Patterns of Referral to Clinical Psychology Services in the Ministry of Health Malaysia

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Abstract

Background: This descriptive study identifies the demographic characteristics and patterns of referral to clinical psychology services, which include types of diagnosis, types of referral and source of referrals in child, adolescent, adult and geriatric cases in Malaysia.

Methods: We utilised 2,179 referrals between January and December 2015 from six general hospitals and three mental health institutions that provide clinical psychology services.

Results: The percentage of male referrals (60.3%) is higher than that of female referrals (39.7%). Adult cases had the highest percentage of referrals (48.2%). Children (48.8%) and adolescent (28.1%) cases were mainly referred for psychological assessment. Meanwhile, adult cases (74.8%) were mainly referred for psychological intervention. Neurodevelopmental disorders was the diagnosis with the highest percentage of referrals recorded (41.4%), followed by depressive disorders (13.3%) and anxiety disorders (12.7%), and the combination of other disorders. Psychiatrists provided the highest number of referrals (82.2%), which is unsurprising as both fields are closely related.

Conclusion: Clinical psychology services within the Ministry of Health (MOH) Malaysia play an important role in mental health care.

Keywords: pattern, referrals, clinical psychology, services, mental health

Introduction

The demands for clinical psychology services are increasing in parallel with the growing number of patients with mental health problems. In 2006, the Australian government launched the Australian Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (Better Access). The programme proved to be a success, with good evidence of improved access to services for common mental disorders.
services. This study aims to identify the demographic characteristics and patterns of referral, which include types of referral, types of diagnosis and source of referrals in children, adolescents, adults and geriatric patients.

Subjects and Methods

A retrospective review of referral letters received by clinical psychologists from January to December 2015 was done. Data were gathered from seven clinical psychologists in five government hospitals (Hospital Pulau Pinang, Hospital Kuala Lumpur, Hospital Putrajaya, Hospital Kajang and Hospital Raja Perempuan Zainab II), five clinical psychologists from three mental institutions (Hospital Bahagia Ulu Kinta Perak, Hospital Permai Johor and Hospital Mesra Bukit Padang, Sabah) and two clinical psychologists in a rehabilitation hospital (Hospital Rehabilitasi Cheras). Data were analysed using SPSS version 22 for descriptive analysis.

Results

A total of 2,179 referrals were received for clinical psychology services in 2015. One thousand and thirty-seven (47.6%) referrals were for assessment, 934 (42.9%) referrals were for intervention and 208 (9.5%) referrals were for both assessment and intervention. Table 1 displays the demographic characteristics and the source of referrals of the patients. Ages range from 2 to 84 years. The mean age of the study sample is 23 years.

Nowadays, clinical psychologists in Malaysia contribute significantly beyond psychological assessments and interventions. They are actively involved in areas such as health promotion programmes, behavioural medicine, neuropsychological assessments, professional management issues and forensic sciences (4). Although very few in numbers, clinical psychologists in the Ministry of Health (MOH) Malaysia are involved in the treatment of psychologically related disorders in almost every level of sub-specialties of medicine. As such, clinical psychologists are also consistently being referred for psychologically oriented advice and recommendations for suitable treatment options by physicians, surgeons and other medical practitioners. In fact, their service in some teaching hospitals is not restricted to the psychiatric department, but they also provide services in other departments such as pediatrics, surgery, medicine, community medicine, obstetrics and gynaecology (4).

Psychiatrists are not the sole source of referrals, as shown by studies such as that by Wagner and Smith (5), who studied the referral patterns of psychological services in a paediatric clinic. Johnston (6) found that clinical psychologists in health centres received more referrals of patients with diverse problems compared with those in centrally organised services. Several studies have investigated the pattern of psychiatric referrals (7–9), but less is known about referral to clinical psychology services. This study aims to identify the demographic characteristics and patterns of referral, which include types of referral, types of diagnosis and source of referrals in children, adolescents, adults and geriatric patients.
Table 1. Demographic characteristics and source of referrals to clinical psychology services

| Age group                        | Number of referrals | Percentage |
|----------------------------------|---------------------|------------|
| Child (0–12 years old)           | 561                 | 25.7       |
| Adolescent (13–17 years old)     | 496                 | 22.8       |
| Adult (18–64 years old)          | 1,050               | 48.2       |
| Geriatric (65 years old and above) | 72                  | 3.3        |
| Gender                           |                     |            |
| Male                             | 1,315               | 60.3       |
| Female                           | 864                 | 39.7       |
| Ethnic                           |                     |            |
| Malay                            | 1,288               | 59.1       |
| Chinese                          | 490                 | 22.5       |
| Indian                           | 199                 | 9.1        |
| Others                           | 202                 | 9.3        |
| Source of referrals              |                     |            |
| Psychiatrists                    | 1,791               | 82.2       |
| Others (pain specialists, rehab specialists, pediatricians) | 388 | 17.8 |

Figure 1. Percentage of age groups according to types of referral
intervention, with half of all cases reported for this age group (50%). Notably, geriatric cases had the lowest percentages of referrals for assessment (1.6%), intervention (3.5%) or both (6.7%).

Details of the types of diagnosis are presented in Table 2. Neurodevelopmental disorders was the diagnosis with the highest percentage of referrals recorded (41.4%), followed by depressive disorders (13.4%) and anxiety disorders (12.8%). The least referred to the clinical psychology services were dissociative disorders and sexual dysfunction, with less than 0%.

Figure 2 and Figure 3 display the tabulation of the types of referral according to age groups. Similar patterns of diagnosis were seen among children (number of referrals = 659) and adolescent (number of referrals = 119), groups where majority were diagnosed with neurodevelopmental disorders, which include intellectual disabilities, autism spectrum disorders, attention deficit/hyperactivity disorder and specific learning disorders. For adults, the highest number of diagnosis is depressive disorders (number of referrals = 249), followed by anxiety disorders (number of referrals = 238). A similar pattern is seen among geriatric patients, in which they were mostly diagnosed with depressive disorders (number of referrals = 16) and anxiety disorders (number of referrals = 7).

Discussion

Clinical psychologists in the MOH serve two major roles in patient management: evaluation of a case using standardised psychological tools and provision of psychological interventions. The range of psychological assessment to be provided includes behavioural assessment, cognitive/intelligence assessment, personality assessment and neuropsychological assessment (10). However, the types of psychological assessment provided may be subject to availability of psychological tools at different settings.

Table 2. Characteristics of patients referred for clinical psychology services

| Type of diagnosis                              | Number of referrals | Percentage |
|-----------------------------------------------|---------------------|------------|
| Neurodevelopmental disorders                  | 903                 | 41.4       |
| Depressive disorders                          | 291                 | 13.4       |
| Anxiety disorders                             | 278                 | 12.8       |
| Schizophrenia spectrum and other psychotic disorders | 123                 | 5.6        |
| Non-psychiatry diagnosis                      | 98                  | 4.5        |
| Neurocognitive disorders                      | 94                  | 4.3        |
| Obsessive compulsive and related disorders    | 83                  | 3.8        |
| Substance related and addictive disorders     | 44                  | 2.0        |
| Bipolar and related disorders                 | 42                  | 1.9        |
| Trauma and stressors related disorders        | 42                  | 1.9        |
| Other conditions that may be a focus of clinical attention | 42                  | 1.9        |
| Personality disorders                         | 39                  | 1.8        |
| Disruptive, impulsive and control disorders   | 35                  | 1.6        |
| Not mentioned in referral                     | 35                  | 1.6        |
| Other mental disorders                        | 9                   | 0.4        |
| Somatic symptoms and related disorders        | 5                   | 0.2        |
| Feeding and eating disorders                  | 5                   | 0.2        |
| Sleep wake disorders                          | 5                   | 0.2        |
| Dissociative disorders                        | 3                   | 0.1        |
| Sexual dysfunction                            | 3                   | 0.1        |
| Total                                         | 2179                | 100.0      |
With almost half of the referrals received were for psychological assessment, clinical psychologists undeniably play a crucial role in the evaluation of patients. Psychological assessment refers to the iterative decision-making process by systematically collating data of an individual (or individuals) through multiple sources in order to adequately respond to the assessment question (11). Therefore, the understanding of psychopathology and familiarity with the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) are imperative as clinical psychologists and psychiatrists work hand in hand. Hence, it is not surprising that 82.2% of referrals came from psychiatrists. Psychiatrists often work...
allowing the integration of information from multiple perspectives to help in understanding a particular case (12). Remaining referrers were paediatricians, anaesthesiologists and other specialists. Despite the small percentage of referrals (17.8%) from these groups, this highlights the need for clinical psychology to work collaboratively with clinical psychologists by utilising the best range of psychological assessment tools to establish and validate a diagnosis.

This has also been the practice in Australia, in which psychiatrists work with clinical and research psychologists in assessment cases, allowing the integration of information from multiple perspectives to help in understanding a particular case (12).

Figure 3. The tabulation of types of referrals (adult and geriatric cases)
Almost half of referrals received were from children and adolescent groups (48.5%). According to the National Health and Morbidity Survey, 12.1% of the child population in Malaysia is estimated to be facing a mental health issue, especially those in the 5–9 year old group (3). This highlights the need for early intervention approaches to prevent further comorbidity and chronicity in adulthood (20). Besides general psychiatrists, child psychiatrists, speech therapists and occupational therapists, clinical psychologists in Malaysia work with a multidisciplinary team (10). In the management of children and adolescent cases, the treatment plan should be multimodal and may include psycho-education, cognitive behaviour therapy, supportive therapy, parent training and pharmacotherapy. As clinical psychologists receive training in evaluation and management in children and adolescent cases, this could be one of the factors why neurodevelopmental disorders was the diagnosis with the highest percentage of referrals (41.4%). With the rising prevalence of neurodevelopmental disorders, including attention deficit hyperactivity disorder (ADHD) (21), autism spectrum disorder (22) and intellectual disability (23), referrals to clinical psychologists are expected to increase.

The present study also revealed referrals received for male patients (60.3%) surpassing that for female patients (39.7%). Although this result is quite surprising in our settings, there is a possibility that the high percentage in male patients was influenced by the high number of referrals received for neurodevelopmental disorders. A study found that boys were more frequently referred than girls to a child psychiatry outpatient setting (24). On the other hand, the female adult population is more vulnerable to mental health issues (25) compared to their male counterparts.

**Conclusion**

Clinical psychologists in the MOH play an important role in the diagnosis and treatment of children, adolescent, adult and geriatric patients, especially in psychiatry services. Children and adolescents were more often referred for psychological assessment, whereas adults were frequently referred for psychological intervention. The findings in this study are useful in delivering more efficient services suited to the needs of the population served.
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Ethics of Study

This research was registered in the National Medical Research Register (NMRR-15-2368-27525) and was approved by the MOH Medical Research Ethics Committee.

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Authors’ Contributions

Conception and design: MM, UIS, TS-ZTB, SAG
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Drafting of the article: MM, UIS, TS-ZTB, SAG
Critical revision of the article for important intellectual content: ND, WMAMWY
Final approval of the article: ND, WMAMWY
Provision of study materials or patients: MM, UIS, ND, TS-ZTB, SAG
Statistical expertise: ND, WMAMWY
Administrative, technical, or logistic support: ND, WMAMWY
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