CLINICAL UPDATES IN COVID-19

CARE FOR VULNERABLE POPULATIONS DURING COVID-19 PANDEMIC

BY INSTITUTE FOR CLINICAL RESEARCH, NIH

NO. 09/2020

Care For Vulnerable Populations during COVID-19 Pandemic

Clinical Updates in COVID-19

Institute for Clinical Research

Published by Institute for Clinical Research, NIH MY, 2020.

CARE FOR VULNERABLE POPULATIONS DURING COVID-19 PANDEMIC

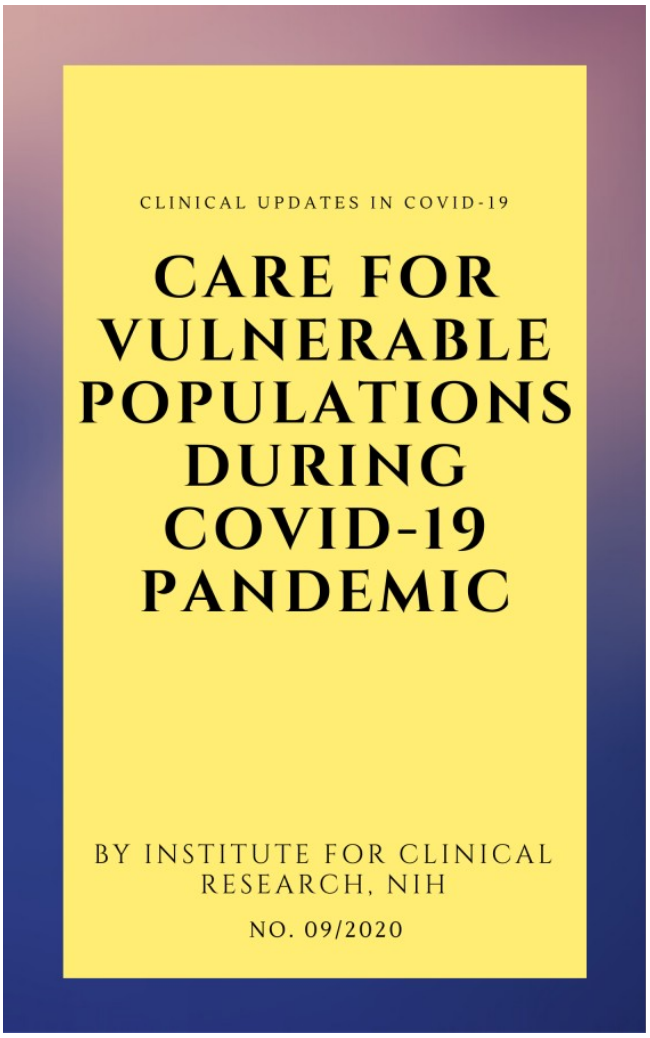
First edition. June 3, 2020.

Written by Clinical Updates in COVID-19 Team, Institute for Clinical.

ISBN: 9780463253779

Citation:

Chew, C.H., Yip, Y.Y., Lim, M.T., Rozita, Z., Tan, S.S., Vanitha, R.T., Sunita K.M.S., & Goh, P.P. (2020). Care For Vulnerable Populations During COVID-19 Pandemic: *Clinical Updates in COVID-19*. Kuala Lumpur, Malaysia: Institute For Clinical Research



Care For Vulnerable Populations during COVID-19 Pandemic

Disclaimer

- This transcript was prepared based on the Clinical Updates in COVID-19 live webinar session on 21/05/2020. The panellists for this webinar are Dr. Rozita Zakaria, Dr. Tan Seok Siam, Dr. Vanitha A/P R. Thangaratnam and Sunita Kaur A/P Manmohan Singh (RN).

- The transcript was prepared by Ms.Yip Yan Yee, Mdm Lim Ming Tsuey and Dr. Chew Cheng Hoon from Institute for Clinical Research, NIH Malaysia.

- This is intended to share within healthcare professionals, not for public.

- Kindly acknowledge “Clinical Updates in COVID-19 http://www.nih.gov.my/covid-19/” should you plan to share the information obtained from this transcript with your colleagues.

Table of Content

Table: Complications and treatments of patients with coronavirus disease 2019 who died and recovered patients.

So, what are the mechanisms of liver injuries?

Pre-existing chronic liver disease and COVID-19 - does it matter?

Metabolic Associated Fatty Liver Disease (MAFLD) and COVID-19

We do need to look out for patients with cirrhosis in COVID-19

What are the recommendations on the management of liver injury in COVID-19?

Treating liver disease alongside COVID-19.

Summary

"Hospice Persists During Coronavirus Pandemic And The New Norm" by Dr. Vanitha A/P R. Thangaratnam, Senior Hospice Doctor, Kasih Hospice

Before MCO

During MCO

Video for Palliative patients and family

Telemedicine is not an ideal way to provide hospice care.

Assistance from palliative care unit, Hospital Selayang

Challenges

Fear of COVID-19

Video conferencing issue

Medical Equipment issue

Problem when patient died at home

Family members found it difficult to visit their loved ones.

Some patient/family member not truthful when answering health risk assessment

Caregiver burnout

Difficulty in communicating end of life issues with PPE

The other issue is patient wanting to loan equipments.

Now, the new norm

"Serving Our Community During a Pandemic: A Sharing experience" by Sunita Kaur A/P Manmohan Singh (RN)

PPE

Hospice service challenges during MCO: Roadblock, curfew and no interstate travel

Fear During Pandemic

We still stay connected to our medical team.

The pros and cons working from home.

Q&A Session

1. Do you think there is a need for us to assess the acceptance of our patients towards these new norms in the healthcare system?

2. How are patients faring with virtual consultations? Are there any preparations needed, e.g. training for both staff and patients?

3. How about vaccination for school children? How do we reschedule and redirect vaccination for school programs to go back to (already busy) clinics?

4. Did the frequency of home visits / phone calls reduced during this pandemic? How far does this pandemic affect hospice care, such as access to painkillers?

5. Do you think the "quality of death" is affected during this pandemic, since the provision of palliative care is challenging?

6. Do you perform COVID-19 test for palliative care patients who would like to return home to their family before their departure?

7. Dr. Tan, you have done a wonderful job in discussing liver diseases amongst COVID-19 patients. What is your advice to other specialists who care for patients with chronic diseases (ie. stroke patients, chronic heart diseases, kidney diseases)?

8. Final Messages and Summaries by the panellists

Speakers' Brief Bio

“Maternal and Child Health Services During COVID-19 Pandemic at Health Clinics - Embracing the New Normal” by Dr. Rozita Zakaria, KK Persint 18, Putrajaya

Thank you for having me. First of all, a very good afternoon to everyone. I will be talking on maternal and child health services during this COVID-19 pandemic at Health Clinic how we embrace the new normal, so I shall share my slides.

So this is my topic (presentation title). When we talk about their vulnerability, we usually refer to a person in need of special support or protection because of the age or the disability and so forth and the risks as well. Generally pregnant mothers and children fall into this category as they are at higher risk of getting into a situation, and we have lack of scientific knowledge on this group of people as they are relatively less being included in research. Generally, we can include them in the vulnerable group.

Background:

A little bit on the background of the maternal and child health services in Malaysia.

Maternal and Child health is an essential component of the National Rural Health Development program 1950s. But, it has evolved to become a comprehensive service which is delivered in the health clinic, on top of many other services that we deliver in our health clinics. Actually, we have categorized our health clinics into types 1 to 7. The working hours are from 8am to 5pm. We start off at 7:30am for registration but there are some clinics where they have extended hours and work until 10 pm and half day on weekends.

So what happens during this COVID-19 outbreak?

I think I must show this picture here of our DG because when DG talks, everyone listens. DG mentioned our service must go on, and we will have to perform all the services including home visit for the mother and child.

Service must go on. Why? This is because mothers and children are vulnerable. So, we have to continue to provide them with safe and effective care.

However, how do we run this service? It should be done differently. The basis of this is to protect our health care workers and also to break the chain of COVID-19 Infection. So, maintaining a healthy workforce will ensure continuous quality care.

And, at the same time, we cannot compromise the quality of care to our patients.

The same principles that we advised to the public: “Avoid the 3C and Practice the 3 W” should be adhered.

So what are the three C's and what are the three W's?

Avoid Crowded places, Confined spaces and Close conversation.

We have to practice **3W**: **Washing our hands, Wearing masks and also Warning** about things like cough etiquette. Not to shake hands now. Instead, just put our right hand on our left chest to greet people

So at the facility or clinic, we also have to adhere to these principles.

We have to minimize crowding in clinics, minimize patient contact time in the clinic, confined spaces, minimize close conversation (face-to-face conversation), minimize handling by healthcare worker, and we had to adhere to infection control, wear PPE, and we have to warn our staff about physical distancing (is not only for people outside, but also) within the clinics as well. Lastly we also have to use digital technology.

1. REDUCE CROWDING IN CLINIC

To minimize crowding and reduce the possibility of cross-infection, an analysis of the number of staff and patients being in the same area, has to be done. So based on the analysis, rearrangement of staff has to be done and necessary changes to the work process should be looked into. At the moment, although we have a staggered appointment system in place, many patients do not adhere to it, for many reasons. So this is the time and opportunity for them to emphasize and re-emphasize the importance of adhering to the given time and date of appointment. From earlier this year, an online appointment system has been launched (but not for all clinics). It was piloted in Putrajaya, where my clinic is also involved, where patients can actually choose when they prefer to come to the clinic (the date and the time). By having this, there would be a control on the number of patients coming to our clinic as well as control on the number of patients waiting in our clinic area. So, social distancing can be practised effectively within our clinics.

Primary triaging at the point of entry is being carried out and navigation of patients will be done effectively. At the moment, plan and discussion has been in place to lengthen the operational hours of our clinics and to go on shift duties.

(As mentioned in earlier slides) typically, we work from 8am to 5pm, and some clinics have extended hours in which they work until 10pm and also half day during the weekend. So now there are plans and discussion for lengthening of operational hours and shift duties. So, all in all, there will be a limit to the number of patients and it will be easier for a one-to-one consultation with no sharing of rooms. Hence, a better infection control process. The plan is for clinics to operate from 8 to 10 pm with two shifts, but closed on weekends.

Primary Triaging (Photo)

This is an example of primary triaging where patients come in and will be triaged by our nurses and also doctors, and they will be navigated to where they are supposed to go to.

Waiting Area (Photos)

This is an example of the waiting area. We practice physical distancing to reduce the possibility of cross-infection.

2. REDUCE PATIENTS CONTACT TIME IN THE CLINIC AND CONFINED SPACES

The next is to reduce patient contact time in the clinic and confined space. To reduce this contact time, some strategies have been carried out for example for booking purposes. We actually do a **pre-booking call which is done via a phone call.** (Previously), pregnant mothers will come to the clinic, and we booked them immediately. We will do a detailed history taking, and we also do a risk assessment. Now, we will do this pre-booking through a phone call.

The purpose to do this phone call is to reduce the patient's contact time in our clinic. Usually a booking process will take about an hour or so, or even more. A newly registered pregnant lady will come to the clinic for a detailed history taking, risk assessment, physical examination and lab tests. So, by doing history taking and opening up the antenatal book via phone call, it will reduce contact time.

As I have mentioned before, **one-to-one consultation with no sharing of examination rooms** will also reduce this contact time and confined space in the clinic. Other strategies that we are emphasizing now is to look at the strength in our **value-added services by the pharmacists**. The patients can get their medication through other means like "locker4u", via "drive through" or get "medication by post".

3. MINIMISE CLOSE CONVERSATION (FACE-TO-FACE CONVERSATIONS) HANDLING BY HEALTH CARE PROVIDER

I've mentioned booking and history taking through the phone can reduce the time and contact of the patient (face-to-face). Now, we also empower the parents or carers of our child health patients who come for immunization; empowering them to self-perform procedures like measuring the height, weight and length of their children. Our nurses have to be there to supervise and the nurse should plot it in the chart (not the parents). All these have to be done without compromising the quality of care. We also have online monitoring of antenatal and postnatal patients. We have checklists for patients that we need to go through to check/to monitor them. The checklist, which has been developed and the nurses go through this checklist to ask certain questions through the phone.

Virtual clinic. This is another exciting thing that has actually happened at our clinic in Putrajaya Persint 18. We have started off virtual clinics as a proof-of-concept pilot project. We started off in August 2019, with only a few NCD patients where the patients do not need to come to the clinic physically, but can be seen virtually. For example, patients being started on ACE Inhibitors, and we have taken the renal profile, and we asked them to come back in two weeks' time to review the blood results. So it can actually reduce congestion in the clinics by having less patients. So this is what we have done virtually. When COVID-19 happened, we took the opportunity to expand our virtual Clinic to include other cases as well.

4. WASH - ADHERENCE TO INFECTION CONTROL

And the 3W, what are they? There are the adherence to infection control measures where our staff should be screened for symptoms and temperature before coming into the clinic every morning and to emphasize on regular hand-washing, use of hand sanitizers and cutting the finger nails.

5. WEAR - PPE USAGE

Staff should use appropriate PPE according to their work process.

For example, for home visits. Our nurses still have to perform home visits. So before going for the home visit, they will call the patients first to ask whether they are around in the house and to ask whether they are having any problems, fever or have any contact with COVID-19 patients. They have a checklist on what to ask and what to do. So, when they go to the homes, they will wear the appropriate PPE for examination of the child and the mother.

6. WARN

Usually our nurses will shake hands with our patients. They are trained to "*salam*" (shake hands), "*senyum*" (smile). Now, no more handshake but still need to greet the patients and talk to them nicely. Physical distancing should be practised; cough and sneezing etiquettes and regular disinfect of our workstations.

7. USING DIGITAL TECHNOLOGY

Lastly by using digital technology like the online appointment system.

I have mentioned just now, virtual consultations in clinics with existing facilities, and for suitable patients. Not all patients are suitable for virtual consultation.

What Other Countries Are Doing?

So when I look through at what other countries are doing and what they have done for the antenatal mother. It is recommended by WHO to have this antenatal contact for eight times throughout the pregnancy ie. at 12 week, 20-week, 26-week and so forth. However, what they have done is an alternate modality of the antenatal contact where they have four face-to-face and four remote contact. With this remote contact, they also have a risk assessment tool ready to ask the patients and this can also be incorporated into our service.

But of course, we will not stop at what we have done. We will also still improve in whatever we have done now. Maybe we can also adapt to whatever other countries are doing.

Conclusion

So in conclusion the process of adaptation of the new Norm will take some time. It creates confusion among staff, among patients. Sometimes there is dissatisfaction, but finally we will have to accept the new Norm.

Slide presentation: https://cutt.ly/6yUHXnw

“Liver Injury in COVID-19” by Dr. Tan Seok Siam, Hospital Selayang

Outline

I like to address: what are the types of liver injuries in COVID-19; how common and do they matter and to discuss some of the possible mechanism of liver injury; whether people with pre-existing liver disease developed COVID-19 - is it important in COVID-19. Then, I'll move on to a recommendation for management of liver in COVID-19 patients and also finally I will end with caring for liver patients without COVID-19 during this pandemic in the new normal.

Abnormal liver function tests have been reported from the beginning.

It's usually transient in mild COVID-19 and does not require specific treatment beyond supportive care. Patients with abnormal liver function can be as high as 53% and as low as 16% but patients with severe COVID-19 has increased incidence of abnormal liver function.

SARS-CoV-2 and the liver

ACE2 is the functional receptor for the SARS-CoV-2 virus and it is present in many organs. It is present in the central nervous system, upper airway, vasculature, lungs, liver, gut, kidneys, heart and eyes. In the liver, more cholangiocytes than hepatocytes. In autopsy tissue samples, when we look at the viral load quantification of this SARS-CoV-2 virus, it is very high in the lungs and pharynx. It is also found in the kidney, liver, heart but small numbers in the brain and blood.

Research paper: Manifestations and prognosis of gastrointestinal and liver involvement in patients with COVID-19: a systematic review and meta-analysis

(Lancet Gastroenterol Hepato 2020 Published Online 12 May 2020)

The meta-analysis based on 12 studies show that the pooled prevalence of liver injury in COVID-19 is 19%, increased AST is 21%, increased ALT somewhat lower than AST at 18%, prevalence of increased total bilirubin of 6% and prevalence of decreased albumin at 6%. The meta-analysis also showed deranged liver biochemistry is associated with more severe COVID-19 cases.

The significance of elevated ALT, AST, bilirubin, ALP

What is significant of elevated liver biochemistry?

Based on a study in China with more than 400 patients, abnormal liver function tests itself is associated with higher risk of severe COVID-19. In another study from New York which involved more than 1,000 patients, the multivariable analysis showed that liver injury at presentation was having an odd ratio of 2.5. And it is independently associated with higher risk of poor composite outcome ICU admission and/or death. Other factors include age, number of comorbidities, respiratory problems like tachypnea and severe hypoxia.

Severe liver failures/injuries with SARS-CoV-2 infection

Severe liver failures and injuries with SARs-CoV-2 infection. It was also reported one case where a 65-year-old male with positive throat swab on admission with mildly elevated ALT, mild hepatitis. He developed from mild to moderate ARDS where oxygen therapy was required. He was given some vasopressor, and antiviral Kaletra and interferon IFN β. His ECHO was normal and ultrasound was also normal. His ALT increased to 400 and subsequent to that, there were increased in INR, total bilirubin. His MELD score was increased to about 40. Eventually, he passed away.

In another case of a 59-year-old, well-controlled patient with RVD disease. This patient has severe hepatitis with AST>1200 u/l, ALT~700 u/l. He was negative for other hepatotropic viruses: HAV, HBV, HCV, HEV, CMV, EBV, and also autoimmune markers. Luckily this patient survived and he was discharged.

Acute Liver Injury from Local Hospitals Data

Three of the seven cases of (PCR) positive COVID-19 patients had acute liver injury. Acute liver injury is defined as jaundice with total bilirubin of more than 51 mmol/l, liver enzymes (ALT, AST, ALP, GGT) ≥2 upper limit normal, INR of ≥1.5. So these three cases have acute liver injury. First case, the thirty-six-year-old male with DM passed away. In second case, it is a 59 years old male with DM and hypertension (at the time of data analysis) he was still intubated in ICU. The third case is a 58-year-old male with similar premorbid history, DM and hypertension was also intubated in ICU.

With regard to LFT, the ALT on admission of the 2 patients who are still alive were quite normal. The patient who passed away, the ALT was high on arrival. The peak value of the patient who passed away has 3 upper limits of normal and the others are about 3 to 4 times upper limit of normal. If you look at the AST on admission, the one who passes away also had a higher AST and this AST can go up to 8 times the limit of normal, so between 4 to 8 times. This is an AST predominant elevation in terms of a liver injury. In terms of alkaline phosphatase, it was quite normal on admission and increased to about two times the upper limit of normal at peak. The bilirubin of the person who passed away peaked at 127 mmol/l and the others also had enough rise of bilirubin to be considered as acute liver injury and the INR can go up to about 1.5.

Table: Complications and treatments of patients with coronavirus disease 2019 who died and recovered patients.

Just to show the slide on a series of moderate-to-severe COVID-19 in Wuhan (China). You can see they have multiple complications. The acute liver injury which occurred in about 5% of total complications; occur more in those who passed away than those who recovered.

So, what are the mechanisms of liver injuries?

These are postulates. Based on autopsy tissues of the liver, there is a direct viral cytopathic effect because we could see the moderate microvesicular steatosis and activities in the lobular area and the portal area of the liver tissue. Also, we can see acute portal & sinusoidal thrombosis, chronic fibrous endothelial thickening in the liver tissues. Possible there is intrahepatic vascular related damage as well. Of course, drug induced liver injury can happen. This can be supported by microvesicular steatosis on autopsy liver tissue. Drug induced liver injury is a diagnosis by exclusion. In COVID-19 patients, the common drug induced liver injury that we need to consider, are the antiviral drugs such as Remidesivir, tocilizumab and other drugs such as HCQ, Kaletra (lopinavir, ritonavir), antifungal and antibiotic. Liver injury can also be happening because of cytokine storms or immune imbalance where the liver could be part of the multi-organs dysfunction. Other possible causes could be pneumonia associated hypoxia or ischemic hepatitis.

Pre-existing chronic liver disease and COVID-19 - does it matter?

What about those patients with pre-existing chronic liver disease and what happens to them when they developed COVID-19. Initial series here showed that there is a very small number of patients with liver disease, but this series has a lot of missing data in terms of what other underlying conditions. Subsequent study from the UK using electronic health record data from over 17 million patients, they found that chronic liver disease is a risk factor for inpatient death from COVID-19. There is another series from America, that is associated with significantly higher mortality. Mortality is even higher in patients with cirrhosis. The etiologies of these chronic liver diseases including cirrhosis, fatty liver disease and Non-alcoholic Steatohepatitis (NASH) are the most common. The mortality risk was independent of the well known risk factors like BMI, hypertension and DM.

Metabolic Associated Fatty Liver Disease (MAFLD) and COVID-19

About fatty liver disease. The liver disease used to be called NAFLD, has changed to MAFLD. MAFLD stands for Metabolic Associated Fatty Liver Disease. So, what happens to them if they develop COVID-19? Why do I want to discuss this?

This is because MAFLD is very prevalent in Malaysia. In the general population, it is about 38%. But, if you're a type II diabetes, it is close to 50%. Even the young adults are also not spared of metabolic associated fatty liver disease. In these studies, using non-invasive tests for fatty liver disease either by ultrasound or using some simple parameters. You can calculate the hepatic steatosis index. They found that patients with MAFLD have higher risk of COVID-19 disease progression, higher likelihood of abnormal liver function from admission to discharge and longer viral shedding time.

We do need to look out for patients with cirrhosis in COVID-19

I think we do need to look out for patients with cirrhosis in COVID-19. This is an international registry of a cohort of patients with chronic liver disease: 491 patients from 28 countries. In this cohort, 209 are cirrhotic patients. The death rate of cirrhosis patients was 36% compared to 7% for non-cirrhotic patients. The liver transplant patient fared better at 17%. The major aetiologies are alcohol, non-alcoholic steatohepatitis and viral hepatitis.

What are the recommendations on the management of liver injury in COVID-19?

When we look at the liver function, if it is elevated for COVID-19, you should check for viral hepatitis B and C; review the medication, in case, it is a drug-induced liver injury. If you consider this patient could have biliary obstruction or venous thrombosis, then an ultrasound is indicated. Otherwise, probably it is best not to expose the patient to more injury.

If the liver function is stable and improved, continue to observe. If the liver function worsen, we should think whether is this ischaemia myositis, cytokine release syndrome or could it be drug induced liver injury.

There's no specific therapy on the management of liver injury. If the patient is found to have hepatitis B and you are considering whether the patient may have hepatitis B flare, there is no contraindication for HBV treatment in patients with COVID-19. The presence of abnormal liver biochemistries should not contraindicate to using investigational or off-label therapies for COVID-19 unless AST or ALT > 5x ULN. Regular monitoring of LFT in all hospitalized COVID-19 is recommended, especially, those on Remdesivir or Tocilizumab.

Treating liver disease alongside COVID-19.

As shown, patients with cirrhosis have higher mortality. So we need to keep this vulnerable group safe. We need to educate patients/caregivers/HCW; streamline appointments and procedures. We can use tele-review or tele-clinics.

Actually, endoscopy is an aerosol generating procedure. Usually we do endoscopy to detect any varices in chronic liver disease patients especially, cirrhotic patients before we start beta blocker. Now, we consider to start beta-blockers in selected group of patients (which in study has shown that they had high risk of varices) for primary prophylaxis without doing endoscopy. Liver transplantation is actually lifesaving emergency surgery for acute liver failure/ high MELD liver patients.

Summary

So, in summary, SARS-CoV-2 has broad organotropism.

Abnormal liver biochemistries are prevalent and multifactorial.

Usually mild and transient in mild COVID-19 but severe liver injuries had also been reported. Abnormal liver biochemistries or liver injury at presentation predicts severe COVID-19 or higher risk for poor outcome ICU admission and/or death.

Patients with pre-existing CLD especially cirrhosis have higher mortality from COVID-19.

We have to take these into consideration, when we plan for management and adaptation of care plan for these patients.

Thank you very much.

Slide presentation: https://cutt.ly/tyUHLdw

“Hospice Persists During Coronavirus Pandemic And The New Norm” by Dr. Vanitha A/P R. Thangaratnam, Senior Hospice Doctor, Kasih Hospice

Good afternoon, everyone. Thank you very much, Dr Goh. I think you've mentioned part of my first and second slide. Yes, we are an NGO and we are charitable. Yeah, we mainly do home visits to patients with life-limiting illness with stage 4 cancer, end stage renal failure who have ceased dialysis covering from Petaling Jaya all the way to Bukit Beruntung. So that's kind of a wide coverage going through many roadblocks during this MCO. Each of this area is actually covered by one designated nurse.

Before MCO

Two weeks prior to MCO, we actually started doing some changes to our normal routine. It was just minor changes. Meaning, the team of two doctors and six nurses were divided into two teams and we actually started having our daily debriefing separately, while we were trying to have physical distancing between ourselves.

During MCO

MCO was established on 18th of March. So based on the discussion by the board of directors, we had to actually start working from home. So we still continue on with our daily briefing via Google Hangouts. Going through all the phone calls of patients that were made the prior day or home visits that were done, and at the same time, we also identify patients that may require home visits during this MCO.

During this MCO, we actually limited our home visits too; mainly to patients who were dying. These patients wouldn't be able to swallow any more and require the insertion of subcutaneous port and subcutaneous medications to keep their pain and symptoms under control. We continued making weekly phone calls to each and every patient under our care but for patients with uncontrolled pain and symptoms, we did daily phone calls and video calls, and we will still see if they require a home visit.

Video for Palliative patients and family

One of our doctors actually designed a video because of our patients having low immune system with high risk of getting COVID-19 infection. We made a video to inform the patients and family members that it is risky to go back to hospital. So, they would liaise with the hospice medical team if there is a need to top up medicines or if there are any uncontrolled symptoms, they would contact the medical team, and we would see what can be done. If it can be controlled within the means of home visit, we would do it. If not we would actually liaise with the doctors at the hospital and try to work something out for the patient.

Telemedicine is not an ideal way to provide hospice care.

Hospice care is about visiting patients, being there for the patient, but we have to move along and do changes. Prior to a home visit during MCO, health risk assessment is done. If home visit is required, we would wear full PPE.

Assistance from palliative care unit, Hospital Selayang

We actually had very good assistance from palliative care unit, Hospital Selayang. We are very thankful for that because there were cases where patients' medications had finished; family members were fearful of going back to the hospital. Family members asked us for help. When transportation was delayed and medication orders did not reach us, Hospital Selayang's palliative care unit was very efficient with topping up medications. We managed to liaise with them and family members just have to go pick up the medications at the hospital. We would discuss the case with them, and they would let us know how to go about so, patients would be able to obtain medications directly, bypassing the A&E Department.

Challenges

Everyone has to go through many challenges during this COVID-19 pandemic.

Fear of COVID-19

Some challenges we faced include **patient's family members not allowing us into the house even though patient has symptoms**. They don't mind coming to our office to collect medications, but they were worried if we would bring in any form of COVID-19 transmission.

Video conferencing issue

For teleconferencing, during the beginning of MCO, there were cable problems. We had **poor internet connection during teleconferencing**. It became quite **difficult assessing the condition of new patients.** As you know, a lot of family members travel, leaving two elderly people at home. These people do have smartphones, but they were unfamiliar on how to use it. So when you needed to video call the patients, it was difficult to get someone to assist in setting up the video call for the patients.

Medical Equipment issue

Also, we had a decreased number of medical equipment available to be loaned out. We would check the equipments before they are loaned out to the next patient.

Problem when patient died at home

This is the wrong time to die because we've had a couple of cases where patients died at home. In accordance with the normal procedures, when there is a death at home, the family members would have to go to the police station and get the death certificate. It has been quite difficult to do so since the MCO has begun because the police is not so convinced even though there are supporting documents to the patient’s death. They are not convinced that the patient died of complications of the cancer or end stage renal failure. Family had to bring the body back to the hospital and it became quite complicated.

Family members found it difficult to visit their loved ones.

Recently there was a case where a patient was dying and the only person there for him was his wife. Their two children were overseas. When I went to visit, I managed to have teleconferencing with both of their children and explained to them that the patient's condition was deteriorating. Fortunately both of them understood the challenge that all of us had to face. I then sat with the wife and explained to her. The wife was wonderful. She was very alert, and she noticed the signs (patient was already gasping), so she immediately made a video call with her kids.

Teleconference indeed helped the family through this process.

Some patient/family member not truthful when answering health risk assessment

We do have health risk assessment but some patients are not truthful. We get most of the referrals from private hospitals and government hospitals. A case whereby a patient had stage 4 cancer. We made a phone call, initially the patient was fine, but he soon developed shortness of breath. We decided that we want to visit. The patient's family members refused to allow us to visit. Two days later, the patient was admitted to the hospital, and we soon found out that the patient passed away due to COVID-19. It becomes quite difficult for us, even though the health risk assessment could be negative, we do not know the true picture.

Caregiver burnout

Being caregivers, everyone goes through burnouts, because they continuously care for the patient. It would be easier when MCO wasn’t implemented, as there would be people coming in and helping out. During MCO, no one could travel. So, caregivers were burnout. It was also difficult to seek private caregivers. Mentally stressed up. So, they would call us for advice. All we could do is just to talk them through and teach them some relaxation techniques.

Difficulty in communicating end of life issues with PPE

As for issues related with PPE, approaching patients with a face mask is not easy. During my encounter with a 91-year-old patient, as I was examining her, she turned away because I was in my full PPE gear. She said, “you don’t like me, is it?”

I said no, and I was trying to smile through the mask and tried to tell her that I am not angry. She said, “No. I cannot see your face”. I tried to explain to her that the fear of transmitting disease to her and I cannot remove these.

As you know being a 91-year-old, I don’t think she understood this. I had no choice but to remove my face mask to give her a smile before she approached me in return and allow me to care for her. All these non-verbal communication are important. What I did in my subsequent visits was to continue wearing my mask but to be more verbal and to smile (laugh) more so that she would know that it is okay for me to care for her.

The other issue is patient wanting to loan equipments.

Everything is free-of-charge, but they would need to get their own transporters. During the initial stages of MCO, no lorry drivers wanted to come because of fear of getting imposed any penalty. For one of the patients, he was sleeping on the floor with very thin mattress. We managed to get one kind soul. We managed to get him to come. He and one of our staff getting the bed to the lorry (pic). The patient was so happy with the bed, and he died peacefully.

Pictures: this is us getting ready for teleconferencing and picture of us getting ready to go out (in PPE).

Now, the new norm

So, how are we going to move on in this new norm? Basically, we're going to continue on with whatever we've been doing the MCO (seeing dying patients) but we're going to (add on) see more patients who have uncontrolled pain and symptoms and newly referred patients.

Health risk assessment would still be carried out. If no risk, we will go in. If there is some risk, we will re-assess the urgency. If yes, we will go in with full PPE.

For stable patients, we will continue with teleconferencing, and this is not going to change. Safety precautions would be continued, which includes handwashing, wearing PPE.

We also intend to start doing educational videos like the teaching of basic nursing care and doing subcutaneous injections so that family members have something to fall back on to help them go through this difficult time.

We are trying to initiate the Electronic Medical System which would be very beneficial, because right now we rely on manual records only. Nurses working from home would be able to access patients' medical records much easily with EMS.

Slide presentation: https://cutt.ly/YyUHG5R

"Serving Our Community During a Pandemic: A Sharing experience" by Sunita Kaur A/P Manmohan Singh (RN)

Good afternoon, and thank you for allowing me to share my humble experience as a hospice nurse.

PPE

Using PPE could be a challenge during MCO because of our hot and humid weather. You can literally feel the sweat. There is a distance that we might have to endure before reaching a patient’s home. We use a lot of sanitizers and disinfectants after our visit

Hospice service challenges during MCO: Roadblock, curfew and no interstate travel

Some of the challenges we face are the roadblocks.

I was especially worried whether the authorities and the police would recognize our service. One of our colleagues did get stopped because the police were not aware of what Hospice Services is all about. We try to travel with the letter of authorization within the curfew period of 8 a.m. to 8 p.m. There was a time when we had to travel at midnight for a patient during her last final hour. One of the concerns was if the children were able to travel to their mother's house at midnight. What we did was, we called the police station, asking if it was possible for them to travel to visit their loved ones. They were very kind enough to allow us to do so. I wrote an official letter for them, and they had to go to the nearest police station to get it approved, before seeing their mother for the very last time.

No interstate travel was another challenge as well. We had a patient, Mr. See who was diagnosed with kidney failure and had only one wish: to return to his hometown in Kuala Kangsar, Perak. The MCO has made his journey somewhat complex in terms of spending time with his family. We decided to write a letter and appealed to the authority and prepared patients with subcutaneous injections and continued even to provide service to them, because Kuala Kangsar is a remote area, with no other hospice to cover that area. Within thirty-six hours, he passed away peacefully surrounded by his loved ones. We do try to make the impossible possible and the family was very grateful.

Fear During Pandemic

As for my family, they were very worried if I should continue to work and my daughter would even ask me every time I go to see patients, if there is really a need for me to go out and if I can just stay home. What I did was to call them five minutes before I reached home, so they would prepare everything including the towel and the soap so that I would be able to bathe outside before entering the house. I have also even considered renting a room outside, fearing that I might spread the virus to my loved ones.

At times, I might get up in the morning, I will do a self-check (body temperature) of my own health. The positive aspect of this fear is that it made me more diligent and more careful. It reminds me to use the hand sanitizer, to use double gloves. In fact to wash hands frequently. For our medical team, I would say that it's a nightmare for frontliners, as we are afraid. We are also aware that many healthcare workers have lost their lives, and we try to avoid contact with our family members until we go home and shower first before we even talk to them. Some of the patients and family members do prefer to do videoconferencing and calling them instead of physically visiting them and the reason is because the patients are immunocompromised and the family members do not want us to increase their risk of COVID-19 as well.

We still stay connected to our medical team.

I call it cyberspace. We do have debriefing with our team ongoingly. We do miss that. We frequently celebrate birthdays together but now we can’t. We still keep in touch. We do have games and lectures online.Last week was my first time playing Charades online so that was quite fun too.

The pros and cons working from home.

Of course, the flexibility of hours, no traffic jam, save time on driving, cost effective for the organization, I would say. However, this new way of work demands more. It seems like we are now working 7 days a week and there is no physical separation between work and leisure time. It can be emotionally exhausting.

Slide: https://cutt.ly/vyUHALo

Q&A Session

1. Do you think there is a need for us to assess the acceptance of our patients towards these new norms in the healthcare system?

Dr. Rozita: Of course, we will need the feedback from our community. So, we have conducted Google Form questionnaires, and we have submitted the questionnaires through WhatsApp platform to the community in Putrajaya and Kuala Lumpur. Currently, we have yet to analyse their feedback for now.

2. How are patients faring with virtual consultations? Are there any preparations needed, e.g. training for both staff and patients?

Dr. Rozita: For virtual clinics, we have started in August 2019. Throughout those months, we have continuous feedback, and also distributed Google Form questionnaires for these patients. The feedback was very good.

Patients like virtual consultations because they don't have to come to the clinic. There were no problems in getting parking space, some patients would be able to breastfeed during virtual consultation. Some would be able to attend virtual clinics in the car or even at pantry at workplace. Thus, it will save time for them. However, we will be selective in choosing patients who are suitable for virtual clinics.

As for training part, initially when we recruited our patients (ie. patients who have taken blood tests and started on ACEI with clinic appointment in 2 weeks' time). So, we will prepare the patient, got their consent on virtual consultations and teach them how to do it. They would have to download Skype for Business on their laptop. Majority of our patients use their mobile network. So, they downloaded the software on their phone. Younger patients are more IT savvy, so, no problems with them. However, for older patients, we would need to train their children.

During this MCO, training was done over the phone, we would call the patient and tell them what to do, step-by-step.

3. How about vaccination for school children? How do we reschedule and redirect vaccination for school programs to go back to (already busy) clinics?

Dr. Rozita: Right now, for the vaccinations, we are planning for a session where the patients would come to the clinic with their parents. We will give them appointment dates, and they will come and get their vaccination in the clinic. This is in the pipeline, and we plan to start in June 2020.

4. Did the frequency of home visits / phone calls reduced during this pandemic? How far does this pandemic affect hospice care, such as access to painkillers?

Dr. Vanitha: Yes, the number of home visits decreased by a lot. Phone calls actually increased because we have been conducting daily phone calls. Usually, our home visits would be 3-4 patients in a day, but when it comes to phone calls could reach up to 10 patients in a day.

As for the care of the patients during this pandemic, from what I can perceived as well as the feedbacks obtained from family members, I do not think that this has affected the care, because if a patient is dying, video calls have allowed us to see and assess the patient. If there is a need, we as a hospice medical team can make a difference to make a patient comfortable at home, we will be able to provide direct care at home. If they want to die at the hospital for their final hours, we will make the necessary arrangements as well and would contact the hospital to see the best ways to bring the patient to the hospital with ease.

5. Do you think the "quality of death" is affected during this pandemic, since the provision of palliative care is challenging?

Dr. Vanitha: I don’t think so, because if a patient is dying, we would make sure that there would be no pain and no symptoms. Even if there is a pandemic, we will still go in if there is a need to ensure that the patient has a good death.

6. Do you perform COVID-19 test for palliative care patients who would like to return home to their family before their departure?

SN Sunita: When patients are discharged and are allowed to return home, we would have a set of questionnaires for patients or caregivers

ie. COVID-19 screening questionnaire: any recent symptoms like fever, cough, flu, diarrhoea; any recent mass gathering; and recent exposure to COVID-19 patients; any family members or relatives who have recently returned from overseas

We would not conduct the COVID-19 RT-PCR test itself.

These tests would only be conducted at hospital on patients with severe acute respiratory illness according to MOH SOP.

Therefore, we rely on the checklists alone, and we require patients to be very truthful in answering the questions.

7. Dr. Tan, you have done a wonderful job in discussing liver diseases amongst COVID-19 patients. What is your advice to other specialists who care for patients with chronic diseases (ie. stroke patients, chronic heart diseases, kidney diseases)?

Dr. Tan Soek Siam: I think COVID-19 is a new disease and certainly, there is a lot to learn. Malaysia being a country with multi-ethnicity, and we have non-communicable diseases (NCD) and infectious diseases. I think that this is the time to look at COVID-19 in different categories, different specialties and subspecialties. This is the time to learn and to identify new things and also how to improve our care for these groups of patients. I am sure that different patients would require different care and different prognostic information. By knowing this, we can improve our care for this arm of patients.

8. Final Messages and Summaries by the panellists

- **Dr. Rozita bt. Zakaria**

In summary, we are still seeing our maternal and child health patients. We are doing it as usual but in a different manner. We are embracing the new norm. Remember to practice the 3Cs and the 3Ws not only outside the healthcare facilities, but within the healthcare facilities as well.

- **Dr. Tan Soek Siam**

When it comes to liver disease, it is a double edge sword. COVID-19 patients can develop deranged liver function and liver biochemistry. Patients with pre-existing chronic liver disease would fare worse when they are diagnosed with COVID-19. So, we would have to look after this group of patients as well.

- **Dr. Vanitha A/P R. Thangaratnam**

Hospice care still persists during this pandemic, whatever challenges we face, we would still persist on.

- **Sunita Kaur A/P Manmohan Singh**

Despite the challenges we face as mentioned by Dr. Vanitha, we at Kasih Hospice will do our best in trying to provide hospice services within our areas of coverage.

Click the link below to view the panellists' information and details of the webinar:

https://clinupcovid.mailerpage.com/resources/x5w2a6-care-for-vulnerable-populations-d

Speakers' Brief Bio

Dr. Rozita Binti Zakaria is the Head of Service Family Medicine, Family Medicine Consultant, Klinik Kesihatan Presint 18, Putrajaya

Dr. Tan Soek Siam is the Senior Consultant Hepatologist, Department of Hepatology, Selayang Hospital. She was the head of department and head of hepatology service in MOH up until 2017. Dr. Tan graduated from Trinity College, Dublin (Ireland) with honours in Medicine and conducted her housemanship and senior housemanship in Ireland. After passing her postgraduate exams she returned to serve as a clinical specialist at both Ipoh Hospital and Kuala Lumpur Hospital (Malaysia), in the latter hospital she started her training in Hepatology. She did her fellowship in hepatology in the Institute of Liver Study at King's College Hospital, United Kingdom and also received training in Queen Mary Hospital, Hong Kong and University of Michigan, USA. She had received several awards for her clinical service and her research work from local and international bodies.

Dr Tan is the immediate Past President of Malaysian Society of Gastroenterology and Hepatology, Deputy Chair and Scientific Co-Chair (Hepatology) of Asian Pacific Digestive Week (APDW2020), Kuala Lumpur. She is also a member of APASL ACLF Research Consortium (AARC) and a member of Editorial Board of Hepatology International.

Dr. Tan's research interests include acute liver failure, acute-on-chronic liver failure, chronic hepatitis B and C, autoimmune liver disease, non alcoholic fatty liver disease and liver transplantation. She is the principal investigator of numerous viral hepatitis B and C and non alcoholic fatty liver disease clinical trials. She had won several grants for research and clinical trial funding. She is a member of the Asia Pacific Association for the Study of the Liver (APASL)-ACLF working party, the APASL-ACLF Research Consortium (AARC). She had authored thirty publications in peer review journals, a few book chapters and a reviewer for several peer review journals. She has experience as organiser and faculty member of several clinical and research meetings at national and international conferences.

Dr. Vanitha A/P R. Thangaratnam is a Senior Hospice Doctor, working with Kasih Hospice Care Society in Petaling Jaya, which is a non governmental organization providing free medical, psychosocial, emotional and spiritual support for patients with life limiting illness. Dr Vanitha has been working with Kasih Hospice Care Society for the past 12 years and is in charge of the medical team.

Sunita Kaur A/P Manmohan Singh is the Senior Hospice Nurse, Kasih Hospice. She joined Kasih Hospice 6 years ago. Prior to this, she was a head nurse in King Fahad Military Medical Complex in Saudi Arabia.

If you are interested in future webinar, do join us every Thursday at 12 PM (GMT+8) live on social media. How to join the future webinar?

There are 6 ways to watch the webinar. You can join us live using your preferred social media account or one of the options below. Don't forget to use app.sli.do to ask questions. As usual our event code is **#hcsmMY**

- Periscope TV: https://www.pscp.tv/clinUp_covid/
- YouTube Channel: https://www.youtube.com/clinicalupdatesincovid19
- Facebook Live: https://www.facebook.com/ClinUpCOVID
- Twitter Live: https://twitter.com/clinUp_covid
- Clinical Updates in COVID-19 blog: https://clinupcovid.mailerpage.com/
- NIH COVID-19: http://www.nih.gov.my/covid-19/

How to get CPD points (for healthcare & medical personnel working in Malaysia)?

We will broadcast the online attendance form 20 minutes before the actual webinar. The link will also be posted on our Twitter, Facebook and YouTube. Please double check your email address before submitting. Any mistake in your email address, you will not get the certificate of attendance.

About the Author

"**Clinical Updates in COVID-19**" is a weekly medical webinar organized by Institute for Clinical Research, NIH Malaysia. The team consist of Dr.Chew Cheng Hoon, Ms.Yip Yan Yee, Mdm Lim Ming Tsuey, Datuk Dr.Christopher Lee Kwok Choong and Dato' Dr.Goh Pik Pin.

About the Publisher

Institute For Clinical Research, National Institutes of Health (NIH), Ministry of Health Malaysia, Block B4, No.1, Jalan Setia Murni U13/52, Seksyen U13, 40170 Shah Alam, Selangor Darul Ehsan, Malaysia.

Phone: 603-3362 7700 Fax: 603-3362 7701 Email: contact@crc.gov.my