

TRIAGE OF CHILDREN WITH MENTAL HEALTH DIFFICULTIES PRESENTING IN A&E IN A GENERAL HOSPITAL

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SUMMARY

In Wexford and Waterford, an "out of hours" child psychiatric service has been developed, in order to provide help when the regular Child Psychiatry services (CAMHS) are not accessible. Providing a service for under 18 years old patients with mental health issues presenting in the Emergency Department (ED) of a General hospital, it functions with extremely limited resources (a consultant psychiatrist and a doctor in psychiatric training), and therefore needs an efficient triage procedure.

The purpose of this article is to review the literature about existing triage tools, and especially the 2016 Irish Children's Triage System (ICTS) and to discuss how to optimise triaging our specific patients in this new 'out of hours' CAMHS cover for Waterford/Wexford area.

Conclusion: A post triage tool and some clinical changes could improve the service.

Key words: triage – tool - child psychiatry – emergency - ICTS

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INTRODUCTION

An increasing young population in Ireland

In Ireland, the total population aged less than 18 years increased by 10.9% between 2006 and 2011 (HSE RCSI 2015). The increase in 2011 was largely in the 0-4 years and the 5-12 years age groups. Currently, one in four of the population is under 18 years of age (Barry 2017).

An increasing need for Youth Mental Health Services

For the past decades, we have observed an increasing demand for Child and Adolescent mental Health Services (Wallis et al. 2017, Aras et al. 2014).

As outlined in the 2014 Health Service Executive (HSE) Fifth Annual report of Child and Adolescent Mental Health Services (CAMHS) 2012-2013: the prevalence of mental illness in young people is increasing over time. An examination of the prevalence rates of mental illness, suicidal ideation and intent, and parasuicide in the population of Irish adolescents aged 12-15 years in a defined geographic area found that 15.6% of the total population met the criteria for a current mental illness (including 2.5% with an affective disorder, 3.7% with an anxiety disorder and 3.7% with ADHD).

The World Health Organization (Dolan & Fein 2011, Aras et al. 2014) predicts that childhood neuro-psychiatric diseases will be one of the causes of mortality and disability among the five most common diseases of adolescence in 2020.

The CAMHS Model and 'Vision for Change'

Chapter 13 of the National Model of Care for Paediatric Healthcare services (HSE RCSI 2015) in Ireland, is dedicated to the Child and Adolescent Mental

Health Services (CAMHS). CAMHS is organised in a 4-tiered model.

A 'Vision for Change' (AVFC) (HSE 2006) is a strategy document which sets out the direction for Mental Health Services in Ireland, including CAMHS. It describes a framework for building and fostering positive mental health across the entire community and for providing accessible, community-based, specialist services for people with mental illness. This policy, was developed by an expert group, which combined the expertise of different professional disciplines, health service managers, researchers, representatives of voluntary organisations, and service user groups.

To cut it short, it describes and recommends an ideal way to staff, organize, deliver and develop CAMHS...

For example, AVFC (HSE 2006, 2015) recommends the following CAMHS services per 300 000 total population:

- A total of 7 multidisciplinary community mental health teams (MHTs) which includes: 2 teams per 100 000 population (1/50 000) + 1 additional team to provide a hospital liaison service per 300 000 population + 1 day hospital service per 300 000 population.
- Each CAMHS team should comprise: 1 consultant psychiatrist (clinical lead), 1 doctor in training, 2 psychiatric nurses, 2 clinical psychologists, 2 social workers, 1 occupational therapist, 1 speech and language therapist, 1 childcare worker and 2 administrative staff.

While AVFC recommends 1 CAMHS team/50 000 total population, it is more appropriate to relate this to the number of the population aged under 18 years. According to the National Clinical Programme for Paediatrics and Neonatology, it is now agreed that there should be one team per 12 500 aged under 18 years. In 2015, there were 63 CAMHS teams.

THE PROBLEM: AN UNDER-RESOURCED CAMHS PROVISION

These recommendations are great on paper (though there are controversies) but the reality is very different due to the lack of available resources.

For example, currently, only 2 out of 5 posts of CAMHS consultants are filled for the geographic area of both Wexford and Waterford Counties. Without clinical lead, these CAMHS struggle to provide a full service as expected and waiting lists get longer.

The number of patients waiting for their first appointment in CAMHS (Aras et al. 2014) is gradually increasing because of a high number of patients, long follow-up times, and insufficient number of physicians. Long waiting times decrease the rate of attendance at the first appointment and lead to waste of time for the team, delayed solution of problems, and inability to evaluate cases of top priority in time.

This is particularly frustrating, knowing that a range of efficacious psychosocial and pharmacological treatments exists for many mental illnesses in children and adolescents, and knowing that long-term consequences of untreated childhood mental illness are costly, in both human and fiscal terms (HSE 2016).

But if these young patients cannot access (soon enough) CAMHS, they present to A&E in hospital, where they expect to be psychiatrically assessed, investigated, treated and linked appropriately with inpatient or outpatient services (Wallis et al. 2017, Goldstein & Findling 2006). And we don't want the same problem to be recreated. During opening hours, these patients used to be seen from a psychiatric point of view by CAMHS in hospital, and out of hours, the psychiatric cover was provided by the adult psychiatric team on call as there was no proper CAMHS on call.

THE IDEA: AN OUT OF HOURS CAMHS COVER FOR WATERFORD/WEXFORD

Two extra factors contributed to the creation of the 'out of hours' CAMHS cover in Waterford/Wexford. On one side, from the 01.09.2016 onwards, the adult psychiatrists in UHW decided to stop providing an out of hours 'cover' for patients under 18 years. On the other side, from January 2017 onwards, the psychiatric care provided during opening hours by the CAMHS teams for children in WGH was ceased. Indeed, CAMHS being under resourced could not manage to deal appropriately with the always growing amount of young patients presenting directly to hospital, and stopped to provide that type of intervention. It is in this context that an 'out of hour' child psychiatry cover was initiated; it has been active since 01.09.2016, and has continually been adjusting as circumstances have always been changing (especially depending on how operational the regular CAMHS were). It has been operated by one consultant psychiatrist and a doctor in psychiatric training on call when the

consultant's presence was not necessary (usually consultant in WGH and doctor in psychiatric training in UHW). Between February 2018 and August 2018, a total of 675 interventions were provided by the 'out of hours' CAMHS consultant between both hospitals. The high number of interventions provided by this 'out of hours' CAMHS cover certainly highlighted the need for an adjusted triage procedure or tool in order to optimize its operation, especially in A&E, which is the common entry point for most of these young people.

Triage (Aras et al. 2014) originates from military medicine and means to categorize the injured individuals into 3 groups on the basis of a pre-examination: the ones who require urgent intervention, ones who can wait and ones who will not benefit from treatment. This means that in the triage system, patients are directed to appropriate treatments according to their clinical requirements, the possibility of benefiting from the treatment, and the urgency level.

THE CHALLENGE

Triage in an A&E is used to focus limited staff and material resources on what is medically urgent (Stocker 2006). Therefore, we needed to explore how we could triage our young patients with mental health issues presenting to A&E. We wanted a triage tool that was both easy to use with a paediatric population but also specific to our young people mental health issues. We also had to keep in mind that the staff using the triage tool would be an A&E staff and or a Paediatric A&E staff, and not child psychiatrists.

THE METHOD

Reviewing the literature, we compared various triage tools that had been developed by different Countries, either for paediatric patients or for patients with mental health issues.

Between June and August 2018, we conducted a literature search based on electronic bibliographic databases as well as other sources of information (grey literature).

We also had to question our own specificities, needs and requirements and establish a few definitions prior to establish a triage tool.

IMPORTANT DEFINITIONS AND CONSIDERATIONS

Child

Under the Mental Health Act, 2001, a child is defined as "a person under the age of 18 years other than a person who is or has been married".

How do they come to A&E?

They can self-refer, or come with some non-professional referrers/escorts (parents, friends or non-parental carers) or be referred by professionals such as GP, Ambulance, Police, School, CAMHS, social work, etc.

What is difficult with these young patients in A&E?

Young patients who need mental health care can be disturbing to the routine and flow of the Emergency Department, and require more resources (including monitoring from the hospital security) than many medical or trauma patients. A&E is often a high-stimulation environment where privacy that is an issue, leading to distraction and disruption of care for these patients and their families as well as the other A&E patients (Dolan & Fein 2011).

Among children who frequently used mental health services in A&E, approximately 50% of them were seen again within 2 months of their initial visit, which suggests that patterns of recidivism are high for psychiatric patients (Wallis et al. 2017). Repeat patients are more likely to threaten to harm others, to be under the care of a child welfare agency and to have an increased risk involvement with juvenile justice.

Assessing Children and Adults, what is different?

The nature of parental responsibility, the child protection framework, the issues of competency to give consent or to withhold treatment, the rights to confidentiality, consideration and understanding of the family and support social environment in which the young person may be discharged and of course, the child's development.

MAIN TRIAGING SYSTEMS

Triage is a clinical process to assess and identify the needs of a person and the appropriate response required. The most important element of triage is the identification of risk. United States, Canada, United Kingdom and Australia (Stocker 2006, Maule 2014) were the first to develop triage for the Emergency Medical System. They worked on triage tools which are described below. They all have in common the fact that they use clinical criteria to limit the maximum waiting time for patients in A&E. Basically the assignment of triage acuity level addresses 2 issues (Warren et al. 2008): "What is this patient's priority (urgency) to be seen?" and "How long is it safe to wait?"

United States

There is no homogeneity. There are models with 3, 4 and 5 levels of triage (and poor concordance between them). There is a preference for 5 levels triage systems.

United Kingdom

The "Manchester Triage Group" (MTS) has developed a five levels model. A first model was developed in 1996, and some further versions were made available in 2006 and 2014 (EMP).

It uses a series of flow charts for various "presentations" with key "discriminators" to determine the triage category. It takes account of the severity of the problem but also of the pain level. This system can be used (adapted) both for adults and children, but remain

primarily an adult triage tool. For example, in MTS there is no child age-specific parameters available for abnormal pulse or respirations for children. It is adapted for phone triage.

Canada

The "Paediatric Canadian Triage and Acuity Scale" (PaedsCTAS) is also a 5 model levels. It was created in 1999 and revised in 2005 (presenting complaint list) and 2008 (first and second modifiers). Its purpose is to standardize triage rules.

The attribution of a patient to a triage category does not depend on flow-charts, but is based on "description" of clinical presentation or illnesses (for example, the critical first look is accomplished by a rapid visual inspection of the patient using the principles of the Paediatric Assessment Triangle: general appearance, work of breathing and circulation. Most PaedsCTAS level 1 and 2 patients will be identified and immediate care provided. Further clarification of the presenting complaint and modifiers can await stabilisation of the child).

The PaedCTAS was the only child specific triage system identified. It was considered less user-friendly than MTS but included an age specific physiologic parameter assessment.

Australia

The Australasian College for Emergency Medicine (ACEM) has adapted the "National Triage Scale" that was created in 1993, and developed the "Australasian Triage Scale" (ATS). The ATS has been used since 2000, both for adults and children, in all the emergency departments in Australia, New Zealand and New Guinea. It is also a 5 levels model. The attribution of a patient to a triage category happens after assessment of the patient's breathing, respiratory tract, circulation, consciousness and pain. Each of these parameters is rated between 1 and 5, and subsequently, some further criteria (neuro-vascular, psychiatric and ophthalmological) are also considered. The parameter with the lowest level determines the global category level for the patient. These 5 parameters are assessed independently from the patient's main diagnosis.

IRELAND: THE IRISH CHILDREN'S TRIAGE SYSTEM (ICTS)

Neither MTS nor PaedsCTAS on their own were considered to fully address the need of the Irish paediatric patient population or the users of the system, thus the merits of both systems were identified and merged into one child-specific triage tool, namely the ICTS.

It was agreed to use a similar format to that of the MTS as the flow charts used in the MTS were thought to be user friendly and easy to follow. It was also considered appropriate to build on a system that was already familiar to the staff rather than introduce a completely new system that would require substantial

re-education. Furthermore, ICTS adapted the use of numbering categories and ideal time targets from MTS rather than the target times recommended in the Canadian or Australasian triage tools. Finally the physiologic parameters assessment of PaedsCTAS, was modified and incorporated in the new tool. Hereafter, ICTS was developed using flowcharts representing the 22 most common paediatric presenting complaints to Irish EDs (+ 2 extra flowcharts: unwell child and unwell infant).

On 16.06.2016, the EMP formally launched the ICTS at the Royal College of Surgeons in Ireland (RCSI) (HSE 2016, EMSP 2013).

DISCUSSION

The ICTs proved itself efficient through our 675 interventions. But some barriers to adequate paediatric mental health services provision in ED, have been identified. There are limitations of the A&E setting that influence timely and comprehensive evaluation, but also a need for education and training of ED staff regarding identification and management of paediatric psychiatric illness. The lack of access to and effectiveness of inpatient and outpatient CAMHS for follow-up is also problematic.

In first instance, we need to address the lack of information about paediatric psychiatric illness within the ED but also in the general population. Developing a practical though detailed post-triage mental health tool for young patients, like it has recently been developed for an adult population (review in 2020) (College of Psychiatrist of Ireland 2017) could also help to an appropriate and efficient provision of care. Availing from a dedicated and specially organised place within the A&E department to meet young patients presenting either with a psychiatric emergency or in crisis, and their family, is certainly crucial. Making this environment safe for both patients and staff is also essential. Providing observation or short hospitalisation beds in this system could help for the assessment /monitoring of some patients and also help to diffuse crises and avoid inappropriate referrals to an already saturated CAMHS system. In order to make this psychiatric emergency/crisis intervention centre functional, we believe that not only psychiatrists should be present 24/7, but that psychiatric nurses and social workers should also be present 24/7.

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