Reasons for referral, intervention approaches and demographic characteristics of clients with intellectual disability attending adult psychiatric outpatient services in the Kingdom of Bahrain

Grey, I. Al-Sahaiti, B., Al-Haddad, M., & McClean, B, Reasons for referral, intervention approaches and demographic characteristics of clients with intellectual disability attending adult psychiatric outpatient services in the Kingdom of Bahrain, Journal of Intellectual Disability Research, doi: 10.1111/jir.120, 2013

Abstract

Background

Relatively little information is available regarding the use of psychiatric services by individuals with intellectual disability (ID) in Arab countries. The current study aimed to identify (1) the reasons for referral; (2) demographic characteristics of individuals referred; (3) previous contact with child psychiatric services; (4) psychiatric diagnoses; (5) level of ID; (6) nature of interventions; and (7) patterns of medication usage in individuals attending a specialist psychiatric service for individuals with an ID in the Kingdom of Bahrain.

Method

Case file analysis was used. Files that recorded attendance at the specialist service within a specific calendar year were selected. A total of 537 files were available for review and 79 contained records indicating the individual had been seen within the year.

Results

The primary referral reason to adult psychiatric services was the presence of behavioural disturbance. Pharmacological intervention was the dominant treatment choice and no individual was recommended for psychological/behavioural intervention. Psychiatric diagnosis was not recorded in over 90% of cases.

Conclusion

Services in the Kingdom of Bahrain for individuals with ID rely exclusively on pharmacological approaches for the treatment of behavioural disorders. Implications for best practice guidelines are discussed.

Introduction

Despite the ubiquity of intellectual disability (ID) across all countries around the globe, substantial variations exist between countries with respect to the quality and quantity of services that individuals with ID receive (Fujiura & Parish 2007). Economic, cultural, legal and religious factors may impact not only on the services that this population receives but also on their social status (Rice 2002;

Skinner & Weisner 2007). It is also evident that there are substantial disparities between countries in relation to the amount of research conducted in the area of ID with a weighting towards Western countries. In contrast relatively little research on ID services has emanated from the countries of the Middle East and of the Gulf Co-operation Countries in particular (Saudi Arabia, Qatar, Jordan, Oman, the United Arab Emirates and the Kingdom of Bahrain). While it may be tempting in light of the homogeneity of religion and language across these countries to infer commonalities, caution should be exercised in this respect owing to the subtle but substantial differences between them. Reliable prevalence rates of ID have yet to be established in several of these countries and only estimates are generally available (Dukmak 2009). Information regarding service provision within these countries is also scant. In a study on the presentation of autism and its prevalence in Saudi Arabia, Al-Salehi et al. (2009) reported that just over half their sample of children were in receipt of psychotropic medication for the control of unspecified behavioural symptoms suggesting a greater reliance on pharmacological approaches to behaviour management in that country.

Disability is considered morally neutral in Islam and is seen neither as a blessing nor as a curse but simply a fact of life which must be addressed appropriately by the society of the day. Yet, little is known about the services that people with ID receive in Arab gulf countries and that information which is available is largely limited to a history of institutional care which was initiated in many Arab countries in the 1960s (Merrick et al. 2009). The Kingdom of Bahrain is an island country lying in the Persian Gulf. Census figures for 2008 indicate a total population of 1 106 509 comprised of Bahraini's and foreign nationals with the local Bahraini population standing at 537 719. State services for individuals with ID are such that if an individual has an ID and a health problem they are recommended to attend their local health care service free of charge and avail of primary care services. Mental health and behavioural difficulties experienced by individuals with ID are the responsibility of a specialist psychiatric service attached to the Department of Psychiatry, Salmaniya Medical Complex and individuals with these difficulties are referred there. This is the only state funded, free of charge service, available to the individuals with ID and mental health/behavioural problems in the Kingdom of Bahrain. Individuals referred to Salmaniya Medical Complex for ID and behavioural problems are typically seen only by a psychiatrist as there remains no dedicated psychological service for this population. According to Ministry of Health statistics, in 2008 there were 40 inpatient beds for individuals with ID. There were 51 admissions in that year and 39 discharges with the average length of stay being 444 days. The picture regarding individuals attending outpatient services is less clear owing to the practice of reporting total number of visits rather than the number of individuals seen.

In 2008, there were a total of 1158 outpatient visits to the Department of Psychiatry ID service with 1067 of these visits accounted for by Bahraini's with

non-Bahraini's accounting for only 61 visits. Official figures do not indicate the total number of individuals with ID seen in a given year and reasons for referral and interventions offered are not reported in official statistics. Such information provides only the most cursory of an overview of patterns of usage of psychiatric services for individuals with ID in the Kingdom and specific patterns of treatment and service use following referral remain unidentified. Such an analysis would be potentially useful for service planning and development in light of previous research which suggests that individuals with ID with a diagnosis of schizophrenia spectrum disorder and a greater number of affective/neurotic symptoms were more likely to be heavy outpatient service users (Spiller et al. 2007).

The current study set out to identify the treatment and service profile of the individuals seen by the Department of Psychiatry in the Kingdom of Bahrain in 2009 as recorded in client case notes. Specific aims were to identify the following (1) the reasons for referral; (2) demographic characteristics of individuals referred; (3) previous contact with child psychiatric services; (4) psychiatric diagnoses; (5) level of ID and presence/absence of Pervasive Developmental Disorder; (6) nature of interventions; and (7) patterns of medication usage.

Method

Participants

A total of 537 files were available for inspection in the records office of the Department of Psychiatry, Salmaniya Medical Complex. This is the total number of individuals with ID who have had recorded contact with the ID service and which were available in the records office of the hospital. The criterion for inclusion in the study was at least one visit to the Department of Psychiatry during the period 1 January 2009 to 31 December 2009 met the (i.e. at least one meeting with a psychiatrist from the Department of Psychiatry). Of the 537 files available, a total of 79 files contained a record of one visit or more to the department during that time period.

Design

A case review design was implemented for the present study. A template was designed based upon inspection of several files. Each file that met the criteria for inclusion (i.e. at least one contact with the Department of Psychiatry in the specified interval and attending outpatient services) was reviewed by the first author and the template completed. The template included specific questions on the use of child and adult psychiatric services, the presence of psychiatric diagnoses, medical conditions and whether objective rating scales to assess psychiatric symptoms and challenging behaviour were implemented. Reliability of recording was determined in 13% of cases with a second individual unrelated to the current research completing the template for a number of files (i.e. 10

files). Reliability scores ranged between 96% and 100% on information recorded. Ethical approval for the study was provided by the ethics committee of the hospital and the study was conducted in accordance with the principles associated with the declaration of Helsinki.

Results

Client characteristics

Of the 79 valid cases that attended, 38 (48%) were male and 41 (52%) were female. Over 87% of the sample was Bahraini with 4% being Iraqi nationality followed by 1% for India and Pakistan respectively. In 6% of cases nationality was not recorded. The mean age of people during the sample year was 32 years (SD = 14 years).

Previous contact with child psychiatric services

File reviews indicated that 36 individuals had previously made contact with child psychiatric services prior to passing to the responsibility of adult psychiatric services at age 18 (see Table 1). Mean age at referral for this sub-group was 10.5 years and the minimum age was 3 years (SD 4.4 years). In respect of reason for initial attendance, behavioural problems were cited in 24 cases followed by medical review (four cases), school referral and advice in one case each. No reason was cited in six cases. The majority of individuals presented with one or two challenging behaviours (18 cases). The most common behavioural problems reported were aggression in 18 cases (40%), sleep disturbance in 12 cases (15%) and property destruction in one case (2.8%). The category of 'other' but unspecified behavioural disturbance accounted for eight cases (10%). No specific psychiatric diagnosis related to an International Classification of Diseases-10 (ICD-10) diagnostic classification was recorded on any of the 34 individual files. Psychiatric symptomatology related to an ICD-10 diagnostic category was only recorded in one case (hallucinations). In respect of intervention, behaviour therapy was recommended in one case. Pharmacological intervention was commenced in 24 of the 36 cases (66%). Twenty individuals were placed on anti-psychotic medication (Thioridazine), two were placed on atypical anti-psychotic medication (risperidone) and one each received mood stabilising medication and an anxiolytic respectively (carbamazepine and clonazepam).

Table 1. Client characteristics at referral to child psychiatry

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Referral characteristics of clients presenting at child psychiatry	
Number of clients first seen at child psychiatry services	36 (45%)
Mean age at first referral	10.5 years (range 3–18)
<i>Reason for Referral</i>	
Behavioural disturbance	24 (66%)
Medical review	4 (11%)
School referral issue	1 (2%)
Advice	1 (2%)
Unknown	6 (16%)
<i>Behavioural disturbance type</i>	
Aggression	14 (40%)
Sleep disturbance	12 (34%)
Property destruction	1 (4%)
Other	8 (10%)
<i>Interventions instigated</i>	
Behavioural intervention	1 (2%)
Pharmacological intervention	24 (66%)
<i>Level of intellectual disability (estimated)</i>	
Borderline	1 (3%)
Mild	2 (6%)
Moderate	9 (26.5%)
Severe	7 (21%)
Profound	0 (0%)
No estimate provided	15 (44%)
<i>Pharmacological intervention</i>	
Melleril	20 (55%)
Respiridone	2 (8%)
Carbamazepine	1 (4%)
Clonazepam	1 (4%)

In respect of level of ID, classifications listed on file were severe (21%), moderate (26%), mild (6%), borderline (3%). No file identified any individual as having a severe level of ID. Level of ID was not recorded in 44% of cases. However, no file contained the results of a formal assessment to indicate the level of intellectual functioning and no file contained formal information

regarding adaptive functioning. In all cases, the level of ID was an estimate provided by the child psychiatrist. In all cases, the formal criteria for diagnosing ID were not met.

Client characteristics at first referral to adult psychiatry

The living location of the majority of the sample was not recorded on first referral to the Department of Psychiatry in 59 cases (79%). Fourteen individuals were identified as living with family members (19%) and two cases were recorded as living elsewhere (3%; see Table 2). The primary presenting reason for initial referral to adult psychiatric services was behavioural disturbance in 28 cases (37%), followed by review in eight cases (11%), and admission to an inpatient unit in three cases (4%). Reason for first referral was not recorded in 31 cases (41%). Thirteen clients (17%) presented with one recorded challenging behaviour, 10 (13%) with two or more challenging behaviours and a further 10 cases (13%) presented with three challenging behaviours. Physical aggression was the most common form of challenging behaviour accounting for 17 cases (21%) followed by sleep disturbance in five cases (7%) and self-injurious behaviour. Psychiatric symptomatology was not recorded on file in 76 cases (94%) of cases. In relation to treatments recommended, instigated or continued at first referral to adult psychiatry, behaviour therapy was not recommended or instigated in any individual case. In contrast, pharmacological treatment was instigated or continued in 54 cases (72%).

Table 2. Client characteristics at referral to adult psychiatry

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Characteristics of clients presenting at adult psychiatry services in 2009	
<i>Living location</i>	
With family members	14 (19%)
Not recorded	59 (78%)
Other	2 (3%)
<i>Reason for initial referral recorded</i>	
Behavioural disturbance	28 (37%)
Review	8 (11%)
Inpatient admission	3 (4%)
Not recorded	31 (41%)
<i>Behavioural disturbance</i>	
Physical aggression	17 (21%)
Sleep disturbance	5 (7%)
Self-injurious behaviour	3 (4%)
<i>Interventions instigated/continued</i>	
Behavioural intervention	0 (0%)
Pharmacological	51 (64%)
<i>Diagnoses recorded on file</i>	
Depression	4 (6%)
Obsessive-compulsive disorder	2 (3%)
Not recorded	73 (91%)
<i>Pharmacological treatments</i>	
Anti-psychotic	28 (55%)
Atypical anti-psychotic	10 (20%)
Anti-depressant	5 (9%)
Mood stabiliser	4 (8%)
Anxiolytic	4 (8%)
Mean number of visits to outpatient department	5.3 (range 1–21)

In respect of associated medical or neurological conditions, only one individual was diagnosed with autism and 9% of individuals had a comorbid diagnosis of epilepsy. Nine per cent were classed as having an ‘other’ medical condition and no additional diagnosis was recorded in 80% of cases. The mean number of visits made by clients during 2009 was 5.3 (range 1–21). Pearson product moment correlation analyses using SPSS 17 indicated no significant relationship between frequency of attendance and presence of behaviour problems at first meeting in

2009, number of challenging behaviours at first meeting, gender, estimated level of ID and age in 2009. Objective rating scales for measuring aspects of behavioural disturbance over the course of 2009 such as frequency, episodic severity or management difficulty were not on any individual client file. As such it is not possible to accurately determine the effectiveness of any pharmacological intervention over the year in respect of treatment of behavioural disturbance. Rating scales for assessment of psychiatric symptomatology in individuals with ID were also not available on any individual file.

Discussion

The results obtained in the current study add to the limited body of research available of the care provision for individuals with ID in the Kingdom of Bahrain. Specifically they help identify the services available and the usage of these services. This research had a number of goals: (1) the reasons for referral; (2) demographic characteristics of individuals referred; (3) previous contact with child psychiatric services; (4) psychiatric diagnoses; (5) level of ID and presence/absence of Pervasive Developmental Disorder; (6) nature of interventions; and (7) patterns of medication usage.

The primary reason for referral to adult psychiatric service was the presence of challenging behaviour. In 37% this was identified as the primary reason for referral. However, the presence of such behaviour was not found to be correlated with frequency of outpatient attendance. This is in contrast to previous research on which indicates that there is greater usage of mental health services among those individuals with ID who present with challenging behaviours (Spiller et al. 2007). Somewhat worryingly however, is the high percentage of files that did not record the reason for initial referral to adult psychiatric services at 41%. The most plausible explanation for this observation is likely to be that these individuals simply received a continuity of care owing to transfer from child psychiatric services to adult psychiatric services. Forty-five per cent of the total number of individuals seen in 2009 had previously attended child services and as such these two figures largely overlap. In respect of demographic characteristics, the majority of individuals lived with family members and the mean age of individuals was 35 years. There was a substantial variation in the number of visits to outpatient psychiatric services (between one and twenty-one) with an average of five visits per year.

As mentioned a high number of clients had previously attended child psychiatric services and the mean age at referral to these services was 10 years. From the files examined in relation to these individuals it was evident that the case notes from child psychiatry had been transferred into new files on entering adult psychiatry services. Again, the presence of challenging behaviour constituted the predominant reason for referral in 66% of cases. Physical aggression accounted

for the largest sub-category of challenging behaviour with 40%. In all cases where challenging behaviour was identified, pharmacological intervention was the primary therapeutic response. Behaviour therapy was only recommended in one case but was not instigated. The second largest category of problem recorded was sleep disturbance which, though does not meet the criteria for challenging behaviour specifically, is one that is known to substantially contribute to levels of familial stress (Souders et al. 2009). Medication to aid sleep was not prescribed in any individual case and the use of psychotropic medication in these cases suggests that such medication may have been used for their sedative properties. Overall, the picture that emerges from child psychiatric services is a near total reliance on pharmacological intervention with anti-psychotic medication in the form of Thioridazine being the dominant agent prescribed. Because of concerns in relation to cardio toxicity this medication has been discontinued in many parts of the world. Owing to the focus of the current study on adults attending psychiatric outpatient services, it is not possible to determine the current usage of this medication in child psychiatric services. However, it is likely to have been discontinued in accordance with medical practice guidelines. The absence of behavioural intervention for children with ID is somewhat worrying and itself requires some discussion. A substantial amount of literature has emerged over the past 30 years indicating that early behavioural intervention can go some way to ameliorating challenging behaviour and teaching both functional and adaptive behaviour skills. This in itself can improve quality of life and facilitate overall better functioning (Eldevik et al. 2009, 2010).

In respect of adult psychiatric services, a largely similar picture emerged. Challenging behaviour was the primary reason for referral in the study year with 37% of cases. However, there was a discrepancy between the numbers presenting with challenging behaviour and those in receipt of psychotropic medication as 64% of the total number were receiving such intervention. This may suggest that the actual rate of challenging behaviour was in fact higher than that recorded on file. It may be that pharmacological intervention was primarily instigated for the treatment of challenging behaviour as rate of psychiatric disorder recorded on file was quite low at 9%. The accuracy of this figure can be of course debated and it may be that the actual rate was substantially higher. It does however raise an issue frequently debated in clinical circles and in the literature concerning the efficacy of psychotropic medication for challenging behaviour in the absence of a psychiatric disorder. The consensus of the evidence to date is that the use of psychotropic medication for the treatment of challenging behaviour in the absence of such disorder is unlikely to be effective (Tyrer et al. 2009).

The presence of a psychiatric disorder was almost wholly absent from case files as were additional diagnoses such as autism. Level of ID was only recorded in just over half of all cases. The very substantial difference between the recorded rate of psychiatric disorder and the frequency of usage of psychotropic

medication does bring the issue of evidence-based practice to the fore. It may be that psychiatrists in Bahrain use psychotropic medication for the treatment of challenging behaviour irrespective of psychiatric diagnosis and determining such a diagnosis may simply have been viewed as unnecessary.

Implications for practice

That pharmacological intervention is the only real treatment option in the Kingdom of Bahrain and that psychological services are absent for the intellectually disabled population raises the issue of first how disability is perceived within this culture and second the training and experience of psychiatrists in the area of ID. The Kingdom of Bahrain is not a poor country and has a well-staffed psychiatric service and as soon monetary considerations alone are unlikely to impede service delivery and development. However, there may be the perception that disability is a biological problem and as such relatively unmalleable. A number of converging points suggest this may be the case. First, in all cases no psychological/psychometric assessment was conducted to determine level of intellectual functioning. Second, behavioural intervention such as teaching of functionally equivalent skills for challenging behaviour is absent. This latter observation may be more pertinent as implicit in behavioural psychology is the idea that learning can occur with the intellectually disabled population. Many countries have moved towards a multi-disciplinary model of care for those with ID and behavioural intervention for challenging behaviour in particular is now an established general part of service input. This of course raises the issue of the training of psychiatrists in the Kingdom of Bahrain. Anecdotal conversations with psychiatrists in the hospital where the study was conducted revealed that their perception of behavioural or psychological intervention appeared largely limited to the use of token economies. Developments such as functional analysis/assessment, function-based interventions, functional communication training or formal frameworks for intervention such as multi-element behaviour support were largely unheard of. As such it is feasible to assume that the training of psychiatrists in this gulf country in the area of ID reflects a predominantly biological or pharmacological approach. It is unclear at present, owing to the lack of research in this area, as to whether the practices observed in this study are also characteristic of other gulf countries.

The near total absence of psychological and more specifically behavioural services for individuals with ID may in fact be linked to how disabilities are perceived, as how disability is understood is linked to what are perceived to be appropriate means of addressing the disability (Rice 2002). In Islamic tradition the best therapy is the one designed to enhance the health of the person, his psyche and spirit. Yet it may be that ID is seen as a biological problem and perspectives emphasising the social construction of disability absent from undergraduate and post-graduate medical training appear to be absent or if present may be relegated to a less important status when it comes to intervention. Nonetheless, one is left in the position of having to offer potential

explanations as to complete reliance on pharmacological approaches and the complete absence of any psychological intervention. It may be argued that while there is an absence of formal psychological intervention, there may be informal ones offered by the consulting psychiatrist (Feldman et al. 2004). However, even informal interventions, if offered, were not recorded resulting in the absence of information for future file users. To the knowledge of the author, there is no study yet currently conducted assessing the attitudes of Arab psychiatrists towards causation and intervention in ID. Such a study may go some way to understanding the pattern of results seen here.

Conclusion

The primary reason for referral to adult psychiatric services for adults with ID in the Kingdom of Bahrain was the presence of challenging behaviour. Current services for individuals with ID in Bahrain are characterised by a near total dominance of pharmacological intervention typically instigated when individuals attended child psychiatric services. Psychiatric and additional diagnoses were typically absent from files and level of ID was not recorded in approximately half of all cases. Behaviourally based interventions for challenging behaviours are absent.

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