Referral pathways between the mental health services and Jigsaw

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Objectives. To examine similarities and differences in the demographic and clinical profiles of young people (15–25 years of age) referred between the mental health services (MHS) and Jigsaw Galway.

Methods. A retrospective chart review was conducted of clinical files of individuals attending secondary MHS who had been referred to or from Jigsaw Galway over a 5-year period. Differences in demographic and clinical data between individuals referred to or from Jigsaw Galway were compared.

Results. A recent act of self-harm was more prevalent in individuals referred from Jigsaw to the adult MHS ($p = 0.02$). No other demographic or clinical differences were detected between individuals attending Jigsaw Galway and the MHS.

Conclusions. Education sessions for clinical staff working in primary care, Jigsaw Galway and the MHS are suggested to support clinicians in choosing the best referral pathway, which may more optimally address young people's mental health difficulties.

Introduction

Mental health disorders are the primary cause of disability in young people aged 10–24 years of age according to the World Health Organization (Gore *et al*. 2011), with 75% of these disorders demonstrated to emerge before 25 years of age (Kessler *et al*. 2005). In addition, mental health difficulties constitute a significant disease burden for young people in Ireland with the Mental Health of Young People in Ireland (2013) report stating that almost one in three young people will have experienced some form of mental disorder by the age of 13 years with this increased to one in two young people by the age of 24 years (Cannon *et al*. 2013). The most frequently encountered mental health disorders incorporate mood and anxiety disorders (Cannon *et al*. 2013). Alcohol and substance misuse in Ireland are also problematic. The recent My World Survey reported that 15% of adolescents (aged 12–19 years engaged in education) were categorized as problem drinkers, with ~3% of adolescents categorized as hazardous drinkers and nearly 3% as potentially fulfilling criteria for alcohol dependence syndrome (Dooley & Fitzgerald, 2012). Additionally, over 25% of adolescents sampled indicated regular illicit psychoactive substance misuse.

Given the deleterious impact of mental health disorders on well-being and functioning, the delivery of mental health supports congruent to individual needs in this population cohort is imperative. Support for young individuals with mental health difficulties in Ireland has traditionally been provided by primary care services with referral to secondary mental health services (MHS) where required [child and adolescent mental health services (CAMHS) or adult mental health services (AMHS)] depending on the age of the individual concerned.

At present, there are few documents to guide general practitioner (GPs) when to appropriately refer individuals to primary or secondary MHS. Some information is currently available however. A guidance document for the management of depression in primary and secondary care is available from the Irish College of General Practitioners (ICGP) (Kelly 2011). In addition, the ICGP have developed a reference guide on the management of common psychiatric difficulties in children and adolescents (O'Keefe *et al*. 2013). The National CAMHS standard operating procedure provides guidance on referrals into CAMHS (CAMHS Improvement Project Group & Health Service Executive, 2015). Guidelines are also available for GPs on when to refer individuals to Counselling in Primary Care.

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In recent years a number of additional agencies have provided mental health support services for young people in Ireland, one of which is Jigsaw. Jigsaw Galway was one of the first national network of Jigsaw services and opened in December 2008. Jigsaw is a free and confidential service and is designed to promote systems of care that are accessible, youth-friendly and engaging for young people with mental health needs with the ambition that young people are connected to their community and have the resilience to face challenges to their mental health (www.jigsaw.ie/what-we-do). Young people are referred to Jigsaw from various sources including parents, self-referral, GPs and the MHSs (O'Reilly *et al.* 2015). Jigsaw predominantly provides brief intervention support (typically 1–6 sessions) to young people aged 12–25 years with emerging mental health difficulties. At the time of data collection Jigsaw Galway offered support to young people aged 15–25 years. In the 5-year period relating to this study, ~2000 young people had attended Jigsaw Galway (personal communication with staff at Jigsaw Galway).

Jigsaw has a stated wide remit including management of mild depression or anxiety disorders, harmful use of alcohol or psychoactive substances (but not dependence) and mild emotional behavioural difficulties. In addition, individuals experiencing an eating disorder without co-morbidity, adjustment disorders, deliberate self-harm without suicidal ideation are also considered. Secondary MHSs are configured given staff expertise and availability of greater structural supports such as day hospitals and inpatient facilities to manage individuals more severe and enduring mental health disorders.

Referral between Jigsaw Galway and the CAMHS or AMHS is due to a service's view that the other agency would best meet the young persons' needs, although occasionally some collaborative work may occur. Clarification of existing referral patterns between Jigsaw Galway and the secondary MHS may thus be informative in relation to the remit of each service. Consequently, in this study, we wanted to examine similarities and differences in the demographic and clinical profile of individuals referred by either the secondary MHSs to Jigsaw Galway or by Jigsaw Galway to the secondary MHSs.

Methods

We conducted a retrospective chart review of all clinical files and electronic patient records over a period of 5 years (January 1, 2009–January 1, 2014) of individuals in the AMHS or CAMHS who had ever attended or been referred to or from Jigsaw Galway. All clinical files and electronic patient records of each individual attending CAMHS (aged 15–18) were reviewed for the 5-year study period. For individuals, attending the AMHS, electronic records were searched, with a patient database search utilizing the terms 'Jigsaw' or 'Jigsaw Galway' undertaken to identify individuals. Additionally, all Emergency Department presentations where clinical staff from either CAMHS or the AMHS are asked to review the presenting individual are clearly documented in a specific log-book, which was reviewed for the 5-year study period. The referral source and management plan are clearly documented for each individual in this log-book. Identified patients

Table 1. *Demographic and clinical data for all participants*

	>18 years [*n* (%)]	15–18 years [*n* (%)]
Gender		
Male	46 (45.1)	10 (52.6)
Female	56 (54.9)	9 (47.4)
Vocational status		
Employed	5 (4.9)	0 (0.0)
Unemployed	36 (35.3)	4 (21.1)
In 3rd level education	27 (26.5)	0 (0.0)
In 2nd level education	34 (33.3)	15 (78.9)
ICD-10 diagnoses		
Major depressive disorder	33 (32.4)	3 (15.8)
Anxiety disorder[a]	27 (26.5)	3 (15.8)
Eating disorder	10 (9.8)	1 (5.0)
Alcohol/substance dependence	23 (22.5)	3 (15.8)
Autism spectrum disorder	7 (6.9)	0 (0.0)
ADHD	0 (0.0)	2 (10.6)
EUPD of borderline type	18 (18.4)	0 (0.0)
No psychiatric diagnosis	20 (20.4)	9 (47.0)
Self-harm history		
Deliberate self-harm	50 (49)	9 (47)
Suicide attempt	39 (38)	2 (11)
Referral pathway		
MHS to Jigsaw	48 (47)	12 (63)
Jigsaw to MHS	40 (39)	5 (26)
GP referral to both services	14 (14)	2 (11)
Stressors		
Childhood stressor	69 (68)	11 (58)
Schooling/occupational stressor	52 (51)	13 (68)[b]
Relationship stressor	60 (59)	14 (74)
Forensic history	19 (19)[b]	3 (16)
Family psychiatric history	52 (51)[b]	9 (47)
	Mean (S.D.)	Mean (S.D.)
Age	20 (3)	16 (1)

ADHD, attention deficit hyperactivity disorder; EUPD, emotionally unstable personality disorder; MHS, mental health services; GP, general practitioner.

[a] Anxiety disorders included generalized anxiety disorder, social phobia, panic disorder, obsessive compulsive disorder.

[b] Data not available for all participants.

were also cross-checked with their treating consultant to ensure all appropriate data was captured.

Following a comprehensive clinical note review, a standardized form was utilized to collect data pertaining to all demographic and clinical variables for each individual. Demographic and clinical data collected included age, gender, clinical diagnosis, vocational/educational status, any history of self-harm, alcohol and/or substance misuse, psychosocial stressors, forensic difficulties and engagement levels with MHSs. An episode of deliberate self harm (DSH) was only denoted as a suicide attempt if this was explicitly stated in the clinical notes by the treating clinician and/or the patient and there was evidence of suicidal intent in the clinical notes. Diagnoses were based on clinical assessments undertaken in the appropriate MHS according to the International Classification of Mental and Behavioural Disorders 10 (ICD-10) diagnostic criteria. Diagnoses were derived from clinical note review with the treating consultant psychiatrist providing additional information where clarification was required. Consensus was reached in relation to diagnosis for each individual.

Statistical analysis was performed using the Statistical Package for Social Sciences 22.0 for Windows (SPSS Inc., IBM, New York, USA). The χ^2 test or Fisher's exact test (where appropriate) were used to examine differences in demographic characteristics between the groups. Parametric continuous data was examined utilizing the Student independent *t*-test.

Results

The demographic and clinical characteristics of the 102 adults and 19 children included in this study are detailed in Table 1. The majority of individuals were in education (59.8% of adults and 78.9% of the 15–18-year-old group). A major depressive disorder (episode or recurrent depressive disorder) was the most common diagnosis in the adult cohort (32.4%), with the largest cohort in the <18 years cohort not fulfilling diagnostic criteria for a mental disorder (47%). Jigsaw Galway received more referrals than they sent from both the AMHS (47% *v.* 39%) and the CAMHS (63% *v.* 26%). Where individuals were referred by GPs to both Jigsaw and the MHS, this occurred at the initial assessment stage concurrently. Individuals that were referred from the MHS to Jigsaw had attended AMHS/CAMHS for a variable length of time, varying from being referred after initial assessment ($n = 29$) to having attended over eight sessions ($n = 6$). Data pertaining to the stage of treatment individuals were referred from Jigsaw to the MHS was not available.

The only demographic or clinical factor differentiating individuals referred between Jigsaw Galway and the AMHS was a history of DSH, which was more prevalent in the group referred to the AMHS from Jigsaw Galway ($p = 0.02$). No demographic or clinical factors discriminated between individuals referred between CAMHS or Jigsaw Galway.

Table 2. *Comparison of Jigsaw and mental health service (MHS) referrals: demographic and clinical data*

	Jigsaw to MHS [*n* (%)]	MHS to Jigsaw [*n* (%)]	Dual referral [*n* (%)]	χ^2	*p*
AMHS					
Gender (male)	18 (45)	25 (52)	5 (36)	1.278	0.528
Major mental illness (axis I disorder)	30 (75)	30 (63)	8 (57)	2.196	0.333
Presence of a personality disorder[a]	8 (20)	9 (19)	1 (7)	1.053	0.634
Deliberate self-harm	26 (65)	20 (42)	4 (29)	7.468	**0.024**
Suicide attempt[a]	16 (40)	21 (44)	2 (14)	4.091	0.128
Employed or in Education	25 (62.5)	28 (58)	11 (79)	1.901	0.387
Harmful or dependant use of alcohol	19 (48)	15 (31)	6 (43)	2.507	0.285
Illicit substance use	18 (45)	14 (29)	6 (43)	2.558	0.278
Psychiatric hospitalization[a]	16 (40)	14 (29)	2 (14)	3.233	0.188
CAMHS					
Gender (male)[a]	6 (50)	2 (40)	1 (50)	0.478	1.000
Major mental illness (axis I disorder)[a]	8 (67)	2 (40)	2 (100)	2.038	0.489
Deliberate self-harm[a]	5 (42)	3 (60)	1 (50)	0.786	0.800
Psychotropic medications prescribed[a]	6 (50)	2 (40)	2 (100)	1.864	0.628
Use of alcohol[a]	3 (25)	2 (40)	0 (0)	1.092	0.787
Illicit substance use[a]	4 (33)	0 (0)	1 (50)	2.689	0.295
Psychiatric hospitalization[a]	0 (0)	1 (20)	0 (0)	3.148	0.368

AMHS, adult mental health service; CAMHS, child and adolescent mental health service.
[a] Fisher's exact computation was used due to low cell count.

Discussion

This is the first study to date to our knowledge to examine referral pathways between the secondary MHSs and a dedicated primary care support service (Jigsaw Galway) for young people's mental health difficulties.

In relation to individuals over 18 years of age who were referred to the AMHS from Jigsaw Galway or from Jigsaw Galway to the AMHS, minimal differences in relation to demographic data or clinical profile were noted, with only DSH more prevalent in individuals referred to the AMHS. There are a number of potential explanations for the similarity in clinical profile in individuals attending services aimed at providing care for different levels of mental health difficulties. First, some individuals referred to the AMHS from Jigsaw do not necessarily require this level of care. However, it is possible that additional support is briefly required during a period of crisis, or when services from Jigsaw are unavailable; that on occasion some collaborative work might be optimal; or that subtle clinical factors may be present that are not distinguishable with a retrospective chart review. Second, it is possible that some individuals are referred to Jigsaw Galway from the AMHS even though their presentation is too acute either in terms of symptomatology or risk of self-harm for Jigsaw Galway. Given the large number of potential referrers (many of whom are in trainee positions or only recently commenced employment) in the MHS, a clear awareness of the referral criteria for Jigsaw Galway may not always be present. Third, many participants may have clinical features where referral to either service might be appropriate (i.e. mild to moderate depression with fleeting thoughts of self-harm), thus differentiating between which of the two services might be most appropriate may be difficult to disentangle. Finally, individuals who are initially reviewed in one service and form a therapeutic relationship with staff members may resist transfer to an alternate service, even if their clinical needs suggest the other service is more appropriate. In individuals aged 15–18 years of age there were no significant differences with regard to demographic or clinical features when comparing the CAMHS and Jigsaw cohorts, however the sample size was most likely underpowered to detect any such differences (Table 2).

Thus, on-going education sessions within Jigsaw Galway and the MHS are required to inform staff in both services of the resources available (particularly given the dynamic nature of these) to help referring clinicians understand the most appropriate service for their patient. The development of clear guidelines detailing referral criteria to both CAMHS and AMHS and easy accessibility to the referral criteria for Jigsaw Galway would be optimal. Education sessions in primary care in relation to appropriate referral pathways

with a collaborative approach from both Jigsaw, CAMHS and the AMHS is suggested. These changes would hopefully provide individuals with the most appropriate supports to optimally manage their mental health needs, and, in keeping with the aims of the Mental Health of Young People in Ireland (2013) report, potentially allow youth-friendly MHSs and supports to be both available and accessible (Cannon *et al*. 2013). It is possible that some individuals referred by GPs to both Jigsaw and the CAMHS/AMHS concurrently, related to uncertainty of the appropriate referral source or could be due to other factors including potentially reflecting a wish for individuals to be reviewed by a service with the shorter waiting time.

Limitations of this study include the relatively small sample size studied, particularly for individuals aged 15–18 years of age. It is possible that some individuals who attended Jigsaw Galway were referred to MHSs outside Galway due to residing in a different county and were thus not included in this study. The study was conducted utilizing a retrospective chart review. Diagnoses were thus derived from clinical note review with the treating consultant psychiatrist providing additional information where clarification was required and were not attained from a structured diagnostic instrument such as the Structured Clinical Interview for the Diagnostic Statistic Manual-IV. Some clinical data pertaining to childhood stressors, family psychiatric history and forensic history was not available for each individual. Future research incorporating a prospective longitudinal study design aimed at participant enrollment at the point of initial presentation in both the MHSs and Jigsaw would potentially more clearly elucidate which factors differentiate where individuals would optimally attain support for their mental health difficulties.

Conclusion

This study examined referral pathways between a primary care support service for young people with mental health difficulties and a secondary care MHSs in Ireland. Minimal differences in demographic or clinical factors were noted between the young people referred between the services, despite both services targeting individuals with different levels of mental health needs. Education sessions for clinical staff working in primary care, Jigsaw Galway and the MHS are required to support clinicians in choosing the best referral pathway, which may more optimally address young people's mental health needs.

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Conflicts of Interest

The authors declare that there are no conflicts of interest.

Ethical Standards

Ethics approval was attained before the commencement of this study from the Clinical Research Ethics Committee for Galway University Hospitals and the Jigsaw ethics committee. The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008.

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