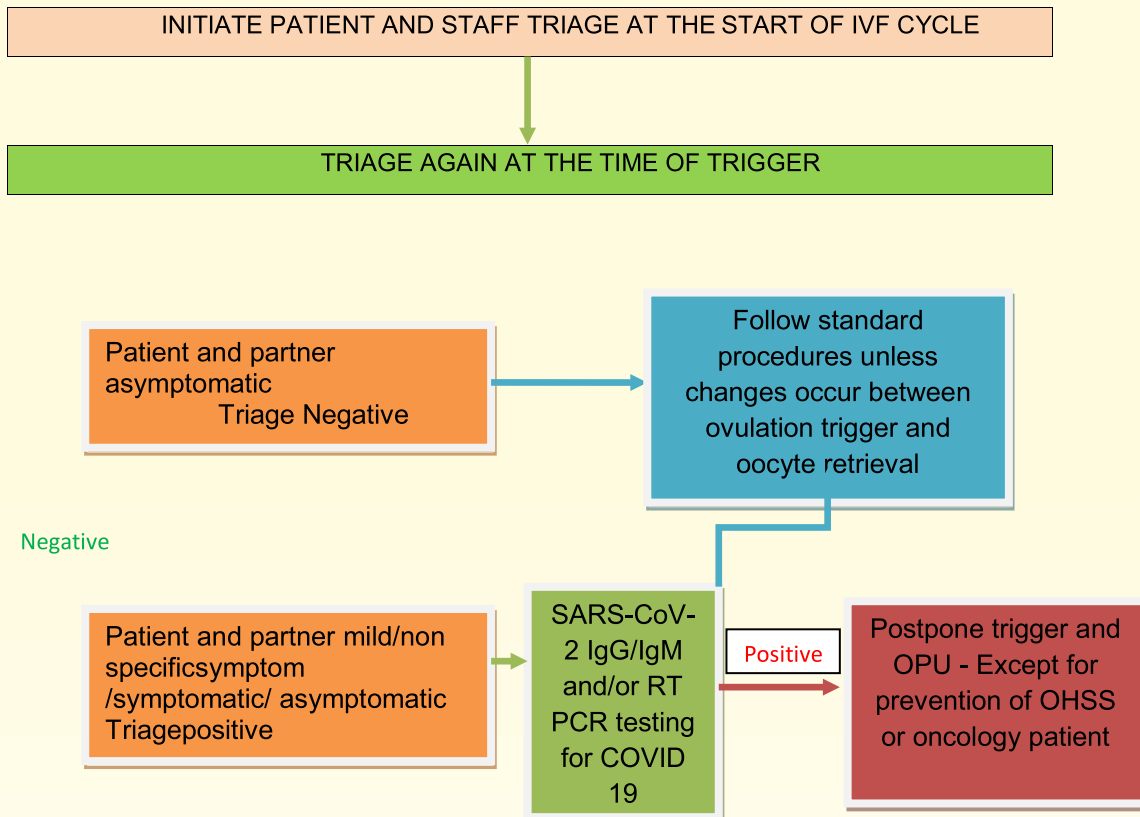
Recommended that single unit air conditioning should be run in an **“open to outside air”** mode (vent open).

Better to shift the computers/printers to adjacent room

The scanning room be well ventilated and sanitised from time to time, the role of UV light for disinfection is still advisable .

## 11. Adaptation of ART Service

Dr Sunita Tandulwadkar | Dr Prashant Patil | Dr Bipin Pandit | Dr Ameya Purandare | Dr Nalini Bagul



Patient Triage

Staff triage.

Triage positive → SARS-CoV-2 IgM/IgG or RT PCR testing for COVID 19

**STAFF**

MINI-TEAMS Formed  
Minimum interactions among them.  
Rotating schedule  
(Eg-7 days working and then 7 days on leave)





### Change in Behaviour

1. COVID SPECIFIC TRAINING TO STAFF
2. COVID SPECIFIC SOPS FOR STAFF
3. TRAINING OF STAFF

(Details mentioned in separate Chapter)

**Patients**

- Telemedicine
- Reduce visits
- Triaging
- Preoperative instructions
- Check Trigger on Phone



### 1. COVID SPECIFIC CONSENT OF PATIENTS

Patients should be made aware that the present experience is limited and does not indicate that the severity of infection is any worse in pregnancy.

No evidence of an increased risk of fetal anomalies or adverse pregnancy complications (RCOG)

Consider individual clinical situation and risk profile, and the likely persistence of the virus in the local community in the medium term.

Counseling and the patient's decision whether or not to proceed with fertility treatment should be documented in the medical record.

### 2. TRIAGE AT THE TIME OF RECRUITMENT AND REPEAT BEFORE TRIGGER (Covered in detail in another chapter)

- Before starting treatment
- During Treatment
- Action in the event of suspected COVID-19

### 3. TRAINING AND COUNSELLING OF PATIENTS

#### Clinic layout

- Physical barriers between staff and patients, and/or appropriate PPE for the activity being undertaken

- Spacing of furniture to ensure physical distancing is maintained between persons not from the same household (e.g. waiting area chairs, workstations in administrative offices)

- Signage and information clearly describing the requirements in place

#### Operational preparation for service resumption

- a. Scheduling of appointments and procedures
- b. Number of visits- Maximum Consultation on calls/video. Maintain confidentiality. Single pathway e.g. scans and blood tests can be undertaken without a return to the waiting area and "drop-in" visits discouraged.
- c. Duration of visits - reduce the length of time spent
- d. Working patterns –Staff- Split, shifts, virtual & work from home
- e. Staff responsibilities – Triaging & testing
- f. Maintaining safe working practices – Teams, clinic zones, scheduled breaks,
- g. Training
- h. Reciprocal agreements
- i. SOP's

### Stimulation Protocol

Clinical protocols to minimize the risk of OHSS

GnRH-Antagonist protocol and GnRH-agonist trigger

To minimize the risk of hospital admission for patients and to reduce the burden

Preventative measures such as prophylactic antibiotics should be considered to reduce risk where appropriate

### Operation Theatre

Make SOP for OT procedure.

Special training to Staff

Avoid batch work & crowding.

Trigger should be given with sufficient time shifting for cleaning

Limit the number of persons simultaneously present in the OT.

Trainees should not be allowed.

Everyone entering the OT should use PPE

All patients should wear triple layer mask

### Sanitation

Routine sanitation - 70 % alcohol few hours prior to procedure

AHU setting should be changed (frequency of air changes -  $\uparrow$  to 15/min and

Outside air intake should be increased to minimum 20 %

Viricidal purification system like plasma purification or photocatalytic

PPE should be worn 30 minutes prior to entering OT to reduce VOC.

### Anaesthesia



First OPU should be tried in cervical anaesthesia, and sedation can be added.

OPU can be done in regional anaesthesia.

Avoid GA as far as possible.

When GA is a must, use a specialised box over the head of the patient to minimise aerosol spread.

### Potential SARS-CoV-2/COVID-19 positive patient

Don't initiate treatment

### Stop Rx once diagnosed (even if in between treatment)

Continue treatment only in emergencies- oncology patient or high risk of OHSS

N95 mask plus full face shield full body protective suit, nitrile gloves with outside powder free gloves, two layer of gown for all staff

Disinfection of operating theatre, transfer room and IVF laboratory after the procedure

Close the OT for 24 hours

Emergency agreements between ART centres to guarantee continuity of treatment provision.

### Embryology Lab changes- mentioned in separate chapter

#### Embryo transfer

Limit the number of staff members in the transfer room.

Perform transfer only in cases of low risk/asymptomatic and triage negative patients and partners.

Apply a freeze-all policy for all patients and/or

partners who became symptomatic after the oocyte retrieval.

### **Cryopreservation**

High security straws and  
Separate liquid nitrogen cylinder in Covid 19 era  
COVID 19 patients- separate cylinder

## Adaptation Of ART Services

Significant co-morbidities- better to avoid ART treatment

Choice to proceed or postpone treatment- Document

Slight increased risk of COVID-19 disease in pregnancy

Educate patients- How to reduce transmission?

Telemedicine

Self Declaration of illness & Consent Forms

Redesign of waiting rooms and working spaces

Protective screens & PPE for staff

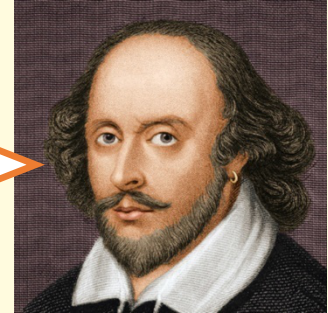
Management of appointments- Consultation/USG/Pathology

## 12. OPERATION THEATRE - CHANGES TO MAKE IN OT PROTOCOLS IN COVID SCENARIO

Dr Ashish Kale | Dr Shalaka Mamidwar | Dr Pratik Kherde

“To Be or Not To Be – That Is  
The Question”

To Start OT or Not To Start—  
That Is The Real Question

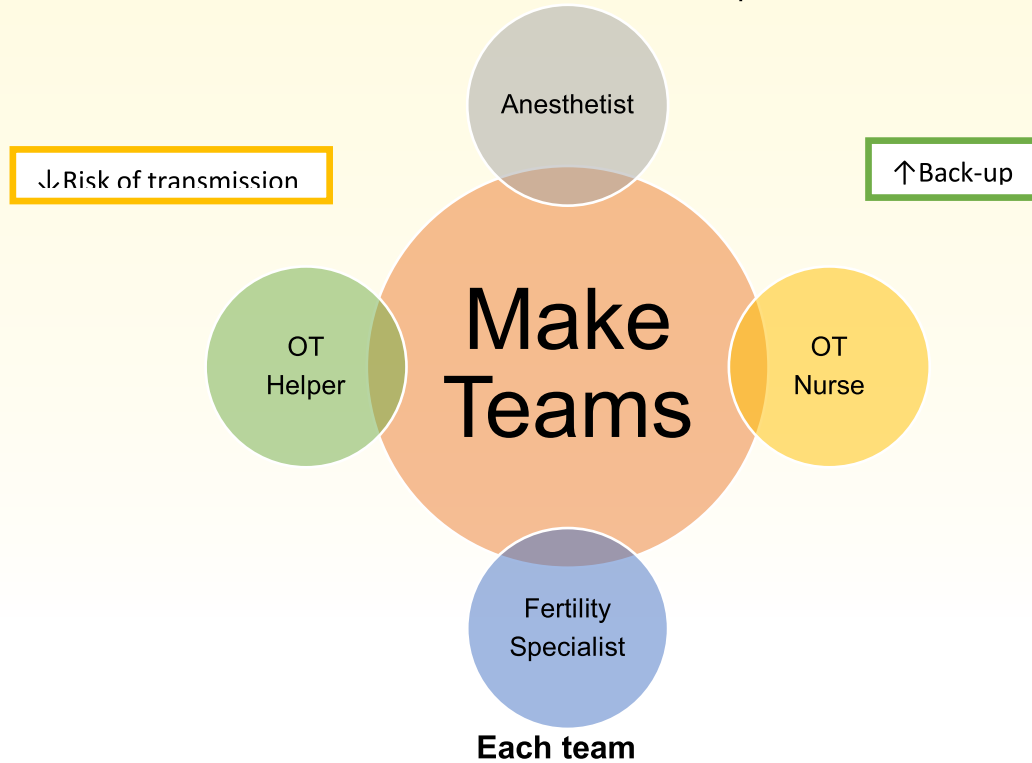


William Shakespeare

### MAKE TEAMS:

This is essential in centres doing a large number of ongoing IVF cases.

At least 3-4 teams of IVF personnel.



Teams should work in a rotation of 7 days

One week per team, to minimise the risk of transmission.

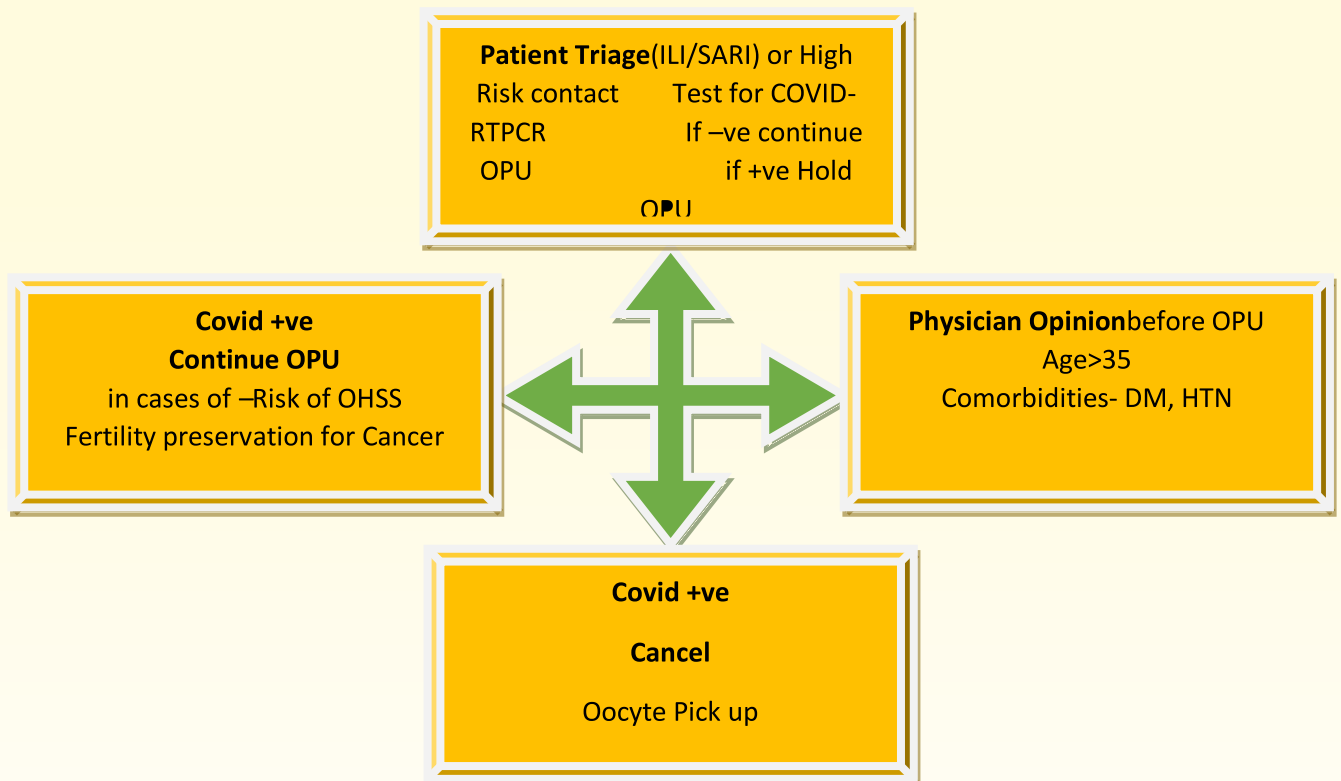
Restrict Access to number of persons

### Why make Teams?

Large number of senior surgeons is exposed to infected patients, the possibility for them to become infected and require self-isolation is real and could potentially result in a dangerous shortage of senior expertise.

Resource usage should be carefully considered (materials, devices, intensive care beds, blood components)

### Guidelines to be followed in patients prior to OPU:



### Shifting to OT

Non-intubated **patient** must wear a surgical mask, disposable waterproof gloves, disposable cap, and shoe covers during transport.

Patient's hands should be sanitized before transport.

**Transport operators** must sanitize hands and wear PPEs before transfer and should minimize contact with patients.

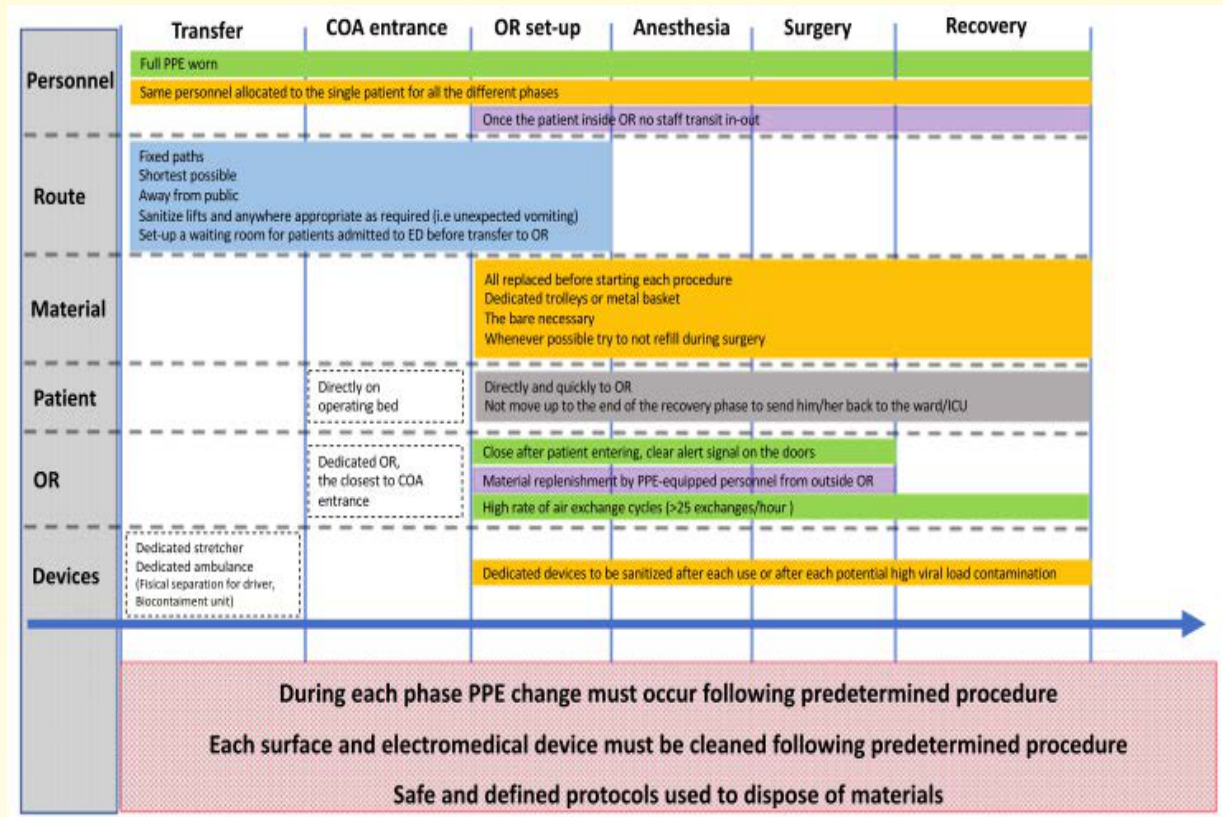
**Coded routes** should be followed and hospital public areas avoided.

Well-organized logistics will contribute to minimizing disposables wastage.

Dedicated well- identifiable containers for infectious-risk **health waste**



### Surgical Patient management Flowchart



### Guidelines for care in the OT:

**Pickup Schedule**

- 45-90 min apart
- Individualise
- History
- Check Reports if Scenario 2

**Staff**

- Minimum staff
- Shift duties
- Hand washing between cases
- Avoid going out
- Remove all non-essential equipment

**PPE Kits**

- If suspected/confirmed +ve case
- 3 layered PPE/Plastic/ Sterile gown
- N95 & Face shield for other cases

**OT Disinfection**

- Oosafe in between cases
- Na hypochlorite where Lab is away
- Fumigation/ UV light/ Ionizer at the end of day

Change the Sterile gown and the disposable plastic gown after each case.  
PPE need not be changed.

### **Anaesthesia**

General Anaesthesia to be avoided i/v/o high risk of aerosol transmission.

Preferred anaesthesias are

- Local block with 1% Lignocaine in Vault
- Saddle/ Spinal Anaesthesia

### **Heat and Moisture Exchanger with Viral Filters (HMEFs)**

Place two high quality Heat and Moisture Exchange Filters (HMEFs). First, between tracheal tube and breathing circuit; and the second between expiratory limb and anaesthesia machine

These HME filters can remove up to 99% of airborne particles of size 0.3 microns or greater, thus helping in preventing contamination of OT atmosphere

Apply a third HMEF on tracheal tube itself, if feasible

### **Scavenging**

Active scavenging is not available in majority of the hospitals

It is suggested that corrugated tubing can be applied to the scavenging port and that can be dipped in a bucket with 1% hypochlorite solution

Suitable PPE should be used while handling the hypochlorite solution and direct contact with skin and eyes should be avoided

### **Aerosol generating procedures (AGP)**

- Aerosol generating medical procedures are tracheal intubation and extubation, suctioning, nebulization, CPAP, BiPAP or high flow nasal oxygen therapy, bronchoscopy, etc
- Aerosolization is also increased when more than one attempt at intubation is required.
- The chances of exposure to the virus are maximum during such high aerosol generating procedures
- During AGPs, all health care workers should always wear full component of proper PPE Kit (Cover all gown, N95 mask, eye shield, cap, double gloves, shoe cover)

### **Newer Filter Systems**

Photo catalytic systems- help in decreasing the viral load.

Negative Pressure systems in the OT and use the negative pressure to cleanse the OT in between two cases.

Positive Lab Pressure (than the OT)

### Changes in OT

(to make it COVID ready)

Blanking (blocking) off the return air vents in the OT.

Exhaust air quantity should be greater than the supply air quantity

Dedicated central air conditioning for COVID OT with provision for altering the pressure in OT (making it negative pressurized).

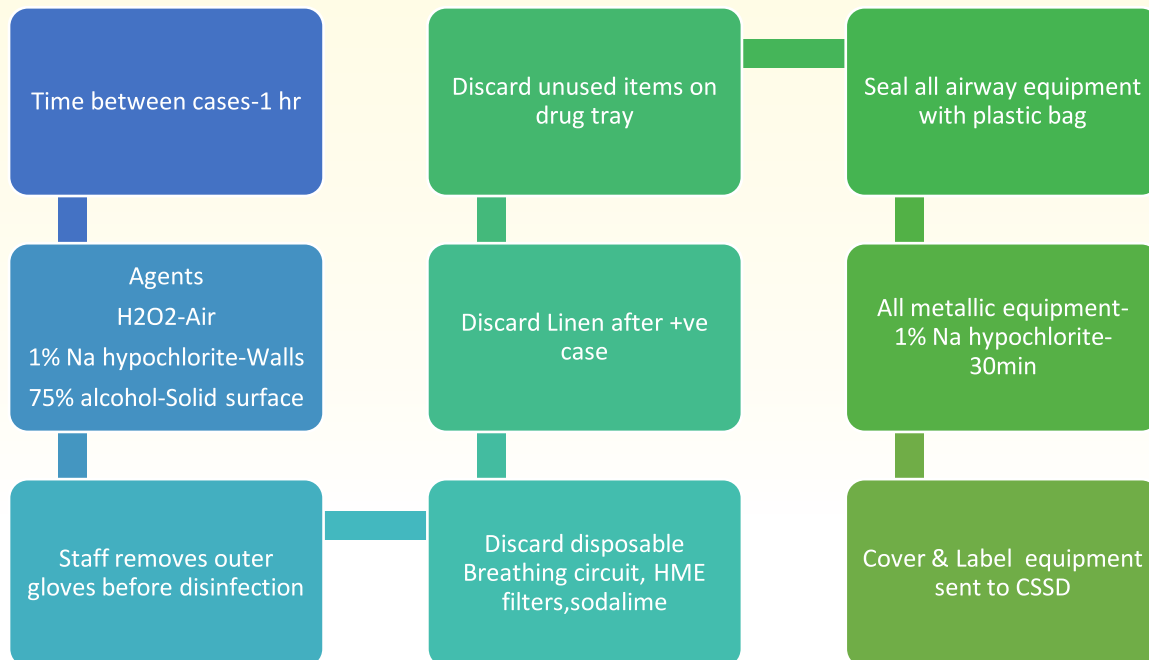
HEPA filters with no leaks in exhaust ducts.

Treatment of exhaust air with 1% Hypochlorite

### Transparent Plastic Sheet Covers

Cover all monitors, cables, anaesthesia work station/machine, cautery, operation table, patient trolley, etc with transparent, water resistant plastic sheets. These plastic coverings should be **removed and changed after each case**

### Sterilization and Decontamination



*“At The End Of The Day, The Goals Are Simple: Safety And Security”*

-- Jodi Rell

#### REFERENCES

1. Surgery in COVID 19 patients operation directives World journal of emergency surgery 2020 Apr7
2. COVID OPERATION THEATHER ADVISORY STATEMENT ISA national volume :64 Indian journal of anesthesia
3. ESHRE practice guidelines.2020

## 13. Embryology Lab in Covid Scenario

Dr Hrishikesh Pai | Dr Sudesh Kamat | Dr Ashwini Kale

Today we stand at the horizon of restarting our IVF LABORATORIES, keeping in mind, the best of interests of our patients, doctors, embryologists, nursing staff, OT and lab personnel

Starting Embryology Lab

- balancing risks and
- empowering our members to prepare and respond
- references from ESHRE, BFS, ARCS and also from the numerous online webinars from IFFS, ISAR

**Questions before us**

- Conflicting statements on Risk of Infection in Pregnancy & vertical transmission
- Conflicting results on presence of virus in semen/follicular fluid
- Ideal disinfection in Embryology Lab
- PPE kits for Embryologists
- Change in protocols

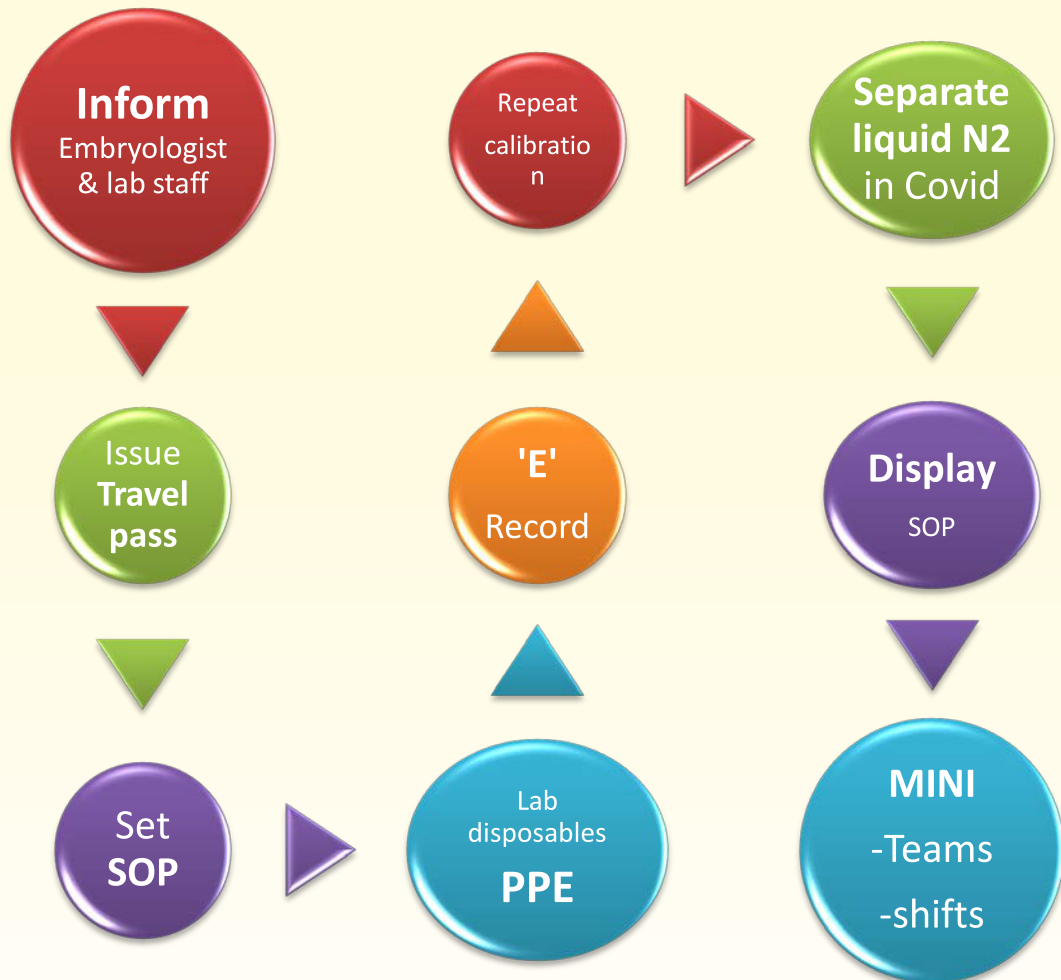


Informed consent  
Prioritization policy  
Fair and transparent approach  
Adopt sustainable changes

**Changes in Lab Policies**



Flowchart-15 Days prior to start

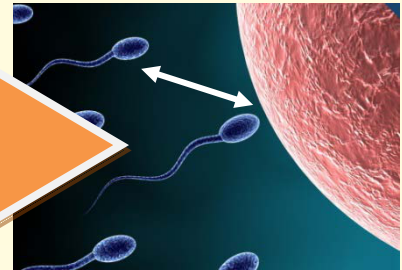




**RESTRICT ENTRY-** Only Lab personnel get entry  
All personal items, such as **mobile phones kept outside**  
**Lab Uniform + Spectacles cleaned with disinfectant**  
Shorter Shift

**DO THE FIVE**

Social Distancing in the Lab (Avoid going out)  
Frequent hand washing+ Respiratory hygiene  
Avoid touching Face/eyes

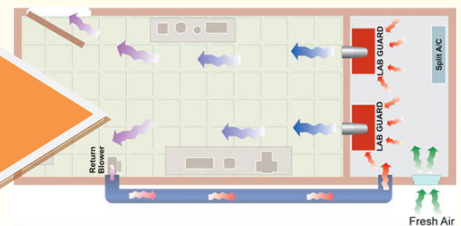


**TRIAGING & TESTING (Staff/Patients)**

Asymptomatic patients with High Risk Contact  
ILI (Fever, Cough, dyspnoea)  
? Elective Testing with consent (ICMR says No)

**AHU Changes**

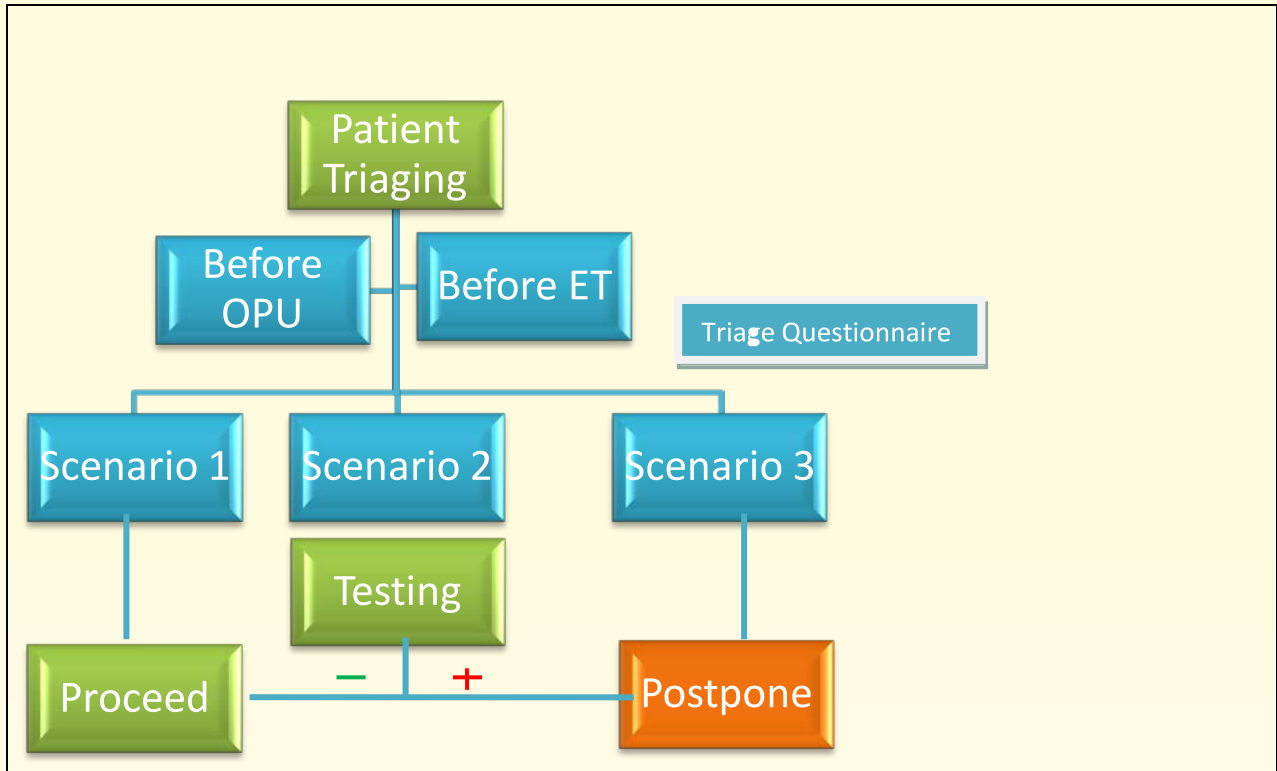
Positive pressure to minimise entry of viruses  
Frequency of air changes increased 15/min  
Outside air intake- Min 20%



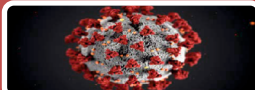
**Disinfection of Lab**


UV light for overnight use & -ve Ion generator (Scitech Airon ionizer)- Disinfection of Air  
Surface cleaning- Oosafe/ Embryosafe.  
(NO HYPOCHLORITE)


**BEFORE OPU**





**DAY of OPU**

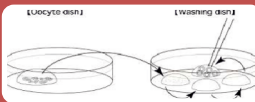
- 

COVID 19 - not present in follicular fluid/seminal plasma/gametes/embryos
- 

Interval between two procedures should be timed atleast 90 minutes apart
- 

All disposables and culture media bottles should be thoroughly wiped with Oosafe
- 

Embryologist-Wear N95 mask, Gloves,Goggles (NO NEED OF COMPLETE PPE)
- 

Procedure- Frequent glove changing before and after each opu procedure; Dilute Follicular fluid before discarding; Discard in plastic bag not in Dustbin
- 

Frequent washing of the oocytes, in multiple droplets of the culture media

### Semen Collection

Home collection of semen sample is recommended (Check transport time)

Container-placed in a paper bag and left inside the collection room. Wipe from outside

Density gradient centrifugation (DGC) for sperm preparation

Clean and disinfect Room after every collection

### SEMEN, OOCYTE, EMBRYO FREEZING

Freezing policy to be followed as per individual IVF unit since the vertical transmission or cross contamination is not known yet

Embryos preserved if ET deferred for reasons like OHSS, poor endometrial lining and patient turns positive after oocyte retrieval in closed system, by vapour technique wherever available

### CRYOTANKS

Separate cryo container for all cases post COVID era

Closed system of freezing to be followed.

One person preferably handles all



## CONSUMABLES

Centres should work to ensure that the supply chain for all consumables is intact.

This should include, where necessary, contacting suppliers to ensure availability.

Use separate single packed dishes

### Summary

- Centres should develop COVID-19 specific documentation to reflect changes in their practice.
- Many lessons will have been learnt during the COVID-19 pandemic
- We've to change working practices and
- SOPs may be updated

### REFERENCES:

1)The Association of Reproductive and Clinical Scientists (ARCS) and British Fertility Society (BFS) U.K. best practice guidelines for reintroduction of routine fertility treatments during the COVID-19 pandemic.

2)[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/879107/T1\\_poster\\_Recommended\\_PPE\\_for\\_healthcare\\_workers\\_by\\_secondary\\_care\\_clinical\\_context.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879107/T1_poster_Recommended_PPE_for_healthcare_workers_by_secondary_care_clinical_context.pdf)

3)<https://www.rcog.org.uk/globalassets/documents/guidelines/2020-04-17-coronavirus-covid-19infection-in-pregnancy.pdf>

4)<https://www.hfea.gov.uk/treatments/covid-19-and-fertility-treatment/coronavirus-covid-19guidance-for-patients/frequently-asked-questions-for-patients-on-coronavirus-covid-19/>



## 14. THIRD PARTY REPRODUCTION

Dr Jaydeep Tank | Dr Hitesh Bhatt | Dr Manjushree Boob

Infertility is a disease and once the risk of COVID-19 infection is decreasing, all ART treatments can be restarted for any clinical indication including third party reproduction.

However, vigilance and measured steps must be taken for safe practice and to minimise the risks related to COVID-19-positive patients or staff during treatment.

The key principle in restarting activity in an ART centre is that patients, staff and donors attending the centre is triage-negative. From a patient perspective, it means that only triage negative patients are commencing and continuing treatments. Each centre should ensure they adapt the triage questionnaire to their specific population.

Third party reproduction is of 3 types, namely, Sperm Donation, Oocyte Donation and Surrogacy.

### 1. Sperm Donation –

As we get semen samples from sperm banks with proper collection and HIV/HbsAg testing at collection and at 6 months, all frozen samples before the pandemic can be used safely as before. Post COVID all donors must be triaged and sample quarantined to prevent possible spread of infection.

### 2. Oocyte Donation –

Triage information regarding health status, symptoms and lifestyle of the Oocytedonors and of individual(s) living in the same household should start at least two weeks before the beginning of clinical activities at the centre. Based on the triage questionnaire there can be three possibilities :

Scenario 1 – Triage Negative, Asymptomatic– Continue normal treatment and take in cycle

Scenario 2 – Triage Potentially Positive, Mild or non-specific symptoms,– Test for SARS/CoV-2 antibodies (IgM and IgG) – Test can have two outcomes – i) Negative – Take in cycle or ii) Positive – Defer till COVID-19 RT-PCR is negative

Scenario 3 – Triage Positive, COVID-19 positive or Symptomatic – Defer treatment and refer for further testing and follow-up

Donor education on COVID-19 risk and prevention is

an essential step prior to acceptance for treatment. Donor education should include:

- Tutorials on the use of personal protection measures like masks, use of hand sanitizers, gloves, etc.
- Advice on continuation of social distancing and avoidance of unnecessary human physical contact.
- Information about symptoms of SARS-CoV-2/COVID-19 infection or exposure occurrence
- Agreement that treatment can be discontinued if the donor encounters a high-risk situation

For Ovulation Stimulation monitoring and Oocyte retrieval, guidelines similar to normal ART cycle are to be followed for Donors too.

For patients needing Donor cycles, counselling regarding the nature of pandemic and written consent regarding various aspects including cancellation of cycle if the Donor gets infected with COVID-19 whilst the treatment is going on, should be considered mandatory.

### 3. Surrogacy –

Surrogate Selection Guidelines should be same as donor selection guidelines. However since surrogate needs management not only until delivery, but also thereafter, special precautions are needed throughout the course of treatment cycle.

References :

1. ESHRE guidance on recommencing ART treatments – from [www.eshre.eu](http://www.eshre.eu)

Disclaimer :

While this article reflects the views of Authors, it is not intended to be the only standard of practice or to dictate an exclusive course of treatment. Clinicians should always use their best clinical judgement and be guided by the needs of the individual patient, available resources and institutional or clinical practice limitations.

## 15. Common FAQs for ART practice in the post Lockdown COVID19 Era

Dr Rohini Deshpande | Dr Bindu Chimote | Dr Kalyan Barmade

### Patient FAQ's

#### 1) Can we try for baby in pandemic period of COVID 19 as we are at home and together..?

Answer: COVID 19 Pandemic can affect all the ages. It has an incubation period of 14 days. Today you may be asymptomatic but you could be exposed. If you become pregnant by chance your immunity in pregnancy is less than normal person so you could be more vulnerable. Hence it is better to hold on till the curve of Pandemic flattens or dips down.

#### 2) I have already taken medication for ovulation induction and had planned for IUI according to doctor advice. Can we get IUI done during this time..?

Answer: IUI is an intrauterine insemination. Sperms are washed in particular solution media and then active sperms are transferred via neck of the womb into the cavity of the uterus. This is to assist reproduction. You have to come to laboratory during this lockdown period and your risk of exposure increases even in non COVID hospital. This is not an emergency procedure so it is better to postpone for some time.

#### 3) I was given daily injections for ovulation induction last month. I had produced six eggs and they were fertilized and 5 good embryos have been frozen by process of vitrification. Doctor has asked me to come for transfer of embryos in this cycle, can I get the procedure done?

Answer: It is ok if your embryos are frozen and preserved. It can easily be in frozen condition for months together. Nothing to worry about its quality. In fact it will be better if you stay home now and we will call you when the time is appropriate for you to come to the hospital. This will minimise your risk and exposure to COVID

#### 4) I am trying to get pregnant naturally. What is your advice? Should I or Should I not be trying?

Answer: If both of you are asymptomatic and are at home then may be you can be together. However I would advise you to postpone for some time. If you get pregnant and have some problem with pregnancy you will have to come to the hospital and it increases your risk of exposure to COVID.

#### 5) My fallopian tubes were tested last month and showed blocks in it. I have been advised Laparoscopy and hysteroscopy procedure. Can I get it done now?

Answer: Yes certainly you need the procedure to be done but not now. We will postpone it for some time. This procedure is done under general that is full anesthesia and it involves more risk as the anesthetist will have to put tube in your wind pipe. You and doctor both will be at risk. This is an invasive operative procedure. We do put in gas in the abdominal cavity. When we deflate your abdomen along with gas there is risk of infection. Even if you are asymptomatic at the time of admission we cannot completely rule out exposure to COVID. As this not an emergency procedure we will postpone it. Secondly any operative procedure needs assistance in OT and all assistants along with doctors and anesthetist need to wear personal protective equipment (PPE). In this COVID era, the procedure if required to be done involves more expense. Some special equipments are needed in the theatre.

#### 6) My husband has travelled from UK two months ago and we are together. He is insisting that we will start fertility treatment. Today is my Day 12 of the cycle. I would like to get ultrasound examination done. Can I come to the clinic?

Answer: Please postpone coming to the hospital. We will be providing only emergency services at the moment. Stay home and be safe.

#### 7) I am under fertility treatment with you and now my period is delayed by 10 days and I have intense pain on one side and have giddiness. My pregnancy

**test is dark positive. Can I come to the hospital now?**

Answer: Yes please do come at the earliest. Call for the ambulance 108. We will examine you and do emergency ultrasonography and confirm the status of pregnancy. I will have to confirm location of the pregnancy. Sometimes pregnancy can be in fallopian tube and it can give pain on one side. This needs emergency treatment.

**8) I want to inform you that I have conceived with your fertility treatment. I have lot of vomiting. I visited local doctor and he did ultrasound for me. He diagnosed that I have triplet pregnancy and I am scared. Can you do something for me?**

Answer: This is possible with fertility treatment. I would like to confirm it and discuss with you about what options of treatment can be considered. Please be at ease. We can offer you treatment of fetal reduction after thorough evaluation to improve outcome of pregnancy.

### Embryology FAQs

**Q1. Is it necessary to screen the couple for COVID 19 before starting IVF treatment?**

A: Yes, advisable along with explanation of potential risks

**Q2. Post lockdown, how do I disinfect my lab before starting any procedures in the lab?**

A: Same as that you would do for a newly constructed lab before starting work.

**Q3. What care do I need to take to verify, protect & maintain my IVF/Embryology lab from potential infection?**

A: Keep number of personnel entering within lab to a minimum. Take periodical swab tests of incubators and working surface. Follow COVID 19 sanitation procedures

**Q4. Does the Embryologist/personnel entering IVF setup need to be screened regularly for the**

**infection?**

A: Yes, advisable periodically for the SARS COV2 IgM/IgG

**Q5. How safe will it be to cryopreserve gametes and embryos?**

A: Safe as long as patients have tested negative for the infection

**Q6. How long do I need to quarantine cryopreserved oocytes/embryos in separate cryocan?**

A: All new cryopreservations to be done in a separate cryocan from those done in pre-COVID era. Preferably use vapour-phase storage tanks as per ESHRE guidelines.

**Q7. What are the chances of cross-infection just in case carrier oocyte/embryos are accidentally placed in same cryocan?**

A: No reported case of cross-infection through liquid nitrogen, so assumably safe. But immediately transfer to a special COVID-cryocan

**Q8. What are the chances of transmission of infection from a positive/carrier to the gametes?**

A: No reported case of transmission from sperm. Oocytes and embryos reported to have the ACE2 receptors. So no IVF for Carrier/positive patients

**Q9. What if an IVF patient tests negative for COVID 19 & post IVF, it is realized that it was false negative & infact the report is positive?**

A: Immediately isolate the couple. Test all other patients who had come in contact with this patient. Preferably cancel the cycle or freeze all oocytes/embryos. No ET

**Q10. Do we need to make any specific changes to the temperature & humidity of our lab since the lab conditions are a very fertile environment for growth of infection?**

A: No, maintain same conditions as optimum for

embryo culture. But carry out periodic lab tests.

**Q11. Are culture media safe from infection? Do we need to do specific tests for media too?**

A: As of now, no known cases of media infection. But advisable to use media within a week of opening even if expiry date is far.

**Q12. Any specific precautions to be taken during the monsoon season to prevent any contamination & infection.**

A: Same as in the pre-COVID era

**Q13. Any specific precautions that we need to take post-thaw?**

A: Not really. But avoid post-thaw extended culture. Do same day ET

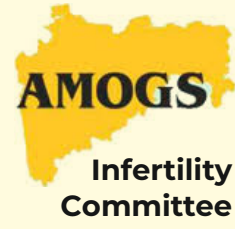
## APPENDIX 1

Triage Questionnaire	Yes	No
1. Have you been sick in the last two weeks?		
2. Do you have fever (over 37.5°C)?		
3. Are you coughing at present?		
4. Do you have a sore throat?		
5. Have you lost your sense of smell or taste?		
6. Have you been in contact with somebody who has any of these symptoms?		
7. Have you travelled to an area at high risk for COVID-19, nationally or internationally?		
8. Do you work in a hospital/nursing home or healthcare facility?		
9. Have you been in contact with somebody who has COVID-19?		
10. Have you been in contact with somebody who has COVID-19?		
11. Have you been you diagnosed with COVID-19?		
12. Do you live in a household with somebody who has been diagnosed with COVID-19 infection or has COVID-19 symptoms (fever, cough, loss of smell)?		
13. Do you have a severe medical condition like diabetes, respiratory disease, chronic kidney disease, etc.?		



# CHANGE

CORONA HANDLING BY ALL  
INFERTILITY GROUP EXPERTS



## APPENDIX 2

हॉस्पिटलचे नाव -----

डॉक्टरांचे नाव -----

दिनांक व वेळ -----

### घोषणापत्र

सध्याच्या कोरोना साथीच्या पार्श्वभूमीवर प्रतिबंधात्मक संचारबंदीच्या (Lockdown) काळात मी माझ्या तातडीच्या इलाजासाठी (Emergency Treatment) म्हणून स्वतःहून हॉस्पिटलला डॉक्टरांकडे आलेलो आहे.

मी COVID 19 चा लक्षणविरहित (Asymptomatic carrier) अथवा निदान न झालेला बाधित व्यक्ती (Undiagnosed patients) असेल तर माझ्यामुळे डॉक्टर व हॉस्पिटलमधल्या कर्मचाऱ्यांना धोक्यात टाकू शकतो याची मला कल्पना असून, त्याबद्दलची योग्य ती खबरदारी घेण्याची व डॉक्टरांनी सांगितलेले सल्ले (Protocols) पाळण्याची माझी जबाबदारी आहे.

तसेच हॉस्पिटल मधून अथवा डॉक्टरांकडून मला संक्रमण (Infection) होऊ शकते याचीही मला कल्पना आहे, व असे होऊ नये याची मी स्वतः सर्वतोपरी खबरदारी घेईनच, पण यदाकदाचित मला किंवा माझ्या सोबत आलेल्या व्यक्तींना (Accompanying persons) असे संक्रमण झाल्यास मी डॉक्टर व हॉस्पिटल कर्मचाऱ्यांना जबाबदार धरणार नाही.

रुग्णाचे नाव-----

रुग्णाची सही व अंगठा -----

## APPENDIX 3 Coronavirus Self Declaration Form

For the health and safety of our community, declaration of illness is required. Be sure that the information you'll give is accurate and complete. Please get immediate medical attention if you have any of the COVID-19 signs.

First Name	Middle Name	Last Name
------------	-------------	-----------

ID number \_\_\_\_\_

Department \_\_\_\_\_

Have you travelled abroad in 2020?

- Yes  
 No

Name of the area visited

Date of Travel

Have you been in contact with people being infected, suspected or diagnosed with COVID-19?

- Yes  
 No

Your relationship with the people and your last contact date with them

-----

Please state whether you've experienced/are experiencing the following

	Yes	No
Fever		
Cough		
Shortness of breath		
Persistent pain in chest		

Can you work from home?

- Yes  
 No

I acknowledge that the information I've given is accurate and complete.

Date

Signature

## Appendix 4 Undertaking on self-isolation

I ..... S/W of  
..... resident  
of.....  
.....being  
diagnosed as a confirmed/suspect case of COVID-19, do hereby voluntarily undertake to maintain strict self-isolation at all times for the prescribed period. During this period I shall monitor my health and those around me and interact with the assigned surveillance team/with the call center (1075), in case I suffer from any deteriorating symptoms or any of my close family contacts develops any symptoms consistent with COVID-19.

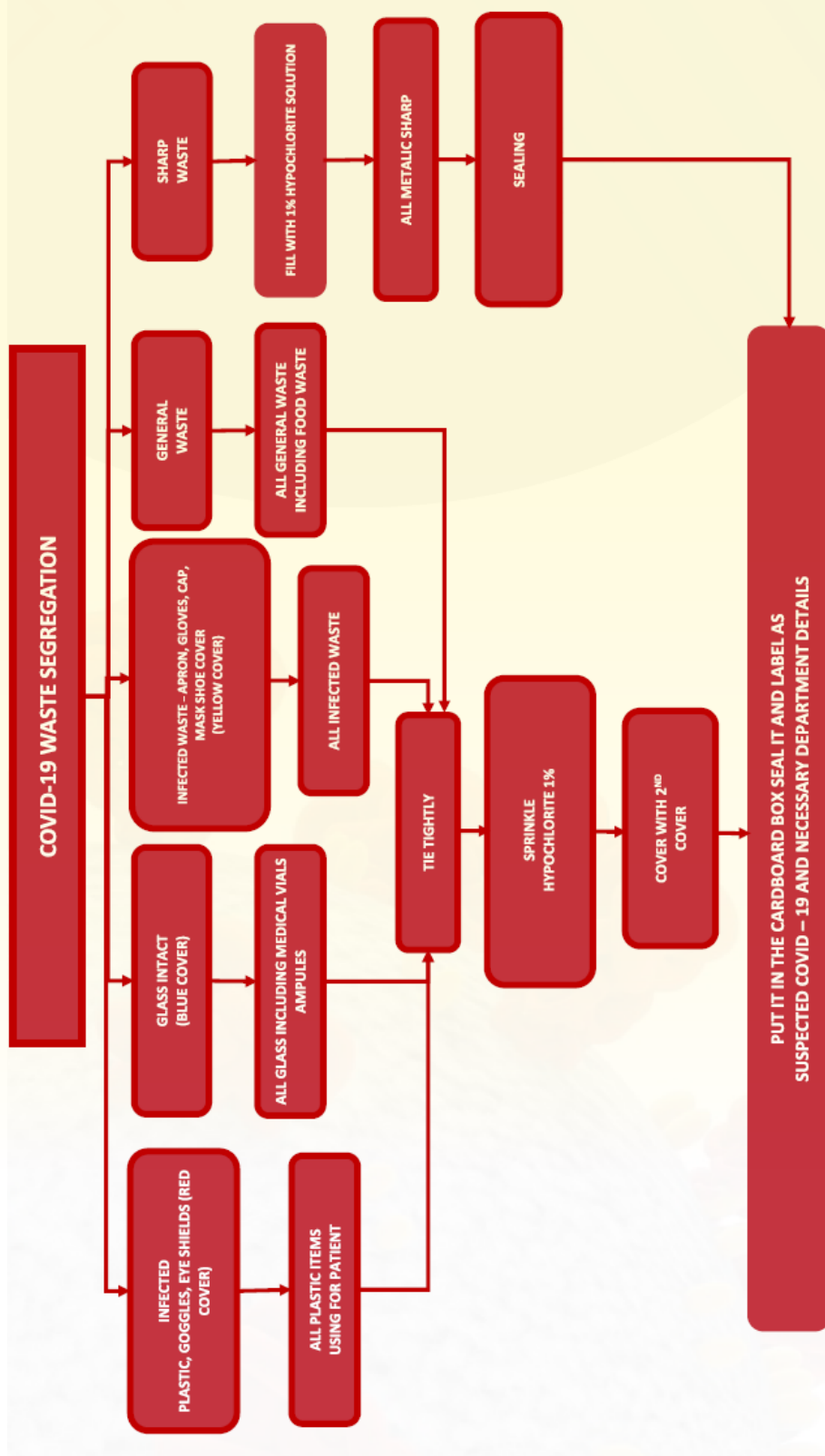
I have been explained in detail about the precautions that I need to follow while I am under selfisolation.  
I am liable to be acted on under the prescribed law for any non-adherence to self-isolation protocol.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Contact Number \_\_\_\_\_

## Appendix 5 COVID 19 Waste Segregation



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