



Original Research Article

Managing COVID pandemic in obstetrics and gynaecology: Experience of a tertiary care hospital of Punjab

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ABSTRACT

The first case of the COVID-19 pandemic in India was reported on 30 January 2020. The outbreak has been declared a global pandemic by the world health organization. The coronavirus pandemic has had a great impact on various health sectors including the residency training programs and patient management. In this publication, we have discussed the various policies along with the effective distribution of residents to manage the pandemic that we have employed in our department, of obstetrics and gynecology at Dayanand medical college and hospital (DMC&H), Punjab.

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1. Introduction

The first case of the COVID-19 pandemic in India was reported on 30 January 2020. The outbreak has been declared a global pandemic by the world health organization. In India, more than a dozen states and union territories have been affected by this. Many educational institutions and commercial establishments where provisions of the Epidemic Diseases Act, 1897 have been invoked, have been shut down.¹ The coronavirus pandemic has had a great impact on various health sectors including the residency training programs and patient management.

In this publication, we have discussed the various policies along with the effective distribution of residents to manage the pandemic that we have employed in our department, of obstetrics and gynecology at Dayanand medical college and hospital (DMC&H), Punjab.

Dayanand medical college and hospital is a tertiary care hospital in Ludhiana, Punjab. There have been around 2,000 cases in the state of Punjab as of 25th may 2020, and Ludhiana falls under the red zone area in the corona-

virus zonal distribution by the health ministry. DMCH is an approved center for covid testing. As of now, there have been 7000 tests done in this area by the real time polymerase chain reaction technique (RT-PCR), the report of which is available in 8 hours. Out of the 7000 cases, 80 cases have reported to be positive by our institute. In our department of Obstetrics and Gynecology, we are doing universal screening for covid for all pregnant women within 5 days of delivery.² No positive cases in pregnancy have been reported so far by our institute.

DMC&H did not shut down their regular outpatient services (OPD) despite the nationwide lockdown. The OPD services were provided from 10am -1 pm on all working days. These were attended by a consultant and assisted by a resident. All the OPD patients were subjected to thermal screening at the entrance (Figure 1). A screening proforma which included the signs and symptoms such as fever, cough or breathlessness along with any recent travel history was filled by the patient (Figure 2). All patients were stamped after being screened (Figure 3).

Doctors in the OPD used level 1 protection which included N95 masks, double gloves with face shields and a gown (Figure 4). A plastic curtain was placed between the doctor and patient (Figure 5). Antenatal and postnatal

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Fig. 1: Thermal screening at the entrance



Fig. 3: Stamping done after screening of patients

visits of the patient were reduced. Antenatal patients were told to keep a check on their blood pressure and were counseled regarding the fetal movement record. DMC&H authorities ensured that the patients were wearing masks and maintained social distancing. Adequate hand hygiene was provided to the patients.

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Screening Performa

Date: _____

Name: _____

Age: _____

Sex: _____

S/o w/o d/o: _____

Address: _____

Mobile No: _____

Clinical symptoms	
1.	Fever
2.	Cough/sneezing
3.	Difficulty in breathing
4.	Travel outside of India within last 14 days
5.	Exposure to a suspected case
6.	Health Care Worker

Fig. 2: Screening proforma



Fig. 4: Level 1 protection



Fig. 5: Precautions taken in OPD

All the surfaces in OPD and medical equipments were cleaned with 1% sodium hypochlorite for a minimum of 20 seconds. Proper ventilation was maintained. The usage of air conditioners was avoided. Pens, phones and stethoscopes were frequently sanitized. Minimal furniture was kept in the OPD area.

Labor room services were also modified in regard to the pandemic and universal precautions were followed. All obstetric admissions were done in a special designated place with HEPA filters, the 'triage area'. All the patients were subjected to COVID testing. After testing negative, they were shifted to labor room. All patients in the triage ward, without COVID report were met with appropriately donned PPE. There was restriction to entry and exit of non-essential staff. A separate delivery room and operation theatre with HEPA filters (high efficiency particulate air filters) was allotted for suspected or confirmed Covid patients or those whose test reports were awaited.

The daily responsibilities attributed to a resident demanded a commitment to proper time management and the ability to prioritize tasks.^{3,4} Under the best of circumstances, a balance between clinical work, surgical training, didactics, and academic investigations had to be

maintained. For gynecology residents, the conflict between the pressure to learn and provide care with the pressure to stay healthy and avoid illness, was difficult to navigate.

In order to provide sustainable, high-quality patient care in a rapidly evolving situation, we departed from normal SOP (standard operating procedure). Residents were divided into teams in a way that each resident on duty had a reserve counterpart resident. (more teams could be created, if needed). These teams were structured as Table 1.

The obstetric care on the other hand is mostly an emergency care, for which teams were divided into the morning and night teams. The morning team comprised of a 12-hour stay of a second year and a first-year resident who stayed in the labor room for the total time period. They were given responsibility to take care of the antenatal patients, laboring patients, post-operative patients and emergency patients. They were supervised by the senior resident on call and the consultants.

Residents followed a two-weekly cycle to observe the incubation period for potential infection, so that a reserve resident can return to the active duty role with confidence that they do not have impending symptoms with potential for viral transmission, reducing the chance

Table 1: - Structure showing the distribution of residents

Team a	Team b	Team c	Team d
Labor Room Team (12 hour shift)			
Day team	Night team	Rescue team	COVID care
1 Senior Resident	1 Senior Resident	1 Senior Resident	1 Senior Resident
2 Junior Resident	2 Junior Resident	1 Junior Resident	2 Junior Resident

of infection of other members of that team or patients. Hydroxychloroquine prophylaxis was also given to every Health Care Worker (HCW).

Ultrasound represents an important part of antenatal care in modern obstetric practice. Ultrasound represents a high-risk situation for coronavirus transmission even if it is a noninvasive procedure. The virus can survive on inanimate surfaces such as an ultrasound machine for 48 to 96 hours and these surfaces are touched repeatedly by the operator. So, appointments were scheduled to avoid waiting time and exposure. Only clinically indicated ultrasounds were performed taking all precautionary measures. The ultrasound room should be cleaned regularly.⁵

2. Conclusion

The urgent and critical cases were attended which limited the interpersonal exposures, and also reduced the workload to make the care team model viable. This diminished the resident exposure and enabled them to carry out their duties as front line health care providers.

During these tough times, our department is trying the best so that the patient care, teaching, research and preventive care goes side by side. We hope that we find new ways to function more appropriately amidst this lockdown restrictions and continue providing services rather than waiting for the pandemic to be over. We hope that our strategies will be helpful to many other departments.

3. Conflict of Interest

The authors declare that there is no conflict of interest.

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