PSYCHIATRY AND MENTAL HEALTH SERVICES PANDEMIC REPORT

MEDICAL DEVELOPMENT DIVISION MINISTRY OF HEALTH MALAYSIA

PSYCHIATRY AND MENTAL HEALTH SERVICES

PANDEMIC REPORT (2020 & 2021)

This document has been updated by the Psychiatry and Mental Health Services Pandemic Report (2020 & 2021) drafting committee, for MOH Hospitals

MEDICAL DEVELOPMENT DIVISION
MINISTRY OF HEALTH MALAYSIA

ACKNOWLEDGEMENT

FOREWORD BY THE DEPUTY DIRECTOR GENERAL OF MOH (MEDICAL)

Assalamualaikum warahmatullahi wbt. May the peace, mercy and blessings of Allah be with you.

As we steadily entered into the endemic phase of COVID-19, we have not forgotten the great impact of the pandemic on the life of every Malaysian. The global crisis affected our physical, mental, social, and spiritual well-being. It was a first in our history that the MOH members took up the role of national warriors to combat the health and psychosocial crisis within our nation.

Throughout the last 2.5 years until today, the MOH psychiatrists and other mental health professionals have taken up the challenge to improvise the delivery mechanism of its psychiatric and mental health services to their patients, caregivers and within the community,
to break through the silo of the individualised field to reform and merge with other specialities as one MOH team to treat COVID-19 patients, their carers and the community, to lead the national, state and community level of mental health and psychosocial services for all patients, their family members and the general population, and to initiate innovative and quality projects amidst the chaos of the crisis.

One such project is a whole country psychiatrists' teamwork documenting the outcome and challenges of their service, the strategies used during the period, and their recommendation for solutions during the COVID-19 crisis. I agreed that such unprecedented event warrants to be documented as a guide and reference for our future health professionals to respond swiftly and appropriately if faced with a similar health crisis.

Well done to Dr Hajah Salina binti Abdul Aziz and your awesome team for this great effort. May Allah repay all your kindness and dedication and forever be blessed on earth and Jannah.

Finally, I would also encourage every reader to take up your role in the informal mental health services, i.e. empowerment of self-care and informal community care (as per the recommendation of the WHO pyramid framework of the optimal mix of mental health services). Some of the positive impacts of this crisis would be the increased awareness of the importance of mental health within the community and the creative use of information technologies as a platform for mental health literacy activities. May the current ongoing effort in promoting a healthier lifestyle among Malaysians be sustainable in the many generations.

Dato' Dr Asmayani binti Khalib

Deputy Director General MOH (Medical)

FOREWORD BY THE NATIONAL ADVISOR FOR PSYCHIATRY SERVICES

The COVID-19 pandemic has had a profound impact across the globe and the National Psychiatry and Mental Health Services is no exception. These past couple of years has seen us rising to unprecedented challenges.

The National Psychiatry and Mental Health Services which comprises of outpatient care, inpatient care, psycho-education programmes, rehabilitation, hospital-based community psychiatry services and Community Mental Health Centres (CMHC) was affected in various ways. An example to illustrate this would be the pre-pandemic shortage of inpatient psychiatry beds which was further compounded by the repurposing of psychiatry beds and wards to make way for overwhelming COVID-19 inpatient admissions. We found ourselves treading a fine line between meeting the rising demands for mental health care, while also contributing to the COVID-19 response with deployment of our manpower and repurposing of psychiatry inpatient facilities.

The pandemic also led to various complexities in delivery of specialised care from community psychiatry home visits up to the delivery of Electroconvulsive Therapy. This, in turn, led to reconceptualizing the provision of mental health care. As the Greek philosopher, Plato, had once said, "Our need will be the real creator." To attest to this, the new-found challenges brought with them opportunities for change, improvements, and creative innovations. We saw our services shift to new modes of healthcare delivery such as digital mental healthcare to mitigate disruptions to services. And for the first time in history, mental health care professionals were directly involved in educating and facilitating the administration of vaccinations.

Apart from the unparalleled time challenges of providing mental health care for the general population during the SARS-CoV-2 pandemic, we were also tasked with the pivotal role of providing mental health psychosocial support for medical frontliners and healthcare workers.

History has taught us that the mental health impact of a pandemic often outlasts the physical impact, hence we need to be prepared for the mental health demands that are likely to persist beyond the pandemic itself. The emphasis on enhancement of Mental Health services as part of the Malaysian Healthcare system reform as outlined in the upcoming 12th Malaysian Plan is a much-welcomed step in the right direction. While we take pride in our accomplishments thus far, we should remain cognizant of the fact that much remains to be done to address mental health in Malaysia.

This report aims to present an objective assessment of hurdles faced by the National Psychiatry and Mental Health Services during the SARS-CoV-2 pandemic, while highlighting the measures employed to curb them. It is hoped that this report, will serve to improve our pandemic preparedness for the future.

The recent pandemic has proven to be a colossal test of leadership and humanity. I would like to thank the Director General of Health, Tan Sri Dr Noor Hisham Abdullah for his remarkable leadership and support. I also acknowledge and congratulate the working committee for their concerted effort that made this report possible. I also praise the dedication of all the Psychiatry and Mental Health Departments nationwide who continue to strive towards improving the quality of mental health care despite the trials and tribulations.

It is my sincere hope that we continue to build the resilience of our services as we prepare for the future of mental health services in our beloved nation. Thank you.

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1. INTRODUCTION

The mental health services in Malaysia aim to create a psychologically healthy and balanced society with emphasis on the promotion of mental health, prevention of psychological problems and stigma reduction. The vision of the mental health services includes providing treatment and psychiatric rehabilitation for those with chronic disabilities and providing adequate and appropriate facilities for the care of clients to ensure optimal potential realisation and employment opportunity, in line with the eight service goals of our Ministry of Health: wellness-focused, person-focused, informed person, self-care of the individual, services to be provided close to home, seamless service, services tailored to individual needs and provision of effective and efficient services.

The scope or focus of the mental health services in Malaysia is providing early detection and treatment services, providing comprehensive psychiatric services including outpatient care and inpatient care with intensive psychosocial interventions including psycho-education programmes, rehabilitation, hospital-based community psychiatry services (acute home care and assertive home care), family intervention and MENTARI programmes.

Overall, the mental health services currently available in our healthcare system can be divided into three levels – psychiatric institutions, state hospitals and other hospitals (major specialist hospitals & minor specialist hospitals). Additionally, district health clinics also provide outpatient psychiatric services. The number of hospitals with psychiatric services has been increasing throughout the years. The lists of hospitals with psychiatric services in Malaysia as shown in Fig. 1.

The COVID-19 infection was first reported to the World Health Organization (WHO) on 31st December 2020. By end of January 2021, the Covid-19 outbreak was declared as a global health emergency by WHO and as a pandemic in March in the same year. The pandemic had significant implication on the global healthcare system by imposing an unprecedented burden to the healthcare services including psychiatric and mental health care.

Many countries are facing difficulties in delivering optimal service due to a lack of resources and manpower as well as dealing with the healthcare demands in this unusual and anxiety-inducing situation. To contain the pandemic, healthcare workers need to be mobilized to provide care to COVID -19 patients, with them also being vulnerable to be infected and quarantined as well. This imposed a great limitation for healthcare service provision, which were further exacerbated by the lockdown and closure of non-essential facilities and services.

At the same time, the COVID-19 pandemic has brought upon a dramatic transformation in the delivery of mental health services for people with mental illness. Standard operating procedures (SOP) recommended by WHO have been implemented to mitigate the spread of virus and indeed it was challenging for a lot of sectors especially the outpatient service. The enforcement of strict social and physical distancing measures is required to ensure safety of staff and patients while receiving treatment from the department. This sudden change of healthcare practice poses great challenges to mental health services.

This report outlines the performance of the psychiatry and mental health services during the pandemic COVID-19 situation and highlights issues and challenges faced by the team to ensure no disruption of the services and sustain the quality of mental health care services.

Table 1: *List of psychiatric institutions and hospitals with psychiatry services*

State Hospital	
Hospital Tuanku Fauziah Kangar	Hospital Tengku Ampuan Afzan Kuantan
Hospital Sultanah Bahiyah Alor Setar	Hospital Melaka
Hospital Pulau Pinang	Hospital Raja Perempuan Zainab II Kota Bharu
Hospital Raja Permaisuri Bainun Ipoh	Hospital Sultanah Aminah Johor Bahru
Hospital Kuala Lumpur	Hospital Sultanah Nur Zahirah Kuala Terengganu
Hospital Tengku Ampuan Rahimah Klang	Hospital Queen Elizabeth Kota Kinabalu
Hospital Tuanku Ja'afar Seremban	Hospital Umum Sarawak
Major Specialist Hospital	
Hospital Ampang	Hospital Bintulu
Hospital Duchess of Kent Sandakan	Hospital Kajang
Hospital Kemaman	Hospital Kulim
Hospital Miri	Hospital Pakar Sultanah Fatimah Muar
Hospital Putrajaya	Hospital Seberang Jaya
Hospital Segamat	Hospital Selayang
Hospital Serdang	Hospital Shah Alam
Hospital Sibu	Hospital Sultan Abdul Halim Sungai Petani
Hospital Sultan Haji Ahmad Shah Temerloh	Hospital Sultan Ismail Johor Bahru
Hospital Sultan Ismail Petra Kuala Krai	Hospital Sultanah Nora Ismail Batu Pahat
Hospital Sungai Buloh	Hospital Taiping
Hospital Tanah Merah	Hospital Tawau
Hospital Teluk Intan	Hospital Tuanku Ampuan Najihah Kuala Pilah
Minor Specialist Hospital	
Hospital Banting	Hospital Bentong
Hospital Besut	Hospital Bukit Mertajam
Hospital Dungun	Hospital Keningau
Hospital Enche' Besar Hajjah Kalsom Kluang	Hospital Kuala Lipis
Hospital Labuan	Hospital Lahad Datu
Hospital Limbang	Hospital Port Dickson
Hospital Sarikei	Hospital Seri Manjung
Hospital Serian	Hospital Slim River
Hospital Sri Aman	Hospital Sultanah Maliha Langkawi
Psychiatric Institution	
Hospital Bahagia Ulu Kinta	Hospital Mesra Bukit Padang
Hospital Permai Johor Bahru	Hospital Sentosa Kuching

2. OBJECTIVES

General objective:

To understand the extent and nature of changes in psychiatric services in Malaysia during the COVID-19 pandemic.

Specific objectives:

- As a reference when facing a similar situation (epidemic, pandemic) in the future
- Ensuring services to patients can continue with new norms and compliance with the standard operating procedure
- Ensure uniformity in providing services during a pandemic
- Identify issues and problems encountered and find the best solution
- Ensure the safety of staff in the department and patients or relatives when providing or obtaining psychiatric and mental health services

3. **SCOPE OF SERVICE**

3.1. OUTPATIENT GENERAL & SUBSPECIALTY SERVICES

In Malaysia, the outpatient psychiatric services are provided at various levels of healthcare centres, including institutions, state hospitals, major and minor hospitals, and in certain state there were also visiting psychiatric outpatient services to local health clinics, prisons, and old-folks homes. Outpatient psychiatric services include general and subspecialty clinics, with other services as well such as clinical psychologists, counsellors, and occupational therapy (OT). The availability of these services in are based on the hospital types. The state & major hospitals can provide more service due to increased availability of resources and manpower. However, during the pandemic these services were badly affected and interrupted. In this report, we will look into the data of outpatient psychiatric services and the challenges faced during the pandemic.

3.1.1. General Psychiatry

General clinics are a vital part of outpatient services, and they are available in all hospitals in Malaysia. Before the pandemic, the general clinics run on four working days each week for Institutions, State and Major hospitals whereas they are run on two working days in Minor hospitals. The general clinic serves as a setting where assessment, diagnosis and treatment for new and follow-up cases can be done, as well as mental health promotion. Some of the hospitals also cater for walk-in services and allocate a specialized clinic for patients on Clozapine. Here, we provide descriptive data of outpatient services before and during the pandemic. Figures below showed the bar chart of the total number of new and follow up cases, Clozapine clinic cases and walk-in cases before & during the pandemic.
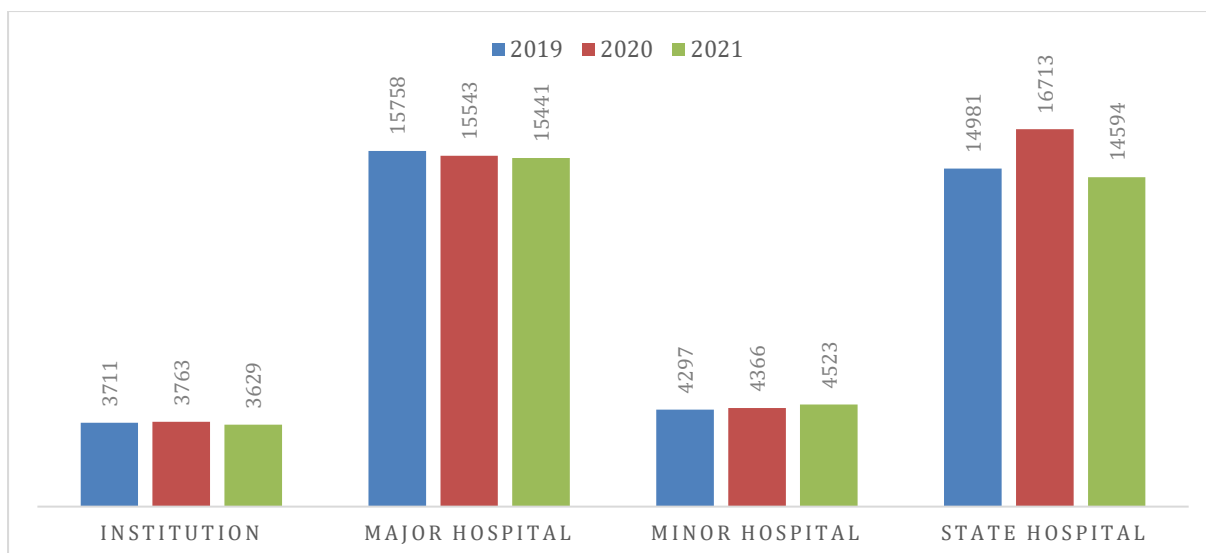
Fig. 3.1.1: *Total number of new cases in general psychiatry clinic, 2019-2021*

There were no major changes in the number of new cases seen in general psychiatry clinic from the institutions, major and minor hospitals. As for state hospitals, there was an increment of cases in 2020 followed by a reduction in 2021 (Fig.3.1.1).
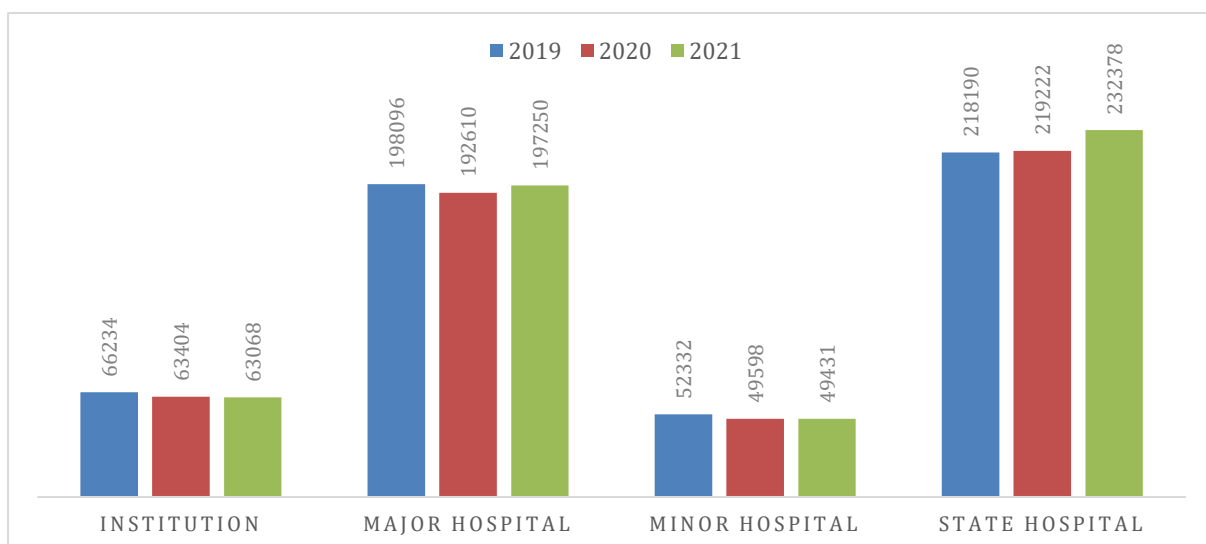
Fig. 3.1.2: *Total number of follow-up cases in general psychiatry clinic, 2019-2021*

The numbers of follow-up cases in general psychiatry clinic remain relatively similar in number before and throughout the pandemic (Fig. 3.1.2). Such trend may be observed due to the use of teleconsultation and restriction of clinic attendance by giving longer appointment dates to ensure compliancy to SOP.
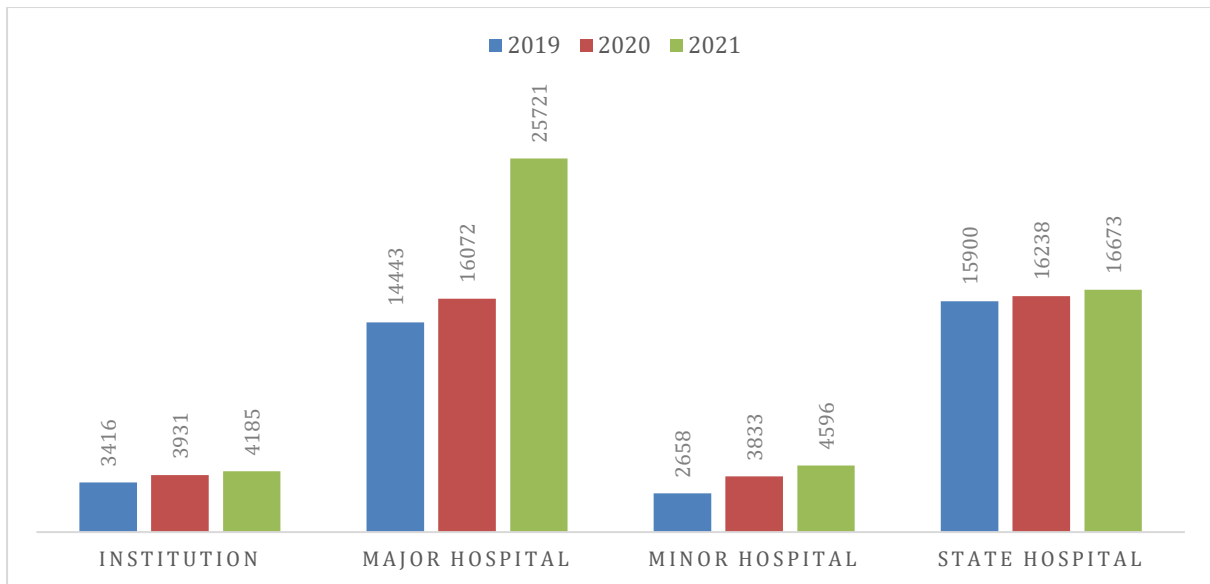
Fig. 3.1.3: *Total number of walk-in cases in general psychiatry clinic, 2019-2021*

There was an increment in number of walk-in cases throughout pandemic in all settings (Fig. 3.1.3). This might be attributed to the unpredictable factors related to COVID-19 pandemic e.g., enforcement of EMCO, patients being quarantined due to COVID-19 infection or close contact, logistic issues.

3.1.2. Clozapine Clinic
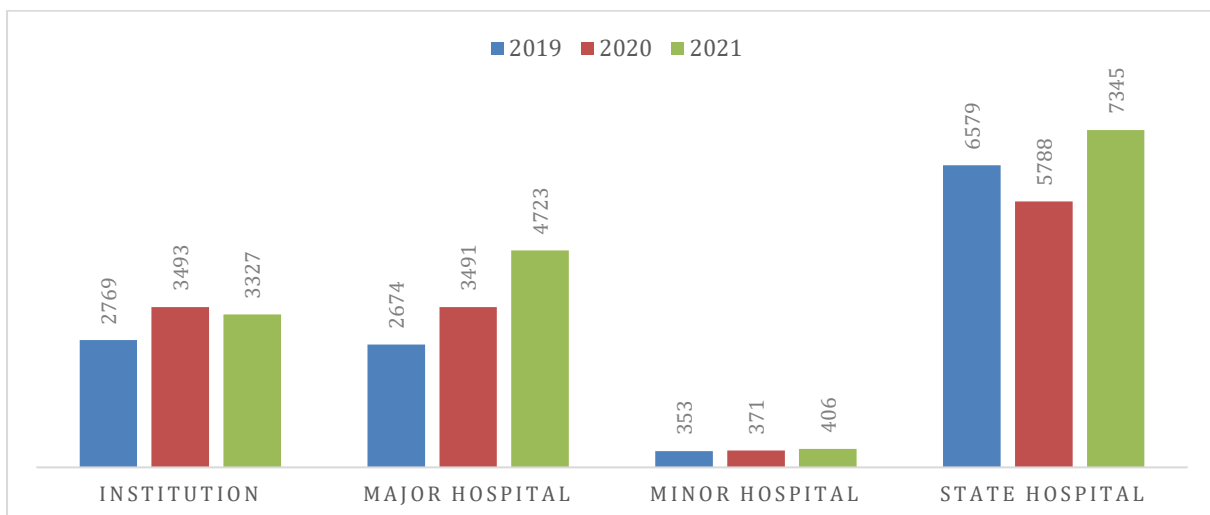
Fig. 3.1.4: *Total number of clozapine clinic cases, 2019-2021*

There was an increment of Clozapine cases seen in psychiatry clinics throughout the pandemic (Fig. 3.1.4). This may signify increased need for Clozapine use due to relapses. Moreover, the diversion from inpatient to outpatient services as a countermeasure during COVID-19 pandemic might explain such trend too.

3.1.3. Child & Adolescent Clinic
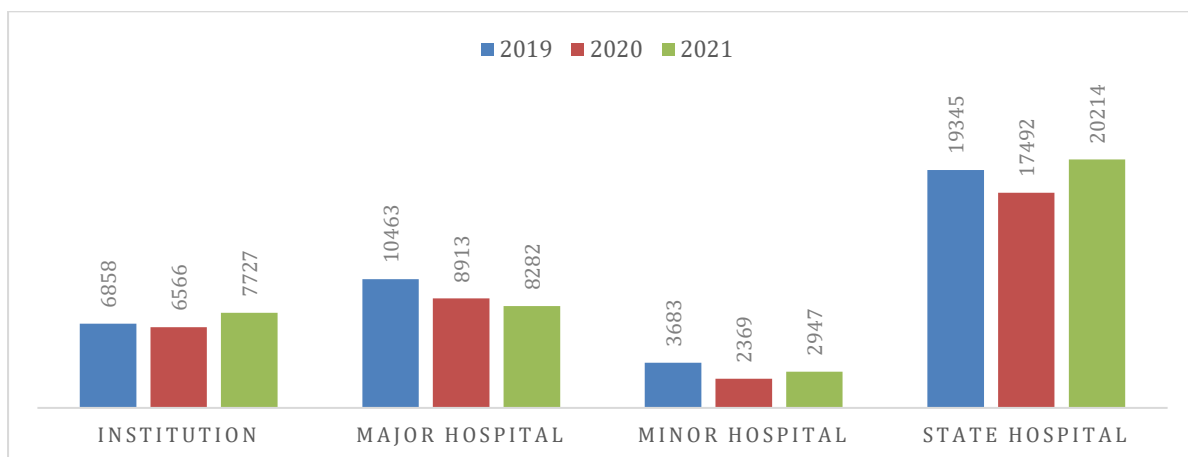
Fig. 3.1.5: *Total number of cases for child and adolescent clinic, 2019-2021*

There was a general reduction of cases in 2020 (first year of COVID-19 pandemic) which might be attributed to the fear of infection and interruption of visiting services due to nationwide lock-down (Fig.3.1.5). Along with adaptation of new norm in COVID-19 pandemic, increment of cases was seen in 2021 which can be attributed to new stressors e.g., online learning, prolonged social isolation, and less rehabilitative activities.

3.1.4. Addiction & Methadone Clinic

3.1.4.1. Addiction Clinic
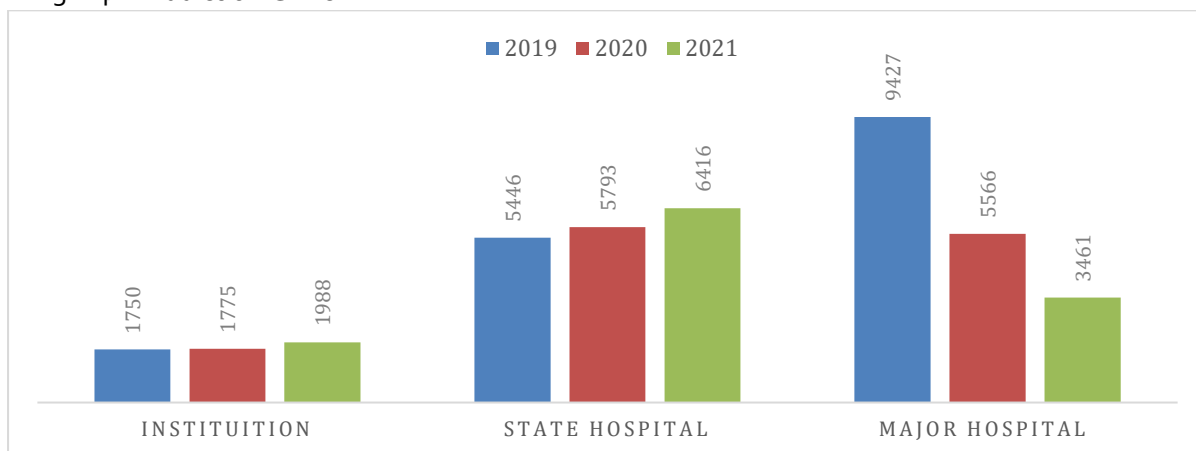
Fig. 3.1.6: *Total number of cases (new case and follow up) for addiction clinic, 2019-2021*

The highest number of Addiction clinic cases were seen in major hospitals followed by state hospitals then institutions (Fig.3.1.6). An increase in the number of new and follow up cases can be seen in institutions and major hospitals. In contrast, the number of new and follow up cases in Major hospitals were reduced by almost 40% in both 2020 and 2021.

3.1.4.2. Methadone Clinic
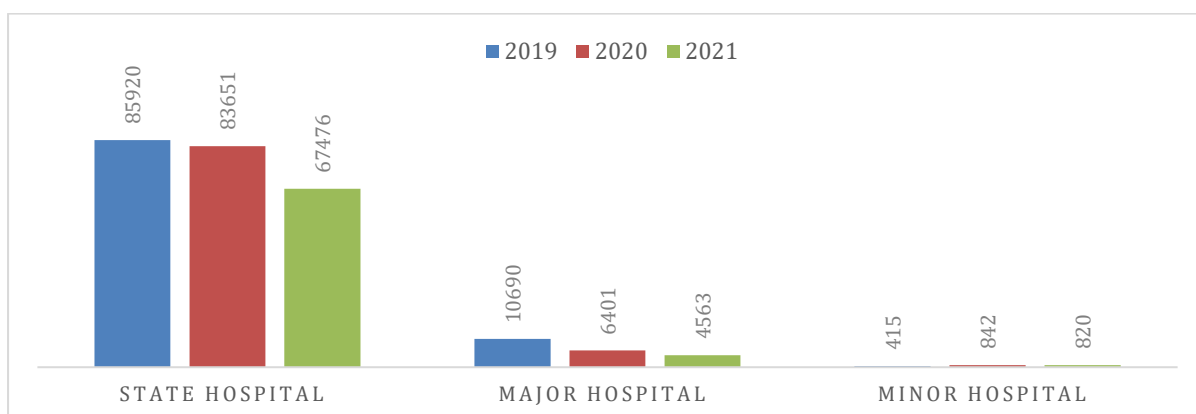
Fig. 3.1.7: *Total number of cases (new and follow-up) for methadone clinic, 2019-2021*

The number of cases in methadone clinic in were seen to be decreasing in trend during the period of pandemic in state and major hospitals which is about 20-40% (Fig.3.1.7). Whereas in minor hospitals, there was an increment in number of cases by 50 % in 2020 and 2021.

3.1.5. Psychogeriatric Clinic
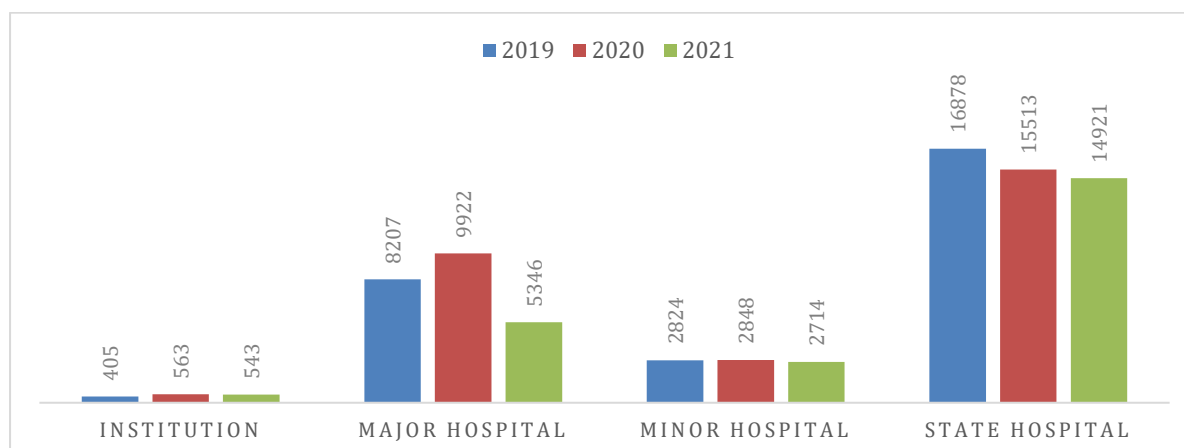
Fig. 3.1.8: *Total number of cases in psychogeriatric clinic, 2019-2021*

An overall reduction of cases in psychogeriatric clinics was observed throughout the pandemic (Fig.3.1.8). Factors contributing to the reduction may be due to poor clinic attendance due to fear of COVID infection, travel restriction, long waiting time, difficulty to practice social distancing due to hearing impairment, and disruption of visiting services.

3.1.6. Neuropsychiatric Clinic
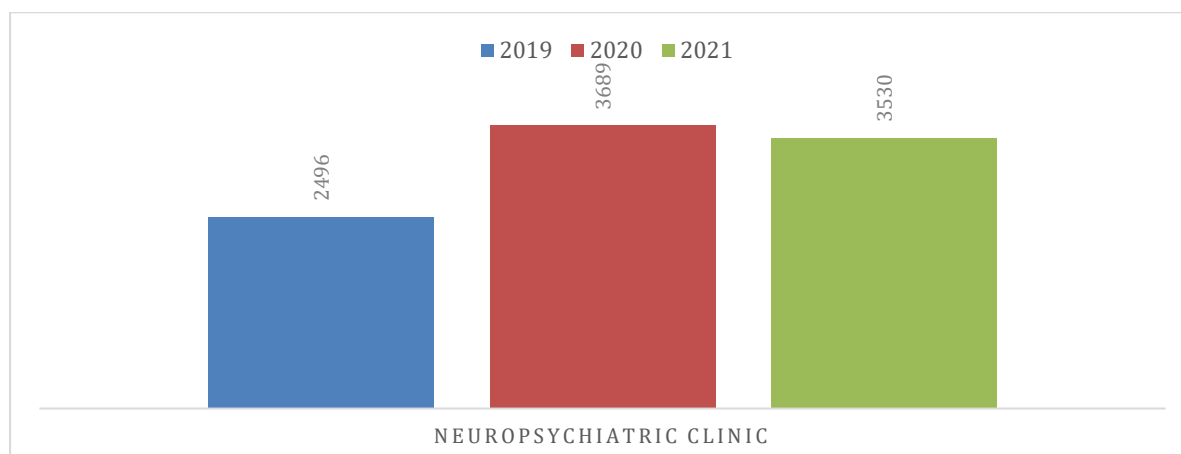
Fig. 3.1.9: *Total number of cases (new case and follow-up) for neuropsychiatric clinic, 2019-2021*

There was a 30% increase in the total number of cases seen at Neuropsychiatric Clinics in 2020 as compared to the previous year (Fig. 3.1.9). During the pandemic period (2020-2021), there was slight difference seen in the total number of cases.

3.1.7. Consultation-Liaison Clinic
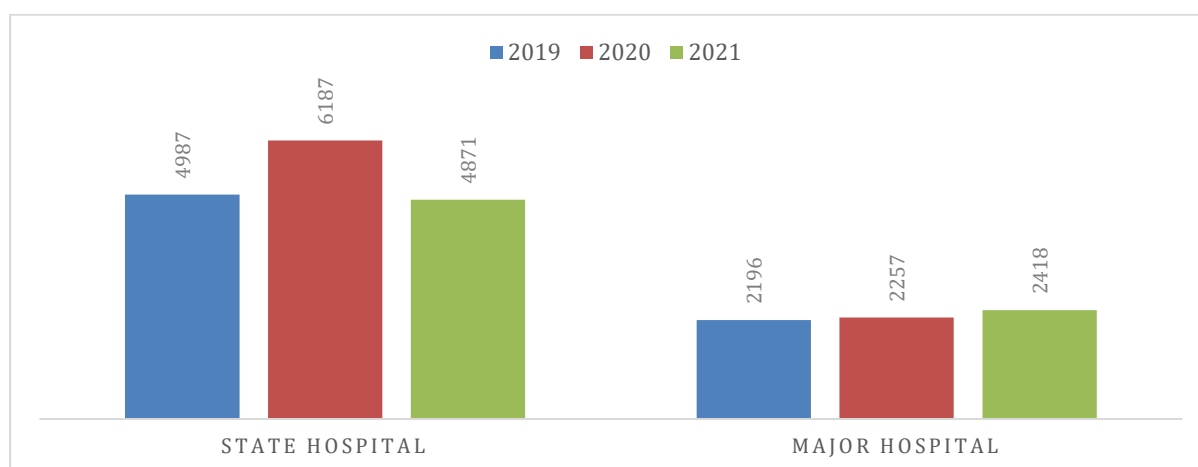
Fig. 3.1.10: *Total number of cases (new case and follow-up) for consultation-liaison clinic, 2019-2021*

In state hospitals, the number of cases in consultation liaison clinic was observed to increase by 20% in 2020 but was reduced in 2021 (Fig. 3.1.10). In major hospitals, the total number of cases seen before or during the pandemic were not significantly affected.

3.1.8. Teleconsultation Services

It is a well-known fact that this pandemic has caused significant physical and psychological impact due to several factors such as fear of contact, social depravation, income loss and many others. In this situation, the delivery of psychiatric services should not be interrupted, but in strict compliance to the new standard operating procedures (SOP) made by stakeholders to mitigate the risk of widespread infection.

On such occasion, many hospitals had started psychiatric teleconsultation services to make sure access to psychiatric services are readily available for new cases and to ensure uninterrupted delivery of services for follow-up cases. Some hospitals had come with strict guidelines and regulations to initiate the service to make sure privacy and confidentiality of patients are protected.

In Malaysia, there has also been an increase in the number of teleconsultation services used in providing psychiatric services since the start of the pandemic. Fig. 3.1.19-3.1.21 showed the use of teleconsultation in psychiatry outpatient services across the country before and during the pandemic.
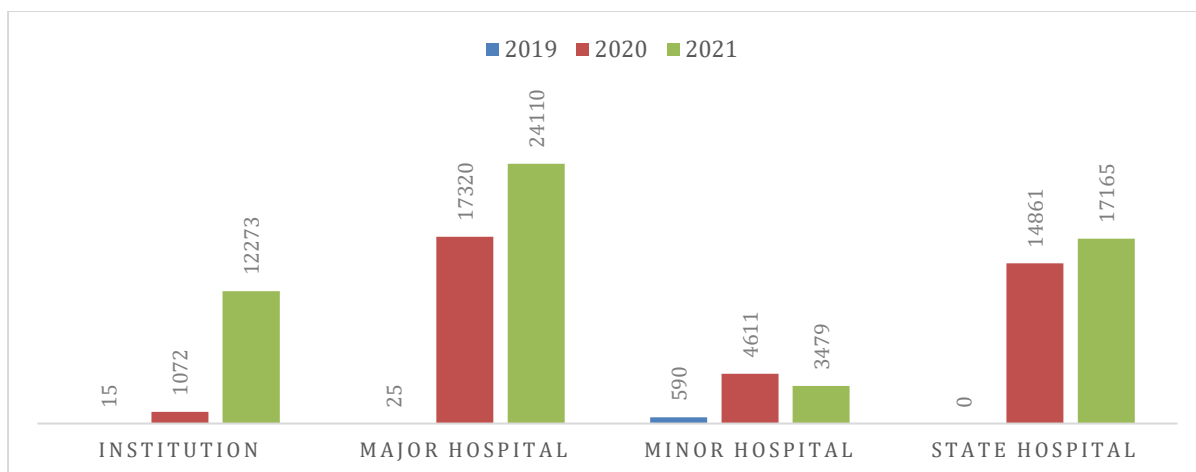
Fig. 3.1.19: *Total numbers of teleconsultation done in general clinics, 2019-2021*

There were about 37% (2020) and 61% (2021) increment in teleconsultation use throughout the pandemic in general outpatient clinic (Fig.3.1.19). Limitation of resources and infrastructure due to the SOP might be the factor encouraging teleconsultation use.
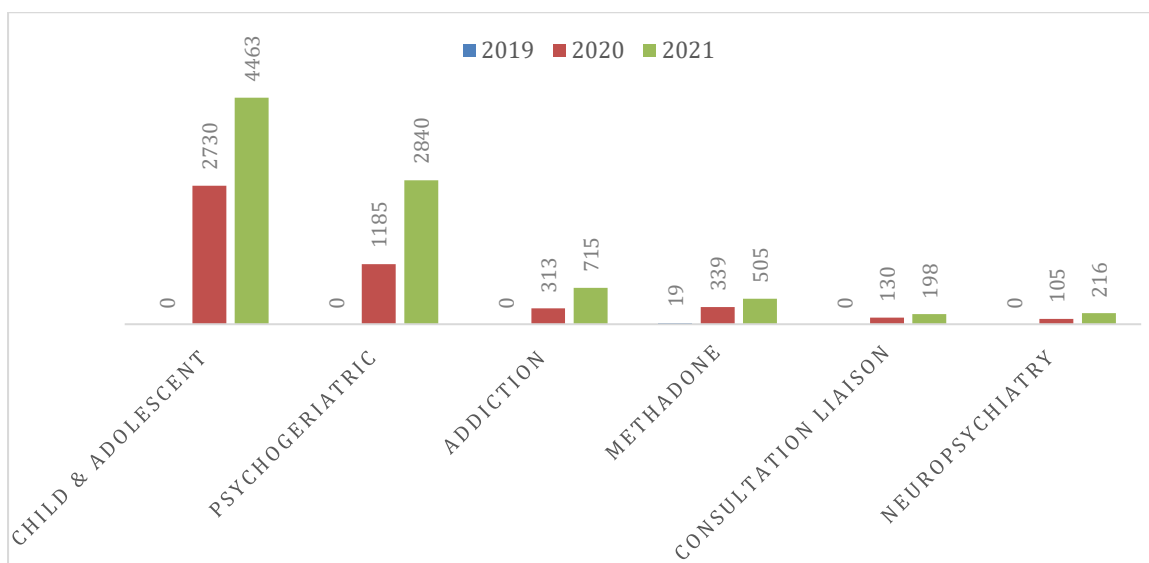
Fig. 3.1.20: *Total number of teleconsultations done in subspecialty clinics, 2019-2021*

Overall, we can see increasing trend of teleconsultation services used in all subspecialty clinics in Malaysia's hospitals. Child & adolescent clinics showed the highest usage of teleconsultation services while neuropsychiatry had the least number of teleconsultation services utilization (Fig. 3.1.20).
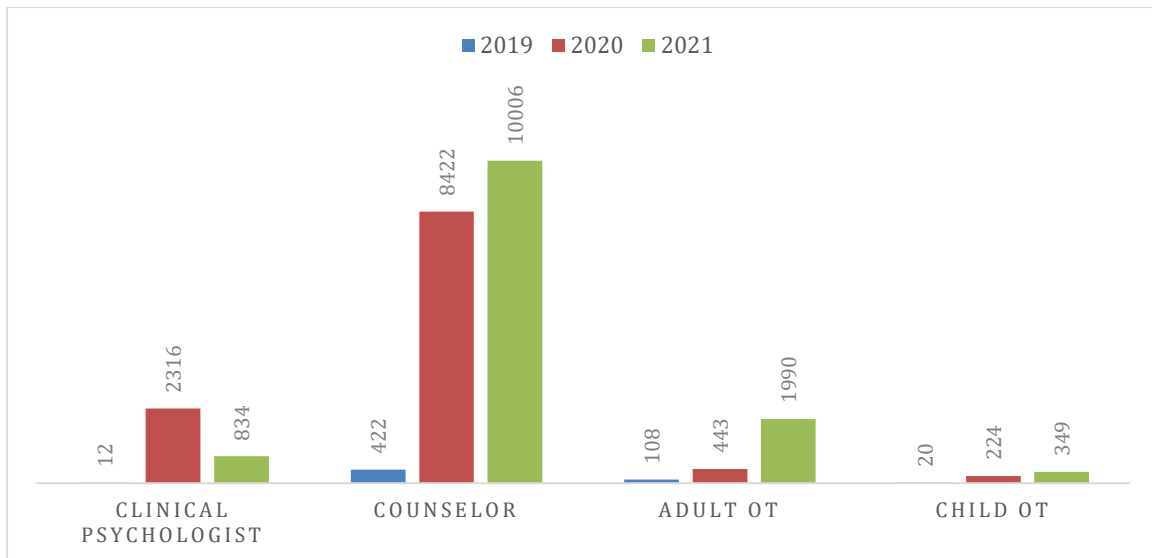
Fig. 3.1.21: *Total number of teleconsultations done in other outpatient psychiatry services, 2019-2021*

Teleconsultation service use also increased in other parts of outpatient psychiatric services, in particularly for counsellor services from 2019 to 2020 with almost 95% of increment. However, teleconsultation services by clinical psychologist showed a declining trend from 2020 to 2021 with 64% reduction in teleconsultation used (Fig. 3.1.21).

3.1.9. Defaulter Rate

3.1.9.1 General Clinic
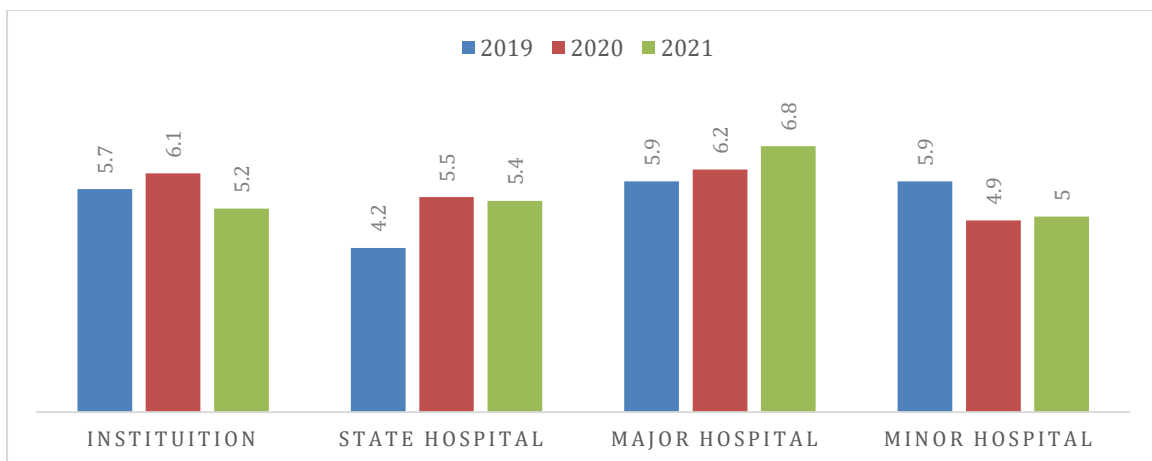
Fig. 3.1.22: *Defaulter rates in General Clinic, 2019-2021*

There was an increment in the number of defaulter rates in general clinics throughout the pandemic in all settings (Fig. 3.1.22). This might be attributed to the unpredictable factors related to covid-19 pandemic, e.g., EMCO, quarantine due to covid-19 infection or close contact, logistic issues.

3.1.9.2. Child & Adolescent Clinic

Fig. 3.1.23: *Defaulter rates in Child and Adolescent Clinic, 2019-2021*

There was an increment in the number of defaulter rates in Child and Adolescent clinics throughout the pandemic in all settings (Fig. 3.1.23). This might be attributed to the unpredictable factors related to covid-19 pandemic, e.g., EMCO, quarantine due to covid-19 infection or close contact, logistic issues, anxiety among parents regarding the safety of their children (fear of children getting infected).

3.1.9.3. Addiction Clinic
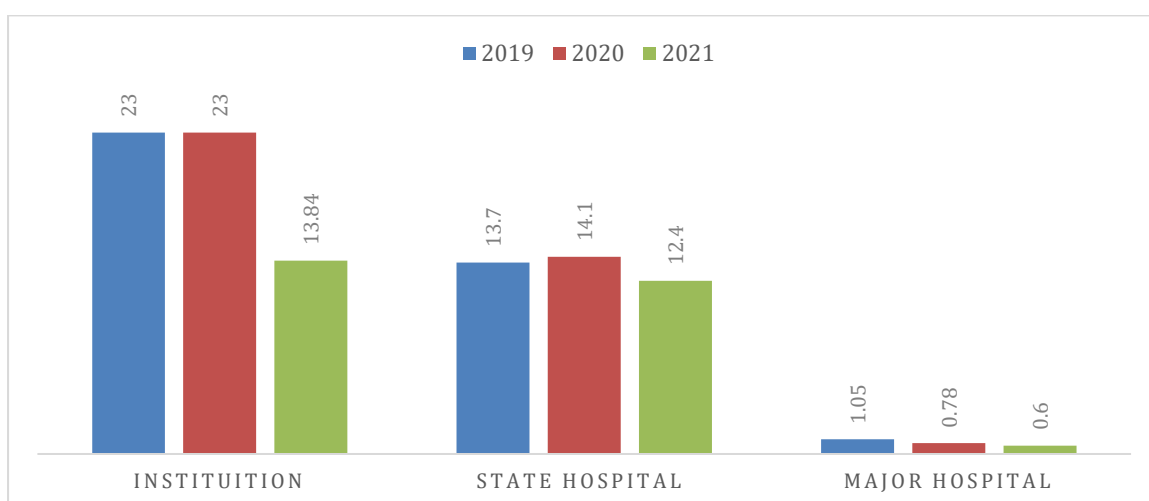
Fig. 3.1.24: *Defaulter rates in Addiction Clinic, 2019-2021*

There were no major changes in the number of defaulter rates in addiction clinics in major hospitals and state hospitals. As for the institution, there was a reduction in defaulter cases in 2021 (Fig. 3.1.24).

3.1.9.4. Methadone Clinic
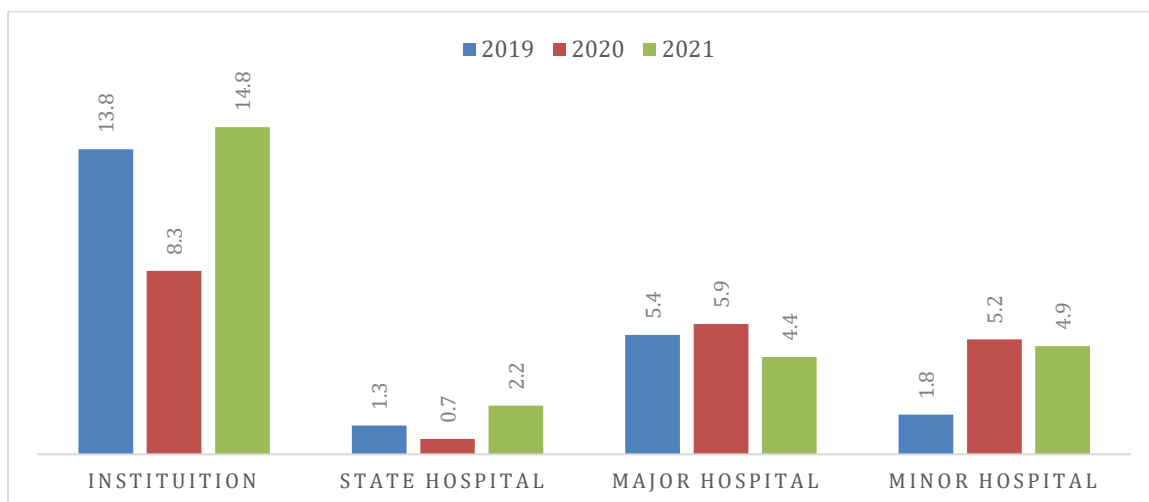
Fig. 3.1.25: *Defaulter rates in Methadone Clinic, 2019-2021*

There was an increment in the number of defaulter rate in Methadone clinics throughout the pandemic in all settings (Fig. 3.1.25). This might be attributed to the unpredictable factors related to covid-19 pandemic, e.g., EMCO, quarantine due to covid-19 infection or close contact, logistic issues. Methadone must be taken daily. This may contribute to an increase in the defaulter rate.

3.1.9.5. Psychogeriatric Clinic
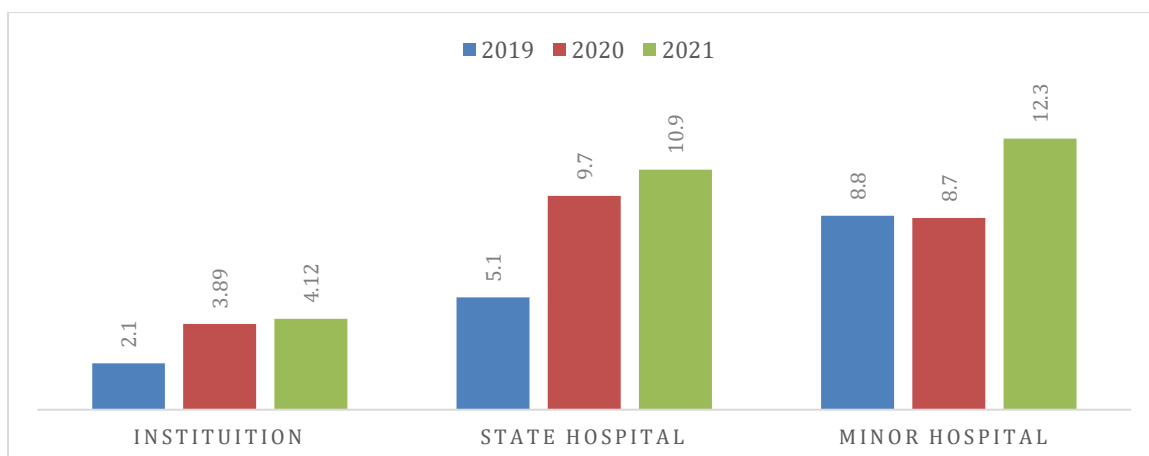
Fig. 3.1.26: *Defaulter rates in Psychogeriatric Clinic, 2019-2021*

There was an increment in the number of defaulter rates in Psychogeriatric clinics throughout the pandemic in all settings (Fig. 3.1.26). This might be attributed to the unpredictable factors related to

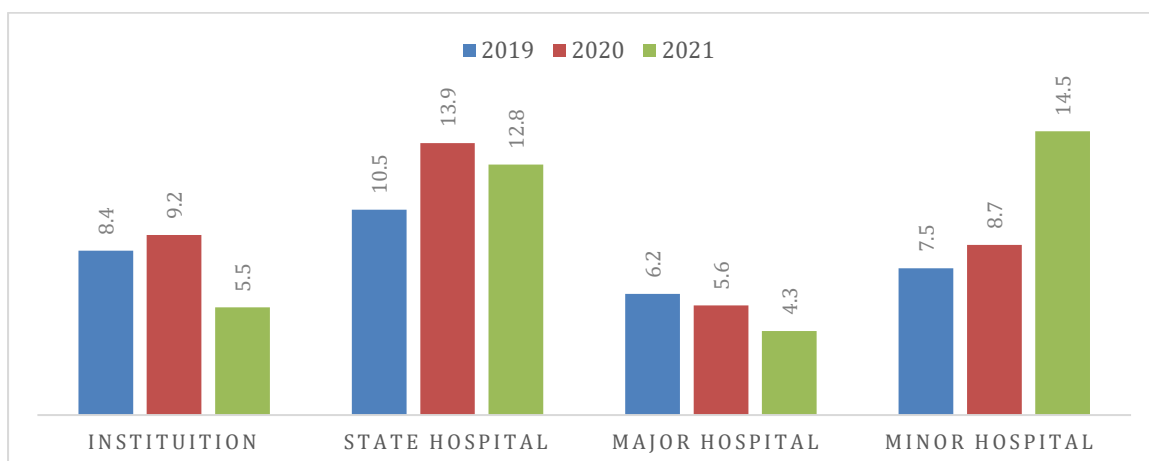the covid-19 pandemic, e.g., EMCO, quarantine due to covid-19 infection or close contact, logistic issues, and anxiety among caregivers regarding patient safety (elderly patients are more susceptible to be infected, and the mortality for elderly patients is high).

3.1.9.6. Consultation-liaison Clinic

Fig. 3.1.27: *Defaulter rates for Consultation-liaison Clinic, 2019-2021*

There were no major changes in the number of defaulter rates in neuropsychiatric clinics in state hospitals. However, there was a reduction in defaulter cases in 2021 (Fig. 3.1.27). This may be due to a reduction in COVID19 cases and ease in government travel restriction.
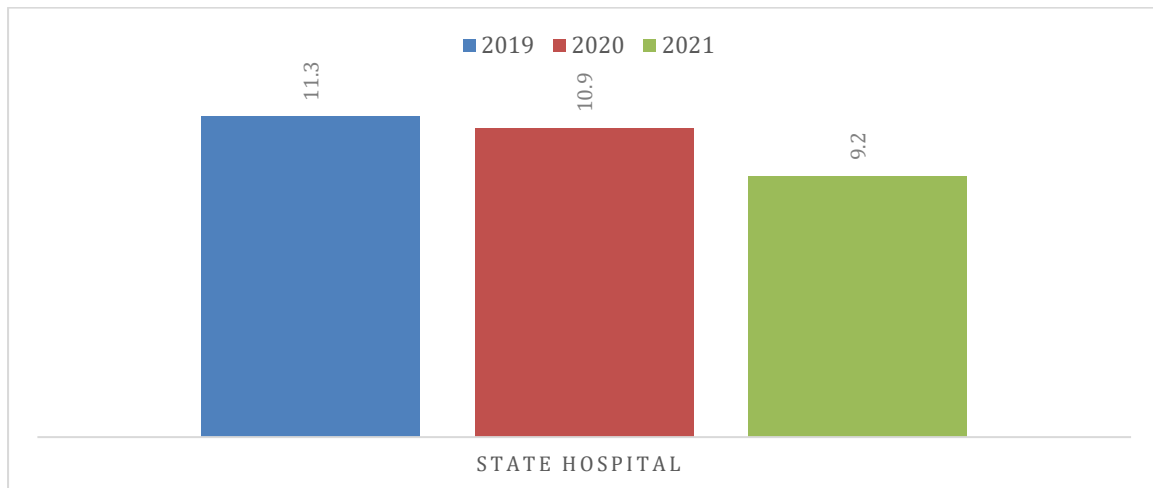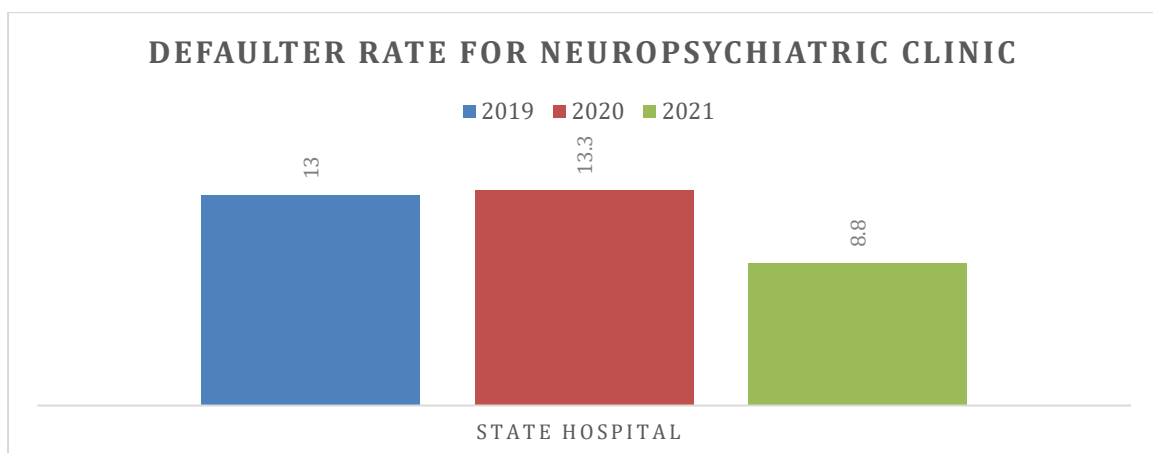
3.1.9.7. Neuropsychiatric Clinic

Fig. 3.1.28: *Defaulter rates for Neuropsychiatric Clinic, 2019-2021*

There were no major changes in the number of defaulter rates in neuropsychiatric clinics in state hospitals (Fig. 3.1.28). There was a reduction in defaulter case of cases in 2021. This may be due to a reduction in COVID19 cases and ease in government travel restriction.

3.1.10. Challenges Faced by Outpatient Services During Pandemic

Outpatient mental health service forms a vital aspect of the services offered by the Malaysian Health Care System, and as we go through this report, we can see how the services have been affected. We collected the data related to the outpatient psychiatric services in Malaysia before and during the pandemic as presented in the early part of this chapter. Even though the overall result did not show drastic changes in terms of patient's attendance to clinic, we should be clear that even at the point of collapse, health care staff had striven hard to make sure the services were not majorly affected. Therefore, we also gather information regarding the healthcare workers' challenges in delivering their service. For outpatient services, there were several obstacles identified. The challenges came from both the health care side as the provider and the patient as the receiver.

The lack of manpower to provide optimal care to the patient at outpatient settings is one of the main challenges. This situation happened due to a few factors. Firstly, many doctors and staffs were deployed to COVID-19 wards, treatment centres and screening centres to cater for the increasing need in those areas due to the drastic increment of cases each day. Secondly, many health staff also contract Covid-19 infection, especially during the big wave of infection and close contact with persons positive COVID19, which need them to be quarantined. Thirdly, outpatient staff are also recruited to COVID19 triaging clinics, which was made to screen patients before they can see the doctor. However, these challenges have led to burnout and exhaustion in healthcare staff as they must work extra hours and the burden of work doubles or more as they need to cover the task of the staff deployed. Meanwhile, the patient would also be troubled due to the increased time spent in the triage area, also putting them at risk of exposure to other people.

The need to follow the new SOP set by the Ministry of health may at some extent compromise outpatient services. The challenge includes lacking resources such as basic protective equipment such as mask, apron, face shield and hand sanitizer due to an increase in demand and lack of supply. Thus, in health care, these basic types of equipment were prioritized for the critical areas delivering direct service to patients with COVID19. These inadequacies also limit the service as the health care staff also need to protect their well-being; thus, earlier during the pandemic, the delivery of services was significantly affected to adapt to the new norm. In term of facilities, inadequate number of

consultation rooms to comply with social distancing rules also had limited the services that can be provided at a time. There we no more sharing rooms if social distancing rules cannot be complied with. Consultation time must be reduced to avoid prolong exposure, and family sessions also had to be reduced to maintain the SOP. The use of assisted tools for assessment and diagnosis, such as toys, diagnostic scales etc., also need to be limited to avoid cross-infection. Patients' attendance to clinic was also limited to avoid overcrowding, which led to a longer time for first consultation, which would lead to reduced number of new cases and longer duration of follow-up put high-risk patients at risk for relapse.

Conversion of hospitals and clinics to hybrid or full COVID19 treatment centres has become a challenge to the psychiatric team to deliver their services. Conversion into full COVID19 treatment centre means full utilization of the psychiatric staff to serve for COVID19 treatment. Patients will be channelled to other nearest psychiatric facilities available, which puts patients at high risk of default. Some hospitals turn the outpatient services into COVID19 screening centres, and the outpatient services are delivered in tents at the hospital compound. This would make patients with psychiatric illnesses uncomfortable as most of them prefer privacy due to the stigma surrounding the diagnosis of mental illness.

Specific outpatient psychiatric services also face a lot of challenges as many need to compromise their service. In Methadone clinics, the integrative sessions with counsellor and other agencies were unable to be done during this period, undermining our patients' management and treatment. Take-away regimes were extended to 4-7 days. Urine drug monitoring cannot be done as frequently as before to avoid close contact between clients and staff. Client attendance was also limited to avoid close contact and overcrowding. This had led to less engagement and relapse in some patients. Clinical psychologists and counsellor services also face the same obstacle: lack of manpower, the need to adhere to SOP, and inadequate facility to deliver their service and compromise their primary task. They were ordered to focus more on mental health and psychosocial support (MHPSS) activities involving COVID19 related areas.

Occupational therapy services are also an integral part of psychiatric services. Many hospitals did not offer OT services during the pandemic because the focus was on managing COVID19 patients. The therapy session was limited, and the sessions were shortened to avoid exposure. They were unable to perform home visits for therapy and also unable to do supported employment, which is a crucial rehabilitation process for our patients. Group therapy was also cancelled due to the ongoing pandemic. Pharmacy services were also affected during this period. Many patients did not collect

their medication after teleconsultation. Many patients did not turn up for their appointment but requested postage of their medications. Some patients were still unfamiliar or reluctant to use new services introduced by the pharmacy department. Pharmacists are unable to provide follow-up counselling to patients, and more difficult to check patients' compliance with medications. Delay in getting medication supply from pharmaceuticals on time due to logistic issues. Restriction in SPUB services for prescription that contained medication under the Dangerous Drug Act (i.e., benzodiazepines)

Teleconsultations have become a new option in delivering psychiatric services during this pandemic. Unfortunately, the initiation of this new service is not as easy as it sounds. A few issues limit teleconsultation use from both provider and receiver end. The critical part that needs to be clear is ensuring the patient profile and consultation remain confidential and private from the provider side. Resources such as phones and computers were not readily available, limited stable internet connection or data, limited direct line in the hospital. During teleconsultation, many patients were unreachable, not cooperative, and difficult to assess, especially in young children. Delivering teleconsultation services were also challenging due to the lack of manpower as it is time consuming to reach patients via teleconsultation. From the patients' side, some of the patients did not feel comfortable with online counselling sessions because of the lack of privacy and confidentiality issues that they preferred physical sessions. The failure to implement teleconsultation successfully was due to difficulty and communication barriers online.

The patient also contributes to the challenges faced in delivery of the psychiatric services. They faced difficulty due to the implementation of movement control order (MCO). MCO was implemented in various phases. This caused travelling restrictions, and only essential services were available. They had difficulty in transportation to go for follow up. Some may feel troubled when they need to pass roadblocks to come to follow ups; thus, they defaulted. Patients were also anxious to go to the hospital, fearing that they may get infected with the COVID virus. Parents also were anxious and fearful about bringing their children for follow up and treatment. Walk-in patients have increased due to this. It was because patients started to relapse, and their medication finished.

Services by visiting psychiatrists to local clinics, institutions, or as visiting- consultants for sub-speciality clinics were also halted due to travel restrictions. Their services need to be held, and the patient could not receive optimal treatment.

3.2. INPATIENT & ELECTROCONVULSIVE THERAPY (ECT) SERVICES

3.2.1. Background

In-patient mental health service forms a vital aspect of the services offered by the Malaysian Health Care System. Inpatient psychiatric services typically consist of inpatient psychiatric wards or designated psychiatric beds in general wards. In addition to the psychiatric institutions, state hospitals and other hospitals (Major & Minor), university hospitals and military hospitals also offer in-patient psychiatric service.

Hospital in-patient setting caters for acute mentally ill patients involving an overnight or longer stay in the psychiatric unit of a general hospital or psychiatric hospital for diagnostic and therapeutic purposes. This treatment option is usually for evaluation of a mental health crisis and short-term stabilisation. During the in-patient stay, family sessions or meetings are also carried out, aimed at gathering collaborative information and encouraging family involvement in the care of the patient. At the same time, psychoeducation or psychotherapy interventions are carried out for family members if required.

Apart from pharmacological and psychotherapy, electroconvulsive therapy is also one of the treatment modalities commonly provided to improve patient's symptoms either as inpatient or day-care setting in selected health facilities.

Supporting staff services in the hospital such as social worker, physiotherapist, occupational therapist, counsellor, and clinical psychologist also contribute to the part of the in-patient treatment when indicated.

Mental Institutions in Malaysia offered additional value to psychiatric services in Malaysia. Forensic psychiatrist oversees forensic psychiatry service. It is currently exclusively available as in-patient service in almost all mental institutions. Forensic service is important especially in determining insanity defence and the fitness to plead among individuals who are suspected to have unsound mind. Such service could be required in both civil and criminal cases. Medical reports will be submitted to the courts as requested in the order. All the cases under Chapter XIII of the Criminal Procedure Code, i.e., admissions under Section 342, 344 or 348 will be admitted to the forensic ward in the mental institution as well. Moreover, the mental institution also has served as placement for patients with chronic and severe mentally illness who require longer hospital stay and rehabilitation, with the aim to reintegrate them back into the society.

3.2.2 Inpatient Services
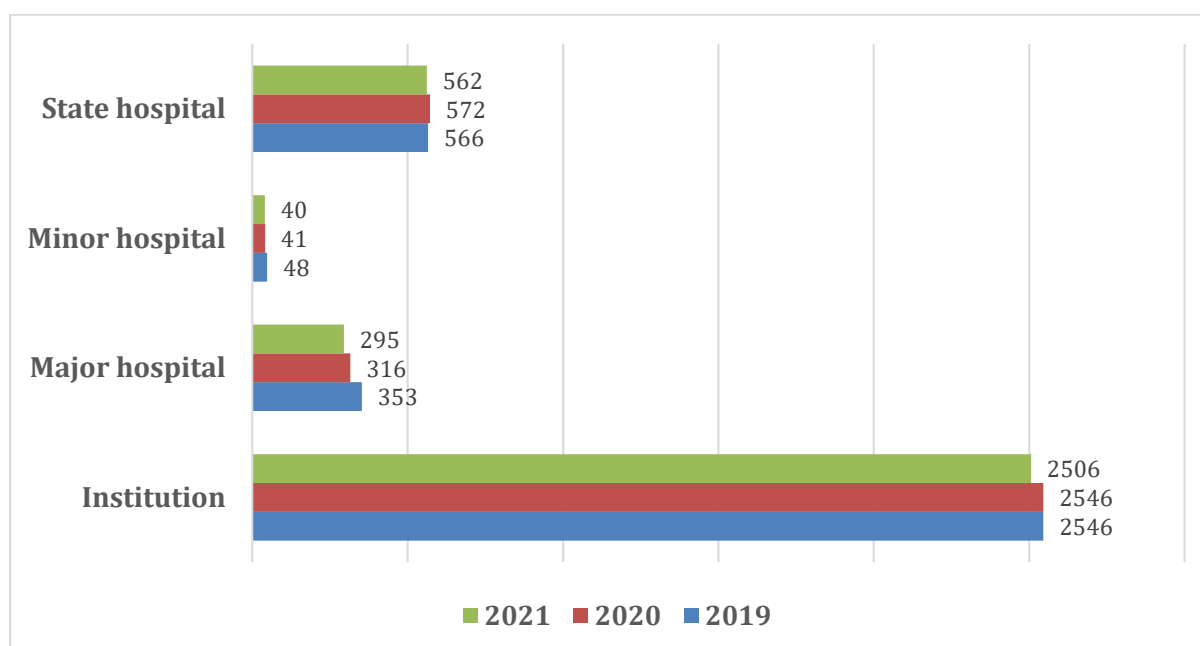
Fig. 3.2.1: *Total numbers of psychiatric inpatient beds, 2019-2021*

In general, mental health institutions expectedly have the most numbers of total bed capacity compared to other types of hospitals in Malaysia. The total number of psychiatric beds are noted to be of reducing trend across all types of hospital levels from 2019 to 2021 (Fig. 3.2.1). While the reduction in the number of beds in institutions is explainable by the deinstitutionalization effort by the government, the reduction of number of beds in other hospitals are best explained by the impact of COVID-19. In some major and state hospitals, hospital beds were almost fully occupied by COVID-19 patients leading to the conversion of general hospitals to a fully COVID-19 hospital and therefore, reducing the number of psychiatric beds.
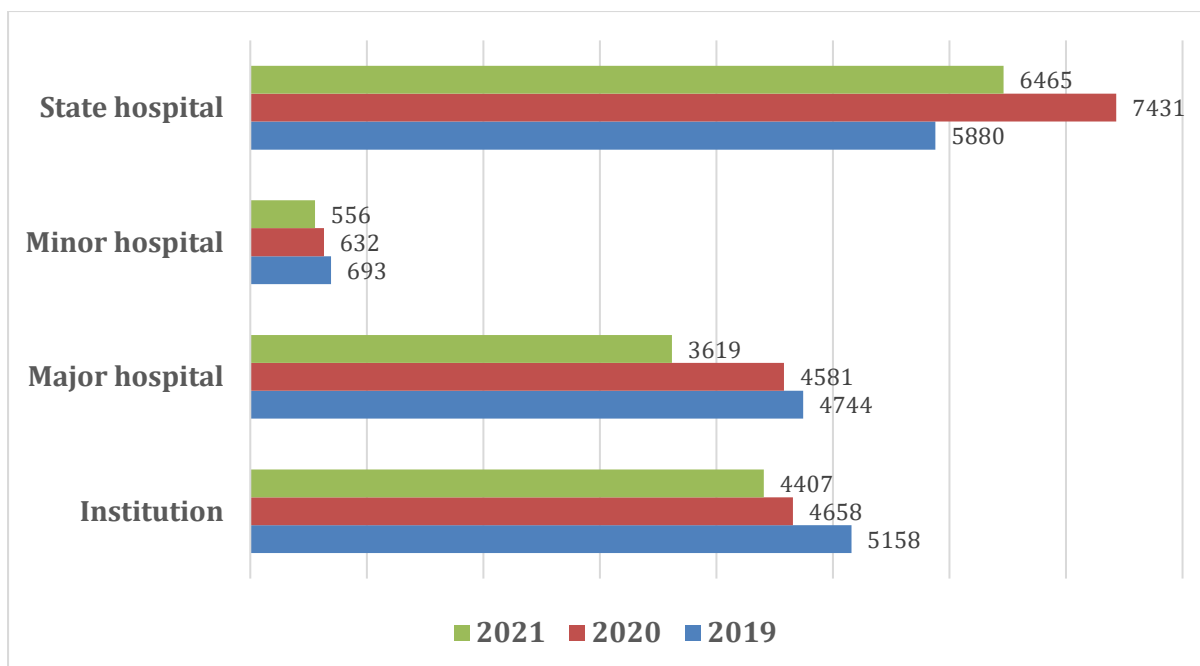
Fig. 3.2.2: *Total number of psychiatric inpatient admission, 2019-2021*

There is a decreasing trend of total number of admissions across the institutions as well as in major and minor hospitals. However, state hospitals had an increasing number of admissions in both 2020 and 2021 compared to 2019 (Fig. 3.2.2). The reduced number of admissions in most hospitals could probably be contributed to the increasing threshold of admission and reduced number of total admissions is likely associated with the reduction of psychiatric beds in some hospitals.

3.2.3 Challenges in inpatient services

Due to recent pandemic, COVID-19 testing has been a compulsory pre-admission criterion, carried out at the Emergency Department. This leads to longer waiting time at the emergency department. The test might need to be repeated during the hospital stay whenever indicated. Some of the patients in psychiatric ward are required to stay longer than originally intended because of the need to be isolated or quarantined due to outbreaks within the inpatient setting. There have been documented cases whereby the patient had contracted nosocomial COVID-19 infection during the stay in the inpatient ward, which further complicate the management of the clinical condition. During the peak of pandemic, many mental health personnel, including psychiatrists, medical officers and staffs found themselves diagnosing, monitoring, and treating COVID-19 in psychiatry in-patient setting apart from carrying out their regular psychiatric clinical duties.

Yet another challenge to note is the lack of infrastructure i.e., isolation rooms equipped with appropriate infection prevention features, which serve to isolate the COVID-19 positive patient, hence preventing transmission to other patients and outbreaks in the wards.
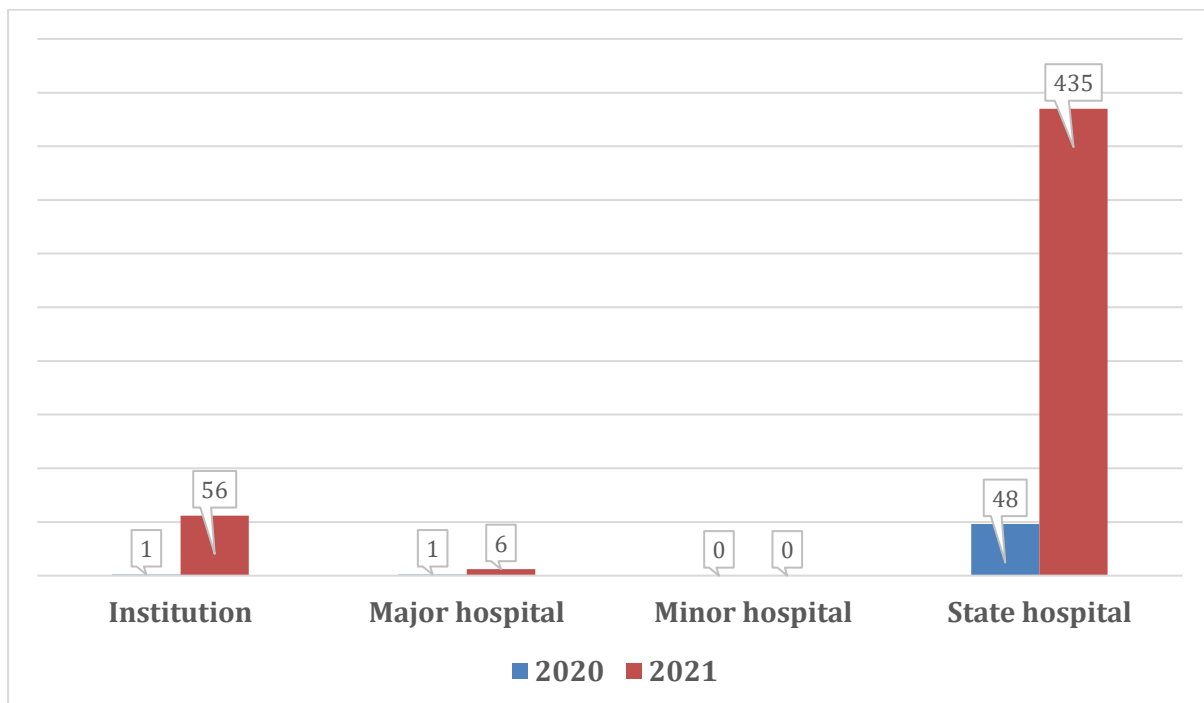
Fig. 3.2.3: *Total numbers of COVID-19 patient admitted into psychiatric wards, 2019-2021*

Since the start of the pandemic, the number of psychiatric patients who are admitted into psychiatric wards have increased exponentially, expectedly similar to the increased number of COVID19 positive cases among the general population.

Understandably, state hospitals contributed to the largest numbers of positive COVID-19 admission into psychiatry ward probably because of the concurrent acute psychotic state and acute COVID-19 infection best to be co-managed by the experts in the respective fields in tertiary centres (Fig. 3.2.3).

Hospital Permai provides 7 facilities such as chronic long stay psychiatric ward and sports complex to be used as COVID19 ward by Infectious Disease team from Hospital Sultanah Aminah as the state pandemic contingency plan throughout years of pandemic, in 2020 until 2022.
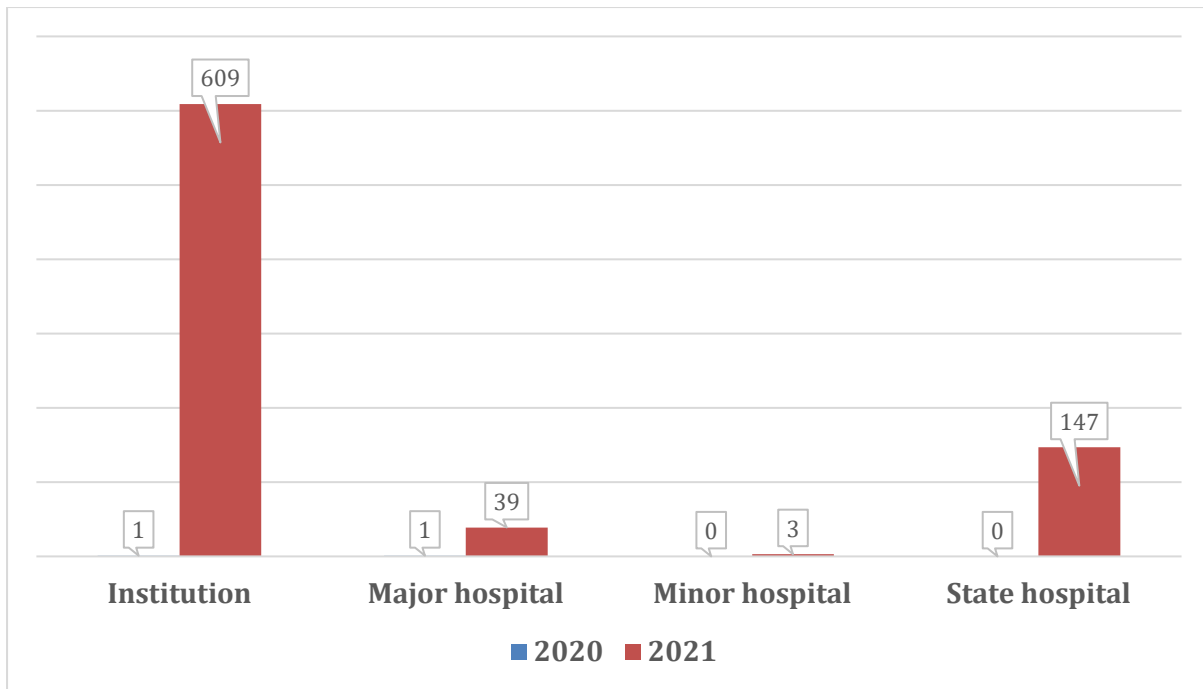
Fig. 3.2.4: *Nosocomial COVID-19 infection in psychiatry wards, 2019-2021*

Nosocomial infections usually occur upon lacking in adherence to universal precautions and the overcrowded situation of the ward. Both situations are likely to occur in large psychiatric wards, such as mental institutions and state hospitals, where monitoring appropriate social distancing and other measures to prevent spread of COVID-19 infection are not able to be fully observed (Fig. 3.2.4). Increased number of admissions as being stated in the earlier part of this in-patient report, most likely contributes to an overcrowded ward situation, and subsequently increases the likelihood of nosocomial infection to occur.

The COVID-19 pandemic has led to the disruption of the entire health services provided globally and nationwide, including the inpatient services provided by Psychiatry and Mental Health departments based in the general hospital and mental institutions. COVID-19 outbreak cases that occurred in the psychiatry ward often resulted in ward closure or lockdown. During the lockdown period, patients with psychiatric admission indications had to be directed to psychiatry wards in other hospitals. The lockdowns also posed a large-scale problem as it meant a decrease in psychiatric bed availability for the affected state, albeit temporarily.

Fig. 3.2.5: *Total number of Psychiatry Ward Lockdown due to COVID-19 related issues in year 2021*

Nosocomial infections and an exponentially increasing number of COVID-19 patients in psychiatric wards needs appropriate intervention to avoid total closure of psychiatric services in any hospital or mental institution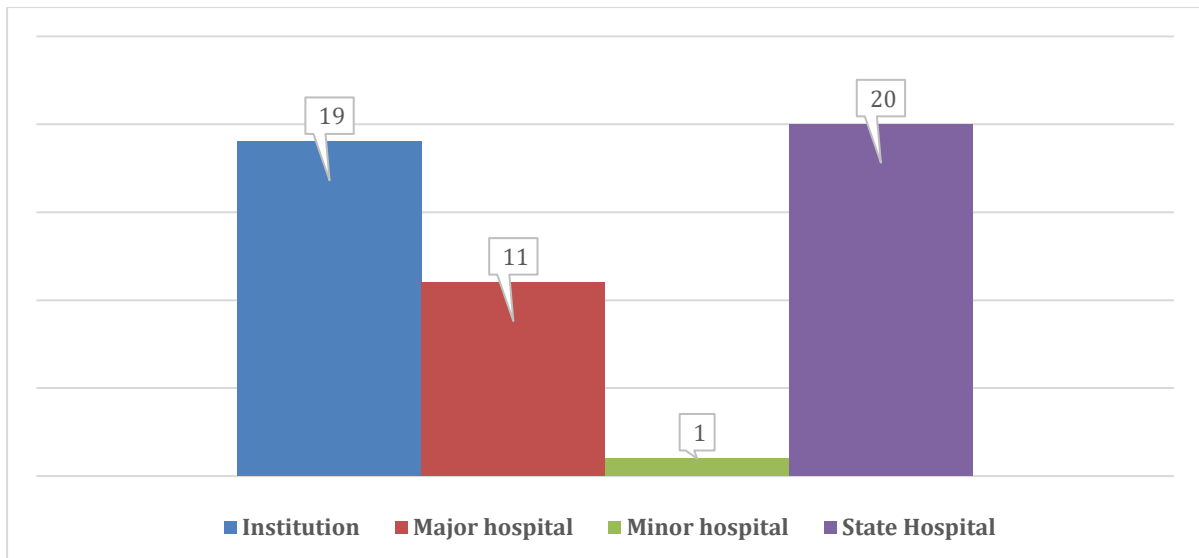 setup. Fig. 3.2.5 reveals that temporary lockdown occurs more frequently in mental institutions and state hospitals in year 2021 (no lockdown in year 2020). This could be due to an attempt to avoid larger number of patients infected by COVID-19 virus which would lead to longer compromise of the service. By implementing temporary lockdown, further spread is less likely to occur hence faster return to fully functional. Smaller hospitals have a smaller number of patients therefore having quick resolutions of any cohort of infection without the need of ward closures.

The situation is further complicated when the hospital at the receiving end is having reduced capacity of total beds to accommodate patients due to the modification/repurposing of the ward due to the pandemic. There were instances where some of the patients and their relatives were reluctant to admit the patient despite clear indications for inpatient admission due to fear of contracting COVID-19. This in turn, burdened and inconvenienced relatives who need to handle unwell patients on their own.

The quality of care delivered within the inpatient setting also was affected during the pandemic. During the beginning of the pandemic when there was a global shortage of Personal Protective Equipment (PPE), patient assessment and monitoring had to be brief and concise, adhering to infection prevention SOPs. The frequency and duration of psychiatric assessment of the COVID-19 positive & PUI psychiatry inpatient were also adversely affected. Referrals to supportive services such as social workers or clinical psychologists as inpatients have greatly reduced in accordance with the

newly revised standard of procedures. Inpatient rehabilitative activities were put on hold as well. As an effort to curb the spread of COVID-19, the Ministry of Health of Malaysia implemented in-patient visitor restrictions across its hospitals. Improvements were made, with family sessions being conducted via telephone calls or video-conference calls.
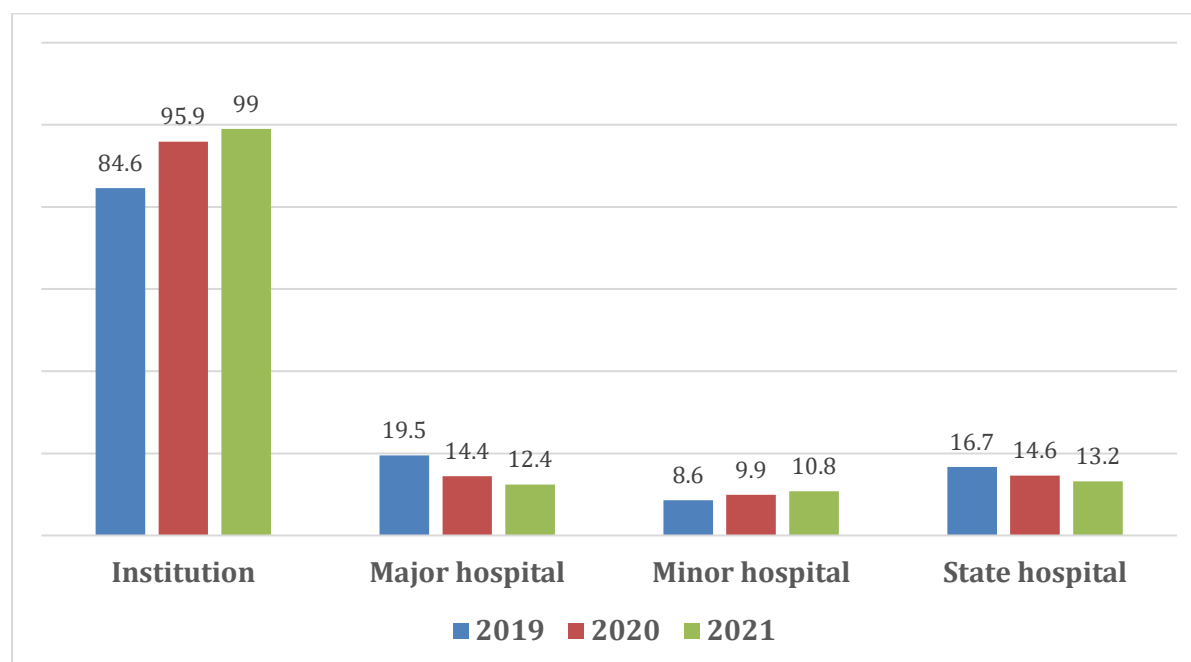
Fig. 3.2.6: *Average length of stay (in days), 2019-2021*

COVID-19 infections are thought to prolong hospital stay of acute psychiatric patients because of combinations of issues having to be dealt with during their hospitalizations. However, increasing length of hospital stays were only observed in mental institutions and minor hospitals (Fig. 3.2.6). Major and state hospitals have both shown to have a declining trend of average length of stay over the period of 2019 until 2021. Vigilant and aggressive treatment plans, along with the lower threshold to discharge patients (e.g., quick turnover) could contribute towards shorter ward stay for psychiatric patients in those hospitals.
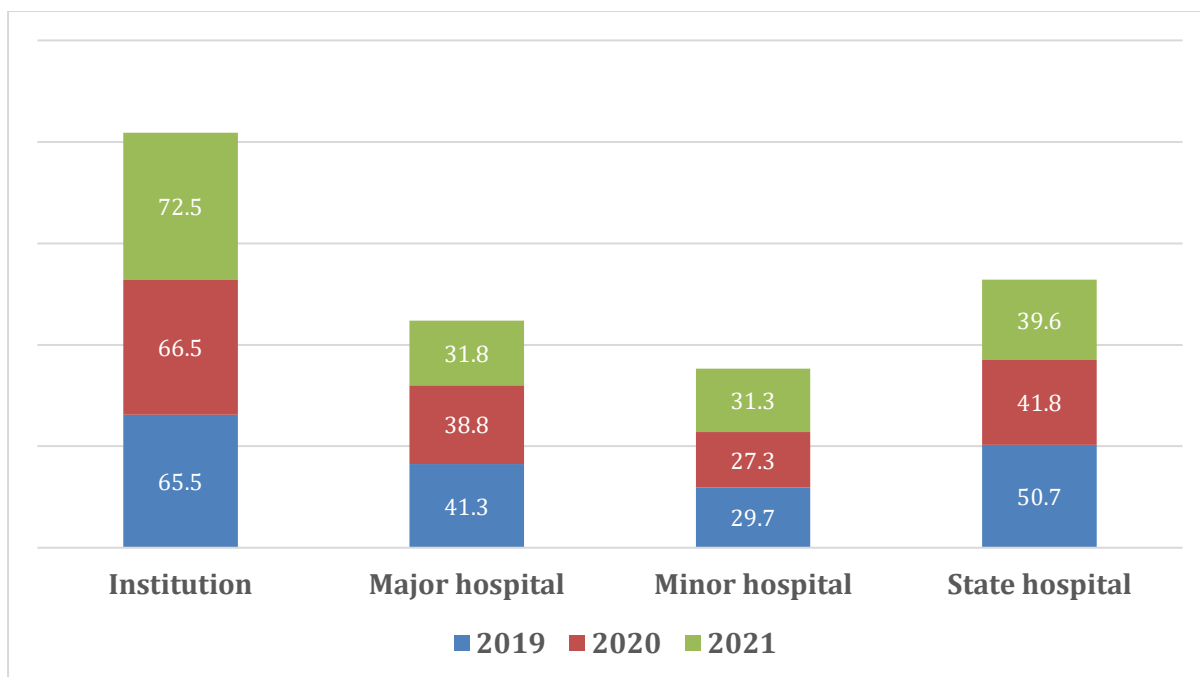
Fig. 3.2.7: *Bed occupancy rate (in %), 2019-2021*

The similarities between minor hospitals and mental institutions continue in this section. Both displayed increased bed occupancy rate in 2021 as compared to the initial value in 2019 (Fig. 3.2.7). This could be partially because, more and more 'pure' psychiatric patients are being diverted for admission into specialised setup such as mental institutions or smaller hospitals that have no need of monitoring of comorbidities hence increasing their bed occupancy. On the other hand, major and state hospitals are facing a reduced trend of bed occupancy rate. This could possibly be related to their shorter ward stay and perhaps part of remedial measures taken by the psychiatric team to spare more beds at hand in preparation of dealing with patients with complicated treatment needs.

Deployment of doctors and staff to COVID-19 wards and treatment centres saw a shortage of human resources in the psychiatry ward leading to suboptimal psychiatry patient care being rendered. This has been more evident in hospitals where psychiatry beds are allocated in general wards instead of a dedicated psychiatry ward. A unique challenge that arose during the pandemic was the repurposing of psychiatry inpatient wards and beds as temporary COVID-19 wards during the pandemic. Amongst the hospitals affected by this were Hospital Sungai Buloh, Hospital Sultanah Nora, Hospital Tawau, Hospital Teluk Intan and Hospital Tuanku Ampuan Rahimah. This has led to a disruption of psychiatry inpatient services at these centres.

3.2.4 ECT Services

The service of providing Electroconvulsive Therapy (ECT), which is one the main non-pharmacological treatment modalities offered to psychiatric patients was also affected during the COVID-19 pandemic period. Patients who are planned for ECT have been required to COVID-19 testing pre-procedure. With the emergence of new SARS COV-2 variants and shorter incubation periods, the SOPs had to be modified accordingly. For example, early in the pandemic, a patient who was planned for maintenance ECT (elective) was allowed self-isolate at home following their pre-ECT COVID-19 testing, however this was no longer feasible with the newer SARS COV-2 variants. Maintenance ECT, which was carried out as a day care procedure in pre-pandemic times, soon became an indication for admission in some centres. The patient planned for maintenance was required to be isolated in the inpatient setting from 2 days prior till after the procedure. This led to additional use of resources and bothered the patient. For patients undergoing a course of acute ECT, some centres require COVID-19 testing to be carried out every 48 hours to ensure the patient is free from COVID-19 infection. During the numerous outbreaks and lockdowns, postponement of maintenance ECT treatment led to increased risk of relapse amongst this group of patients.
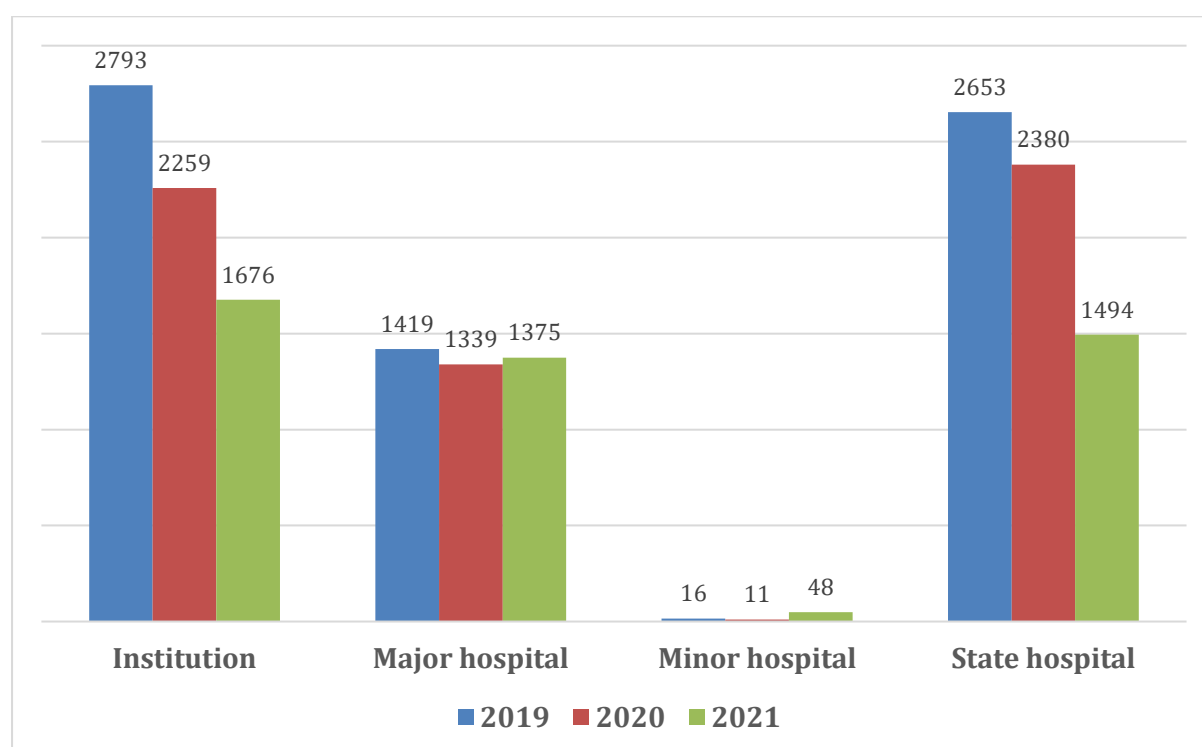
Fig. 3.2.8: *Total number of patients receiving ECT, 2019-2021*

Generally, all hospitals except minor hospitals have shown a reduced number of ECT procedures in 2021 as compared to the year 2019 (Fig. 3.2.8). This can easily be understood as most hospitals had reduced the number of procedures, not only ECT, because of higher threshold of allowing intervention and tighter preliminary measures set by anaesthesiology team prior to the performance of any procedure in the operating theatre.
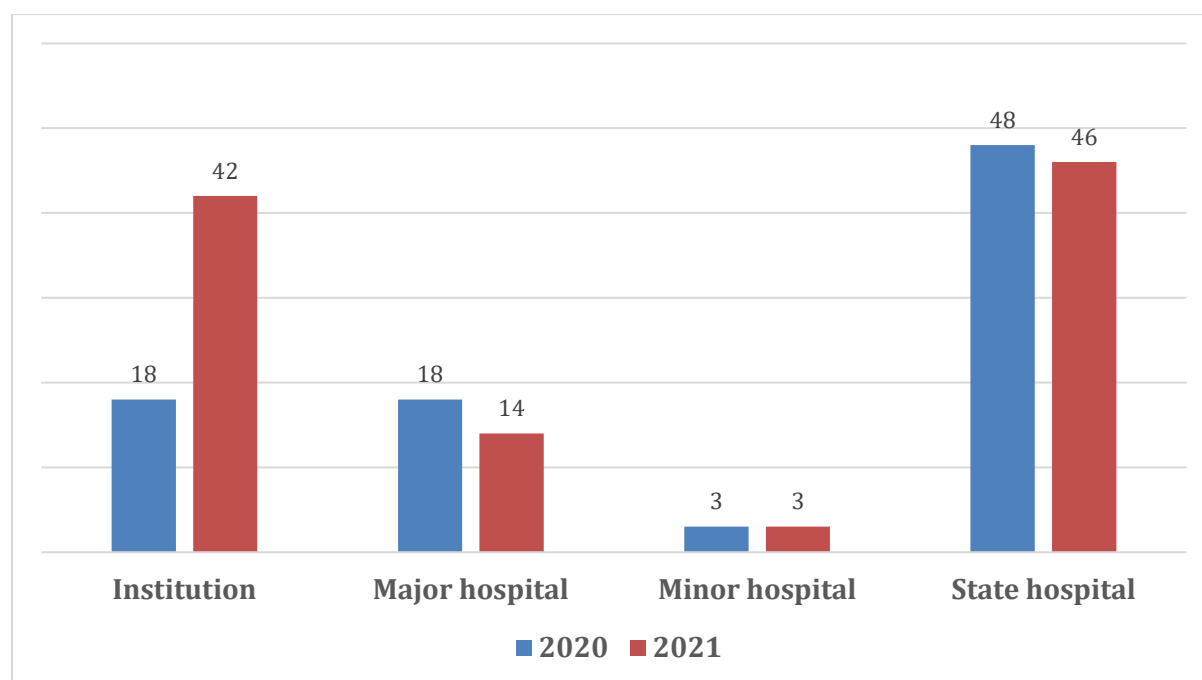
Fig. 3.2.9: *Total number of patients with postponed or cancelled ECT due to COVID-19, 2020-2021*

Tighter preliminary check-up among patients going for ECT could mean cancellation of the planned ECT intervention. Prior to COVID-19 pandemic, among the possible reasons for cancellation are URTI or unstable concurrent physical condition. With the existence of such pandemic and exponential increase numbers of nosocomial COVID-19 cases will lead to cancellation of ECT by the anaesthesiology as not to compromise patient physical health. Nonetheless, above figure reveals both major and state hospitals which have reduced number of postponements or cancellations of ECT procedures in 2021 as compared to 2020 (Fig. 3.2.9). A probable explanation could be that more knowledge is known in managing COVID-19 patients and more preparedness in dealing with COVID-related situations hence leading to a higher threshold of postponement or cancellation in 2021.

3.3. COMMUNITY PSYCHIATRY SERVICES

The community psychiatry service (CPS) delivers treatment and rehabilitation to patients with mental disorders at their home or as near to home as possible. This service is provided by a dedicated multidisciplinary team either based in the hospital or at the community mental health centre.

This report is divided into four sections: Hospital-based community psychiatric service (H-CPS), Community Mental Health Centre, also known as MENTARI, Rehabilitation Services and Supported Employment Programme, including RESTART project.

3.3.1. Hospital-based Community Psychiatric Service (H-CPS)

The H-CPS is a team of doctors, staff nurses, assistant medical officers and other supporting staff led by a psychiatrist. The main role of this team is to provide home care to psychiatric patients and their caregivers. In this report, the level of home care is divided into acute home care and assertive home care.

During the pandemic COVID-19, among the challenges faced by the H-CPS included:

a) patient, caregiver, and public fear of healthcare workers as carrier for virus, hence few patients opted to withdraw temporarily from treatment and service despite repeated psychoeducation given

b) the fear among healthcare workers that patient and caregiver are potential source of infection during the treatment interaction in the community

c) the diversion of resources including manpower, transport, and funding from non-critical services (including CPS) to COVID-19 related activities disrupted the delivery of service

d) breakout and quarantine involving the CPS team members

e) Other psychiatric and public health services cannot cater to the needs of patients under CPS.

Based on the data collected, there was a slight reduction in the total home visit by H-CPS team during the pandemic period (2020-2021) as compared to pre-pandemic period (2019). The 4% drop (2020) and 8% drop (2021) as compared to pre-pandemic (2019) in mental health institutions is likely related to the disruption of the service following clusters breakout.
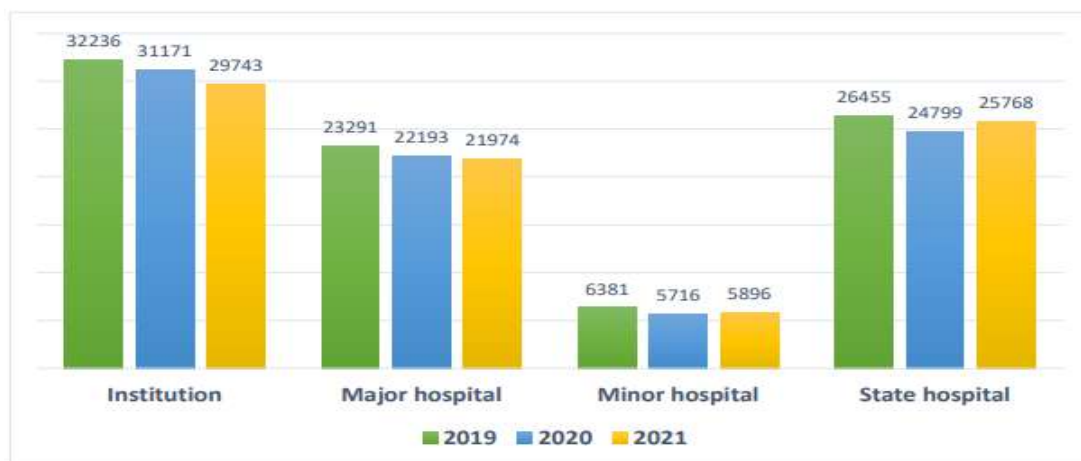
Fig. 3.3.1: *Total number of home visits for community psychiatry service, 2019-2021*

3.3.1.1. Acute Home Care

On further analysis, the acute home care service was greatly affected by the COVID-19 crisis; especially in the mental health institution (MHI) and the state hospitals. The MHI reported a 35% drop in the number of patients under acute home care (AHC) from the year 2019 to both years 2020 and 2021. This trend is also observed in the state hospital whereby there is a 22% decrease in the number of patients under AHC in 2020 and another further 64% in 2021, as compared to pre-pandemic period. The marked reduction of AHC workload in the state hospital is likely due to the diversion of health resources to cater to the COVID-19 crisis. Major hospitals reported a reduction of 14% in the number of patients under AHC in 2020. However, in 2021 the number increased 22% as compared to 2020 (or increased 5% as compared to 2019). The minor hospitals reported an increase in the number of patients under AHC of 47% (2020) and 23% (2021) as compared to the year 2019. It is postulated that this increment is due to the strategy of some centres by optimizing the AHC to provide service in replacement of acute inpatient care.

Fig. 3.3.2: *Total number of patients under Acute Community Team, 2019-2021*

3.3.1.2. Assertive Community Visits

The assertive home care service was also affected by the COVID-19 crisis. The MHI reported a 2% drop in number of patients under assertive community treatment (ACT) from the year 2019 to 2020, and a further 11% in 2021. The reduction of ACT workload in MHI is likely due to disruption of the service following clusters outbreak in the institutions. On the other hand, the state hospital reported a 26% increase in the number of patients under ACT in 2020, and 11% in 2021, as compared to pre-pandemic period. The increment of ACT workload in the state hospital is probably due to optimisation of ACT service to compensate for the disrupted inpatient and clinic care. Both major hospitals and minor hospitals did not observe remarkable changes to ACT service pre and during the pandemic period. This observation shows that despite the pandemic crisis and resources challenges, the ACT continued to deliver its services to the clients.
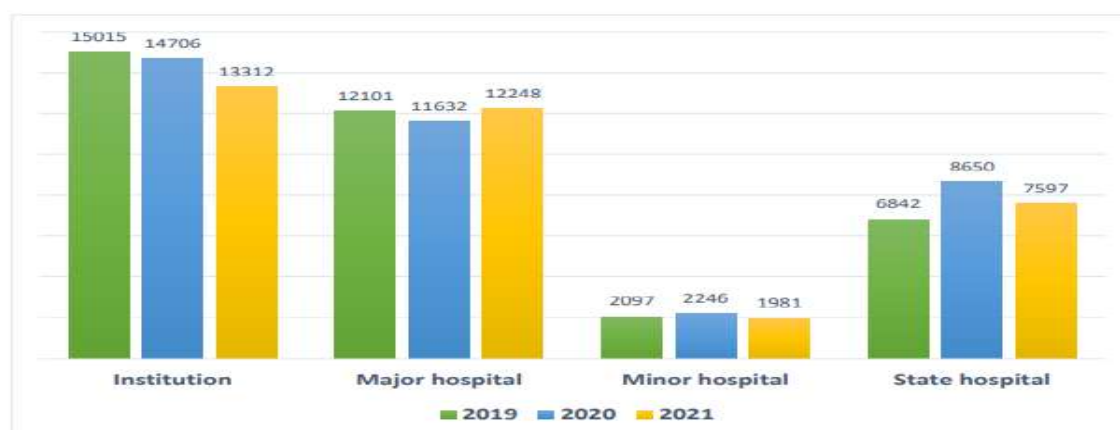

Fig. 3.3.3: *Total number of patients under Assertive community treatment, 2019-2021*

The disruption of health services for individuals with mental health issues during this pandemic and the potential role of CPS to address this issue were reported by several other countries. During the severe health crisis in Northern Italy in 2020, all health services diverted to focus on dealing with the pandemic and only the community mental health services were allowed to remain operationalised (Durbano et al., 2021). Similarly in the United States of America, the community mental health clinics in several states have remained resilient during the crisis and adopted more flexible and creative strategies to continue the provision of care to the patients (Kopelovich et al., 2021). This strategy recommendation is also shared by colleagues in Thailand (Puangsri et al., 2021). Following the COVID-19 crisis in China and Uganda (Africa), the authors acknowledged the role of CPS and proposed for future reformation to strengthen the community based mental health services (Mwesiga et al., 2021; Xiang et al., 2020)

3.3.1.3. Recommendations:

a) Reorganization of the service delivery during a health crisis needs to be done in a timely manner. This includes the early recognition of the valuable role of H-CPS and optimization of its services to help compensate for the disruption in inpatient and clinic care.

b) During a health crisis like COVID-19, restructuring and applying the various methods to deliver the care also helps to control infection transmission (Cardinal et al., 2021). Following COVID-19, we proposed strengthening the application of tele-psychiatry as another option, and shall not replace face-to-face consultation, in our clinical practice.

3.3.2. Community Mental Health Centre, MENTARI

3.3.2.1. Introduction

The first MENTARI was established in Putrajaya in 2011 as an initiative by MOH to improve outreach and reintegration of individuals with mental health problems. The MENTARI program serves as a nationwide strategy by MOH to expand its specialist psychiatric services into the community. The program aims to shift the treatment focus from curative (hospital-based) to prevention and re-integration (community-based) managed by the Psychiatric Department of the respective hospitals. Over the years, the MENTARI program has expanded with one national office (MENTARI Selayang)

and 30 community-based branches in all states (as of July 2021), where services are provided through the combined efforts of multidisciplinary healthcare professionals.

The MENTARI multidisciplinary team is led by a psychiatrist, while team members include medical officers, nurses, occupational therapists, social welfare officers, and volunteers who provide assistance in non-clinical activities.

3.3.2.2. Job scope

The main activities carried out by MENTARI include the provision of psychiatric assessment and treatment, individual placement, and supported employment (IPS-SE), assertive community treatment, and support groups for patients and their carers.

3.3.2.3. Data obtained

The service report was generated based on hospitals that provide MENTARI services. They comprised State Hospitals, Major and Minor Hospitals, as well as Mental Health Institutions. The charts below demonstrate the number of new referrals, cumulative follow-up cases and defaulter rates in MENTARI clinics in Malaysia from the year 2019-2021.
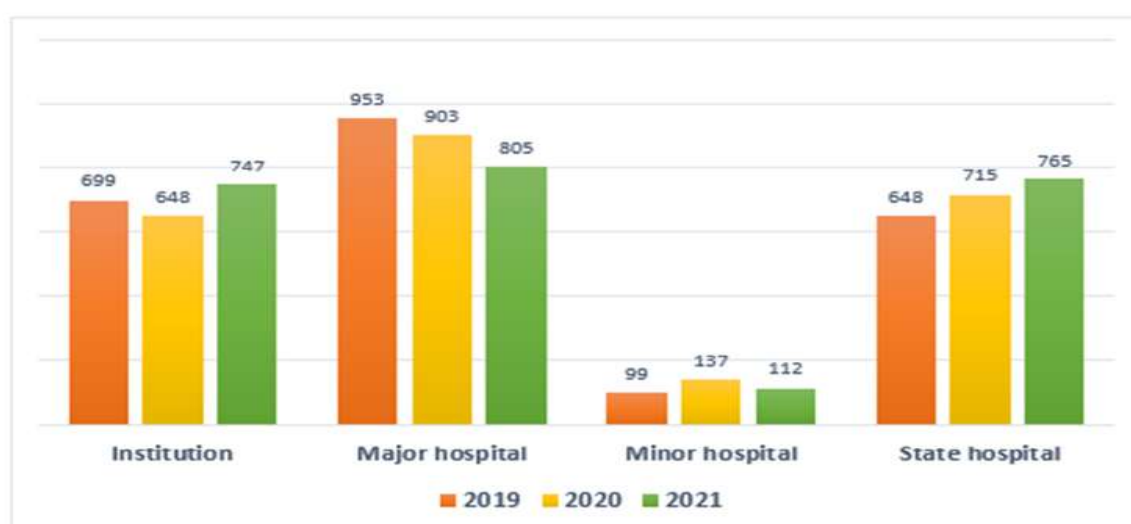
Fig. 3.3.4: *Total number of new referrals for MENTARI clinic, 2019-2021*

Based on the data collected above, there was a slight increment in the number of new referrals to institution, state, and minor hospitals during the pandemic period (2020-2021) as compared to pre-pandemic period (2019). There was a decrease in the number of new referrals (16% drop in 2021) to major hospitals as compared to pre-pandemic period (2019).
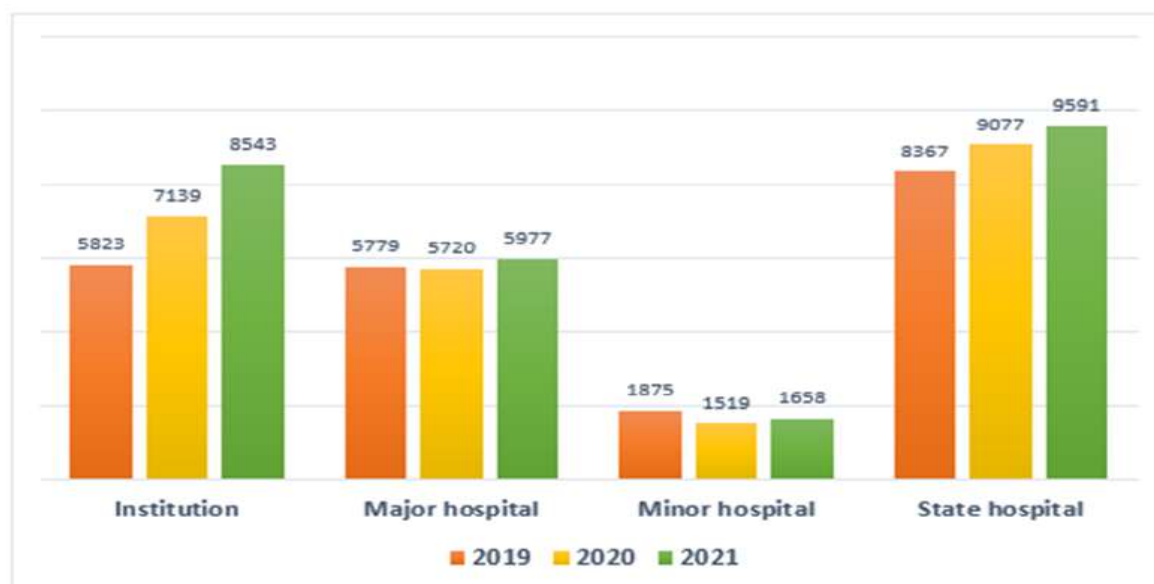
Fig. 3.3.5: *Total cumulative follow-up cases for MENTARI clinic, 2019-2021*

Based on the data collected above, there was an increment (around 9-47%) in the total cumulative follow-up cases in institution and state hospitals during the pandemic period (2020-2021) as compared to pre-pandemic period (2019). However, no obvious differences were seen in major and minor hospitals.
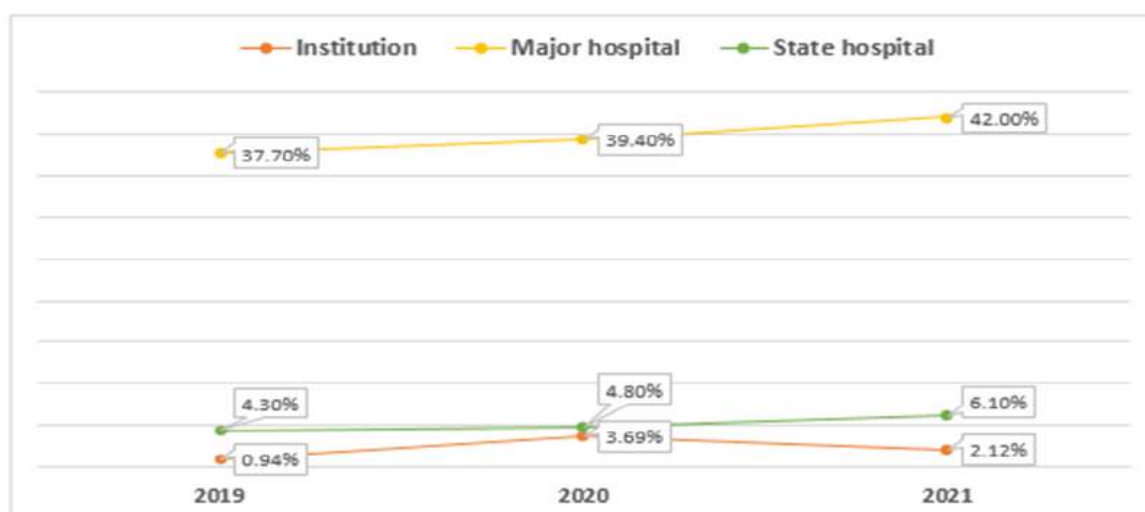
Fig. 3.3.6: *Defaulter rate among MENTARI outpatient clinic, 2019-2021.*
Note. No data submitted for minor hospital

Based on the data collected (Fig. 3.3.6), there was an increment in the defaulter rate among MENTARI outpatient clinic during the pandemic period (2020-2021) as compared to pre-pandemic period (2019) for all 3 types of hospitals – institution, major and state hospitals. However, the defaulter rate in institutions decreased slightly by 1.6% in the year 2021.

3.3.2.4. Issues and challenges identified during the pandemic

The issues and challenges in MENTARI clinic that were identified included but not limited to:

<u>Mental Institutions</u>

- Patients need to undergo quarantine or restriction of movement due to EMCO causing difficulty to collect medication, thus increasing relapse and more defaulters (Hospital Ulu Kinta)
- MCO causes significant stress to the patient leading to increased aggressive behaviour (Hospital Mesra Bukit Padang)
- Staff deployment and quarantine results in a lack of manpower to run clinics (Hospital Mesra Bukit Padang)
- Facilities must be shared with other health facilities (e.g., Klinik Kesihatan), resulting in overcrowding and lack of equipment (Hospital Permai)

<u>Major Hospitals</u>

- Lack of proper places to implement the program (Hospital Duchess Kent)
- Staff deployment or quarantined leading to disruption of Mentari clinic services (Hospital Miri, Hospital Sibu and Hospital Sg. Buloh)
- Reduced clinic sessions lead to an increase in the number of patient load (Hospital Putrajaya)
- Increased defaulters due to patients needed to be quarantined after inter-state travelling (HOSHAS and Hospital Kuala Pilah)
- There is no in-house pharmacist available to dispense medication (Hospital Segamat)
- Time and contact with patients are limited because of pandemic SOP, resulting in a lack of treatment optimization (HTAA)
- Outpatient services were disrupted following COVID outbreak (HOSHAS)

- The Mentari building was converted into COVID-19 ward, resulting in the clinic being relocated to a small and inconvenient space. The renovation did overcome this issue (Hospital Taiping)

Minor Hospitals

- Staff deployment results in lack of manpower to run clinics (Hospital Bukit Mertajam and Hospital Lahad Datu)

State Hospitals

- Due to staff deployment or being quarantined, MENTARI clinic was only able to operate for 5 months in 2020 and 4 months in 2021 (Hospital Melaka)
- Stable patients only come to collect medication and are given longer appointment to limit contact (Hospital Sultanah Bahiyah)
- Consultation was time-limited causing a lack of treatment optimization (HTAA)
- Consultation conducted in an open space causing a lack of privacy (HSNZ)
- Due to COVID-19 restrictions, there are increased defaulters (HTAR)
- Delay in treatment due to patients requiring quarantine (Hospital Umum Sarawak)

3.3.2.5. Additional information/ Recommendation

In France, stakeholders report that mental health was not part of early health directives. In other countries, such as China or Italy, the lack of coordination between the mental and physical health systems has contributed to a loss of opportunity for people living with psycho-social disabilities.

In this COVID pandemic period, it has been necessary for mental health services to innovate in order to respond to the double challenge of continuing to provide mental health care and participating in the overall epidemic response. For mental health services, lack of visibility on the crisis impact on mental health, and difficulties in defining their place in the overall health strategy appeared as the main challenges to overcome.

In an article by Percudani et al, the activity in the Mental Health Centres in Lombardy, Italy has been maintained in patients suffering from serious mental disorders, those with serious social problems or

judicial sentences (Percudani et al., 2020). For these patients, the activity has been maintained with particular attention to clinical monitoring and drug administration. Patients who attend clinic visits physically were provided a pre-scheduled time to avoid close contact in the waiting rooms. Each patient will be brief on the indications for limiting the spread of the infection. Home interventions and off-site activities are only provided for urgent situations. Most activities involving the patients' family members have been replaced by audio or virtual communication. For new cases, triage is done over the telephone to understand the urgency of care, and an appointment is scheduled when required. The work within inpatient Psychiatric Facilities continued as normal however external activities such as home leave and visits of relatives were suspended.

In another article by Alavi et al, the author shared the measures taken in implementing COVID-19 mitigation within the Community Mental Health setting, it was found that the most pertinent equipment needs in their setting were related to information technology and personal protective equipment (PPE) (Alavi et al., 2021). Information technology equipment needs consisted primarily of telehealth encounter technology including identifying which platforms were best suited to the services that are provided, testing out those platforms, and implementing appropriate and practical formats for usage. A dedicated email account and webpage were also created for the network and the local community mental health facilities. Each CMHC has set up a specific email address and or phone line dedicated solely to address any requests from patients for medication refill and other associated issues.

Some practical strategies for improving care for psychiatric patients in community mental health during the COVID-19 pandemic, as shared in the article by Kopelovich, utilize a spectrum of a continuum of service delivery options (Kopelovich et al., 2021). The spectrum includes in-person care in the community, clinic-based care in a larger room that allows physical distancing, clinic-based teleconsultation in which the patient will attend the session in a private clinic office for a tele-psychiatry session with their provider, clinic-based care in a standard clinic setting that adheres to the local public health guidelines and telehealth sessions with clients at home or in the community. Clinic-delivered care can also be expanded by coordination with primary care and public health, coaching family members, establishing linkages to hotlines, and usage of supplemental forms of e-mental health.

3.3.3. Rehabilitation services

The rehabilitation services reported include both the adult and child occupational therapy (OT) services.

For adult OT services, participants attending mental health institutions showed a reduction from the year 2019 (n=106084) to 2021 (n=53467). There is an 18.7% drop in participants from the year 2019 to 2020, and 38% drop from 2020 to 2021. For Major Hospitals, rehab attendance showed a reduction of 14.4% in 2020 (n=25992) but increased by 13% in 2021 (n= 29373) after RMCO was implemented. Attendance was comparable to pre-lockdown figures. State Hospitals Rehabilitation services data showed a similar trend with Major Hospitals with a reduction in 2020 by 33.1%, followed by a rebound increment of 13.5% in 2021. Data trends for Minor Hospitals revealed gradual increment in attendance in 2020, i.e., by 5.6%, and a further increase of 15.45% in 2021 despite the pandemic lockdown. The observed trend could be due to increased referrals of clients with Covid-19 related mental health issues.

All hospital categories showed significant reduction of the number of child OT clients since the pandemic. For Mental Health Institutions and Minor Hospitals, the data pattern was similar with gradual reduction over the years 2019 to 2021. For MHI, there was a 29.7% drop in attendance for 2020, and further decline of 18.48% in 2021. Whereas for Minor Hospitals, 2020 showed 32.7% reduction and further 6.5% drop in subsequent years. For Major and State Hospitals, the clients' attendance dropped in 2020 since implementation of MCO but showed some rebound increment in 2021.

3.3.3.1. Challenges

The challenges reported by both the adult and child OT services included:

Mental Health Institutions

- No outpatient service was offered during MCO (both OT, Hospital Mesra Bukit Padang)
- Restricted treatment session to 30 minutes - unable to deliver quality service (both OT, Hospital Permai)
- Unable to do group session (both OT, Hospital Permai)
- Longer interval for next appointment session (both OT, Hospital Permai)
- Unable to do home visit for home management (adult OT, Hospital Permai)

- Unable to go ground visit for Supported Employment work process (adult OT, Hospital Permai)
- Issues with teleconsultation via phone – difficult for parents to follow the task given due to time limitation (child OT, Hospital Ulu Kinta) (child OT, Hospital Permai)

<u>Major Hospitals</u>

- Outpatient number was reduced to allow SOP compliance, group activity was not recommended / allowed (both OT, Hospital Tawau), (adult OT, Hospital Tanah Merah), (adult OT, Hospital Sultan Ismail Petra), (adult OT, Hospital Sultan Haji Ahmad Shah).
- Patients were unable to attend therapy sessions due to pandemic fear, home quarantine and lockdown (adult OT, Hospital Duchess Kent) (adult OT, Hospital Tawau), and not being fully vaccinated (adult OT, Hospital Sultan Ismail Petra).
- Group activities cannot be conducted as per usual. Smaller group sessions with reduced frequency due to space limitations (adult OT, Hospital Segamat).
- Lack of manpower due to inadequate therapists (adult OT). Rehabilitation activities for were withheld for a certain period when the therapist was deployed to COVID area (adult OT, H. Sibu). Limited therapist led to longer appointment dates given with shorter consultation time (child OT, Hospital Bintulu).
- Lack of facility or infrastructure and no dedicated space for patients, thus no privacy (adult OT). Limited space in rehabilitation centre – children rehabilitative centre is shared with other patients (child OT, Hospital Tanah Merah), social distancing is a challenge (child OT, Hospital Bintulu).
- Shorter time for activities and consultations (child OT, Hospital Sultan Haji Ahmad Shah).
- Increased defaulter cases (child OT, Hospital Segamat).
- OT service was withheld to accommodate hospital's full COVID19-status (child OT, Hospital Selayang).

<u>Minor Hospitals</u>

- OT department was closed a few times to be converted to general ward, due to rising numbers of COVID-19 (both OT, Hospital Seri Manjung), (both OT, Hospital Keningau)
- Group activities were withheld (farming, domestic, social activities, indoor and outdoor activities, art therapy, group discussions) (both OT).
- Only one occupational therapist covering all referrals for Limbang district (both OT, Hospital Limbang).

State Hospitals

- Limitation of time for therapy sessions with patients due to SOP restriction (both OT, Hospital Tengku Ampuan Afzan) (both OT, Hospital Sultanah Nur Zahirah)
- Some patients were unable to come for TCA or TCA postponed due to EMCO – affecting treatment plan (both OT, Hospital Tengku Ampuan Afzan) (both OT, Hospital Tuanku Fauziah)
- Poor turn-up for clinic appointments due to pandemic scare (both OT, Hospital Tuanku Fauziah)

Measures were taken to address limitations in service delivery during pandemic, for example teleconsultation in both adult and child OT services. For adult OT teleconsultation services, Major Hospitals showed the highest number in terms of OT teleconsultation, starting off with 148 cases in 2020, significantly increased to 1,479 cases in 2021. State hospitals show gradual increment of teleconsultation services from 98 cases in 2019, to 265 cases in 2020 and 453 cases in 2021.

Child OT Teleconsultation services showed a significant rise especially for major hospitals from 72 clients in 2020 to 263 clients in 2021. Teleconsultation for children's occupational therapy was not offered in minor hospitals.

3.3.3.2. Rehabilitation (Occupational Therapy) Services

Fig. 3.3.7: *Total number of inpatient undergone rehabilitation services, 2019-2021*

There is a similar trend seen with state, major and institutions with a gradual decrease of inpatients attending rehab. This trend is more marked in institutions with a steep decline of patients from 101,840 to 85,521 to 55,484 from the year 2019 to 2021, respectively. On the other hand, the number of patients attending minor hospitals remains marginally unchanged.
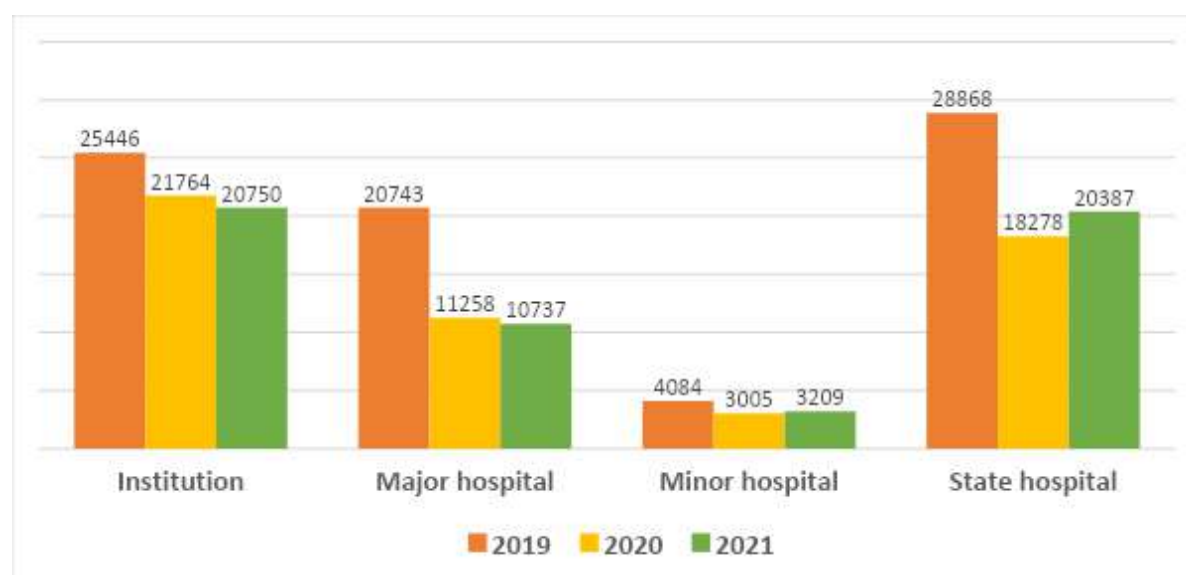

Fig. 3.3.8: *Total no. of out-patient undergone rehabilitation services, 2019-2021*

There is a similar trend seen with institutions and major hospitals which show a decline of patients attending rehabilitation. State hospitals show an initial steep decline from n= 28868 in 2019 to n= 18,278 in 2020 before increasing to n= 20,387 in 2021. On the other hand, the number of patients attending Minor Hospitals remains marginally unchanged.

3.3.3.3. Recommendations:

It is vital to continue monitoring the pandemic evolution and its impact on people with mental illness to understand how community-based psychosocial rehabilitation structures can continue to have a protective effect against COVID-19, protecting people from virus exposure and allowing them to support people's daily life activities.

3.3.3.4. Role of "tele-rehabilitation"

Changes in rehabilitation must parallel corresponding changes in mental health care delivery. Some areas in which tele-rehabilitation may play a role are as follows:

1) Tele-medicine
2) Tele-psychotherapy
3) Tele-psychiatric social work and liaison
4) Supervision of home-based rehabilitation
5) Training and mentoring of workers

Tele-consultations with rehab staff can help clients in gainful engagement, activity scheduling, skills training, and monitoring of progress toward goals. Some activities can be adapted for online groups. Long-term engagement and adherence are two important aims of any intervention, whether clinical or rehabilitative.

3.3.4. Supported Employment

Supported employment is a work rehabilitation program based on the IPS (Individual Placement and Support) model (Becker et al., 1994). It is modified for helping people with severe mental illness to find regular part-time or full-time jobs. The individuals are immediately placed in the competitive employment settings and provided necessary training and ongoing support to maintain employment. It has proven that supported employment increases competitive employment rate both overseas and locally (Bond et al., 2012; Wan Kasim et al., 2014).

Supported employment is a team-based service provided by a multidisciplinary team, mainly conducted by occupational therapists in a hospital or MENTARI. The processes involved in supported employment comprise job search, job matching, job canvassing, and job interview, meeting with employers, placement, job coaching, job visit and ongoing support.

RESTART (Re-Employment Support, Treatment and Rehabilitation Teamwork) is a project of collaboration between Psychiatry and Mental Health services, Ministry of Health Malaysia and SOCSO Malaysia, aiming to increase the employment rate of people with mental illness. In November 2020, the RESTART project was started in a few hospitals and MENTARIs and had been expanding

since then. As of December 2022, a total of 29 hospitals and MENTARIs have successfully embarked on the RESTART project and a total of 328 patients have been referred to the RESTART program, where 33 have been successfully employed. (Data provided by PERKESO) The workflow of the RESTART program is almost similar to supported employment except it is led by PERKESO and closely collaborating with the psychiatry unit in each setting.

During COVID-19 pandemic, there were several impacts on carrying out the activities in supported employment due to the lockdown. Among the challenges faced were lacking job opportunities probably due to economic recession, fast-growing online business ventures causing the reduced need for manpower and employers' preference in hiring a healthy employee to offset the economic impact of MCO. Besides, job interviews and job visits were carried out in a very limited way or completely suspended due to the implementation of MCO. The worst situation encountered by some hospitals was the halt of the service owing to the hospital OT unit being converted to COVID ward or lack of manpower. A single report by a hospital showed that some patients refused vaccination causing difficulty for job placement.

With regards to RESTART, COVID-19 pandemic and the stringent SOP implemented during the MCO period has caused major delays in starting the program in some hospitals and getting employment for the patient. This is clearly reflected by the employment success rate of the program. Before the pandemic in 2019, employment success rate in psychiatric institutions, state hospitals and major hospitals were 45.1%, 42.8% and 42.9% respectively. Moving into the pandemic period of the year 2020, the rate decreased unanimously in all 3 levels of organizations within 4-6%. In the following year, the success rate picked up significantly in state and major hospitals around 9-11% while there was a slight increment in institutions, possibly resulting from gradual withdrawal of SOP in 2021. Similarly, the RESTART program has encountered several challenges as reported in supported employment. Apart from that, as some hospitals started conducting interviews via virtual platforms, the move is hindered by the poor internet connection and unfamiliarity with virtual communication, leading to difficulty in the program enrolment process especially the documentation part. Besides that, job coaching was impossible when PERKESO staff were working from home.
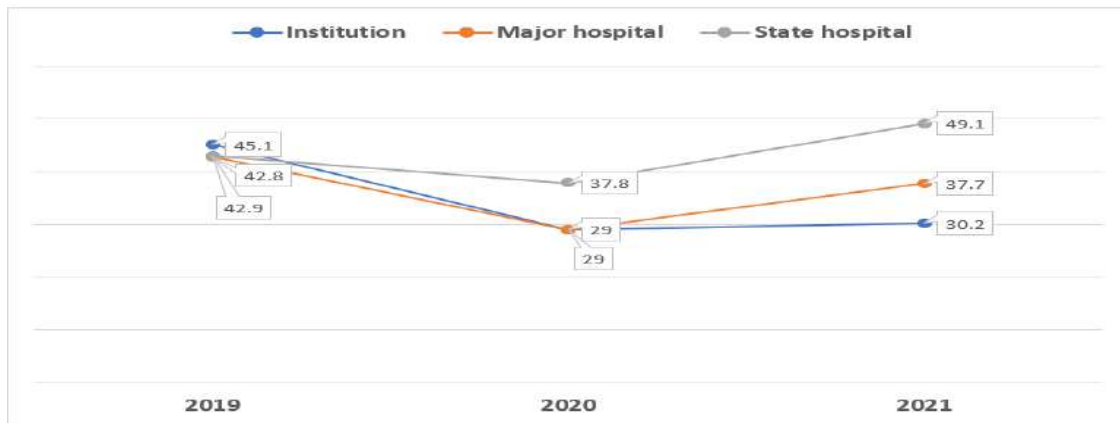
Fig. 3.3.9: *Employment success rate, 2019-2021*

Note. No data submitted for minor hospital

3.4. CONSULTATION-LIAISON PSYCHIATRY (CLP) SERVICES

Consultation-Liaison Psychiatry (CLP) is the subspecialty of psychiatry that focuses on the interface between psychological and physical health. The CLP team reviewed patients admitted in multidisciplinary ward following referral by the treating team. CLP team comprises of Consultation-Liaison Psychiatrist/ Clinical Specialist, Medical Officer, Staff Nurses, Paramedics, Clinical Psychologist/ Counsellor, Occupational Therapist and Medical Social Worker.

The CLP team is involved in the multidisciplinary management by the various treating teams in hospital settings especially in areas of identified needs, for example psycho-oncology, organ transplant programs, chronic pain services, perinatal mental health, rehabilitative medicine, and palliative medicine. Inpatient referrals are made to the assigned teams according to local arrangements. Consultation services include assessment and treatment for medically ill patients with emotional and behavioural presentations, self-harm and self-injury behaviour, patients with multiple somatic symptoms with no clinical correlation and for mental capacity assessment. Ideally, urgent cases such as inpatient self-harm or suicidal risk, aggression and agitation will be reviewed by the team within 1 hour and non-urgent cases (such as patient that required optimisation of inpatient management) within 24 hours of referral. The frequency of review depends on the clinical condition of the patient and the severity of the presentation.

In general, there are increasing number of referral cases to the CLP teams in 2020 and 2021 (Fig.3.4.1). During the pandemic COVID-19, different methods of services delivery were practiced to ensure the safety of the team. The team should comply with the SOP and adhere to COVID-19 preventive measurements, such as limiting the number of team members and reducing the time and frequency

of reviewing cases to minimise risk among them. The team must wear full PPE to assess COVID-19 cases or at least equipped with medium PPE while reviewing other patients in non-COVID-19 ward. During the initial phase of COVID-19, there are hospitals with a limited number of PPE, which may cause disruption of the services. However, the number of PPE improved throughout the phases of the pandemic.

Issues and challenges concerned by the team while reviewing cases with full PPE include disruption of the conversation and effectiveness of the therapy session, difficulty in doing the assessment or conducting the family session due to restriction of ward visitors, delay in the situation that required immediate action such as aggression and suicidal patients and risk of possible exposure to COVID-19 in undiagnosed patients.
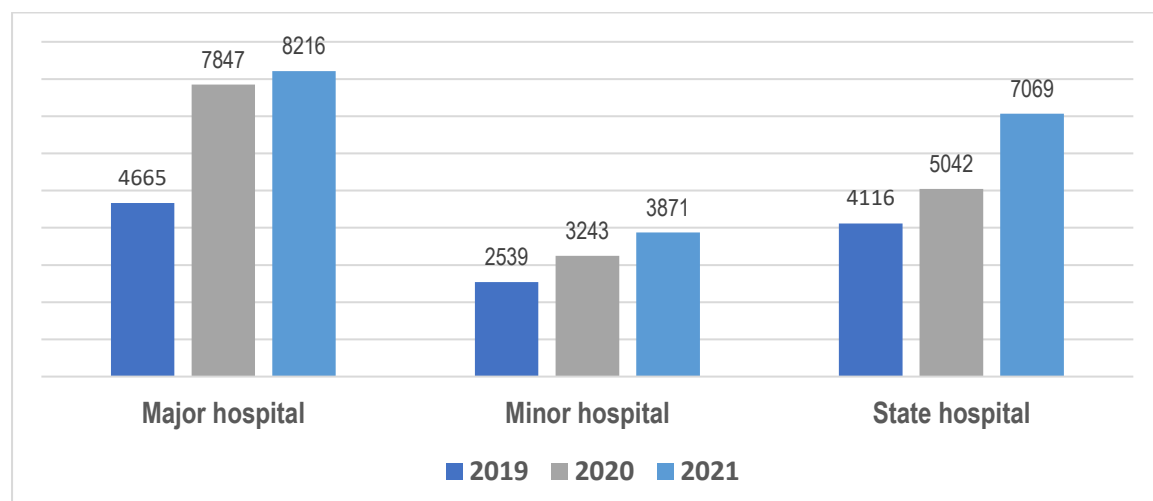

Fig. 3.4.1: *Number of referral cases to the Consultation-Liaison Psychiatric team, 2019-2021*

3.5. FORENSIC PSYCHIATRIC SERVICES

Forensic psychiatric services in Malaysia are exclusively provided by the four mental institutions which have been designated as approved psychiatric hospitals in accordance with Section 22 of the Mental Health Act 2001.

The four institutions are:

a) Hospital Bahagia Ulu Kinta, Perak
b) Hospital Permai, Johor

c) Hospital Sentosa, Sarawak

d) Hospital Mesra Bukit Padang, Sabah

These four forensic facilities receive referrals from the courts under Sections 342, 344 and 348 of the Criminal Procedure Code (CPC). Referrals for mental assessment under Section 342 of the CPC account for nearly 1000 cases every year. 90% of these cases are referred to Hospital Bahagia Ulu Kinta and Hospital Permai. In addition, mental health services for prisoners are also provided in accordance with the Prisons Act 1995. However, the facilities, manpower and number of beds available are limited.

With the onset of the Covid-19 pandemic, the forensic hospitals were required to draw upon general and mental health specific guidance in terms of how it responds to COVID-19 by the Ministry of Health. However, forensic hospitals receiving cases from the courts and prisons needed to adopt more stringent approaches to prevent and limit the threat posed by COVID-19. Restrictions, which in the past were non-existent, now had to be imposed in the light of this pandemic.

Efforts were made to engage with the Judiciary, the Attorney General's Chambers (AGC) and the Royal Malaysian Police (PDRM) which culminated in a directive "Sistem Temujanji Bagi Rujukan Tahanan/Orang Kena Tahan (OKT) Untuk Pemeriksaan Mental di Hospital-Hospital Psikiatri" issued by the Director General of Health dated 20 January 2021. Following this important directive, the Courts were required to make bed reservations and conduct COVID19 RTK or PCR screening tests for every case referred to the forensic hospitals. This approach enabled the forensic units to control the number of admissions according to bed availability and to only accept cases that were COVID19-negative within three days of the admission. With this approach, many Covid-19 cases were detected prior to being admitted to the forensic wards and the necessary quarantine procedures were imposed accordingly.

Nevertheless, despite the COVID19-negative screening requirement pre-admission, the cases were screened again upon admission to the forensic units. The fig.3.5.1 below shows the number of COVID19 positive cases under Section 342 of the CPC detected upon admission to the four forensic hospitals from 2020 until 2021:
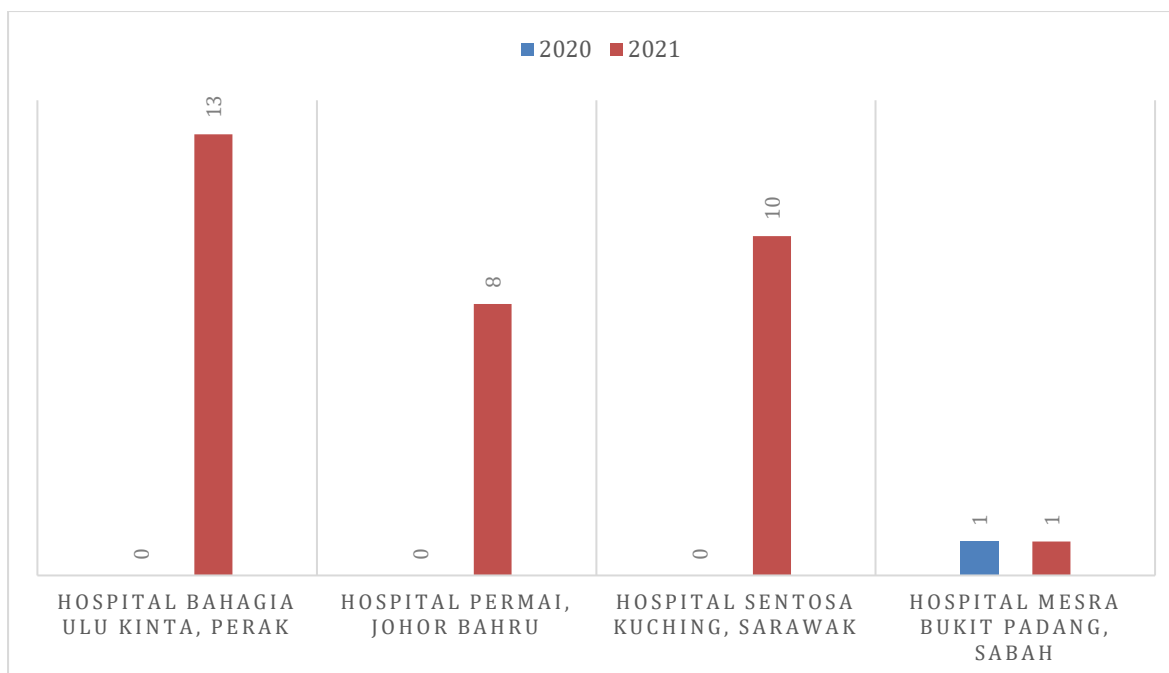
Fig. 3.5.1: COVID19-*Positive Cases under Section 342 CPC, 2020-2021*

Following the detection of positive cases upon admission, the cases were referred to the nearest COVID19quarantine centres for isolation and treatment. This stringent process of screening cases pre-admission and post-admission needs to be continued despite the changes in SOP's at the national level as detainees from prison and police lock-ups are at a high-risk for COVID19.

3.6. MENTAL HEALTH & PSYCHOSOCIAL SUPPORT SERVICES (MHPSS)

Mental Health & Psychosocial Support (MHPSS) provide psychosocial support services based on the psychological needs of those suffering or exposed to a crisis or serious event. MHPSS aims to help people cope with challenges & distressing events by providing mental health assessment, consultation, and intervention by addressing their basic needs, offering mental & emotional support, educating stress management techniques & self-care techniques, and providing access to information or available support. MHPSS interventions are essential to minimise suffering and improve the mental health and psychosocial well-being of people who are directly or indirectly affected by the disease. MHPSS activities throughout the pandemic aimed to increase awareness of mental health, provide knowledge on self-help techniques and stress management skills, and increase screening activities for early detection of mental health issues.

In general, majority of the MHPSS teams lacked experiences and skills in delivering services during the pandemic situation. In contrast to other crises or disasters, physical sessions or face-to-face sessions were avoided, if possible, to reduce the risk of infection during the pandemic. Alternatives methods of service delivery were used during the COVID-19 pandemic which includes sessions through phone or video calls, distributing information and infographic via social media (online graphic) and providing mental health support via hotlines, WeChat, WhatsApp & other forms of communication technology.

Issues and challenges faced by the team during online sessions include limited skills, resources and number of staff, connectivity problems, privacy and confidentiality issues, and insufficient telephone line. These problems may reduce the engagement and effectiveness of the sessions. Due to the lack of human resources, staffs in MHPSS team were also involved in other core commitments at work, hence need to manage their time accordingly to multitask. Thus, their mental health may also be compromised in view of the demanding workload. To prevent burnout among the team members, other healthcare workers from multidisciplinary departments or units were also trained in Psychological First Aid (PFA) to help deliver the services.

Each state has their own MHPSS team, consisting of Hospital MHPSS team and Primary Health MHPSS Team. The Hospital MHPSS team will focus more on mental health issues among the targeted group, consisting of health care workers, supporting staff and COVID-19 patients, either in the ward or at the Low-Risk Quarantine and Treatment Centres (PKRC), whereas Primary Health MHPSS team focus more on front liners from multi agencies and the public. In general, the number

of MHPSS activities were higher in 2020 and continued to increase in 2021. There were cases requiring referral and follow-ups by psychiatrist, trained psychiatric medical officers, clinical psychologist, or counsellor due to worsening psychological distress. However, majority of the symptoms resolved with psychosocial intervention and mental health support with a small number of cases requiring as needed (pro-re-nata or PRN) basis of oral medication. Other than healthcare workers, COVID-19 related patients (including PUS and PUI), their relatives, and front-liners from other agencies and the public also benefitted from the services. Additional funds were allocated to MHPSS for mental health activities in most hospitals throughout the pandemic to ensure the services were available and accessible to all.
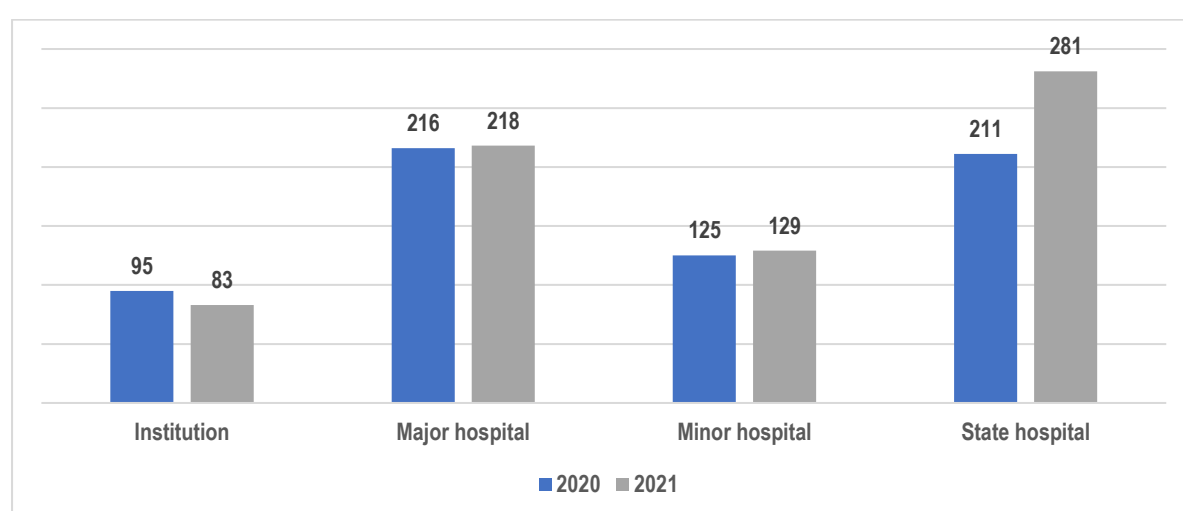
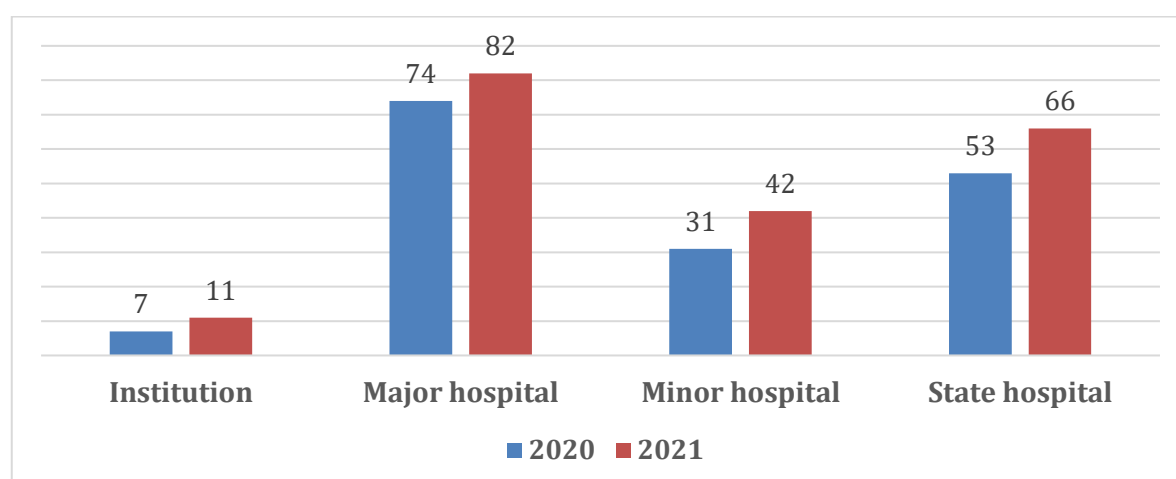**Fig. 3.6.1**: *Total number of MHPSS staff, 2020-2021*

Fig. 3.6.2: *Total number of facilities and equipment received, 2020-2021*
Note. These includes smart phone, computer/ laptop, internet line, video camera / PA system, office extension and dedicated room.
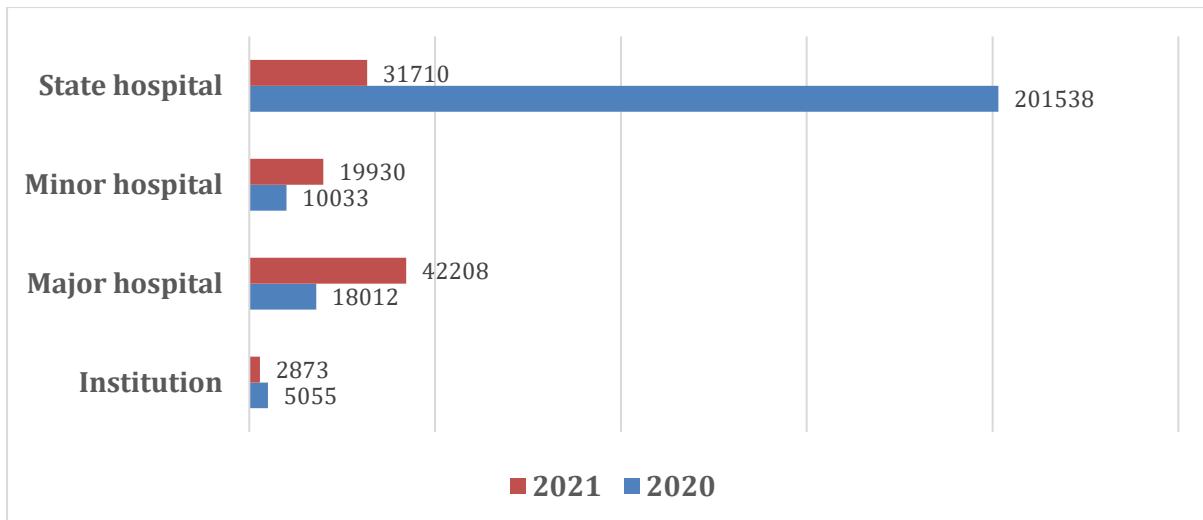
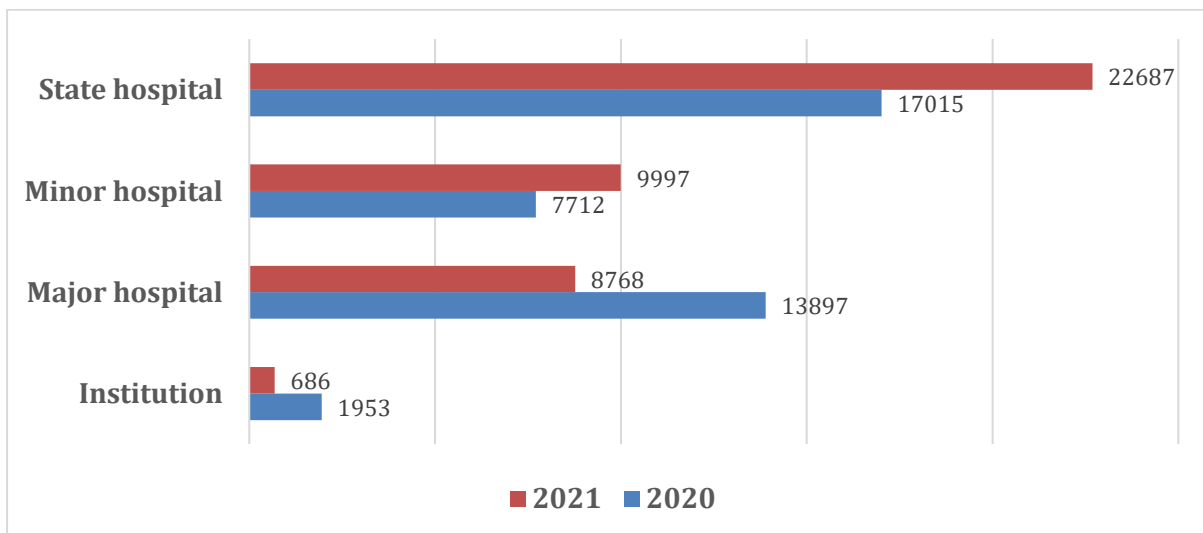**Fig. 3.6.3:** *Total number of PFA done, 2020-2021*

Fig. 3.6.4: *Total number of mental health screening done, 2020-2021*
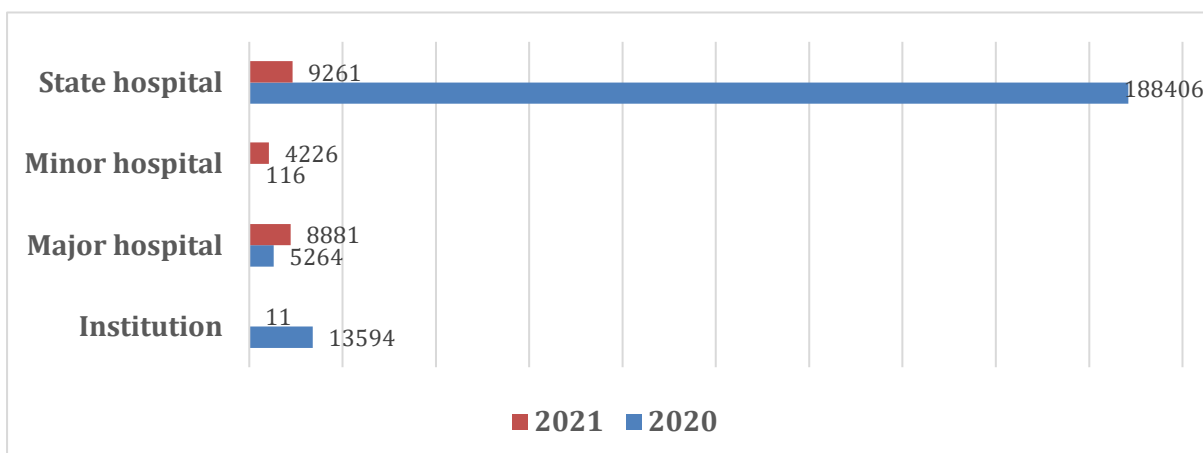

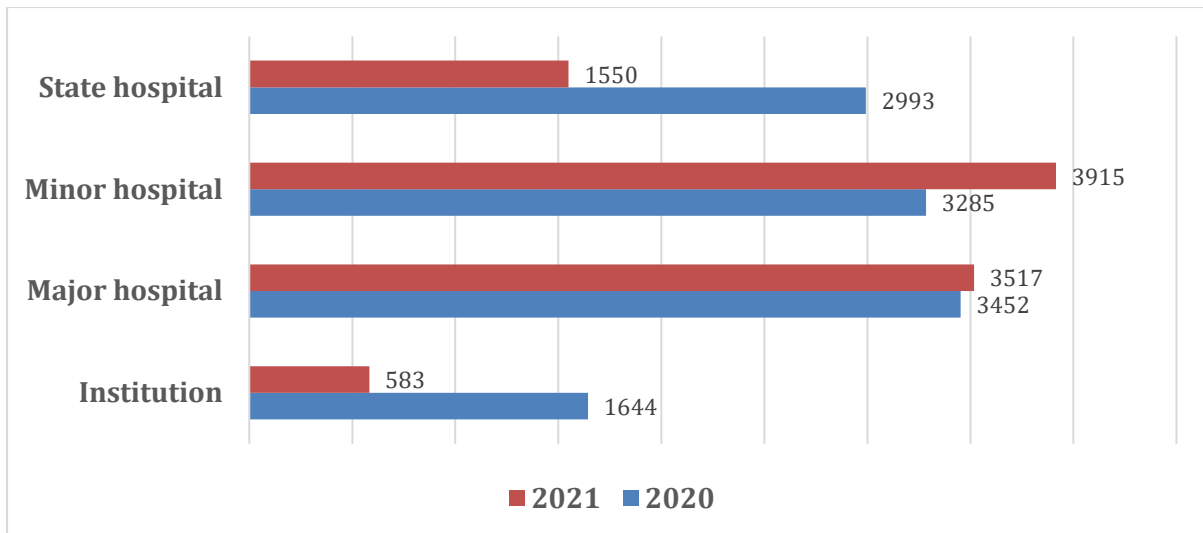**Fig. 3.6.5**: *Total number of helplines / hotlines received by MHPSS, 2020-2021*

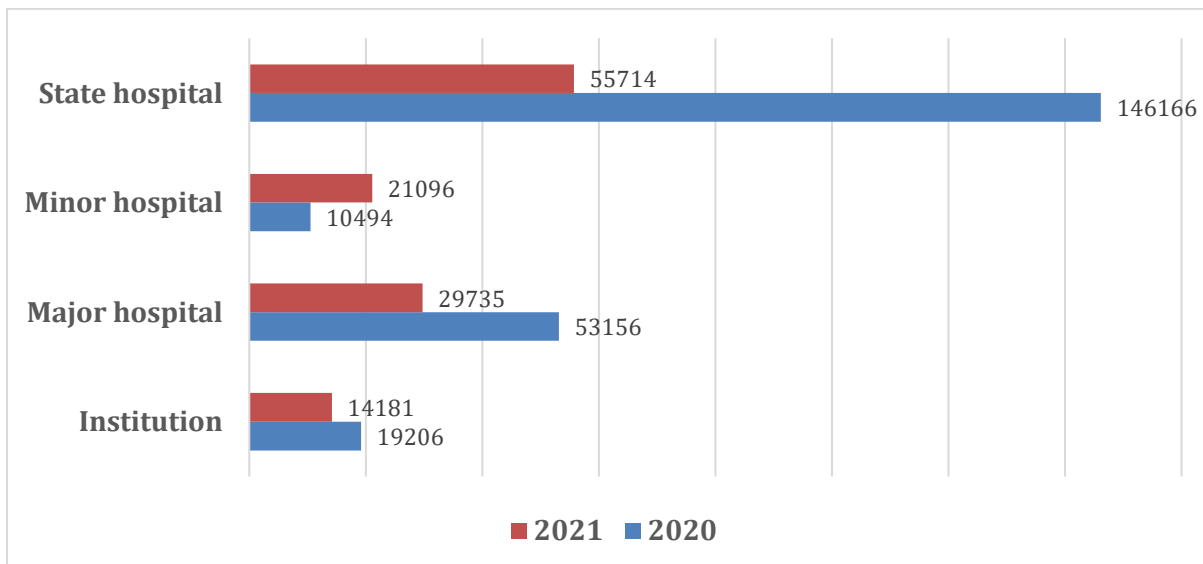**Fig. 3.6.6:** *Total number of MHPSS face to face sessions, 2020-2021*

Fig. 3.6.7: *Total number of Tele-health, 2020-2021*
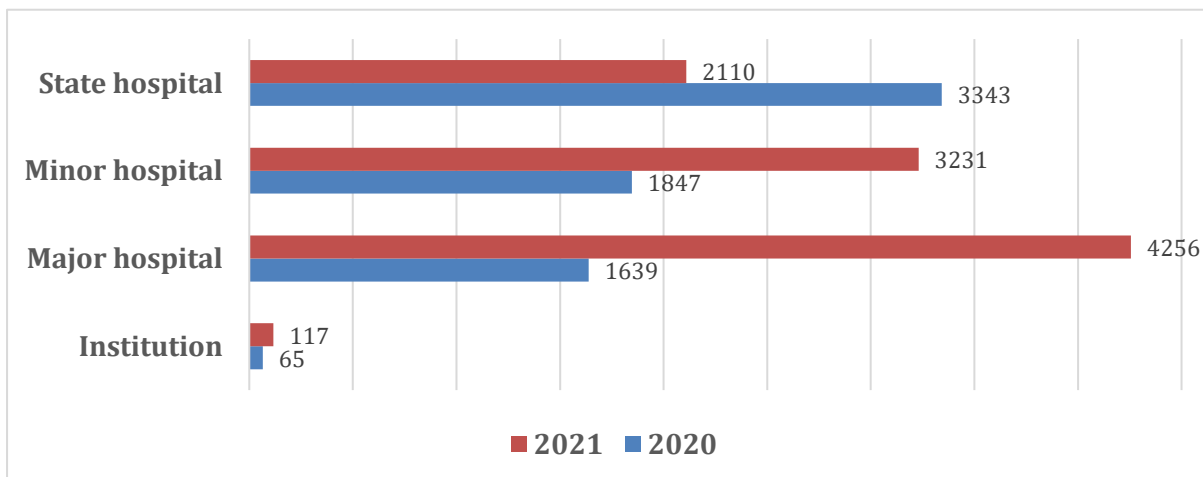*Note.* These include phone call, WhatsApp / messages, Google form, infographic/e-pamphlet / QR code

Fig. 3.6.8: *Total number of consultation or treatment done by MHPSS, 2020-2021*
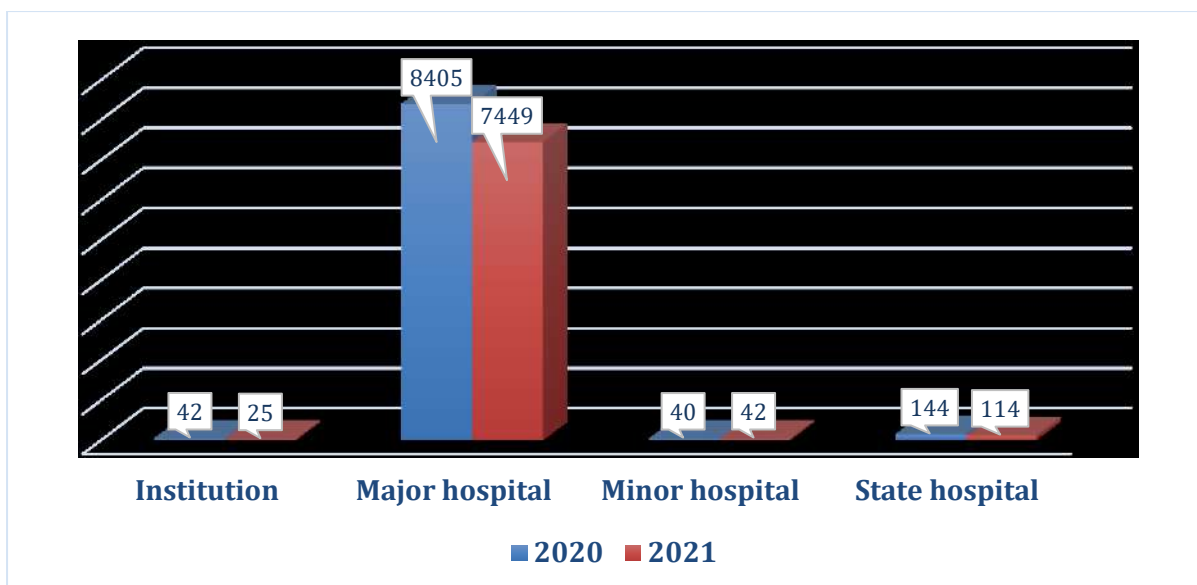
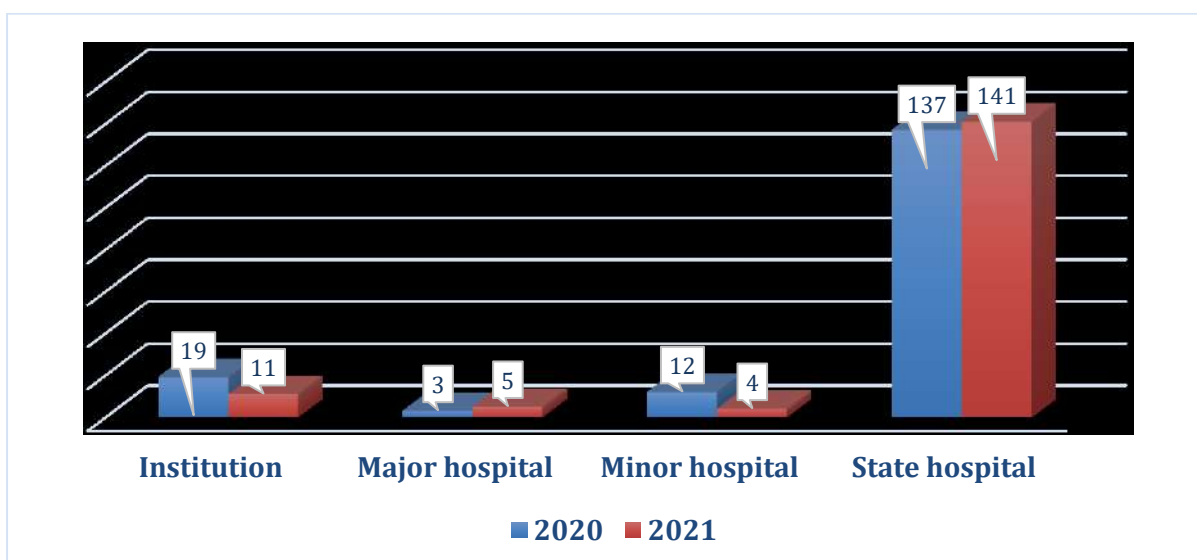**Fig. 3.6.9**: *Total number of cases from MHPSS screening that need Psychiatrist follow-up, 2020-2021*

Fig. 3.6.10: *Total number of cases from MHPSS screening that need Clinical Psychologist follow-up, 2020-2021*

4. OTHER SERVICES

Clinic Psychologists, counsellors, occupational therapy, and pharmacy are also important service providers as part of multidisciplinary approach to cater for well-being of patients with mental illness. Clinical psychologists and counsellors mostly work to achieve and promote psychological well-being while reducing psychological distress. Occupational therapy is equally important in providing rehabilitation activities to assist patients in achieving optimal function and facilitate recovery process. Pharmacy services are most vital to ensure adequate and uninterrupted supply of medications to keep patients in stable state. Availability of these services are based upon the

availability of resources and staffing. With these services, we aim to promote and maintain patient remission as well as reduce risk of relapse. Figures below showed the bar charts of total case of these psychiatric services before and during pandemic.
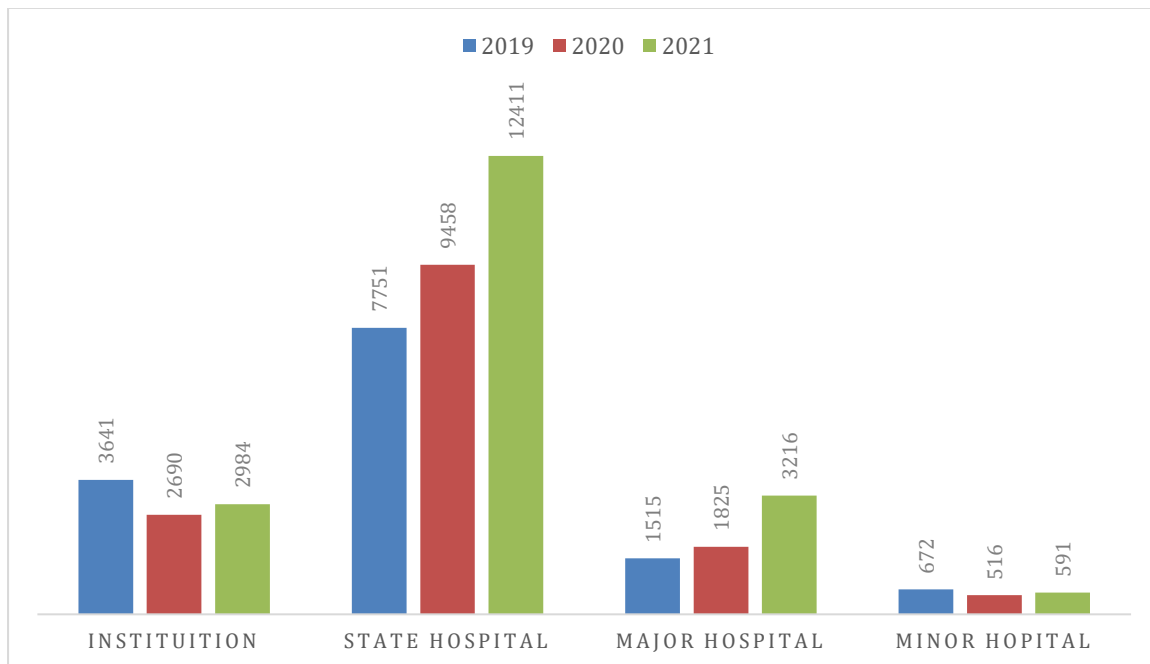
4.1. Clinical Psychologist

Fig. 4.1.1: *Total number of cases (new case and follow-up) for clinical psychologist, 2019-2021*

The highest number of cases for clinical psychologist service were observed in state hospitals (Fig. 4.1.1). There was a 20% increment of cases seen by clinical psychologists from 2020 to 2021. Meanwhile other types of hospitals showed no significant difference of the total number of cases before and during pandemic period.
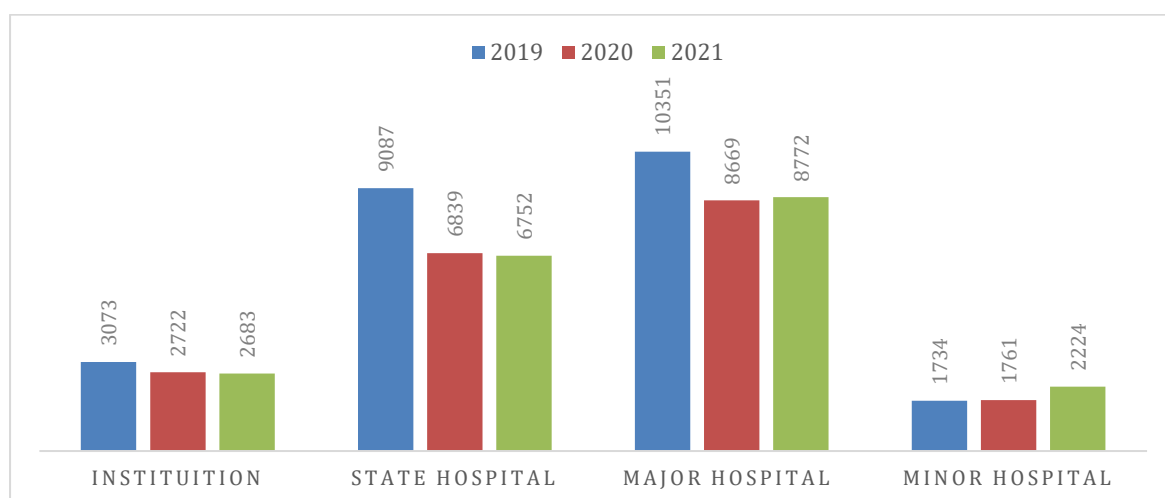
4.2. Counsellor

Fig. 4.2.1: *Total number of cases (new case and follow-up) for counsellor, 2019-2021*

In all type of hospitals, the number of cases seen by counsellors were reduced, except in minor hospitals during the pandemic period (Fig.4.2.1). Highest number of cases requiring counsellor service were seen in state and major hospitals which were more than two times the cases in institutions and minor hospitals.

4.3. Pharmacy Services
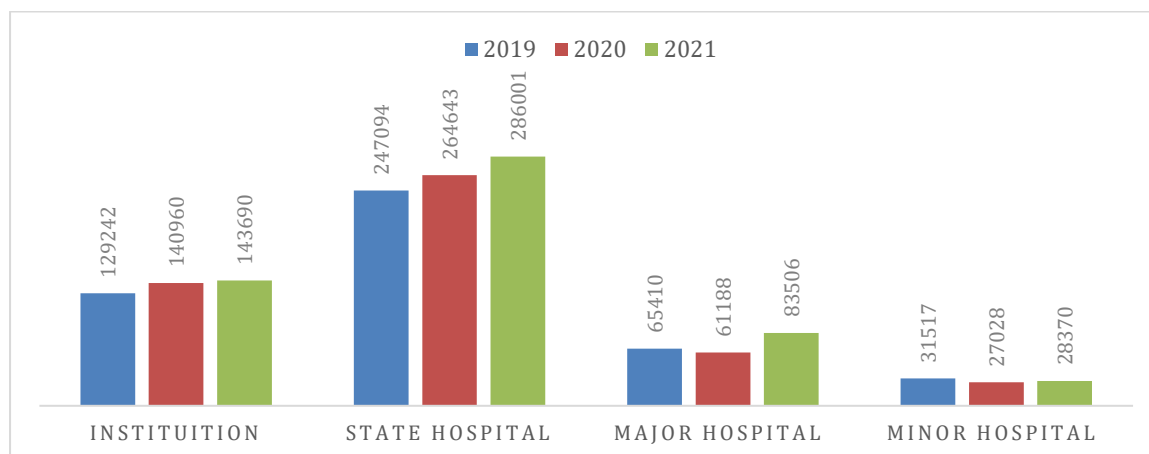
Fig. 4.3.1: *Total number of cases for self-collection, 2019-2021*

The number of cases for self- collection were noted to be highest in State hospitals compared to other hospitals and Institutions before the pandemic (Fig.4.3.1). During the pandemic, there was a modest but steady increase of cases in the State hospitals. In Major and Minor hospitals, there was a small decrease of cases in 2020 which then increased slightly in 2021. For Institutions, there was a mild but steady increase from 2019 to 2021.
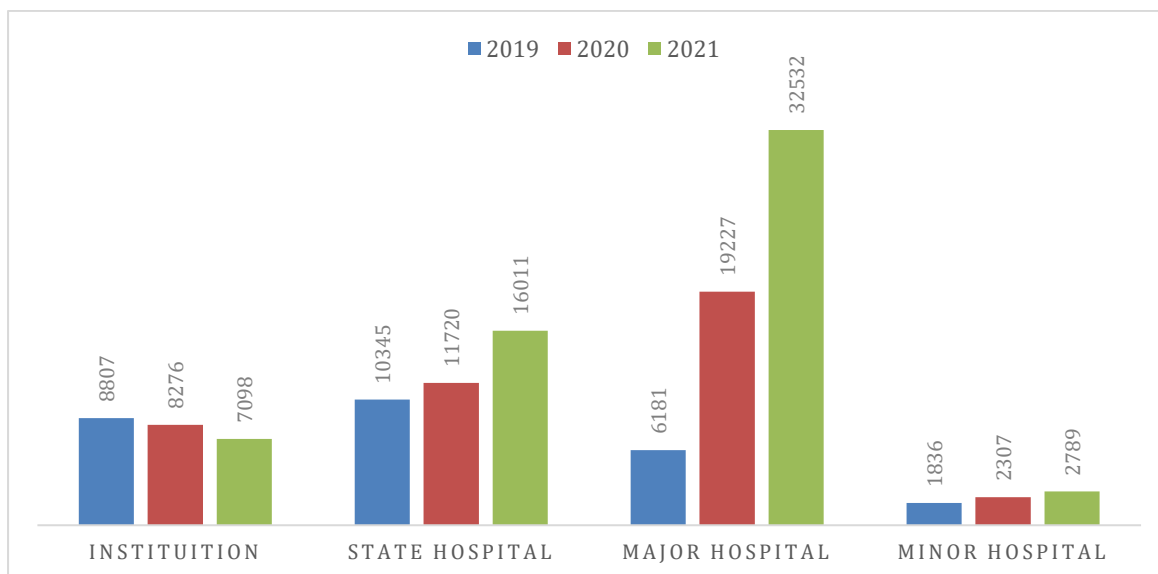
Fig. 4.3.2: *Total number of cases for SPUB, 2019-2021*

There was a significant increase of total number of SPUB (*Sistem Pendispensan Ubat Bersepadu*) cases in Major hospitals followed by State hospitals. A modest increment in the number of cases was observed in Minor hospitals whereas there was slight reduction of cases in Institutions (Fig.4.3.2).

Fig. 4.3.4: *Total number of cases for drive through, 2019-2021*
Note. Minor hospitals did not offer drive-through pharmacy services

Total number of drive-through cases was the highest in State hospitals followed by Institutions and Major hospitals. All three categories showed an increasing trend from 2019 to 2021 (Fig.4.3.2).
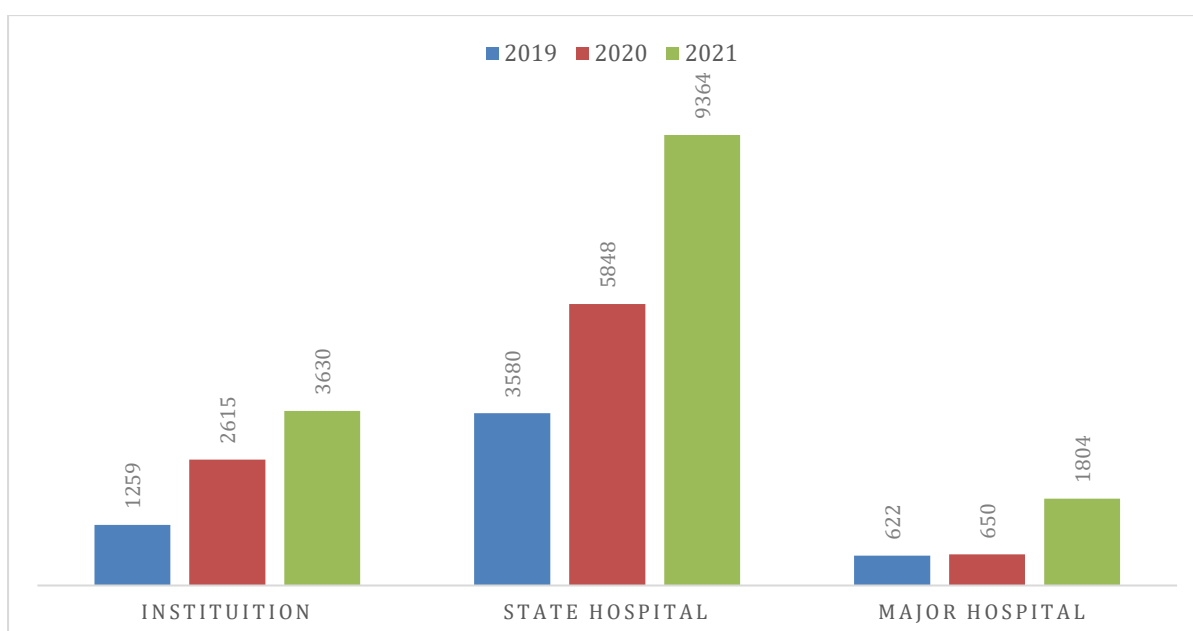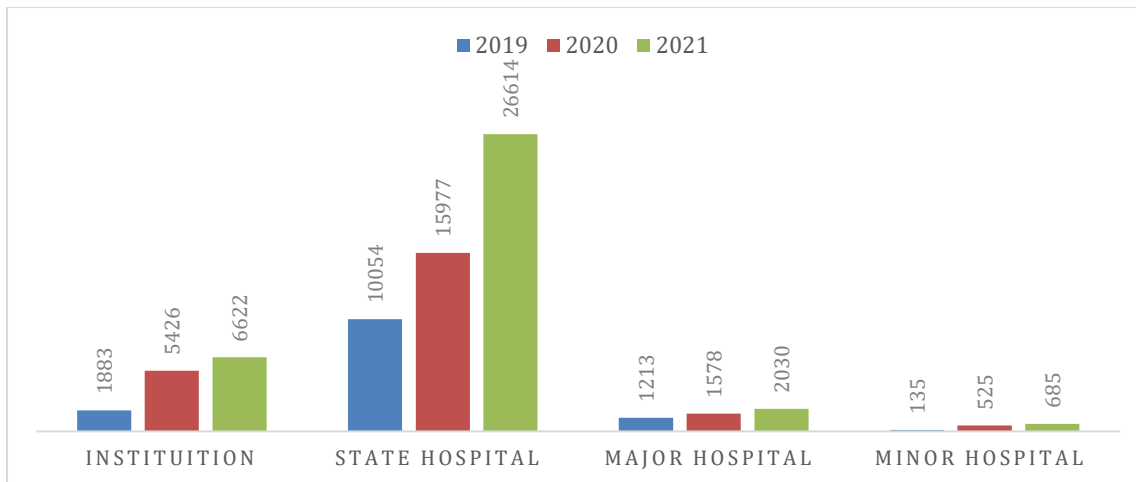
Fig. 4.3.3: *Total number of cases for postages, 2019-2021*

The total number of postages was highest in State hospitals followed by Institutions, Major and Minor hospitals, respectively. All three categories showed an increasing trend from 2019 to 2021 (Fig. 4.3.3).

5. OTHERS

5.1. HUMAN RESOURCES

5.1.1. Introduction

Human resources (HR) are the most valuable asset of a mental health service. In provision of mental health services, availability of competent and motivated personnel is crucial, in order to provide care for people with mental disorders (World Health Organization, 2005).

In Malaysia, there are limited data on the number of HR in mental services per profession (Midin et al., 2018). WHO report in 2001 showed that Malaysia had 0.3 psychiatrists, 0.5 mental health nurses and 0.2 occupational therapists/social workers per 100,000 population (World Health Organization, 2001). Subsequent data in 2011 showed increment in mental health personnel to 0.83 psychiatrists, 3.31 nurses, and 0.29 psychologists per 100,000 population in Malaysia (Midin et al., 2018). In recent data in 2018, there was increment of ratio on the number of psychiatrists to population at ratio of 1.27 per 100,000 (Guan et al., 2018). The number of other mental health workers in Malaysia is estimated to have improved slightly based on observation, but accurate data are not available (Midin et al., 2018).

Overall, mental health human resource levels in Malaysia are relatively low compared to those in other countries (Midin et al., 2018). There are many challenges in mental health service provision locally, and human resource is one of the recognized factors identified. This is significant as the burden of mental health in Malaysia has been increasing over the years, as reported in the National Health and Morbidity Survey (NHMS) (Abu Bakar et al., 2015). These deficiencies in service availability should be addressed and policy to be revised to increase the proportion of psychiatrists and mental health clinicians in Malaysia.

5.1.2. Challenges and Ways to Overcome In Terms Of Human Resources

From the graph, it is found that there are more numbers of clinicians (psychiatrists, medical officers, house officers and paramedics) in institution, followed by state hospitals and major hospitals, whilst lowest in the minor hospitals in whole Malaysia. It was correlates with the workload burden in different hospital setting, as discussed in Section 3. By understanding this fact, it should be known the minimum requirement of staff needed in order to continuously deliver mental health services, despite of shortage of HR during pandemic COVID-19. Nevertheless, the Psychiatric Service should aim for the optimum normal of staff in order to provide a safe work environment and safe patient care.

It was a challenge when the clinicians (psychiatrists, medical officers, house officers and paramedics) were deployed out to help with COVID-19 duties. The existing burden and psychiatric workloads have to be shared among the remaining clinicians. According to the data, a greater number of clinicians were deployed out for COVID-19 duties in 2021 compared to 2020. The deployment also had involved supporting psychiatric staff (PPK, clinical psychologists, counsellors, and occupational therapists) from all levels of hospitals (Institution, State Hospitals and Major Hospitals) except minor hospitals. The implementation of bubble system or rotation system among clinician and supporting staffs is suggested to ensure continuity of service as well as minimize risk of contracting positive COVID-19 from close contact.
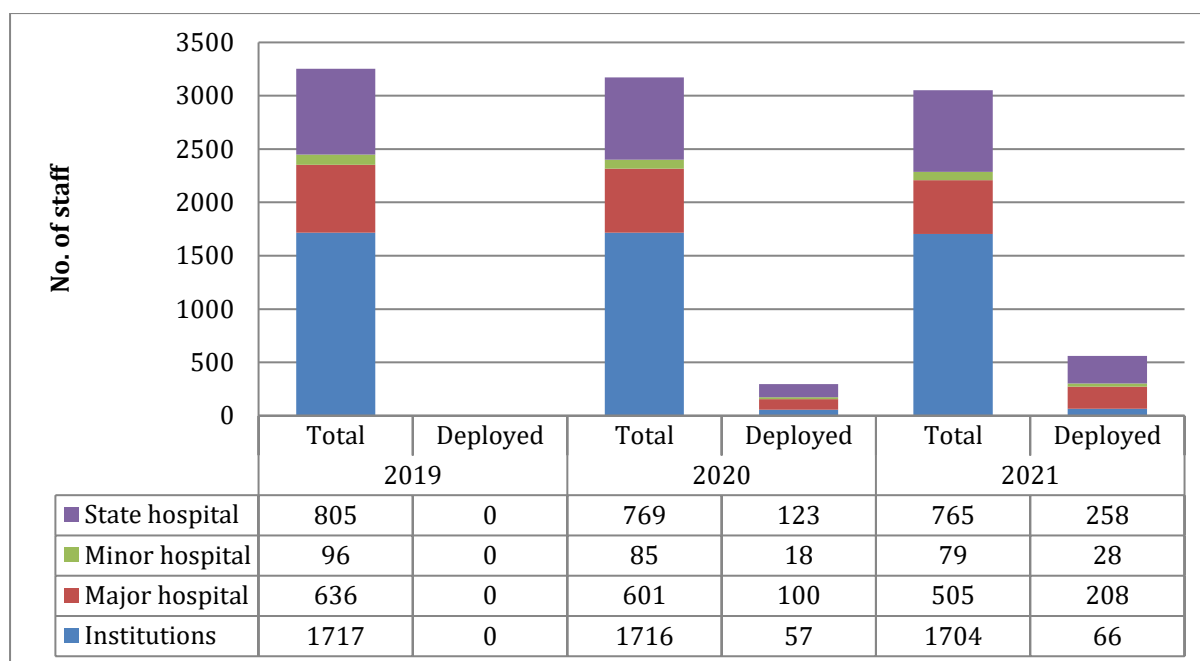
Fig. 5.1.1: *Total number of clinicians, 2019-2021*

	Total 2019	Deployed 2019	Total 2020	Deployed 2020	Total 2021	Deployed 2021
State hospital	805	0	769	123	765	258
Minor hospital	96	0	85	18	79	28
Major hospital	636	0	601	100	505	208
Institutions	1717	0	1716	57	1704	66

Note. Clinicians include psychiatrist, medical officers, house officers and paramedics
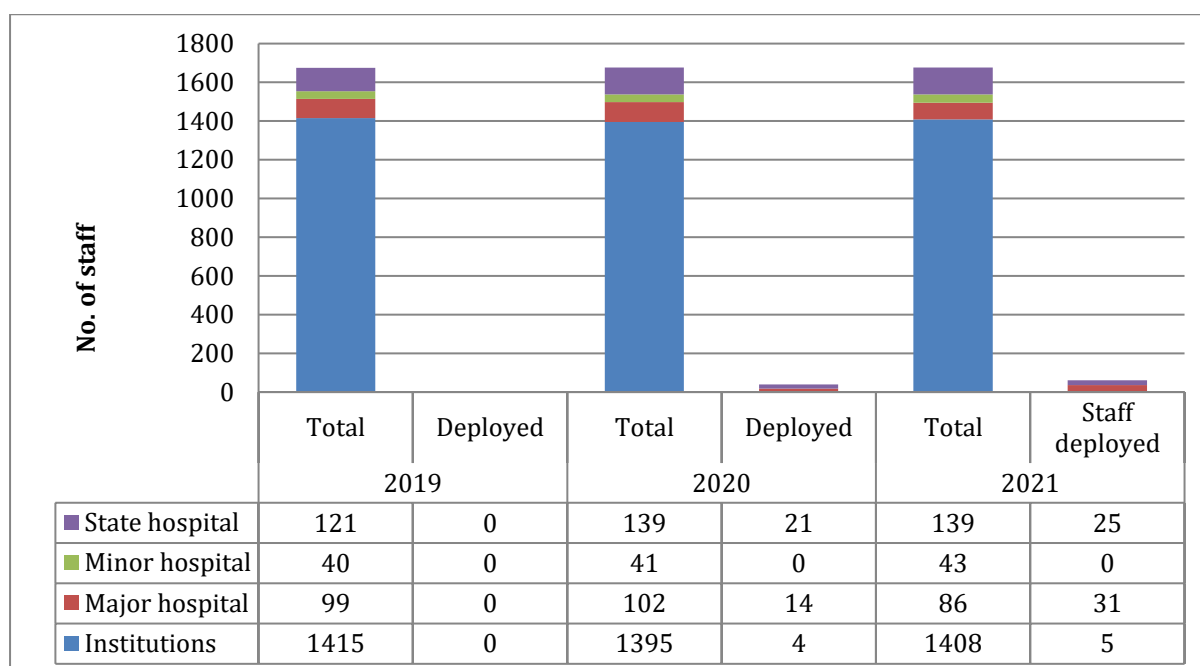
Fig. 5.1.2: *Total number of supporting staff, 2019-2021*

	Total 2019	Deployed 2019	Total 2020	Deployed 2020	Total 2021	Staff deployed 2021
State hospital	121	0	139	21	139	25
Minor hospital	40	0	41	0	43	0
Major hospital	99	0	102	14	86	31
Institutions	1415	0	1395	4	1408	5

Note. Supporting staff include PPK, clinical psychologist, counsellors, and occupational therapist

5.1.3. Number Of Staffs Tested Positive / Close Contact Quarantine

Data has shown that both institutions and state hospitals have high numbers of healthcare workers who were infected with COVID-19 and required home quarantine. These were proportionate to the large number of existing staffs in both hospital settings. It also found that the majority of the source of infections were from non-work contact in all four hospital settings (institution, state hospitals, major hospitals, and minor hospitals). This could be explained by the strict SOP practiced at workplace which could mitigate the risk of getting infected while at work. There were higher number of staffs affected by COVID-19 in 2021, compared to 2020.

This issue had caused a significant challenge, as the provision of mental health services must be continuously delivered, despite of limitation of human resources. Few measures must be done such as implementation of teleconsultations as a temporary measure could reduce the overcrowding at the outpatient clinic especially during limited manpower. This was also beneficial as it could reduce the risk of exposing patients from infected with COVID-19.

Optimizing human resources is crucial in order to reduce the burden of staffs that still need to be present at work. Staffs who are under home quarantine but still well, could be given task that can be done from home such as data entry, PFA calls or replying to emails. Not forgetting, MHPSS activities to mental healthcare workers should be done to identify burn-out and to improve productivity and promote healthy work culture.

Other measures included establishing networking with the primary health care to manage mild to moderate psychiatry cases to reduce number of referrals. Not only that, emphasizing on community care among psychiatric patients is important, especially in relapses prevention which could reduce the number of hospitalizations.

Lastly, all mental healthcare workers should be encouraged to get COVID-19 vaccination and to follow Revised Guideline as stated by MOH, to minimize the risk of contracting COVID-19 infection. By following these guidelines, the infection rate is at low, and indirectly ensuring continuity of the mental health services.
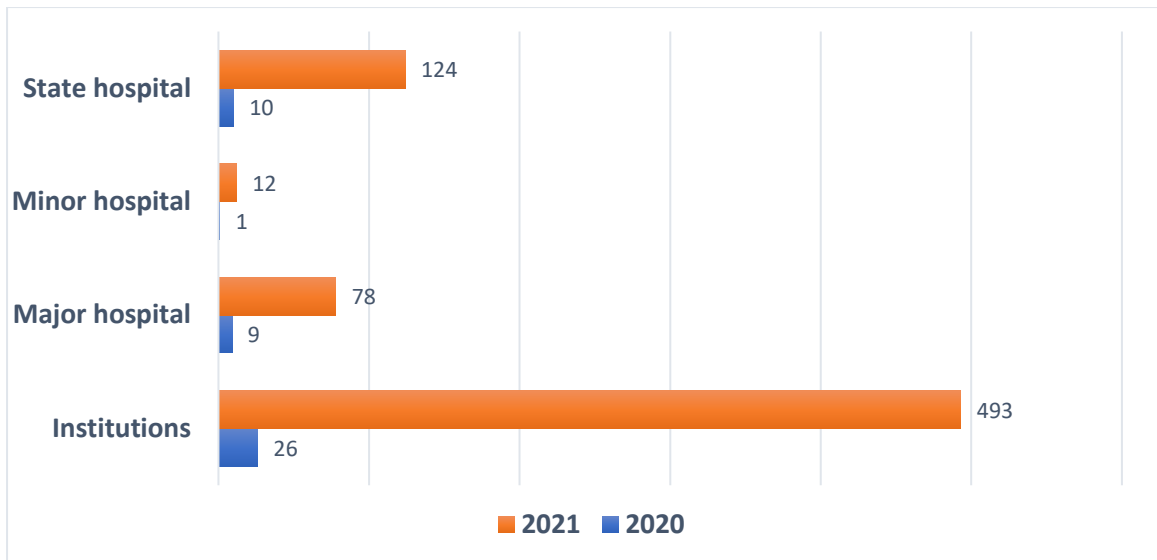
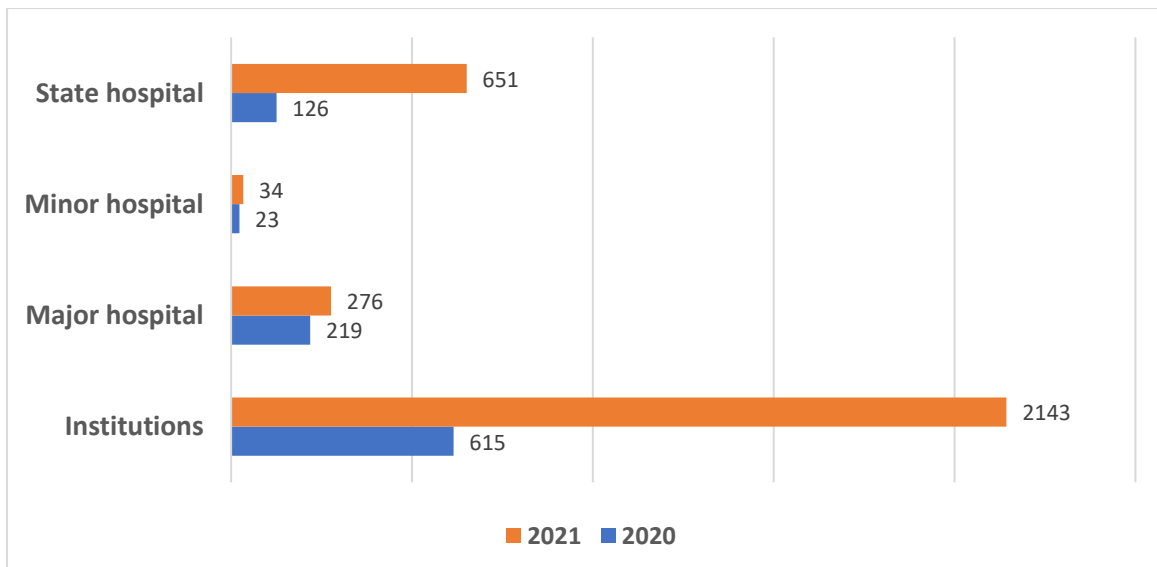**Fig. 5.1.3**: *Total number of staff tested positive, 2020-2021*

Fig. 5.1.5: *Total number of staff classified as PUS/PUI and required quarantine, 2020-2021*

5.1.4. Conclusion

The availability of mental health human resources which was low even before pandemic, were further reduced during the COVID-19 pandemic. More clinicians from institutions and state hospitals were deployed out of psychiatry facilities in 2021. Apart from that, more healthcare workers were infected by COVID-19 and a larger number were close contacts and required home quarantine. This led to an increased risk of burn-out for the remaining healthcare workers, which eventually affected the system's efficiency. However, the continuity of services was good with the implementation of the

rotation/bubble system and with the revision of latest guideline for quarantine period for healthcare workers.

5.2. TRAINING & LEARNING ACTIVITIES

5.2.1 Introduction

The COVID-19 pandemic and the unavoidable Movement Restriction Orders throughout the year 2020 and 2021 had affected our country in many ways, causing a major negative impact. The crisis was especially challenging for our healthcare system, with the rapid spread of the illness and rising number of cases that placed a heavy burden on the available resources. The Mental Health Services in all our healthcare centres throughout the country also faced challenges that affected not only patient care, but also other important services such as training and education. The training and educational services vary between different centres/hospitals, depending on accreditation and resources available.

The following are the main training and educational activities that were affected:

1. Postgraduate training
2. Sub-speciality training
3. Training of House Officers
4. Post Basic training
5. Undergraduate training
6. Education/Learning activities such as CMEs, Journal Club, case presentations and courses or seminars.

For the purpose of this report, the healthcare facilities that offer Specialized Mental Health Services are categorized as:

1. Institution
2. State Hospitals
3. Major Specialist Hospitals
4. Minor Specialist Hospitals –
   -With Gazetted Inpatient Services
   -Without Gazetted Inpatient Services

5.2.2 Training and Teaching

In Malaysia, psychiatrists with subspecialty are in need. For the subspecialty training in Psychiatry, the number of training centres were increased over the years (2019-2021). The number of subspecialty trainees were also increased over the years (Fig.5.2.1). The COVID19 Pandemic did not stop the intake of the trainees. Intake of master trainees was rather static from 2019-2021. Thus, more candidates decided to go for parallel pathway by taking up MRCPsych (Fig.5.2.2).
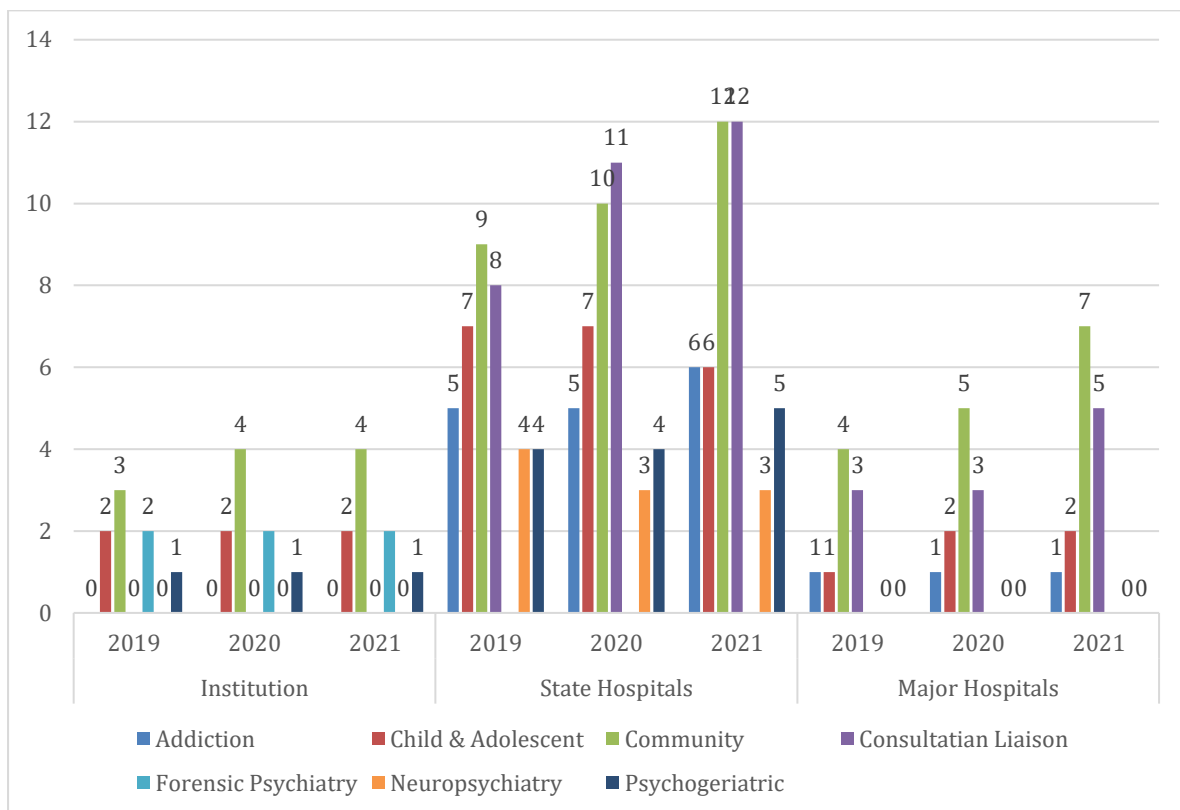

Fig. 5.2.1: *Subspeciality training that is available at different types of hospitals, 2019-2021*
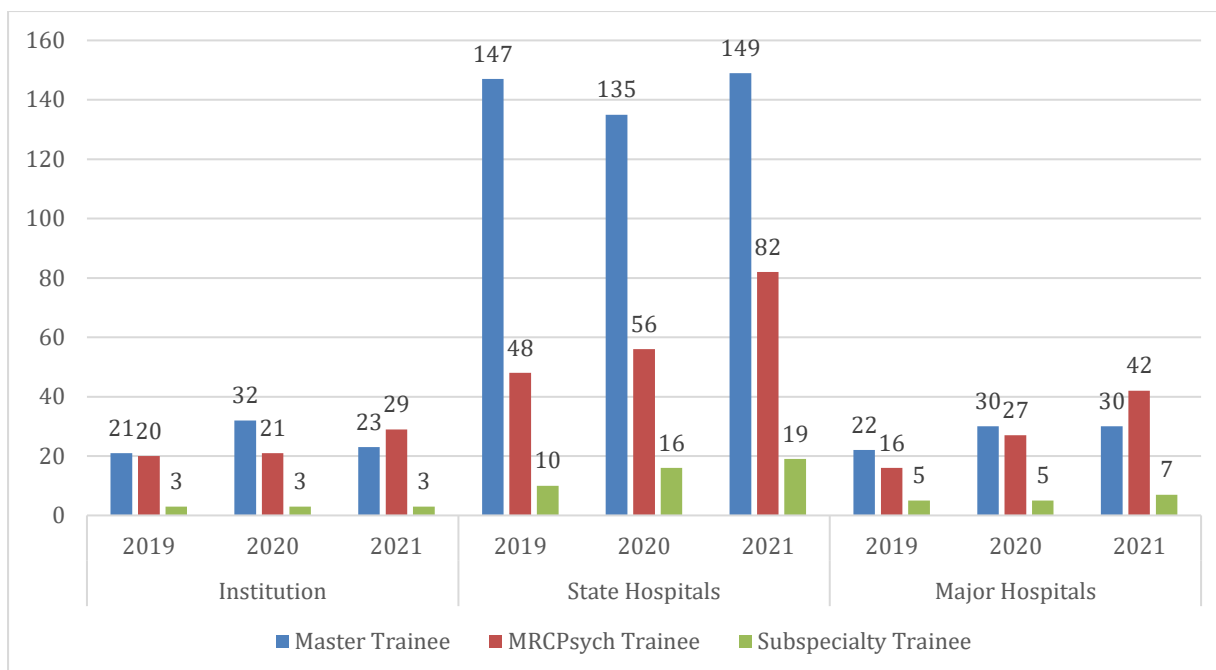
Fig. 5.2.2: *Distribution of postgraduate trainees according to type of hospitals, 2019- 2021*

Psychiatric Centres in KKM health facilities do provide training for house officers as one of their options for sixth posting. The total number of house officers with psychiatric posting was similar for year 2019 and 2020. There was an increment of house officers choosing Psychiatric posting in year 2021 (Fig.5.2.3).
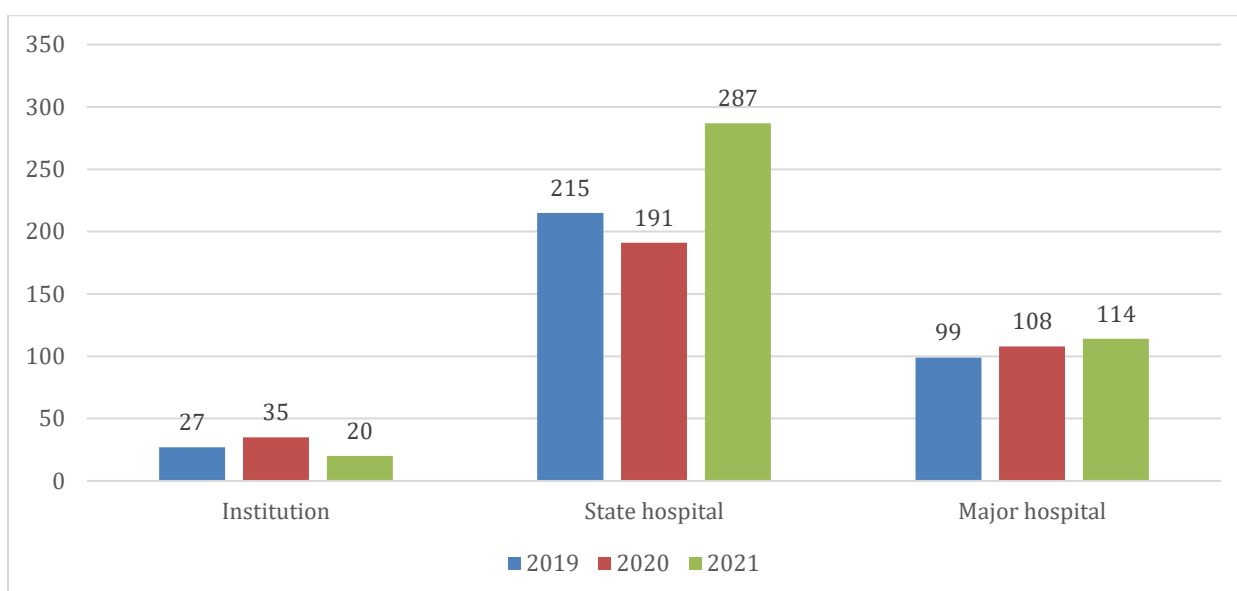

Fig. 5.2.3: *Number of house officers who did their 6th posting at psychiatric centres, 2019-2021*

Most of the Psychiatric Post Basic students had their attachment at mental institution, with some at state hospitals, the least at major hospitals. The number of students were decreased over the period as less intake of new batches and current students called back to their respective hospitals during COVID19 Pandemic Period to increase manpower (Fig.5.2.4).
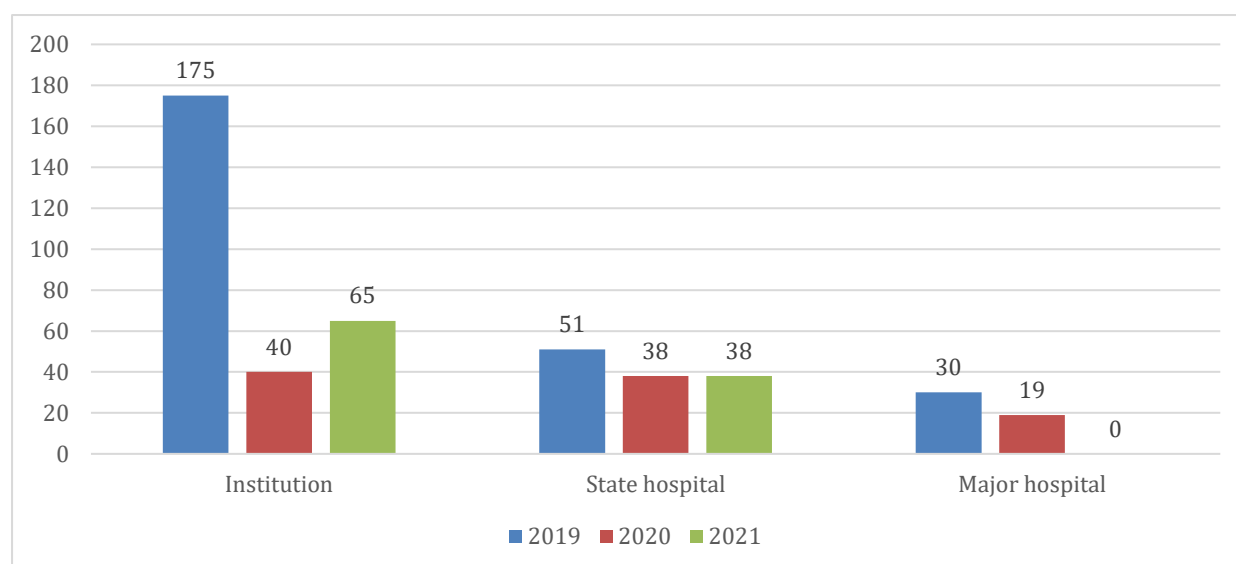

Fig. 5.2.4: *Number of psychiatric post basic students attached at psychiatric centre, 2019-2021*

The training of medical, nursing and medical assistant students was severely affected by the COVID19 Pandemic (Fig.5.2.5-5.2.6). Generally, the COVID19 situation affected their opportunities to have attachments at Psychiatric Centres.
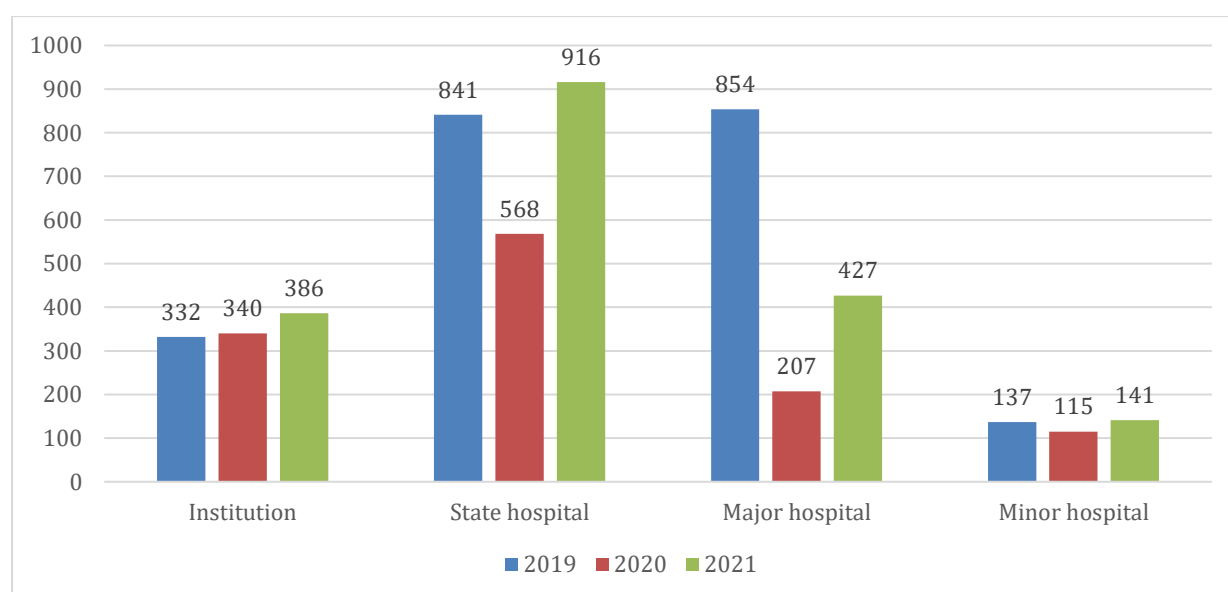

Fig. 5.2.5: *Number of medical students attached at psychiatric centre, 2019-2021*
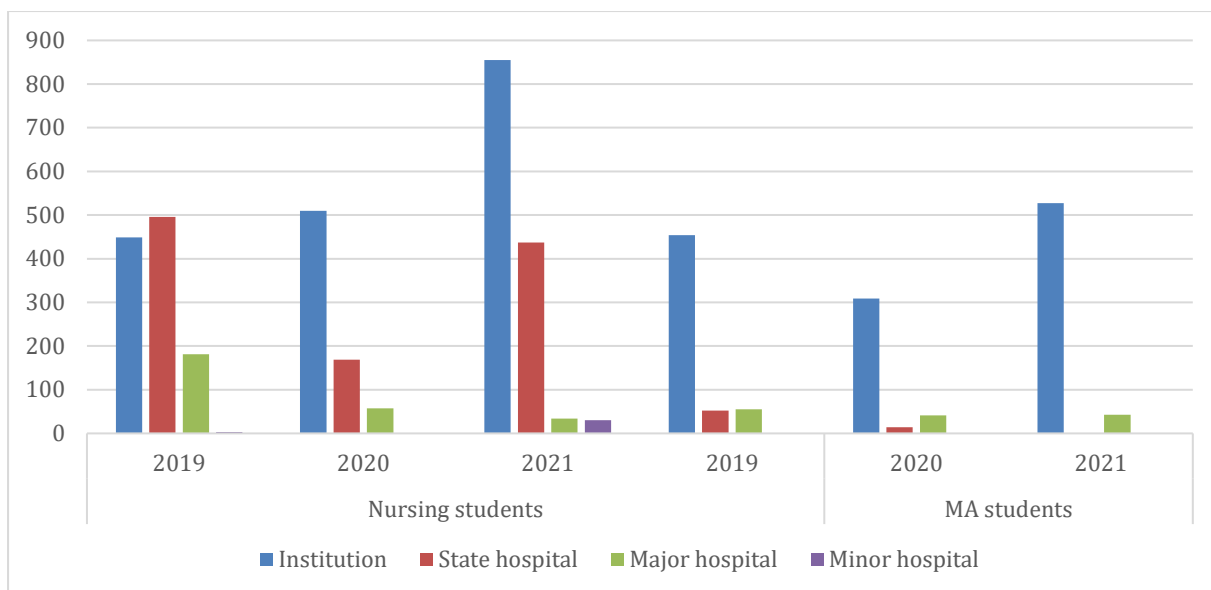
Fig. 5.2.6: The *number of nursing and medical assistant training in psychiatric centre, 2019-2021*

During COVID19 Pandemic, due to the SOP requirements, there were a lot of challenges to organise physical training activities such as continuous medical education, workshop, seminar, course, conference, etc. There was a reduction in the number of training activities conducted in year 2020 when COVID19 waves hit the nation. However, with the advance of Information Communication Technology, training activities shifted to virtual platform. Thus, the number of trainings conducted were increased in year 2021 compared with the year 2020, although in total, the number is still low in comparison with the training activities done in 2019, before the COVID19 Pandemic (Fig.5.2.7).
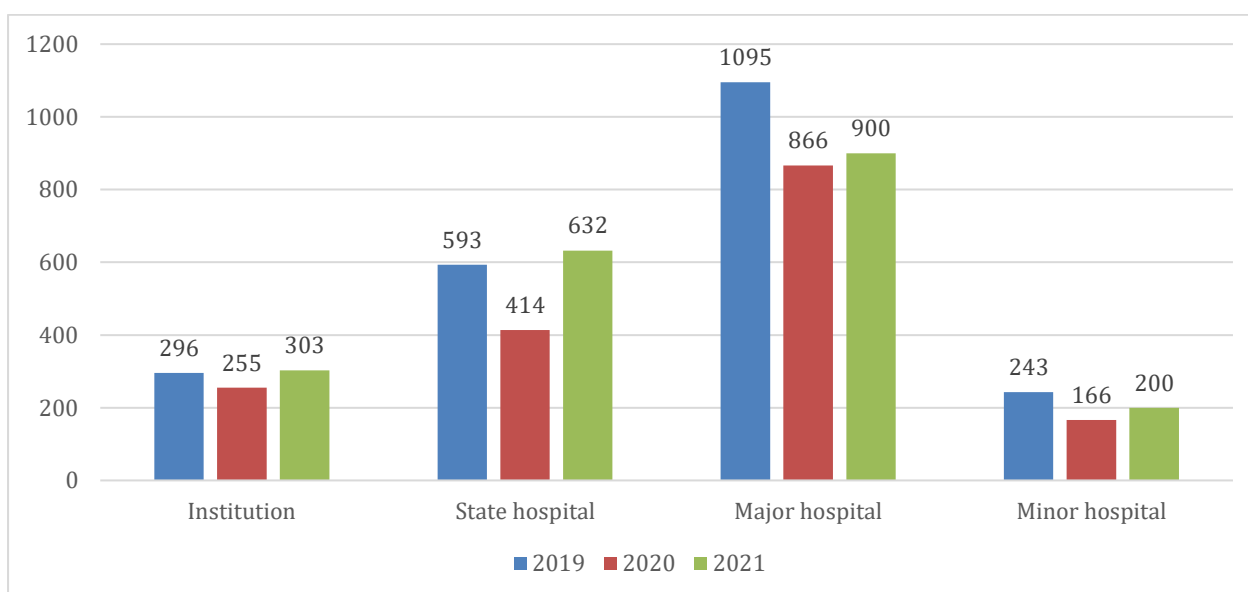

Fig. 5.2.7: *Number of training activities conducted by psychiatric centres, 2019-2021*

5.2.3 Issues and Challenges

The training activities in the psychiatric service include departmental CME, journal club and case presentation or conference. Some centres are accredited for post basic training for paramedics, as well as undergraduate, post-graduate and subspecialty training. Generally, training activities were affected by COVID-19 pandemic due to implementation of Movement Control Order.

The most common challenges faced are:

a. Reduced number of patients in outpatient clinic as well as less admissions to ward leading to inadequate exposure
b. Limited physical training as to comply to SOP
c. Postponement or withhold of training/attachment as well as examination especially for master trainees
d. Deployment of staff and trainees to accommodate COVID-19 services
e. Teaching and learning sessions conducted via mixed platform (more virtual than physical)

In term of house officers training, the main limitation is the requirement of COVID-19 rotation as new logbook was introduced in the second half of year 2021 leading to reduced training exposure for psychiatry and mental health.

5.3. VACCINATION TEAM & VACCINATION FOR PSYCHIATRIC PATIENTS

2020 was a challenging year to the world as a threat to public health emerged in the form of novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) outbreak known as COVID-19. We have all been through a very tough and demanding time frame since this pandemic surfaced as it completely changed our lives. The first case of Covid-19 was recorded in Malaysia on the 25th of January 2020 and together our nation along with the world has been fighting to survive this catastrophe.

Fortunately, we started seeing some light at the end of the tunnel with the vaccination programme that was made available to us in 2021. Our national vaccination programme was headed by 'Jawatankuasa Khas Jaminan Akses Bekalan Vaksin Covid-19 (JKJAV). As for patients in Psychiatry and Mental Health, they were grouped under the second phase of the national vaccination exercise. These patients were prioritized as they were considered a high-risk group. There are some studies

worldwide showing that those with mental health disorders were associated with higher Covid-19 mortality. Factors contributing would be that some patients were not able to understand and comprehend the disease. They fail to comply with standard operating procedures and preventive strategies such as social distancing and wearing masks which then puts them and the society at risk as they were more likely to contract the disease.

Apart from that, another major challenge faced while enlisting patients was that many of them lack awareness of the importance of vaccination. Thus, many centres handled this by having information booths at patient's waiting area to educate them and promote vaccination. We also helped patient with the registration process including downloading the My Sejahtera application, registering themselves and for those who did not have a smart phone, we registered them through the website provided.

We also had to overcome the issue of patients' lack of mental capacity to consent for vaccination as per Section 77 of the Mental Health Act hence necessary assessments were commenced according to the law.

As for the vaccination process per se, patients were recruited at the centres. From our data, 59 Psychiatric Centres were involved in recruitment or registration activities of psychiatric patients for COVID19 Vaccination Programme, as shown in Fig. 5.3.1. Many centres came up with specific workflow to enrol patients. Patients were given their vaccinations at different set-ups accordingly which will be described later. Following that, all enrolment information were gathered and sent to authorities involved and after which patients were informed on the vaccination dates and location. Stable patients were given their vaccinations at the Vaccination Centres. Some vaccination centres had gone the extra mile by providing some quiet rooms and fast-tracking patients at the centres. Another strategy includes giving specific slots on certain days only for psychiatric patients and having psychiatric-related medical personnel on-site to help facilitate and assist the process. Besides that, we also had vaccinators coming over to bigger institutions, clinics and wards to vaccinate patients.
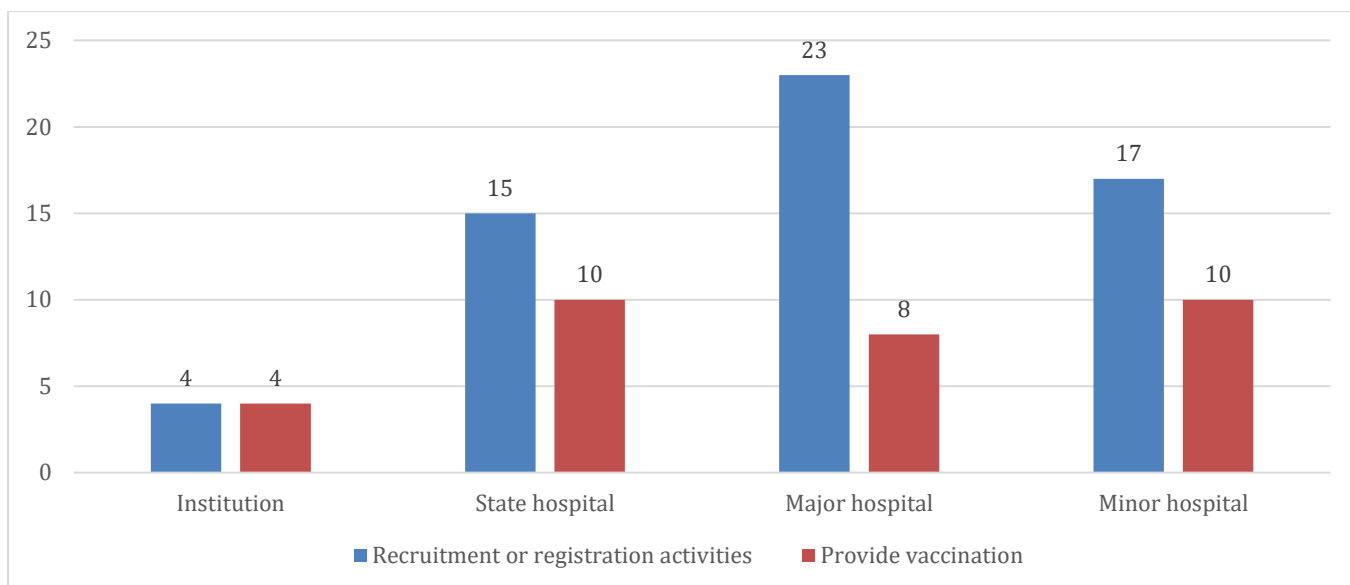
Fig. 5.3.1: *Involvement of psychiatric centres from various settings in recruitment, registration and provide* COVID19 *vaccination for psychiatric patients*

Small number of Psychiatric Centres have dedicated vaccination teams for inpatients, outpatients, and those under community psychiatric nursing care, as shown in Fig. 5.3.2. All 4 mental institutes have dedicated vaccination teams to provide vaccination for all groups of patients. Majority inpatients of Psychiatric Centres under general hospital were vaccinated by hospital vaccination teams. There were 17 psychiatric centres which formed teams to provide vaccination for patients under community mental health team service. We were able to secure the single dose vaccine mostly for our outreach programmes to smoothen the process.
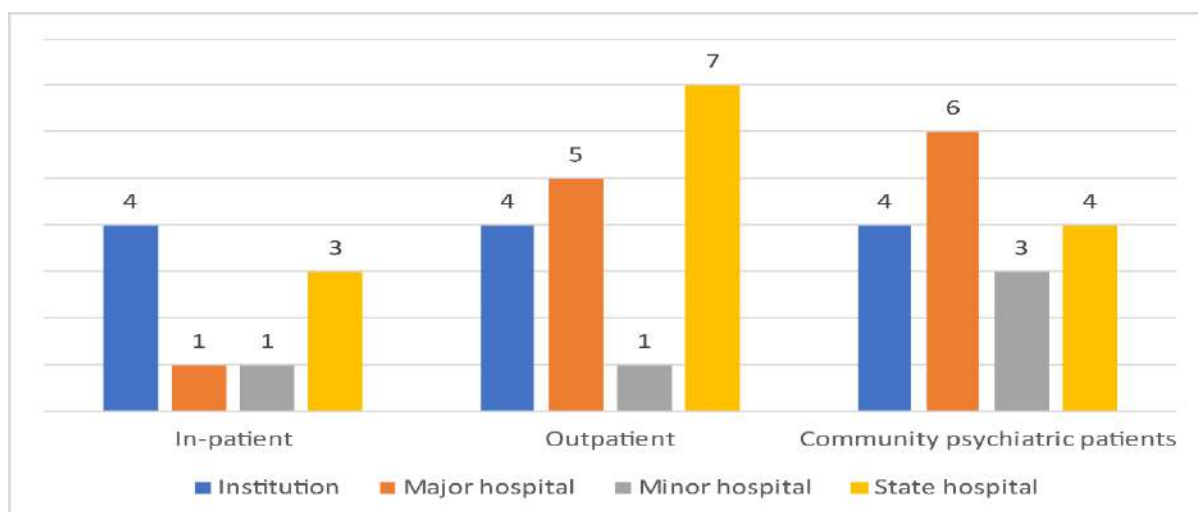

Fig. 5.3.2: Psychiatric centres with designated COVID19 vaccination team for various groups of psychiatric patients

Some of psychiatric team members helped the public health teams who went to vaccinate specific groups of people such as old folk's home residents, special children, and those with special needs as outpatient setting. For mentally ill patients that received vaccination under public health teams, few psychiatric teams from KKM facilities did involve in the vaccination process especially on the consent taking part, as shown in Fig. 5.3.3.
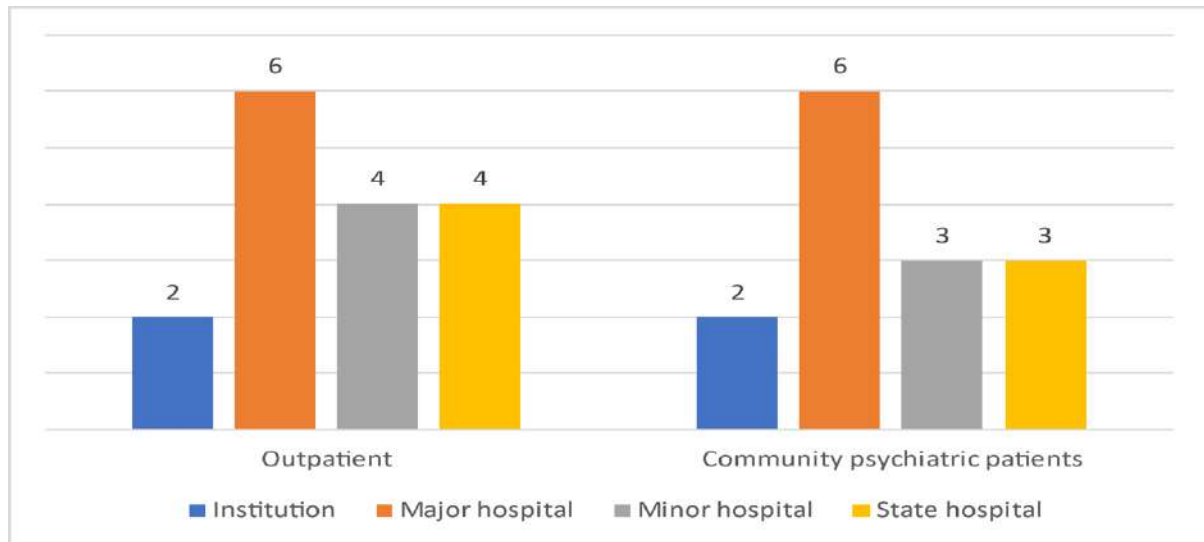

Fig. 5.3.3: *Involvement of psychiatric centres in assisting public health team for providing* COVID19 *vaccination to special group of people*

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7. ABBREVIATION

AHC	Acute Home Care
ACT	Assertive Community Treatment
CPS	Community Psychiatric Service
CMHC	Community Mental Health Centre
CME	Continuous Medical Education
Covid-19	Corona Virus Infection Disease 19
CLP	Consultation-Liaison Psychiatry
ECT	Electroconvulsive Therapy
EMCO	Extended Movement Control Order
H-CPS	Hospital-based Community Psychiatric Service
HR	Human Resources
IPS-SE	Individual Placement and Supported Employment
JKJAV	Jawatankuasa Khas Jaminan Akses Bekalan Vaksin Covid-19
MENTARI	Community mental health centre
MHI	Mental Health Institution
MHPSS	Mental Health and Psychosocial Support
MCO	Movement Control Order
MOH	Ministry of Health
MRCPsych	Member of the Royal College of Psychiatrists
NHMS	National Health and Morbidity Survey
OT	Occupational Therapy
PERKESO	Pertubuhan Keselamatan Sosial
PFA	Psychological First Aid
PPE	Personal Protective Equipment
PPK	Pembantu Perawatan Kesihatan
PUI	Person Under Investigation
PUS	Person Under Surveillance
RESTART	Re-Employment Support, Treatment and Rehabilitation Teamwork
SARS COV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SOP	Standard Operation Procedure
SOCSO	Social Security Organization
SPUB	Sistem Pendispensan Ubat Bersepadu
URTI	Upper Respiratory Tract Infection
WHO	World Health Organization