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MINI REVIEW

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## Unique Challenges for Mental Health in Inpatient Settings Amid the COVID-19 Pandemic: Perspective from Sabah

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## Abstract

COVID-19 has impacted the world in many ways due to fears of contracting the pandemic, social distancing, and large-scale movement control rules. These have especially grave consequences for inpatient psychiatry. This article reviews measures taken to adapt to the new norm in inpatient care, both for standalone psychiatry units and consultation-liaison units. For inpatient units, changes have been made for personal protective equipment usage, screening and triaging policies, and training and educational policies. Consultation liaison units together with inpatient units have been required to expand the scope of coverage and difficulties by providing certain teleconsultation services. As the new norm takes precedence, Sabah has to embrace and empower community-based psychiatry services for better outreach and coverage. This article discusses the issues underlying the new norm in the management of inpatient psychiatry patients in both units and presents some points and practical solutions on the ground to instil hope.

Keywords: inpatient, consultation liaison, psychiatry, COVID-19.

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## Introduction

The novel Coronavirus (COVID-19) was first identified in a 41-case pneumonia outbreak in Wuhan, Hubei Province, China, with symptoms onset as early as 8<sup>th</sup> December 2019 (World Health Organization, 2020). In Malaysia, the country's first patient (who travelled from China via Singapore) was identified on 25<sup>th</sup> January 2020 (Joseph, 2020). On 12<sup>th</sup> March 2020, Sabah reported its first confirmed positive case involving a male resident from Tawau, who was one of the participants in a religious gathering in Sri Petaling, Kuala Lumpur (Daily Express, 2020b). The second positive case was reported the following day in Papar, also originated from the religious gathering (Daily Express, 2020a).

The number of confirmed positive patients in Sabah has increased since then, hence the Malaysia Federal Government implemented an approach called the Movement Control Order (MCO), which to date has lasted for two months in Sabah. This has resulted in massive upheavals and disruptions to the provision of psychiatric services, as different measures need to be strengthened to prevent the risk of COVID-19 infection. In view of these changes, a "new norm" has been required to be implemented for the provision of adequate inpatient and outpatient psychiatric services.

There have been some major changes in pre-existing psychiatric services in Sabah. This ranges from difficulties for patients to visit hospitals for follow-ups, initiation of phone consultations, postage of medications in between districts, high defaulter rates in view of fear of coming to hospitals due to the perceived highly infectious nature of COVID-19 and the setting up of screening counters in hospitals. In this review, some unique changes, challenges and difficulties in inpatient psychiatric services in Sabah are highlighted, and the experiences on the ground of psychiatrists in both inpatient and consultation liaison units are shared.

#### Difficulties in COVID-19 and challenges in inpatient psychiatry

In Sabah, there are four hospitals currently providing in-patient psychiatry services. One is a mental institution, namely Hospital Mesra Bukit Padang. The other three hospitals are general hospitals with dedicated psychiatry wards, namely Hospital Keningau, Hospital Tawau, and Hospital Duchess of Kent which is in Sandakan. As a mental institution, Hospital Mesra Bukit Padang caters for psychiatric inpatients on the entire West Coast of Sabah. With such a high volume of patient load, there is a very high risk of cross-infection if COVID-19 indeed infiltrates the hospital. Moreover, due to its status as a mental institution, there are many long stay in-patients who are old and frail and have very little social or family support, and long-stay forensic patients who will not able to be discharged in the near future. Therefore, a sudden infiltration of COVID-19 would be catastrophic and would lead to a high death toll.

A thorough and drastic set of preventive measures were taken by the administration of Hospital Mesra Bukit Padang in the early stages of the Malaysian MCO to prevent an avoidable outbreak in the psychiatric hospital. A triage centre was setup in the main entrance of the hospital to screen all staffs and the public who entered the hospital. The newly formed triage team comprised of medical officers, staff nurses, and medical assistants who worked 24 hours in shifts. They were required to undergo training and wear personal protective equipment (PPE) while screening patients. Body temperature was checked and handwashing was strictly enforced prior entering the clinic premises. The hospital also strictly adhered to Ministry of Health policies for social distancing. As such, no visitors were allowed to visit patients during the MCO period. For those patients originating from COVID-19 transmission hotspots, they were attended by doctors in designated areas outside the hospital.

Those patients who presented high risk of self-harm and harm to others were screened thoroughly prior to admission into the male and female admission wards. In both locations, patients were clerked in designated open areas with proper social distancing practised by the doctors and allied health professionals.

This also necessitated changes in the "new norm" of providing inpatient care. Grand ward rounds were continued with minimal number of doctors. Only psychiatrists and one medical officer from each respective teams was required to attend the grand ward round, with all requisite social distancing measures like spaced-out seating and adequate sanitation measures. This differed from previous times where all doctors were required to attend the grand ward rounds.

Training and education were also subjected to new norms in light of COVID19. House officer continuous medical education (CME) were conducted via video conferencing to reduce mass gathering risks. From a patient's perspective, many changes were required in light of COVID-19. Group rehabilitation activities i.e job placement, social group training, and children developmental training were withheld temporarily. At the same time, movement control was implemented in hospital areas, whereby staff from particular wards were not allowed to go to other wards unless indicated. The underlying principle at Hospital Mesra Bukit Padang was to continue delivering optimal in-patient psychiatry services without interruption. Hence, acute and maintenance Electroconvulsive Therapy (ECT) would be conducted if indicated. As it requires anaesthesia and the use of suctioning and possible intubation or mask ventilation, each indicated ECT was performed with proper PPE and necessary sanitation measures.

### Difficulties in COVID-19 and challenges in Consultation Liaison psychiatry

The second part of inpatient psychiatry relates directly to COVID-19 related issues in inpatients who are in non-psychiatry wards with psychiatry or psychological issues. Hospital Queen Elizabeth is the largest tertiary center in Sabah. Besides, Hospital Queen Elizabeth is also one of the COVID-19 treating hospital. The psychiatry team in Hospital Queen Elizabeth offers liaison consultation services for inpatients. Numerous challenges were anticipated by healthcare workers when handling both COVID and non-COVID cases.

Firstly, there was the challenge of the limitation of staffing. Due to the massive COVID-19 outbreak, the healthcare workers were assigned to both screening and managing of the COVID cases. All non-COVID related tertiary departments were required to send their staff to relieve the staffing of managing COVID cases, which in turn interrupted routine departmental services. Moreover, there were staff who were required to be quarantined after being in contact with COVID-19 positive patients. On the other hand, the possibility of undisclosed information of exposure to confirmed or suspected COVID patients by staff or patients may lead to high potential of spread or contact to healthcare personnel, which subsequently may further reduce the number of active workforce in the ward.

Secondly, there was the limitation of resources. Staffs were required to wear proper personal protective equipment (PPE) while managing COVID cases. However, due to the limitation of time and prohibition of formal CME sessions, only minimal training was provided. The physical limitations of proper PPE further worsened the situation. Staffs need to wear proper PPE throughout the services for COVID cases. It was not comfortable for the staff as theyhad to wear the PPE for a long duration without resting.

Thirdly, there was the psychological turmoil among healthcare workers themselves. Staffs often face anxiety, insomnia, and stress while managing COVID cases. They might be stigmatised by the public due to their exposure to the cases. There were health care workers refusing to manage COVID cases despite the possibility of facing disciplinary actions. The healthcare workers required substantial psychological support. They were often sad, worn-out, and frustrated. Mental health psychosocial support were provided for these workers in Queen Elizabeth Hospital via numerous facilities such as virtual mental health services, phone call counselling, individual counselling, and education to relieve their psychological burden.

Fourthly, there was a limitation of care for non-COVID cases. Due to the utilisation of services by COVID cases and the limited number of resources and staffing, the monitoring and management for non-COVID cases became extremely difficult. Medical staffs faced challenges of handling difficult patients such as delirious and aggressive patients. The assessment and monitoring were compromised due to the limitation of staffs. The equipment allocation especially for intensive cases was difficult due to the utilisation for COVID cases.

Fifthly, there ws a limitation in health seeking services due to the Movement Control Order (MCO). Malaysia initiated the MCO on 18<sup>th</sup> March 2020. Therefore, patients had difficulty to seek medical help at hospitals. This often-caused patients to delay seeking treatment and their presentation was often severe. The treating team faced difficulty to manage severe cases due to the tardiness in seeking treatment.

Lastly, the QEH consultation liaison team faced unique difficulties to manage COVID consultation liaison cases. Due to the limitation of PPE, psychiatry liaison services could only be carried out via phone call or distant assessment. There were times the psychiatry staff needed to wear proper PPE to assess the patient's mental status properly. Psychological services were also required to be provided to family members whose close ones had died due to COVID-19. Psychiatry staffs often had limited knowledge on wearing proper PPE. This increased the risk of COVID -19 exposure to the staffs.

## Discussion

## Challenges

The challenges for inpatient psychiatry have been discussed in other countries too. In China, there have been changes to mental health services, as they have been required to transition online in the COVID-19 pandemic. These include online mental health surveys, online mental health education with communication programmes, and online psychological counselling services (Liu et al., 2020).

Similar to Malaysia, the issues of overcrowding and consequent difficulties in social distancing most certainly present themselves in China. Another interesting dilemma identified is the need for psychiatry inpatients in particular to get involved in group activities as part of the therapeutic healing process, for example occupational therapy, physiotherapy, horticulture, supported employment and other activities which by necessity include other people (Xiang et al., 2020). Accordingly, there is a need to adjust to the new norm. Therapeutic activities no doubt still need to continue, but perhaps with the practising of adequate social distancing, use of face masks, and adequate hand sanitisation facilities, the risks of the pandemic versus the benefits of performing therapeutic activities will be able to be balanced out.

Inpatient psychiatry will pose a unique difficulty level. Due to the high levels of care required, it is almost impossible to avoid close contact, both in consultation and psychotherapeutic situations, and in acute stabilisation scenarios where close contacts are needed to deescalate and possibly use physical restraints (Li, 2020). In these scenarios, it is not always feasible to put on personal protective equipment, especially in the acute stabilisation scenario.

Besides that, stronger measures are needed to safeguard ward entry. Pre-COVID19, perfunctory medical assessments would have been performed with admitting inpatient psychiatry patients, as no suspicion of any highly contagious illness were present. Post-COVID19, it is likely that there will be more stringent screening of incoming inpatients to assess for contact, travel, or symptomatic risk, which has proven to be a good strategy as shown by Shanghai Mental Health Center, a 2400 inpatient beds centre with 0 case of inpatient infection (Shao et al., 2020). At the same time, the awareness and provision of basic sanitation and personal hygiene measures will be increased.

## Emerging Importance of Community Psychiatry

Another issue identified which is paralled in the China setting is the effect of mass quarantine strategies upon the provision of community psychiatry care. In China, due to pre-existing lack of community based services, a lot of psychiatric services have been centralised in major hospitals (Xiang et al., 2012). However, in the time of COVID-19, it is preferable for patients to reduce the attendant risks of entering a potentially highly infectious hospital by having community services go to the patient's house instead. Another issue highlighted is the suspension of public transportation and multiple roadblocks in China, which can be

extrapolated to the Malaysian situation. This will create significant barriers for patients to access treatments. This will then widen the treatment gap for serious mental disorders, at least in the short to medium term. Brief interventions are hence very helpful in dealing with the distress surrounding COVID-19, as they can be administered online as well as offline (Pang, Shoesmith, et al., 2020). These interventions can have the added benefit of improving psychological mindedness, which has been found to mediate the relationship between dysfunctional coping styles and depressive symptoms (Pang, Masiran, et al., 2020).

#### Dilemma of Patients with Psychiatric Disorders

Another issue presented in this paper is the difficulty of managing patients with severe psychiatric disorders who have suspected or confirmed COVID-19. This represents a major logistical challenge, as psychiatric patients with medical illnesses are by right treated in a medical-based hospital, as there is far from sufficient facilities and grossly inadequate training in psychiatric hospitals to provide adequate medical care. Isolation wards have been proposed to be set up in psychiatric hospitals. However, these can increase nosocomial infection risk, especially if there is a lack of capacity for infection control (Xiang et al., 2020).

One of the biggest factors is the higher risk per se of contracting pneumonia in individuals who are known to have severe mental illness. There are multiple possible explanations, including cognitive impairment, little awareness of risk, and diminished efforts regarding personal protection in patients, as well as confined conditions in psychiatric wards (Seminog & Goldacre, 2013).

Secondly, there are clear and present barriers for patients with known mental health disorders in getting timely medical attention, which is quite unfortunately related to pre-COVID19 discrimination in the world of healthcare when speaking of mental health issues (Yao et al., 2020). There is a lot of enacted stigma especially amongst healthcare workers – many people with mental illness have had physical symptoms misinterpreted as symptoms of mental illness, and their complaints can be trivialised or assumed to be a result of "wrong reporting" rather than actual illness.

This increases the risk of false negatives in mental health patients. For instance, individuals who take a medication called clozapine tend to experience higher levels of constipation, which can lead to a serious and life-threatening consequence called intestinal obstruction (Tang & Ungvari, 1999). However, in individuals with schizophrenia, stigma can result in patients' complaints being discounted. Therefore, in the crucial times of COVID-19, individuals with mental illness face the possibility of genuine medical risk if the stigma occurs.

Additionally, mental health disorder comorbidities have the potential to make treatment of COVID-19 more challenging and potentially less effective (Yao et al., 2020). Individuals with mental health disorders take antipsychotics that can lead to them developing higher risk of metabolic syndrome, including such illnesses as hypertension, diabetes, and higher lipid and cholesterol levels (Riordan et al., 2011). Also, the medications can have drug-drug interactions with the medications that they might be taking for COVID-19, due to potential induction or inhibition in the liver (Roncero et al., 2018; Zhang et al., 2020). Thus, they might actually have poorer response or toxicity to COVID-19 medications, at normal doses to other individuals who are not taking medications. There is also emerging evidence that shows that certain mental illnesses, for example schizophrenia and depression, have independent associations with diabetes and cardiac disorders respectively, which is independent of medication use (Fiedorowicz, 2014). This may be multifactorial and be linked to different genetic and phenotypic factors; to the social, occupational and interpersonal dysfunction that is secondary to the illness progression; or could be due to socioeconomic variables e.g. poverty, food insecurity, and financial privations that are associated with mental illness.

Third, the COVID-19 epidemic has caused a parallel epidemic of fear, anxiety, and depression. People with mental health conditions could be more substantially influenced by the emotional responses brought on by the COVID-19 epidemic, resulting in relapses or worsening of an already existing mental health condition because of high susceptibility to stress compared to the general population. However, there are two sides to this coin. From personal experiences, many clients with mental disorders actually find the enforced societal isolation of social distancing, movement control orders, and not being able to socialise with others somewhat reassuring, as it "normalises" the restrictions that are already present in their lifestyle. Hence, we need to be careful of the danger of generalising psychological effects on COVID-19 on all individuals with mental illness, and the behaviour of individuals in the COVID-19 crisis can run the full gamut, from extremely negative to extremely positive outcomes (Koh et al., 2020).

#### Tele-psychiatry: An Alternative

Finally, many people with mental health disorders attend regular outpatient visits for evaluations and prescriptions. However, nationwide regulations on travel and quarantine have resulted in these regular visits becoming more difficult and impractical to attend (Chattopadhyay, 2020). This can lead to higher risk of adherence issues, difficulty in maintain therapeutic relationship with patients, and patients' feeling of isolation increasing. However, many psychiatrists are beginning to use telepsychiatry services judiciously to adopt to the "new norm". In the absence of necessity of physical examinations for most individuals with mental illness, telepsychiatry is hence being deployed to provide continuation of care (Webster, 2020). Due to the advent of online prescription systems, patients can then be prescribed medications from a distance, and collect at hospital pharmacies through contactless dispensing. This system certainly looks ideal on paper, but as it has been launched without any pre-planning for most hospitals and psychiatrists due to the necessity of launching it in a time of crisis, not peacetime, there have been many practical issues in implementation. Firstly, many patients who are acutely unwell require face-to-face de-escalation, and there needs to be a backup mechanism in all hospitals to allow for that to happen, and on-call doctors 24 hours (Gibson et al., 2011). Secondly, there are certain patients who will require a more face to face intervention in order to run certain complicated psychological interventions which require preferentially the therapist to be present in person, e.g. desensitisation procedures. However, in the new norm, therapists then need to take it upon themselves to boost their IT capabilities and use

videoconferencing tools cleverly to ensure all treatment protocols can proceed as usual (Wagnild et al., 2006). Last but not least, there is always the lingering issue of boundary violations. Using internet services to provide consultations always leave the risk of clients being able to access therapists' phone numbers and personal contacts 24 hours (and vice versa too for vulnerable clients and unscrupulous therapists) (Sanders & Bashshur, 1995). Therefore, it is important that standard operating procedures for teleconsultations and high-security teleconsultation services be established early on. This is especially because of the inherent suicidal and aggression risk incorporated in psychiatric teleconsultation. Legal measures need to be enacted and strengthened, while medical insurance policies need to be notified thereof as well, to ensure that teleconsultations do not put therapists at unnecessary increased medicolegal risk.

#### Conclusion

There are multiple challenges for the new norm in psychiatry, and in medicine, we always need to balance beneficience versus non-maleficience, both to healthcare workers and to patient. There needs to be an urgent effort to increase preparedness and readiness efforts for the psychiatry fraternity to change the way things are being done to embrace the new norm. This is because come rain, shine, or COVID-19, inpatient psychiatry will still need to go on albeit with certain modifications. It is hoped that this article can shed some light into the practical difficulties of providing inpatient psychiatry in both general psychiatry and consultation liaison settings, and serve as the springboard for further discussion of the best way to practically implement what is known in theory about how we can safeguard our inpatient psychiatry services against the danger of COVID-19, while simultaneously being able to not compromise the quality of care for patients.

#### References

- Chattopadhyay, S. (2020). *India's coronavirus lockdown worsens access to mental healthcare*. Al Jazeera. https://www.aljazeera.com/news/2020/04/india-coronavirus-lockdown-worsens-access-mental-healthcare-200422094532809.html
- Daily Express. (2020a). *EXCLUSIVE: Sabah's second positive COVID-19 case in Papar*. Daily Express. http://www.dailyexpress.com.my/news/148674/exclusive-sabah-s-second-positive-COVID-19-case-in-papar/
- Daily Express. (2020b). Sabah's first COVID-19 case found in Tawau. Daily Express. http://www.dailyexpress.com.my/news/148672/sabah-s-first-COVID-19-case-found-in-tawau/
- Fiedorowicz, J. G. (2014). Depression and Cardiovascular Disease: An Update on How Course of Illness May Influence Risk. In *Current Psychiatry Reports*. https://doi.org/10.1007/s11920-014-0492-6
- Gibson, K. L., Coulson, H., Miles, R., Kakekakekung, C., Daniels, E., & O'donnell, S. (2011). Conversations on telemental health: Listening to remote and rural first nations communities. *Rural and Remote Health*.
- Joseph, S. (2020). *Malaysia confirms first cases of coronavirus infection*. https://www.reuters.com/article/china-health-malaysia/malaysia-confirms-first-cases-of-coronavirus-infection-idUSL4N29U03A
- Koh, E. B. Y., Pang, N. T. P., Shoesmith, W. D., James, S., Nor Hadi, N. M., & Loo, J. L. (2020). The Behaviour Changes in Response to COVID-19 Pandemic within Malaysia. 27(2), 45–50.
- Li, L. (2020). Challenges and Priorities in Responding to COVID-19 in Inpatient Psychiatry.

Psychiatric Services (Washington, D.C.). https://doi.org/10.1176/appi.ps.202000166

- Liu, S., Yang, L., Zhang, C., Xiang, Y.-T., Liu, Z., Hu, S., & Zhang, B. (2020). Online mental health services in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e17--e18.
- Pang, N. T. P., Masiran, R., Tan, K.-A., & Kassim, A. (2020). Psychological mindedness as a mediator in the relationship between dysfunctional coping styles and depressive symptoms in caregivers of children with autism spectrum disorder. *Perspectives in Psychiatric Care*.
- Pang, N. T. P., Shoesmith, W. D., James, S., Nor Hadi, N. M., Eugene Boon Yau, K., & Loo, J. L. (2020). Ultra Brief Psychological Interventions for COVID-19 Pandemic: Introduction of a Locally-Adapted Brief Intervention for Mental Health and Psychosocial Support Service. 27(2), 51–56.
- Riordan, H. J., Antonini, P., & Murphy, M. F. (2011). Atypical antipsychotics and metabolic syndrome in patients with schizophrenia: Risk factors, monitoring, and healthcare implications. In *American Health and Drug Benefits*.
- Roncero, C., Villegas, J. L., Martínez-Rebollar, M., & Buti, M. (2018). The pharmacological interactions between direct-acting antivirals for the treatment of chronic hepatitis c and psychotropic drugs. In *Expert Review of Clinical Pharmacology*. https://doi.org/10.1080/17512433.2018.1519392
- Sanders, J. H., & Bashshur, R. L. (1995). Challenges to the implementation of telemedicine. *Telemedicine Journal: The Official Journal of the American Telemedicine Association*. https://doi.org/10.1089/tmj.1.1995.1.115
- Seminog, O. O., & Goldacre, M. J. (2013). Risk of pneumonia and pneumococcal disease in people with severe mental illness: English record linkage studies. *Thorax.* https://doi.org/10.1136/thoraxjnl-2012-202480
- Shao, Y., Shao, Y., & Fei, J. M. (2020). Psychiatry hospital management facing COVID-19: From medical staff to patients. In *Brain, Behavior, and Immunity*. https://doi.org/10.1016/j.bbi.2020.04.018
- Tang, W. K., & Ungvari, G. S. (1999). Clozapine-induced intestinal obstruction. *Australian and New Zealand Journal of Medicine*. https://doi.org/10.1111/j.1445-5994.1999.tb00760.x
- Wagnild, G., Leenknecht, C., & Zauher, J. (2006). Psychiatrists' satisfaction with telepsychiatry. *Telemedicine Journal and E-Health*. https://doi.org/10.1089/tmj.2006.12.546
- Webster, P. (2020). Virtual health care in the era of COVID-19. *The Lancet*. https://doi.org/10.1016/s0140-6736(20)30818-7
- World Health Organization. (2020). Novel Coronavirus-China. https://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en/
- Xiang, Y.-T., Yu, X., Sartorius, N., Ungvari, G. S., & Chiu, H. F. K. (2012). Mental health in China: challenges and progress. *The Lancet*.
- Xiang, Y.-T., Zhao, Y.-J., Liu, Z.-H., Li, X.-H., Zhao, N., Cheung, T., & Ng, C. H. (2020). The COVID-19 outbreak and psychiatric hospitals in China: managing challenges through mental health service reform. *International Journal of Biological Sciences*, 16(10), 1741.
- Yao, H., Chen, J. H., & Xu, Y. F. (2020). Patients with mental health disorders in the COVID-19 epidemic. In *The Lancet Psychiatry*. https://doi.org/10.1016/S2215-0366(20)30090-0
- Zhang, K., Zhou, X., Liu, H., & Hashimoto, K. (2020). Treatment concerns for psychiatric symptoms in COVID-19-infected patients with or without psychiatric disorders. *The British Journal of Psychiatry : The Journal of Mental Science*. https://doi.org/10.1192/bjp.2020.84