COVID-19 Pandemic: An Experience of OBGYN Residents at Kathmandu Model Hospital
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ABSTRACT
COVID-19, a novel corona virus has affected the life of each and every individual worldwide. Nepal being the neighborhood country of china, though, we had a late case detection. But, since the month of July this virus has spread in an alarming manner in Nepal. Nepal being one of the developing countries, we lack in equipments, manpower resources and also in treatment centers. Looking into the devastating scenario of Covid 19 in China, Italy, New York, Brazil and our neighboring countries like India, Pakistan and Bangladesh is scary. We wondered how we were going to handle this pandemic if similar circumstances happened in our country too. At the same time being OBGYN residents, we all know pregnancy is very crucial and our patients have faced much difficulties to receive the maternal health services. In this manuscript, we have shared our experience regarding preparedness for COVID-19, management of positive cases and its effect in OBGYN trainee.

KEY WORDS
COVID-19, Effect, Maternal health, OBGYN residents

INTRODUCTION
Cases of the viral illness (COVID-19) first emerged from Wuhan, China, in December 2019.1 Nepal is a landlocked country bounded by India on three sides and China's to the north. Nepal being a Neighborhood country of china, we had a high tendency of getting the infection. As the infection was spreading rapidly with thousands of deaths every day and affecting 213 countries worldwide till now.2 Everyone was scared and no one was aware about the exact cause of this disease at this moment regarding it’s mode of transmission, mechanism of death and it’s case fatality. But researcher in China identified a novel corona virus as the causative agent on January 9, the genetic sequence was released on the January 12.3,4

In Nepal, the first case of COVID-19 positive was detected on January 23, on a returnee from Wuhan, China.5 Till that time most of the COVID positive cases were imported cases from china and other countries. We didn’t have single case identified in our country itself. Nepal’s Health Ministry registered its first mortality from corona virus on 29 years old woman on May 8, 2020 in a postpartum mother at Dhulikhel hospital.6 At present, we have more than twenty thousand active cases of COVID-19 with mortality of sixty-five plus patients. At the same time Mahottari, Kathmandu, Rautahat, Parsa has become the areas with high active cases.

From OBGYN view point, In 1998 government of Nepal formulated the national reproductive health strategy with safe motherhood program to address reproductive health issues and developed national maternity care guidelines.7 We are near to achieve our Millennium Development Goal 5 with decreased in maternal mortality ratio by 48% within one decade between 1996-2005.8 Before this pandemic, maternal mortality ratio for Nepal is 239 deaths per 1,00,000 live births with decline in its ratio every year. The confidence interval for the 2016 MMR ranges from 134 to 345 deaths per 1,00,000 live births.9 Movement restrictions, transport challenges and anxiety over possibly being exposed to corona virus are acting as barriers to women
who are trying to access maternal health care during the pandemic.\textsuperscript{10} As a result of which, this subsequently rise the maternal mortality rate of Nepal this year.

**RESIDENTS’ EXPERIENCE**

At the beginning of COVID-19, we fellow of College of Physicians and Surgeons (FCPS) residents of Kathmandu Model Hospital also thought it was just a viral flu and will go back in few days or in a week. Now, we realize that it has already been seven months that we are still struggling with this microscopic organism. We are unable to go back to our normal days and life style. Our OB/GYN department of Kathmandu Model Hospital have five consultants and six residents (Four FCPS and Two National Academy of Medical Sciences (NAMS) Residents for four months rotation). While highlighting about the plan of and action during this period, we had constant change in management techniques. At the very beginning of this pandemic i.e from January 2020, fever screening clinic was started. All residents from surgery, medicine, anesthesia, OB/GYN including medical officers were allocated in the clinic. We were required to stay for 6 hours and we are thankful to our hospital as they used to provide us full personal protection equipment for fever clinic. However, since it was a novel experience for all of us, there were times when we were left dazzled. Patients with travel history were screened out, but that became quite impossible when every district and every locality had spread of the disease. Especially when Bagbazar, where our hospital resides, became the hotspot. As our hospital is not allocated for the treatment of COVID-19 positive cases, after screening patient with fever and associated symptoms we referred them to COVID-19 hospital. After few days, COVID-19 management team was established with the five to six focal members. We residents approached them in case of any queries and regarding the patient management.

After few weeks patient themselves have become much aware about the disease with the help of social media, media briefing and via National level through phone ringtone. Patient mobilization in hospital was also decreased compared to our normal days. Our OB/GYN department also made our protocol for COVID-19 management. We decreased our ANC visit schedule for lesser hospital exposure. As most of our patients were from peripheries of Kathmandu and areas like Dhading, Sindhupalchowk and Dolakha. Along with the nationwide lockdown by Nepal government our patients faced so much of difficulties to reach the hospital. We even started giving services via phone calls and social media. We stopped in our routine cases like abdominal, vaginal and laparoscopic hysterectomy, gynecology, urogynecology and other gynecologic procedures.

Because of this COVID-19 pandemic, our academic activities have also been affected; consequences include reduced operative volume, disruption of academic curriculums and a limited personal life outside the hospital. Despite, these changes, our priorities are unchanged. We smoothly ruined the OPD and provide services to 30-40 ANC cases every day. We had total 400 in patients in our department from the month of Jan-July 2020, with highest inpatients in the month of July i.e 71 cases.

We had an average inpatient cases of 52 in every month. Initially, we found so much of difficulties to work with all those protective gears and gadgets. We all residents had even prepared a corona virus kit bag and kept it in a hospital locker. We always came to the hospital and do the duties with the fear that today we would not be able to return home if any case reported positive. In this fear our six months passed away. Slowly, we got adapted with the situation and resumed our academic activities like classes and conferences via zoom meeting twice in a week. Any changes in a protocol and regarding the obstetrics patient management plan was disseminated through online meetings too.

Since we provided Emergency Obstetric services, it was sometimes difficult for us to manage patients who came from high risk areas, and had RT PCR report pending. Initially, getting the PCR test done was problematic. Due to case load at National lab, we were not allowed to request tests. Slowly when, several other government and private hospitals were authorized to conduct the swab test by Ministry of Health, we were able to get hold of the reports. At times, we were denied services by our radiology department for not having a Negative PCR report of the patient, which made us re-think our responsibilities as a physician.

As the time passed, so much of changes had occurred, we made active and passive groups to save the manpower but could not last long. Our department tried each and every aspect to protect frontline workers and the obstetric patients. We made protocol to send RT-PCR after 37 weeks of gestation for both suspicious and asymptomatic cases. Till 1st August 2020, we did not have any positive cases. But at the end of first week of August, 2020 we had our first positive case at our hospital. It was in a female patient who came from Dubai two weeks back and her initial RT-PCR done at Dubai was negative but after two weeks of quarantine her repeat report came positive. On my duty day itself, she was at our hospital for safe abortion service at 14-15 weeks of gestation, an unmarried female with mental health issues probably have had sexual assault.

At that moment we thought we have been spared for four-five months but at the end it happened despite our proper history taking and screening clinic. For few hours there was an chaotic situation in hospital but our preparedness of initial 2-3 months worked. At first index patient was kept in an isolation room, informed to Epidemiology and Disease Control Division, Teku and with full protection she was transferred to COVID-19 management hospital. Two consultant doctors, two residents and two sisters
with history of primary contact were kept in hospital isolation, three residents with history of secondary contact also stayed in a hospital itself to prevent community transmission. During that period everyone looked tense and stressed. Our helper dai, didi and every staff of hospital, while wearing the PPE, all staffs of the hospital had forgotten to wear the smile on face had forgotten to smile. Nepal government did the swab test of both primary and secondary contact health care frontline workers on the 5th day of exposure. All results came out be negative and we all had big smiles on our face. We left hospital on the 5th day of isolation from home whereas primary contact people are still in 14 days’ quarantine.

CONCLUSION
We might undergo a lot of hurdle in this COVID-19 pandemic but let us not get panic and tackle this situation wisely by remembering the Hippocratic oath which we had taken in the beginning of our medical career. We should take every precaution from our side such as wearing a mask, cap, goggles, maintain social distancing at OPD, during rounds and decreased doctor patient interaction to avoid this virus transmission. Like other natural disaster, we will sure overcome this situation too. Have faith and keep going.

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