

# Why are so many more adolescents presenting to our emergency departments with mental health problems?

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New data on the rise in presentations should be seen as canaries in the coal mine



**A**ustralia has in recent decades made major investments in mental health care; government expenditure has risen rapidly,<sup>1</sup> the availability of psychological therapies has expanded,<sup>2</sup> antidepressant use has increased,<sup>3</sup> and the size of the mental health workforce has grown.<sup>4</sup> There has also been a major focus on adolescents with the national rollout of Headspace centres and early psychosis programs.<sup>5</sup> Data in two articles in this issue of the Journal, describing trends in mental health crisis presentations by adolescents to emergency departments in Australia's two most populous states, provide an important test of the success of these investments.

Perera and colleagues analysed data from 115 emergency departments in New South Wales.<sup>6</sup> During 2010–2014, presentations leading to a primary diagnosis of self-harm, suicidal ideation

and behaviour, and intentional poisoning dramatically increased in all age groups, except 0–9-year-olds. The peak age band for presentations was 10–19 years, the group that also experienced the greatest increase in presentation numbers.

In Victoria, Hiscock and colleagues analysed presentations to emergency departments by 0–19-year-olds with mental health and physical disorders during 2008–15.<sup>7</sup> The authors found a disproportionate increase in the numbers of presentations for mental disorders compared with those for physical disorders (46% *v* 13%). During 2014–15, 77% of these mental health-related presentations were by 15–19-year-olds and 19% by 10–14-year-olds. Self-harm presentations had increased by 53% since 2008–09, becoming the most frequent of six broad diagnostic groups of mental disorder.

Both studies illustrate the value of administrative data for assessing the success of important health service initiatives. Such health service information systems are not without limitations, particularly with regard to diagnostic coding. A recent Australian multi-site study of emergency physicians identified that nearly half found the system confusing, with wide variations in coding of even simple childhood physical disorders.<sup>8</sup> However, such limitations



cannot explain the rising rates of young people presenting to emergency departments with mental health problems, particularly within a relatively short time period.

One possibility is that the rise reflects a shift in the prevalence of adolescent mental disorders. The 2013 Australian Survey of Child and Adolescent Mental Health and Wellbeing found that one in six 4–17-year-old boys and one in nine girls had mental health problems.<sup>9</sup> Among 12–17-year-olds, 7.5% had experienced suicidal ideation in the past 12 months, 7.2% had made a suicide plan, and 2.4% had attempted suicide.<sup>10</sup> However, these rates were similar to those found by the 1998 survey, suggesting that changes in prevalence do not explain the increase in presentations to emergency departments.

A more likely explanation is that current mental health services are failing to provide alternatives to emergency departments for adolescents in crisis. According to the 2013 survey, just over half the 4–17-year-olds with a mental disorder had used a mental health service in the past 12 months, with rates of use higher for those with more severe disorders.<sup>9</sup> However, we know little about the extent to which services are meeting minimum clinical standards or the extent to which young people are adhering to the treatments provided.

Jorm and colleagues recently examined why investments in mental health services have brought so little benefit in any age group.<sup>11</sup> In Australia, Canada, England, and the United States, countries that have invested heavily in mental health services, there were no reductions in the prevalence of mental health disorders between 1990 and 2015. The authors concluded that many treatments did not meet minimum clinical standards and were not tailored to help those in greatest need. They also noted that in Australia, national recommendations for a greater emphasis on prevention had remained unheeded.

The capacity of the health care system to respond to mental health crises is a further important indicator; the rise in emergency department presentations suggests it is inadequate. Just over half the emergency mental health presentations in the study by Perera and colleagues were made outside regular working hours,<sup>6</sup> reinforcing the importance of crisis support being available at any time. Telephone helplines, including Kids Helpline (for people aged 5–25 years) and Lifeline, have long been important parts of the crisis response network, but are perennially underfunded. Recent innovations, such as real time support via text messages (crisis text lines) may also provide valuable opportunities for crisis responses, especially with adolescents. However, single point of care telephone lines that provide high level triage and the capacity to link with other services, prioritising next day or same week assessment, is missing from the Australian model—as it is in most parts of the world.

Regardless of broader system responses, the trends reported by these two articles underscore the need to train emergency department staff in the management of adolescents who present with acute emotional distress and mental health problems. It is pleasing that mental health competencies have increasingly been promoted in the Australasian College of Emergency Medicine quality standards for emergency departments.<sup>12</sup> Physical facilities also matter: loud, busy emergency departments are not appropriate for emotionally aroused, aggressive, or substance-affected adolescents. Their management is facilitated by quiet, calming environments that are also safe.

Access to specialist expertise in emergency departments is equally necessary. Hiscock and her co-authors found that a higher proportion of 0–19-year-olds with mental disorders required inpatient admission than those with physical disorders (27% *v* 20%).<sup>7</sup> Clinicians at the coalface appreciate that integrating service elements, rather than simply bolting mental health expertise onto existing services, underpins effective responses to severe or complex mental health presentations. At the Royal Children's Hospital in Melbourne, longstanding collaboration between the emergency and mental health departments means that specialist mental health clinicians are now available around the clock, greatly increasing the capacity of the emergency department to assess and initiate mental health care, promote linkages to community-based services, and provide secondary consultation. However, integration also needs to be aligned with funding models; the lion's share of the expense for this flexibility is borne by the hospital mental health service rather than the emergency department, thereby diverting funds from community services.

The emergency department data reported in this issue of the *MJA* should be seen as canaries in a coalmine. Despite major investments in the mental health service system, it is failing to provide alternatives to emergency departments for adolescents in crisis. There is a pressing need to understand why, particularly in the context of persisting high prevalence rates. More extensive and more frequent surveys of child and adolescent mental health are needed to understand trends in prevalence and important risk factors. Better linkage with health care system data would also provide essential information about service coverage and quality.

Two further messages are clear. The dramatic increases in the numbers of presentations by adolescents with mental health problems require a commensurate response from emergency departments that does not detract from community services. Further, while improving the quality of clinical services is important, it is likely that only effective prevention will ultimately stem the tide of mental health problems in adolescents; this will require greater emphasis on supporting struggling families and disadvantaged communities. The welcome announcement of the “Million Minds” initiative, partially funded through the Medical Research Future Fund,<sup>13</sup> provides an opportunity to invest in two neglected but essential areas to improve the mental health of all Australians: obtaining adequate data for guiding health service systems, and preventing mental health problems in children and adolescents.

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- 1 Australia Institute of Health and Welfare. Mental health services in Australia. Updated Feb 2018. <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/mental-health-resources/expenditure-on-mental-health-related-services> (viewed Mar 2018).
- 2 Whiteford HA, Buckingham WJ, Harris MG, et al. Estimating treatment rates for mental disorders in Australia. *Aust Health Rev* 2014; 38: 80–85.
- 3 Stephenson CP, Karanges E, McGregor IS. Trends in the utilisation of psychotropic medications in Australia from 2000 to 2011. *Aust N Z J Psychiatry* 2013; 47: 74–87.
- 4 Organisation for Economic Co-operation and Development. Health at a glance 2013: OECD indicators. Paris: OECD, 2013. <https://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf> (viewed Mar 2018).
- 5 Reavley NJ, Jorm AF. Mental health reform: increased resources but limited gains. *Med J Aust* 2014; 201: 375. <https://www.mja.com.au/journal/2014/201/7/mental-health-reform-increased-resources-limited-gains>
- 6 Perera J, Wand T, Bein KJ, et al. Presentations to NSW emergency departments with self-harm, suicidal ideation, or intentional poisoning, 2010–2014. *Med J Aust* 2018; 208: 348–353.
- 7 Hiscock H, Neely RJ, Lei S, Freed G. Paediatric mental and physical health presentations to emergency departments, Victoria, 2008–15. *Med J Aust* 2018; 208: 343–348.
- 8 Spillane IM, Krieser D, Dalton S, et al. Limitations to diagnostic coding accuracy in emergency departments: implications for research and audits of care. *Emerg Med Australas* 2010; 22: 91–22.
- 9 Lawrence D, Johnson S, Hafekost J, et al. The mental health of children and adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Canberra: Department of Health, 2015. <https://www.health.gov.au/internet/main/publishing.nsf/Content/9DA8CA21306FE6EDCA257E2700016945/%24File/child2.pdf> (viewed Mar 2018).
- 10 Zubrick SR, Hafekost J, Johnson SE, et al. Suicidal behaviours: prevalence estimates from the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. *Aust N Z J Psychiatry* 2016; 50: 899–910.
- 11 Jorm AF, Patten SB, Brugha TS, Mojtabai R. Has increased provision of treatment reduced the prevalence of common mental disorders? Review of the evidence from four countries. *World Psychiatry* 2017; 16: 90–99.
- 12 Australasian College of Emergency Medicine. Quality standards for emergency departments and other hospital-based emergency care services. Melbourne: ACEM, 2015. <https://acem.org.au/getmedia/cbe80f1c-a64e-40ab-998f-ad57325a206f/Quality-Standards-1st-Edition-2015.aspx> (viewed Mar 2018).
- 13 Hunt G. Interview with Sabra Lane on ABC Radio National AM Program [transcript]. 6 Mar 2018. <http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-medirel-yr2018-hunt180306.htm> (viewed Mar 2018). ■