

# Improving mental health care for people with an intellectual disability in Singapore: bridging the health-social care divide

Ker-Chiah Wei<sup>1</sup>, MBBS, MMed, Cheng Lee<sup>1</sup>, MBBS, MMed, Rathi Mahendran<sup>2</sup>, MBBS, MMed, Choon Guan Lim<sup>1</sup>, MBBS, MMed

**ABSTRACT** Intellectual disability is known to be associated with a high incidence of psychiatric co-morbidity and problem behaviours. However, there are many challenges in trying to meet the mental health needs of people with an intellectual disability, and these are often not adequately addressed in Singapore's current healthcare system. This article outlines the present service provisions for this area in the country and details the importance of, as well as difficulties in the integration of health and social care measures in service development and delivery.

*Keywords: intellectual disability, mental healthcare, mental retardation, service development, social care*  
*Singapore Med J 2012; 53(7): 428–432*

Intellectual disability (ID), otherwise referred to as mental retardation, mental handicap, mental deficiency, developmental disability or learning disability, is common worldwide. The definition of ID used in major diagnostic systems, such as the International Classification of Diseases, 10th Edition (ICD-10),<sup>(1)</sup> Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, text-revised (DSM-IV TR)<sup>(2)</sup> and the American Association on Intellectual and Developmental Disabilities,<sup>(3)</sup> are very similar; all of them contain three essential elements, namely low performance on standardised intellectual testing, behavioural limitations in adapting to environmental demands and an early age of onset. Although official data on the prevalence of persons with an intellectual disability (PWIDs) is not available for Singapore, studies from most countries have placed it at around 1% of the general population, with China reporting a prevalence of as high as 6.68%.<sup>(4)</sup>

It has become increasingly known that PWIDs have a very high prevalence of mental health problems, which consist of psychiatric disorders as well as severe problem behaviours. Epidemiological studies have found them to be present in as high as 40%–50% of PWIDs,<sup>(5,6)</sup> a percentage that is significantly higher than that of the general population. For Singapore, based on its population of 4.988 million in 2009<sup>(7)</sup> and an estimate of 1% PWIDs with 40%–50% having psychiatric comorbidities/severe behavioural problems, it can be postulated that as many as 20,000–25,000 PWIDs will require access to mental health services at some point in time. The impact on carer burden as well as health and social care service costs is, therefore, considerable.

## MEETING THE MENTAL HEALTH CARE NEEDS OF PWIDS

Recognising the magnitude of the problem, many governments worldwide have stated their commitment to address the mental health needs of PWIDs,<sup>(8)</sup> and there is an international consensus on the need for current systems to respond more adequately in this area.<sup>(9)</sup> However, generic health and psychiatric services have difficulties meeting the needs of people with ID and psychiatric disorders for the following reasons:<sup>(10)</sup>

- The problems are often not recognised by caregivers as deviating from 'normal' intellectual disability.
- Even if the problems are recognised as representing deviance, they are often not seen as being treatable, or they are not brought to the attention of medical staff for further management.
- Psychiatrists who are referred to PWIDs may lack sub-specialist training and experience, and may ascribe any problem identified as being purely due to mental retardation itself. This is known as 'diagnostic overshadowing'.
- When problems have been correctly identified as representing potentially treatable deviance, accurate diagnosis and treatment in PWIDs is particularly challenging due to their impaired cognitive abilities and attention, functional deficits, communication difficulties and high incidence of other comorbid developmental disabilities such as autism.

Thus, specialised skills are needed for proper assessment and management of psychiatric comorbidities and problem behaviours in this population. Effective care requires a multi-

<sup>1</sup>Department of Community Psychiatry, Institute of Mental Health, <sup>2</sup>Department of Psychological Medicine, National University Hospital, <sup>3</sup>Department of Child and Adolescent Psychiatry, Institute of Mental Health, Singapore

**Correspondence:** Dr Wei Ker-Chiah, Consultant and Deputy Chief, Department of Community Psychiatry, Institute of Mental Health, 10 Buangkok View, Singapore 539747. Ker\_Chiah\_Wei@imh.com.sg

**Table 1. Organisations running special education schools and early intervention programmes for intellectually disabled clients.**

Organisation	Target clients
APSN (5 schools)	IQ 50–70
AWWA Special School	ID with autism and other disabilities
Eden School	ID with autism
Grace Orchard Special School	IQ 50–70
Metta School	IQ 50–70
MINDS (5 schools)	IQ < 50
Rainbow Centre (2 schools)	ID with autism, multiple disabilities
Spastic Children’s Association of Singapore	Cerebral palsy with ID

ID: intellectual disability

disciplinary approach by a specialised team of professionals who can address the multifaceted causes of their behavioural presentations and provide both biomedical and environmental interventions, as well as appropriate support to families and care-providers.<sup>(11,12)</sup>

In view of this, professional bodies worldwide, such as the Royal College of Psychiatrists, have strongly advocated specialist mental health services for PWIDs.<sup>(13,14)</sup> Studies comparing care by specialised vs. generic psychiatric facilities have shown better outcomes in terms of a decrease in psychiatric symptoms, an increase in overall functioning and an improvement in behavioural function in the former.<sup>(15)</sup> Specialised services are also important, as they lead to improved general awareness and increased knowledge among PWIDs and their caregivers, thus encouraging them to seek help earlier for mental health issues. In addition, they allow for better coordination with ID services from the social sector to better meet the needs of PWIDs with psychiatric comorbidity.<sup>(16)</sup> In countries with an overall lack of specialist services for PWIDs, there is evidence of adverse consequences.<sup>(17,18)</sup> PWIDs with concomitant psychiatric disorders have often been under-served or inappropriately treated due to inter-organisational barriers, leading to unnecessary hospitalisation and lengthy delays in community placement.<sup>(9)</sup>

As a result of greater awareness, specialised psychiatric services for the intellectually disabled have seen major developments in many countries over the past decade, most notably in the United Kingdom (UK), where ID Psychiatry is an officially recognised and accredited subspecialty of psychiatry.<sup>(19)</sup> Social inclusion and the rights of people with ID to access specialist mental health services have been emphasised in the UK Government strategy,<sup>(20,21)</sup> which has led to the extensive development of Multidisciplinary Community Learning Disability Teams in the country. Funded by both the Departments of Health and Social Services, these teams, consisting of psychiatrists, psychologists, nurses, occupational therapists, social workers, physiotherapists and speech and language therapists, provide

a holistic approach to managing problems faced by PWIDs in the community. Care for PWIDs with psychiatric comorbidities is delivered and coordinated through a person-centred Care Programme Approach (CPA).<sup>(22,23)</sup> CPA consists of assessment and treatment processes, risk assessments, care planning and reviews, as well as crises and contingency plans. There are also small specialist inpatient units at a tertiary level to provide comprehensive assessment and management of mental health problems when these cannot be achieved in a community setting or within generic mental health services.

## THE SITUATION IN SINGAPORE

Considering the range of necessary specialised services provided overseas and based on the estimated number of PWIDs in Singapore, it can be seen that the mental health problems of PWIDs are not adequately addressed by our current healthcare system. There is no differentiated or dedicated service for PWIDs, who are presently treated in general psychiatric wards and out-patient clinics in our hospitals, where there are limited resources to address their complex presentations, difficult-to-manage behavioural issues, as well as rehabilitation needs. As a result of this and the lack of care coordination with other agencies, there exist many issues such as access to mental health care services, misdiagnosis of the patient’s condition and persistent high burden of care due to inappropriate or inadequate treatment, thereby resulting in frequent hospital re-admissions or prolonged unnecessary hospitalisations due to poorly coordinated discharge plans. The outcomes are high untreated psychiatric morbidity and a poor quality of life for both PWIDs and their care-providers,<sup>(24)</sup> which may result in carer burnout and institutionalisation of the PWID. The difficulties in caring for PWIDs with unaddressed psychiatric comorbidity would also lead to them being marginalised from many services in the social sector,<sup>(8)</sup> thus reducing the needed support they could receive and further worsening their condition. A typical observation that highlights the service gap in the psychiatric care of PWIDs is that many specialist psychiatric services, even those run under the National Mental Health Blueprint, consider ID to be one of their exclusion criteria.<sup>(25)</sup>

## IMPROVING PSYCHIATRIC CARE FOR PWIDS

So how can we progress from the current state? The complex needs of PWIDs require a comprehensive system of support for them and their caregivers, and this necessitates close collaborations with organisations in the social sector. Unlike in other areas of medicine, habilitation, which is predominantly a domain of social services rather than healthcare, is essential to the treatment process. For example, the management of certain problem behaviours would require interventions that help the patients to acquire more adaptive communication skills or address their sensory needs, and involves a responsive daily schedule of training activities. The management plan of psychiatric issues in PWIDs should also have a strong focus

**Table II. Residential homes for intellectually disabled clients.**

Organisation	Target clients
Bishan Home for the Intellectually Disabled	IQ < 50
Blue Cross Thong Kheng Home	IQ < 70
Moral Welfare Home for the Disabled*	IQ < 50
Metta Home for the Intellectually Disabled	IQ < 70
MINDS Tampines Home (2 homes)	IQ < 50
Red Cross Home for the Disabled	IQ < 70, multiple disabilities
TOUCH Ubi Hostel	IQ 50–70

\*1 home for children and 2 homes for adults.

on educating caregivers and addressing family issues, such as family dynamics and parenting skills. Comprehensive treatment, therefore, involves many resources that may only be available from the social sector, and coordination of an integrated care plan also utilises necessary services from both the healthcare and social agencies. It is thus necessary in the planning of psychiatric care for PWIDs to have a good understanding of the local framework of social services available for them.

**CURRENT SOCIAL SERVICE PROVISIONS**

In Singapore, there has been significant development in social services for PWIDs since the Report of the Advisory Council for the Disabled was published in 1988.<sup>(26)</sup> The recommendations of the report formed the basis for many initiatives to expand and enhance services for the intellectually disabled. These are provided by various Voluntary Welfare Organisations under the purview of the Ministry of Community Development, Youth and Sports (MCYS) and/or the National Council of Social Services (NCSS). Major providers in this field include Movement for the Intellectual Disabled of Singapore (MINDS), which serves intellectually disabled persons with IQ 50 and below, and Association for Persons with Special Needs (APSN), which caters to persons with mild intellectual disability (IQ range 50–70).

A predominant number of social organisations serving PWIDs cover mainly children and adolescents through their early intervention programmes and special schools<sup>(27)</sup> (Table I). These schools usually employ their own team of psychologists and medical social workers to identify and provide intervention for individuals identified with mental health needs. The primary healthcare and specialised paediatric services provide comprehensive developmental assessments at regular intervals after birth, providing opportunities for early identification of PWIDs and referral to the appropriate organisation for intervention and education. As education is compulsory in Singapore, those who are not identified earlier often get recognised and referred for intellectual assessments in primary school. The programmes for adults are, however, relatively less developed. For agencies that have services for adults, the focus is mainly on long-term residential placement, vocational training and daycare<sup>(27)</sup> (Tables II and III). Certain key areas of support,

**Table III. Organisations offering independent living/vocational training and day activity for intellectually disabled clients.**

Organisation	Target clients
APSN Centre for Adults	IQ 50–70
Blue Cross Thong Kheng Day Activity Centre	IQ < 70
Bishan Home for ID	IQ < 50
Christian Outreach for the Handicapped	IQ < 70
Metta Welfare Association Day Activity Centre	IQ < 50
MINDS (2 TDCs and 3 EDCs)	IQ < 50
SAD Vocational School for the Handicapped	IQ 50–70, autism, hearing-impaired
SUNDAC Centre for the Disabled (2 centres)	IQ < 50
SPD-SOKA Day Activity Centre	IQ 50–70
Spastic Children’s Association of Singapore	Cerebral palsy with ID
TOUCH Community for Independent Living/Learning Support Services	IQ < 70

ID: intellectual disability; RDC: Training and Development Centre; EDC: Employment Development Centre

such as the provision of respite care and help in crisis management, are still lacking. There are also relatively few provisions for caregiver support and training, most of which are either generic programmes for a general audience (e.g. training programme provided by the Disabled People’s Association, which is open to caregivers of all types of disabilities) or catered only to specific groups (e.g. programmes run by the Autism Resource Centre or Down Syndrome Association of Singapore), and are therefore not accessible by everyone. Such services are especially important for higher-needs individuals in order for them to be cared for effectively in the community, e.g. those with multiple disabilities, behavioural difficulties or psychiatric comorbidity.

With better healthcare and the increased life expectancy of PWIDs over the years, many are expected to outlive their parental caregivers. This, together with the demands of modern society, and arguably, insufficient support services in the community, fuels an increasing demand for residential home services. The last decade has seen many residential homes being set up to meet the growing need (Table II). However, these facilities are often understaffed or heavily staffed with foreign nursing staff and healthcare workers, as it is very difficult to recruit locals into this field of work. This heavy reliance on foreign workers, who have to leave when their contract expires, poses problems to the stability and continuity of service delivery. The high turnover of caregivers also creates confusion in PWIDs and hinders progress in habilitation. In addition, most residential homes have minimal resources to address mental health issues or behavioural difficulties in their clients due to a lack of manpower as well as trained and competent staff. Coping with these high-needs individuals with psychiatric comorbidities has become a significant problem in many residential homes in recent years.

## CONSIDERATIONS FOR DEVELOPMENT OF SPECIALIST MENTAL HEALTH SERVICES FOR PWIDS IN SINGAPORE

The development of specialist psychiatric services for the intellectually disabled needs to take into account the earlier outlined local situation and the unique support needs of this population. It requires an emphasis on extensive networking and coordination with the social sector, as well as building their capacity to recognise and deal with mental health problems. However, it is not an easy task to coordinate care with the social sector; difficulties in collaborative efforts between the health and social sectors have been described in many health systems.<sup>(28)</sup> It has been highlighted that health and social care professionals follow different models of mental health and illness, and in some cases, even conflicting value systems.<sup>(29)</sup> Social workers, who are trained to identify strengths and skills, often criticise the medical model's focus on pathology and deficits as being too restrictive. As a result, the aims and emphases in social welfare initiatives often differ from those in healthcare programmes, since the workers from these groups may not share the same views about the service needs in the community. Both sectors also have their own distinct organisational structure and culture, and in Singapore, the two are under different Ministerial oversight with separate funding streams and reporting structures.\* In addition, the social sector is characterised by the involvement of a variety of agencies and organisations, with their respective ideologies, procedures, work processes, and possibly, conflicting professional views,<sup>(9)</sup> e.g. differing opinions about segregation vs. integration with mainstream in the area of education. It is thus a great challenge to navigate through all these to administer joint initiatives and integrate holistic care.

However, probably in no other area of medicine is health and social care more intertwined and the need to bridge this divide more crucial than in the area of mental health care for the intellectually disabled. Despite the anticipated difficulties, the process can be made easier by a continual commitment to improve communication and cooperation, and to facilitate an appreciation of each party's roles and values in every partnership.<sup>(30)</sup> Before the introduction of any mental health service, efforts should be made to bridge the gap with social agencies, and these entail understanding what each of these major stakeholders with ID clients needs, as well as planning together how the services they provide can be integrated into a comprehensive management and habilitation care system. Groundwork that can be done through the networking process with these social organisations include collaborative research on the mental health needs of the local ID population, joint advocacy activities, as well as discussions to prioritise current service requirements, craft areas of responsibilities and work out processes for inter-agency referrals and joint interventions. By emphasising an integrative process from the start, we can avoid unnecessary duplication of resources, ensure the right siting of

care and set up a collaborative framework to effectively deal with problems when they occur.

In view of the lower capabilities of some social sector organisations to address mental health issues, an important component of networking efforts has to be in the area of capacity-building through training. Such training aims to enhance staff competencies in dealing with common behavioural problems and identifying psychiatric disorders early in PWIDs, and in building confidence in delivering management plans initiated by healthcare professionals. This will promote appropriate and timely referrals, and ensure recommended interventions, e.g. behavioural training can be effectively undertaken and followed through in the patient's place of residence. Training activities can also help to build goodwill and improve communication between the health facility treating ID patients and the social service providers. All of these would help to lower the probability of the hospital becoming, colloquially, a 'revolving door' or 'dumping ground' for difficult-to-manage patients. As the nature of many interventions for PWIDs, especially behavioural treatments, requires the active participation of all caregivers, no efforts should be spared to reach as many people as possible. To do so, programmes can adopt a Train-the-Trainer Model, where individuals trained by the programme can subsequently train their own staff in their respective organisations. Examples of important areas in training courses would be basic mental health issues in PWIDs, positive behavioural support programmes and the management of sensory issues, among others. The range of training activities can be broadened to improve the working relationship between the two sectors as well. This can be undertaken through round-table discussions on challenges faced by social agencies in managing PWIDs with psychiatric comorbidities, joint workshops for skill development in areas of common interest and case conferences discussing challenging clients from the centres or homes run by VWOs.

A discussion on the range of psychiatric services for individuals with ID will not be complete without highlighting the role of forensic psychiatric services. Individuals with ID are not only vulnerable to victimisation by others, but can also be offenders themselves. Medical and social services are often roped in to assist the legal services to assess and manage PWID victims and offenders. However, it is a challenge for both the health and social services to provide good quality treatment programmes and support systems, especially for ID offenders with comorbid psychiatric disorders and substance use problems.<sup>(31)</sup>

## CONCLUSION

In recent years, we have seen a greater understanding of the importance of mental health services for the intellectually disabled, as well as considerable advancements in this area in many developed countries around the world. However, specialised psychiatric care for this often marginalised population is, unfortunately, still in a fledgling stage of development in

Singapore. Thus, there is an urgent need to improve on current service provisions. Due to the complex nature of the support needs of PWIDs, a strong interdisciplinary approach, together with close collaboration and working relationships between the health and social sectors, is essential to the process of service development and delivery. It is hoped that the coming years will see more progress in this area in Singapore and that this development will blaze the trail for the bridging of the health-social care divide in other areas of community health care.

### \*ENDNOTE

Social welfare is under the purview of the MCYS and NCSS, which fund many voluntary and non-profit welfare organisations, while healthcare is under the administration of the Ministry of Health. MCYS has made attempts to integrate community care for ID patients through the setting up of The Centre for Enabled Living, to act as a centralised coordinating body to refer PWIDs and their caregivers to appropriate social services and residential facilities. The Ministry of Health has also set up an Agency for Integrated Care to coordinate community health care, including mental health care, but does not cover PWIDs at this point in time.

### REFERENCES

- World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorder: Clinical descriptions and diagnostic guidelines. Geneva: World Health Organization, 1992.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed, text revision. Washington: American Psychiatric Association, 2000.
- Schalock RL, Borthwick-Duffy SA, Bradley VJ, et al. Intellectual Disability: Definition, Classification, and Systems of Supports. 11th ed. Washington: American Association on Intellectual and Developmental Disabilities, 2010.
- Jeevanandam L. Perspectives of intellectual disability in Asia: epidemiology, policy, and services for children and adults. *Curr Opin Psychiatry* 2009; 22:462-8.
- Corbett JA. Psychiatric morbidity in mental retardation. In: James FE, Snaith P, eds. *Psychiatric Illness and Mental Handicap*. London: Gaskell, 1979.
- Cooper SA, Smiley E, Morrison J, Williamson A, Allan L. Mental ill-health in adults with intellectual disabilities: prevalence and associated factors. *Br J Psychiatry* 2007; 190:27-35.
- Ministry of Health. Health Facts 2009. Singapore: Ministry of Health, 2009.
- Nancy Cain, et al. An international perspective of mental health services for people with intellectual disability. In: Bouras N, Holt G, eds. *Mental Health Services for Adults with Intellectual Disability*. Hove and New York: Psychology Press, 2010.
- Moss S, Bouras N, Holt G, et al. Mental Health services for people with intellectual disability: a conceptual framework. *J Intellect Disabil Res* 2000; 44(Pt 2):97-107.
- Stawski M, Merrick J. Mental health services for people with intellectual disability in Israel – a review of options. *Isr J Psychiatry Relat Sci* 2006; 43:237-40.
- Tufnell G, Bouras N, Watson JP, Brough DI. Home assessment and treatment in a community psychiatric service. *Acta Psychiatr Scand* 1985; 72:20-8.
- Roy A. The Care Programme Approach in learning disability psychiatry. *Advances in Psychiatric Treatment*, 2000; 6:380-7.
- Royal College of Psychiatrists. Meeting the Mental Health Needs of People with Learning Disability. London: Royal College of Psychiatrists, 1996.
- Royal College of Psychiatrists. Meeting the Mental health Needs of People with a Mild Learning Disability. Royal College of Psychiatrists Council Report CR115. London: Royal College of Psychiatrists, 2003.
- Xenitidis K, Gratsa A, Bouras N, et al. Psychiatric inpatient care for adults with intellectual disabilities: generic or specialist units? *J Intellect Disabil Res* 2004, 48:11-8.
- Chaplin E, Dimitrios Paschos D, Jean O'Hara J. The specialist mental health model and other services in a changing environment. In: Bouras N, Holt G, eds. *Mental Health Services for Adults with Intellectual Disability: Strategies and Solutions*. Hove and New York: Psychology Press, 2010.
- Davidson PW, Morris D, Cain NN. Community services for people with developmental disabilities and psychiatric or severe behaviour disorders. In: Bouras N, ed. *Psychiatric and Behavioural Disorders in Developmental Disabilities and Mental Retardation*. New York: Cambridge University Press, 1999.
- Jacobson JW. Psychological services utilization: relationship to severity of behaviour problems in intellectual disability services. *J Intellect Disabil Res* 1998, 42(Pt 4):307-15.
- Davidson PW, O'Hara J. Clinical services for people with intellectual disabilities and psychiatric or severe behavioural disorders. In: Bouras N, Holt G, eds. *Psychiatric and Behavioural Disorders in Intellectual and Developmental Disabilities*. New York: Cambridge University Press, 2007.
- Department of Health. Valuing people: a new strategy for learning disability for the 21st century – a White Paper. London; Department of Health, 2001.
- National Institute for Mental Health in England. From here to equality: a strategic plan to tackle stigma and discrimination on mental health grounds 2004-2009. Leeds: NIMHE, 2004.
- Department of Health. National service framework for mental health: modern standard and service models. London: Department of Health, 1999.
- Department of Health. Facing the Facts: Services for people with learning disabilities – a policy impact study of social care and health services. London: Department of Health, 1999.
- Bouras N, Jacobson J. Mental health care for people with mental retardation: a global perspective. *World Psychiatry* 2002; 1:162-5.
- Ministry of Health. National Mental Health Blueprint. Singapore: Ministry of Health, 2007.
- Report of the Advisory Council for the Disabled. Opportunities for the Disabled. Singapore; Singapore National Printers, 1988.
- Ministry of Community Development, Youth and Sports and National Council of Social Services. Directory of Services for the Disabled. Singapore: Sonic Printing, 2007.
- Wei KC, Lee C, Wong KE. Community psychiatry in Singapore: an integration of community mental health services towards better patient care. *Hong Kong J Psychiatry* 2005; 15:132-7.
- Thornicroft G, Szmukler G, eds. *Textbook of Community Psychiatry*. Oxford: Oxford University Press, 2001.
- Barnes D. Effective partnerships in mental health. Centre for Applied Social Studies. University of Durham, 1996.
- Männynsallo L, Putkonen H, Lindberg N, Kotilainen I. Forensic psychiatric perspective on criminality associated with intellectual disability: a nationwide register-based study. *J Intellect Disabil Res* 2009; 53:279-88.