

A NATIONAL SNAPSHOT OF SUBSTANCE MISUSE AMONG CHILD AND ADOLESCENT PSYCHIATRIC INPATIENTS IN MALTA

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SUMMARY

This paper reports on a patient record survey that was undertaken with the central aim of establishing reliable, baseline information to inform strategic planning and organisation of future CAMHS in Malta. The records of the total population of children and adolescents admitted into the psychiatric hospital over a five year period were surveyed. Results showed that the characteristics and circumstances of children and adolescents with mental disorder and comorbid substance misuse in Malta are similar to those described in international studies. The survey emphasised the pressing need for further research into this sub group and also highlighted gaps in reliable data systems locally.

Key words: CAMHS - comorbidity - substance misuse - Malta

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INTRODUCTION

Setting the scene

Malta, consisting of three main islands with an area of 315 km², is situated at the centre of the Mediterranean. It has the highest population density in Europe combined with the lowest total population of any European Union Member State (Azzopardi Muscat et al. 2014). In 2011, a national census established the total Maltese population as being 417,432. Of these, 76,885 (18%) were aged 17 or under (National Statistics Office 2012). Like most countries in Europe, the public health system faces significant challenges, not least in the area of mental health. Despite notable improvements in services for people suffering from mental disorders in recent years, strategic planning and policy makers recognise that this is a sector that requires major development in order to bring it in line with the present international standards for good practice in this field (Ministry for Health 2014). At present, in Malta we are updating our mental health policy and there is currently no precise data available regarding mental disorder amongst the population in general nor regarding specific sub groups. As in most European countries, child and adolescent mental health services (CAMHS) operate from a range of settings, however there is only one psychiatric hospital which serves the population of Malta. CAMHS are based on a multi-disciplinary team approach. The teams are led by Consultant Psychiatrists and are made up of medical doctors, psychologists, social workers, educators, specialist nurses, general nurses and care staff.

Background

The wellbeing of children is increasingly at the centre of policy and practice development across many

countries, not least since it is generally accepted that the mental health of children is an essential part of health development with long term implications for both the child and the family when ill health occurs (Joint Commissioning Panel for Mental Health 2013). In fact child and adolescent mental health is receiving growing attention worldwide due to factors such as an increasing awareness of the accumulative negative consequences of poor mental health amongst young people; the advances made in diagnosis and treatment of these disorders and demands from families and communities for appropriate services in an increasingly consumer led healthcare environment. By 2020, mental and substance use disorders will surpass all physical diseases as a major cause of disability worldwide (SAMHSA 2014). Co morbidity of mental health and substance misuse issues are common among young people and can have enormous repercussions on individuals, families, communities and health systems (Salvo et al. 2012, Canadian Centre on Substance Abuse 2013, SAMHSA 2014). Moreover, people with a mental health issue are more likely to use alcohol or drugs than those not affected by a mental illness (Canadian Centre on Substance Abuse 2013). Co-morbidity can determine a etiology, cause a diagnostic dilemma and may influence the clinical presentation, the course, the treatment strategies and the outcome of both co morbid conditions (Swadi 2002). Salvo et al. (2012) reviewed compelling research based evidence of the increased risk for substance misuse amongst under 18's. This study reported that children and adolescents with both a mental disorder and substance abuse disorder are difficult to manage and one disorder exacerbates the other. When combined they often lead to family dysfunction, delinquency and reduced life opportunities, further complicated by poor treatment compliance and poor outcomes, both in the short and long-term. This

view is supported by the National Treatment Agency (NTA) for Substance Misuse (UK) who observed that many of the adolescents presenting to child and adolescent mental health services (CAMHS) show significant substance related problems. NTA research found that the presence of co-existing substance misuse complicates the clinical course, treatment compliance and prognosis for these young people. Furthermore the converse is also true: substances exacerbate and maintain psychiatric disorders. Disturbingly, the NTA noted that many youngsters who misuse substances do not receive adequate treatment, even the brief interventions that are relatively easily delivered in medical settings (NTA 2008).

As children leave their early childhood years and approach adolescence they encounter multiple, complex, and challenging developmental tasks involving significant intertwined and overlapping changes in biological, social, psychological, and environmental/societal domains. The multiplicity and complexity of this negates addressing issues in isolation of each other. Mental health needs cannot be separated from matters related to substance misuse. It is imperative to establish processes and protocols to better recognize and respond to the possibility of co-occurring diagnosis.

The study

The World Health Organisation (WHO) emphasised the importance of reliable data as a foundation when developing mental health policies and programmes (WHO 2005). Mental health is a neglected and an under researched area of public health and research generated information is considered crucial in determining needs, proposing new cost-effective interventions, monitoring their implementation and evaluating their effectiveness. Conceivably, such information will enable better utilisation of limited mental health resources (Sharan 2007). However, WHO (2005) also acknowledged that difficulties in obtaining such essential data are symptomatic of a worldwide challenge faced by those interested in promoting mental health and providing services for those who need them.

All organisations that are pursuing objectives in a health, social and economic environment are concerned with establishing and examining their own performance and planning ways to refine and improve services. To this end, in an attempt to capture a national snapshot of the socio-demographic characteristics of child and adolescent mental health services (CAMHS) users, and details regarding their contact with, and uptake of inpatient services, a retrospective survey of patients' case notes was undertaken.

This report focuses on just one data set that emanated from the survey, specifically substance misuse amongst the population under study. The findings of the survey allowed the following crucial questions to be answered: of the total number of

children and adolescents who received inpatient psychiatric services over a five year period, how many report substance misuse? What are the main characteristics of this patient group?

The central aim of the exercise was to establish reliable, baseline information to inform strategic planning and organisation of future CAMHS that reflect Malta's unique needs, whilst heeding the financial and resource limitations and restraints that all public health services are subject to.

SUBJECTS AND METHODS

Subjects

The population under study were children and adolescents who were inpatients either in the young person's psychiatric unit or in adult acute psychiatric wards of Malta's only psychiatric hospital between 1st July 2010 and 31st July 2014.

Method

This study was a retrospective record survey. A data gathering instrument was devised in order to conduct systematic examination and verification of factors related to the total population of in patients under 18 years of age during a five year period (2010 to 2014). It included 46 data points, and information mined from the records ranged from basic demographics, to diagnoses, medication, length of stay and co morbidity of substance misuse.

RESULTS

There were 212 child or adolescent admission to inpatient services during the period surveyed. 102 cases were recorded to have misused one or more substances. In the remaining 110 cases there was missing or incomplete information available. Of these recorded cases, 56 % were male patients and 44% were female patients. The majority of the cases misusing substances (96.1%) were in the age group of 11-18 years, with only 4 recorded cases between the age of 4-10 years. There were a higher percentage of recorded cases living in socially deprived areas (over 30%) and single parent households. 46% of recorded cases were from single parent households, 34% both parents, and 22% from state run homes or facilities. When comparing primary diagnosis on admission in each case against misuse of substances, conduct disorder was the predominant diagnosis in the majority of cases (29%). This was reaffirmed by primary diagnosis on discharge, as 31% of cases were diagnosed with conduct disorder. In 55% of cases, patients had previous service contact with mental health services. Figure 1 indicates the types of substances misused by gender (in some cases more than one substance was involved).

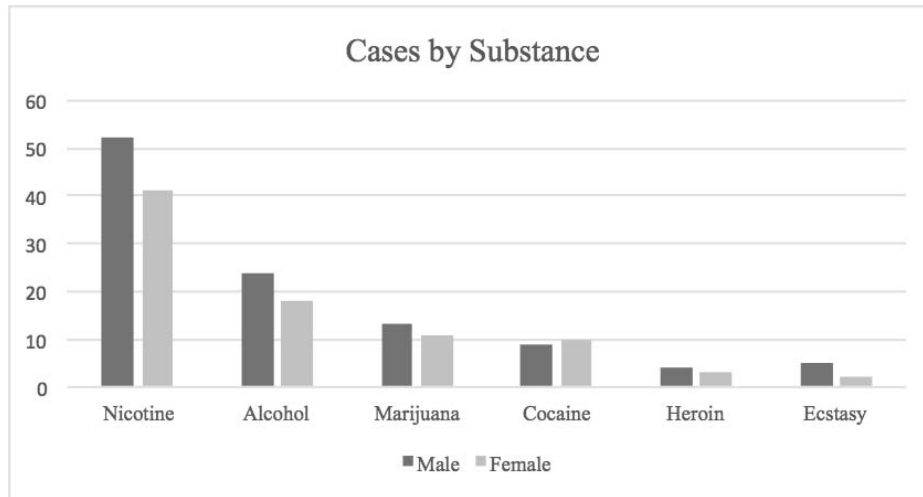


Figure 1. Substances used (misused) by gender

DISCUSSION

The prevalence of substance misuse amongst child and adolescent patients with a mental disorder can be seen to be in line with other countries. Nageotte and Murphy (2000) stated that in the United States of America (USA) 40–70% of adolescents admitted to mental health facilities have at least one significant drug or alcohol problem. Swadi (2002) reported that data specific to New Zealand, indicated that about two thirds of inpatient youths with a severe psychiatric disorder have a co morbid substance abuse disorder. In the UK, a national research briefing looking at the relationship between substance misuse and mental health issues, suggested that the prevalence of comorbidity affects between 30 and 70 % of those presenting to health and social care settings (Crome 2009). Comorbidity of misuse of one or more substances was found in the sample surveyed in Malta to be 48% of total admissions. It is of some concern that comorbidity was not excluded in the remaining 52% (110 cases), but rather could not be established due to incomplete records. This may suggest that the prevalence of comorbidity is higher than this survey suggests.

Literature supports local findings regarding conduct disorder being the predominant primary diagnosis in comorbidity. Conduct disorder has long been recognised as being associated with substance misuse (Zeitlin 1999, Swadi 2002). According to Nageotte and Murphy (2000) conduct disorder is a real vulnerability factor for adolescent substance abuse. In Canada, research showed that approximately 25-50% of young people who have abused drugs have been diagnosed with conduct disorder or oppositional defiant disorder, whereas Riggs (2003) stated that 60-80% of adolescents who misuse substances have conduct disorder.

Riggs (2003) stated that research reflects the relevance of social problems and early childhood development of a mental disorder as high risk factors for early substance misuse. The Canadian Centre on Substance

Abuse (2013) also reported that early childhood adverse social experiences in patients with a mental disorder lead to a greater risk of substance misuse. Such reports are borne out locally since social deprivation and family factors appear to be correlated to substance misuse in this sample.

When looking to the actual substances involved in this study, similar comparisons can be found in recent literature. Mangerud et al. (2014) conducted an extensive study in Norway which examined frequencies of smoking, alcohol use and illicit drug use in over 500 adolescent psychiatric patients. They found that prevalence of smoking is considerably higher in people with a psychiatric disorder than the general population, and people with a psychiatric disorder start smoking at a younger age and smoke more cigarettes per day than those with no mental illness. They stated that alcohol is often used as a means of self medication in patients with psychiatric disorders. The Norway study concluded that compared with adolescents in the general population, adolescent psychiatric patients had a higher prevalence of smoking and the chance of having tried illicit drugs increased by four times. Conversely they had a similar incidence of alcohol use as the general population. NTA research (2008) found that the most common drugs used are alcohol, tobacco, cannabis and combinations of the three. They also found that some young people occasionally used ecstasy and that a small proportion of their client group, about 15-20%, showed class A drug abuse, mostly heroin and cocaine.

There is consensus in the literature regarding prevention and screening for substance misuse in this population (Swadi 2002, Riggs 2003, Canadian Centre on Substance Abuse 2013). Swadi (2002) noted that early detection is paramount and is possible at the first point of contact through screening. 55% of cases in this study had prior contact with mental health services. Although no information is available as to whether substance misuse was recognised at initial contact, the possibility for early screening may well be unaddressed locally.

Limitations

The main limitation of this study is the lack of available data which prevented a more rigorous and scientific approach to analysis to be employed. This also counteracted the strengths associated with surveying a total population, since in approximately 50% of cases, records were incomplete. Currently there are no comprehensive electronic patient information systems within mental health services and all data was mined from mainly handwritten notes. This meant that the process of gathering data was lengthy and laborious (taking around 12 weeks) and rendered the findings open to researcher interpretation.

CONCLUSIONS

This study was the first undertaking which attempted to chart the characteristics of children and adolescents with comorbid disorders in Malta. Although lacking generalisability to a wider audience it is an important first step in using researched evidence as a tool for future service policy and planning. Whilst the findings have shown that young people with comorbid disorders in Malta share many similarities in characteristics with similar children and adolescents in other countries, this study has also revealed that there is a clear and pressing need to develop research systems and conduct more detailed enquiries.

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References

1. Azzopardi Muscat N, Calleja N, Calleja A, Cylus J: Malta: health system review. *Health Systems in Transition* 2014;16:1–97.
2. Canadian Centre on Substance Abuse: *When Mental Health and Substance Abuse Problems Collide Understanding, Preventing, Identifying and Addressing Mental Health Disorders and Substance Abuse Issues in Youth*, 2013. Retrieved from <http://www.ccsa.ca/Resource%20Library/CCSA-Mental-Health-and-Substance-Abuse-2013-en.pdf>
3. Crome I, Chambers P, with Frisher M, Bloor R & Roberts D: *The relationship between dual diagnosis: Substance misuse and dealing with mental health issues.*, SCIE Research Briefing, 2009; pp30. Retrieved from <http://www.scie.org.uk/publications/briefings/files/briefing30.pdf>
4. Joint Commissioning Panel for Mental Health: *Guidance for commissioners of child and adolescent mental health services*, 2013. Retrieved from <http://www.jcpmh.info/wp-content/uploads/jcpmh-camhs-guide.pdf>
5. Mangerud WL, Bjerkeset O, Lingaas Holemn T, Lydersen S, Saebo Indredavik M: *Smoking, alcohol consumption and drug use among adolescents with psychiatric disorders compared with a population based sample.* *Journal of Adolescence* 2014; 37:1189-1199.
6. Ministry for Health: *A National Health Systems Strategy for Malta 2014-2020. Securing our health system for future generations*, 2014.
7. Nageotte CA, Murphy KM: *Child-adolescent substance use disorders. Program and abstracts from the 153rd Annual American Psychiatric Association Meeting. May 13 – 18 2000. Chicago, Illinois, 2000.*
8. National Statistics Office: *Census of Population and Housing 2011, Preliminary Report.* - Valletta: National Statistics Office, 2012.
9. National Treatment Agency for Substance Misuse (NTA): *The role of CAMHS and addiction psychiatry in adolescent substance misuse services. 1st May 2008.* Eds: Mirza K, McArdle P, Crome I, Gilvarry E. Retrieved from http://www.nta.nhs.uk/uploads/yp_camhs280508.pdf
10. Riggs P: *Treating Adolescents for Substance Abuse and Comorbid Psychiatric Disorders. Science and Practice Perspectives*, August 2003 pp18-29.
11. Salvo N, Bennett K, Cheung A, Chen Y, Rice M, Rush B, Bullock H, Bowlby A: *Prevention of Substance Use in Children/Adolescents with Mental Disorders: A Systematic Review.* *J Can Acad Child Adolesc Psychiatry* 2012; 21:4.
12. SAMHSA: *Prevention of Substance Abuse and Mental Illness. Substance abuse and mental health services administration 10.03.2014.* Retrieved from <http://www.samhsa.gov/prevention>
13. Sharan P: *Prevention of Substance Abuse among Adolescents in Low-and Middle-Income countries.* *J. Indian Assoc. Child Adolesc Ment Health* 2006; 2:96–9.
14. Swadi H: *Perspectives on co-morbidity of substance misuse and mental illness among youth.* *New Zealand Family Physician* 2002; 29:184-187.
15. World Health Organisation: *Atlas: child and adolescent mental health resources: global concerns, implications for the future.* Geneva. Switzerland, 2005.
16. Zeitlin H: *Psychiatric comorbidity with substance misuse in children and teenagers.* *Drug and Alcohol Dependence* 1999; 55:225-234.

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