headspace
National Youth Mental Health Foundation

part 1:

why are integrated interventions recommended?

About this resource

For the purpose of these documents the term 'young people' refers to individuals aged 12–25.

The integration of screening, assessment and treatment of substance use issues into primary mental health care should be considered from a funding, organisational, service delivery and a clinical level. These resources focus on addressing integration at the clinical level and are written from the perspective of general practitioners and mental health service providers working in primary care settings, rather than a specialised AOD treatment service provider. Therefore, interventions discussed are generally designed for young people with mild to moderate co-occurring problems and are primarily psychological rather than pharmacological interventions.

A suite of resources has been developed for clinicians working with young people who have co-occurring mental health and alcohol and other drug (AOD) problems.

Part 1 (this resource) focuses on:

- the context for adopting an integrated intervention approach, which is distinguished from parallel and sequential models of care,
- the evidence for integrated interventions.

Part 2 focuses on:

- the evidence for substance use screening and assessment,
- the currently available evidence-based interventions for young people with AOD issues.

Part 3 provides:

- practical tips for working with young people who have co-occurring mental health and AOD problems (hereafter termed co-occurring problems).

why are integrated interventions recommended?

Background

Experimenting with alcohol and other drugs during adolescence and early adulthood is considered a normal part of life for many young people.[1] In 2019 the most popular substances used by young Australians were alcohol, cannabis and tobacco (in order of prevalence).[2] Substance use patterns differed depending on age. Risky alcohol use (more than four standard drinks on one occasion at least once a month) over 12 months was more common in young adults aged 18–24 than adolescents aged 14–17 (41 per cent versus nine per cent).[2] Similarly, 30 per cent of young adults compared to nine per cent of adolescents reported using cannabis within the previous 12 months.[2] The reasons young people continue to use AODs after first use are similar to those reported by adults: primarily for enjoyment and wanting to have fun.[2] Young people are particularly vulnerable when using AODs, given they are in a life stage that is characterised by increased risk-taking and sensation-seeking behaviours. Young adults have a 34 per cent chance of being a victim of any alcohol-related incident (such as physical/verbal abuse or being put in a state of fear).[2] Young adults who engage in risky alcohol use have a 41 per cent chance of injury from a single occasion of drinking.[2] These percentages are higher than for any other age group.[2]

> **Young people with mental health issues use AODs more frequently,[8, 9] and more often use multiple substances[10] compared to young people who do not have a mental health problem.**

Young people most often seek help from treatment services for problematic cannabis, alcohol and amphetamine use; seeking help for amphetamine use is more common in young adults than adolescents.[2] However, many young people aged 16-25 do not perceive substance use as necessarily harmful; 74 per cent believe it can be a 'pleasant activity' and 67 per cent believe there are 'many things that are much more risky' than trying substances.[1] More than two thirds of young people do not seek help from mental health services when it is needed, especially if their problem is AOD use.[3, 4] **Therefore, problematic AOD use can often go undetected and untreated.** In some instances AOD problems may be perceived by young people as normal experiences, not issues worthy of seeking help for, especially if their peers experience the same or similar AOD problems. Substance use of any kind among young people warrants concern, given that it can cause harm and interfere with the physical, social, emotional and neurodevelopmental changes that take place during the transition from adolescence to adulthood.[5–7]

AOD use by young people with mental health problems

Over the past two decades AOD use by young people has decreased in the general population, yet it remains high in those with mental ill health. Young people with mental health issues use AODs more frequently,[8, 9] and more often use multiple substances[10] compared to young people who do not have a mental health problem. For example, in adolescents with major depressive disorder, prevalence of cannabis use is at least three times and alcohol use is almost two times higher than same-age peers in the general population.[8] To have co-occurring problems, difficulties do not need to be at the level of meeting diagnostic criteria for a mental health/substance use disorder; co-occurring problems may be sub-threshold. Approximately a third of help-seeking young people attending headspace have some degree of problematic alcohol or cannabis use.[11] Around 23 per cent have problems with past/current multi-substance use, including alcohol, cannabis and/or cigarettes plus use of other substances such as amphetamines, ecstasy or cocaine.[12] Help-seeking younger adolescents tend to use a single substance, mainly alcohol, while older adolescents-young adults tend to use more substances.[10, 12] Notably, young people are less likely to seek help for AOD issues than adults.[13, 14] Because people are more willing to seek help for mental health rather than AOD issues,[13] youth mental health services are a key avenue for early detection and treatment of AOD problems.

Having both a substance use disorder and mental health problem in adulthood is associated with greater risk of suicidality and self-harm, more conflicts with family/friends, poorer physical health, poorer social and occupational functioning and increased homelessness.[15, 16] Young people with co-occurring AOD and depression/anxiety disorders, similarly tend to have increased suicidality, more severe AOD use, poorer social skills and decreased academic performance relative to young people who meet criteria for a single disorder.[15] Help-seeking young people with co-occurring problems have been shown to have worse symptoms and poorer functioning at six months follow-up when compared to help-seeking young people without a co-occurring AOD problem.[17]

Take home messages

1. Although AOD use has recently decreased amongst young Australians, it remains relatively common, particularly amongst 18-25 year olds. Despite possibly harmful developmental impacts, young people may not recognise AOD use as a problem, with many unwilling to seek AOD-specific care.
2. AOD use remains disproportionately high in vulnerable groups of young people, including those with mental ill health. Many help-seeking young people attending mental health services will have problematic use of substances like alcohol and cannabis, with a sizeable minority (10-20 per cent) reporting clinically significant patterns of multi-substance use either currently or in the past.
3. Co-occurring problems is an important marker for poor outcomes, including in young people.

Early intervention during the critical maturational stage of adolescence-early adulthood, where substance use issues are less entrenched, is an essential strategy for preventing and minimising both long-term and immediate harms linked to co-occurring problems.[18–20]

Treatment approaches to co-occurring AOD issues and mental ill-health and why an integrated approach is preferred

Historically, sequential and parallel treatment approaches have dominated both research and clinical practice when it comes to co-occurring problems. Sequential treatment typically involves a person first receiving treatment for only one issue (often AOD problems), before receiving treatment for the other issue. Parallel treatment typically involves a person receiving independent simultaneous treatment for both their AOD and mental health issues via different services.[15] These approaches often lead to people 'falling through the gaps' and never receiving treatment for the problem that is perceived to be secondary or less severe.[15, 21] Receiving treatment for one issue but not the other reduces the likelihood of treatment benefits being sustained.[22] Both sequential and parallel approaches fail to address the inherent interconnectedness of mental health and substance use issues, and promote involvement of multiple services and clinicians, placing greater burden on the individual, and their family and friends. Additionally, the young person may not perceive their co-occurring problems as separate issues, which can influence their level of engagement in sequential and parallel treatments.

Integrated models (also termed coordinated or shared care) involve a person receiving treatment for both co-occurring problems simultaneously from a single service. An integrated 'treatment' typically involves a single provider delivering treatment for both issues. In this resource the term 'integrated interventions' will be used to refer to both integrated models and integrated treatments. Integrated interventions allow the exploration of the interconnectedness between the individual's AOD and mental health problems.[15] Common core components of an integrated model of care for people of any age with co-occurring problems can include:[23]

- a multidisciplinary care team,
- shared decision making and treatment planning that considers the individual's readiness for change,
- motivational enhancement interventions,
- self-help groups,
- physical health promotion,
- involvement of family and friends in treatment, and
- assertive outreach and long-term service provision.

There is extensive evidence that integrated models work for young people, primarily coming from the global movement towards integrating mental health treatment within primary medical health care.[24–26] Evidence also comes from research into the efficacy of early intervention psychosis services,[27] where young people receive integrated specialised treatment for psychosis/psychosis risk, as well as vocational/educational support, and treatment for co-occurring mental health issues, such as depression and anxiety.[28] Broad principles of integrated community-based care models specifically for young people commonly include:[29]

- rapid access and early intervention,
- engagement of the young person and their family,
- service provision in a youth-friendly setting,
- partnerships and collaboration (e.g., with academic institutes, support agencies), and
- evidence-based practices.

> **Integrated interventions allow the exploration of the interconnectedness between the individual's AOD and mental health problems.[15]**

An integrated model of care for addressing co-occurring mental health and AOD issues is the approach recommended by Australian[30, 31] and international[32, 33] government bodies, and by AOD and youth mental health experts and organisations.[16, 34–41] Globally, there is service-wide acceptance that mental health and AOD support is best integrated across the model of care. However, multiple barriers exist when it comes to implementing an integrated care model and more so integrated treatments. Structurally, there is a need for services to broaden the scope of care provided, and to provide adequate support and training to up-skill the clinical, allied health, and AOD worker workforce to better detect and treat co-occurring problems.[42] There is also need for increased accessibility and affordability for clients.[42] Other barriers for young people seeking help for co-occurring problems include: stigma and embarrassment, beliefs of health care providers, fears around confidentiality, lack of family/community support, lack of awareness about the interconnectedness of problems, and the direct impact of symptoms of mental health and of AOD problems, on motivation, judgement and insight.[42–44] These barriers are not only real-world obstacles young people face, but they also make it difficult to run randomised controlled studies. This has slowed down the development and evaluation of specifically integrated interventions and ultimately much needed system reform.

Integrated interventions are preferred, although high-quality research in young people is lacking

Research exclusively involving young people

The majority of previous randomised controlled trials (RCTs; gold standard studies) in mental health focused on two cohorts; children/adolescents aged 12-17, and adults (people aged 18 and older). This is largely because mental health systems traditionally divide service provision into child and adult services. The global movement in youth mental health service reform has lead to new models of care that provide specialised treatment to young people aged 12-25.[45] However, some researchers and health systems have yet to embrace this shift and are yet to view young people aged 12-25 as having unique developmental and cultural needs. Therefore, there is currently a lack of high quality research that specifically involves young people aged 12-25.

A limited number of RCTs have evaluated the efficacy of integrated interventions (i.e., both integrated models and integrated treatments) for young people with co-occurring issues. A review that evaluated RCTs of integrated interventions in adolescents who had both a substance use disorder and (any) mental health disorder, found cognitive problem solving therapy and family behaviour therapy in particular had large effects on reducing substance use and internalising and externalising problems, compared to either treatment as usual or some other active intervention.[46] Cognitive behavioural therapy (CBT) also had moderate-to-large effects on reducing both substance use and internalising problems, compared to interactional group therapy or psychoeducation.[46] A review of integrated treatments for young people with a substance use disorder (excluding tobacco) and depression, found preliminary evidence for the efficacy of CBT, family-focused therapy and motivational enhancement therapy (MET) to reduce both depressive symptoms and symptoms of substance use disorder.[47] A recent narrative review concluded that integrated treatments combining elements of CBT, family-based therapy, motivational interviewing (MI) and/or contingency management, are the most promising for treating adolescents with co-occurring substance use disorders and either internalising or externalising disorders in adolescents.[48] Overall, emerging evidence supports family-based interventions, problem solving therapy, CBT and MET for treating co-occurring problems in young people.

Research involving young people and adults

The lack of good quality evidence in this area extends also to young adult and adult populations. A gold standard review recently examined the efficacy of psychological interventions for over 4,000 participants aged 18-65 with co-occurring AOD use and serious mental illness.[49] Only four of the RCTs reviewed used integrated models, which were intensive and usually lasted 36 months. When compared to treatment as usual, there were no significant differences in illness outcomes, including reducing substance use, remaining in treatment, improving mental health or global functioning.[49] Overall it was concluded there was no evidence to support any one particular intervention over and above standard care, and that evidence to date has been of poor quality.[49] The same was concluded in a Cochrane review of psychological therapies for people with co-occurring substance use disorder and depression, where one of seven studies comprised adolescents.[50]

What about tobacco?

Tobacco use is the leading cause of preventable death and disease worldwide.[51] Despite this, research into the efficacy of integrated treatments for young people with co-occurring issues often excludes individuals when their only AOD issue is tobacco use. Around 70 per cent of young people with co-occurring problems are current smokers.[52] A meta-analysis involving at-risk adolescents (defined as having a mental illness, receiving treatment for substance use problems or being pregnant) failed to find CBT, MI, MET, peer support, relapse prevention, nicotine replacement therapy or a combination of these, to be effective for smoking cessation when compared to treatment as usual or a control intervention.[53] Another more recent review of interventions for reducing or ceasing tobacco use in young people with co-occurring depression highlighted the need for more research in this area, as only two (unsuccessful) RCTs were identified.[54] Further, these interventions did not appear to be delivered as integrated treatments.

E-cigarettes

Although tobacco use is at an all-time low in Australia, use of electronic cigarettes (e-cigarettes) are on the rise, with around 10 per cent of adolescents and 26 per cent of young adults having ever smoked e-cigarettes.[2] People with mental illness are twice as likely to be current e-cigarette smokers than people without a mental illness.[55, 56] Evidence suggests that the vapours inhaled from e-cigarettes may overall, be less harmful than smoke inhaled from traditional cigarettes.[57] However, e-cigarettes still contain worrying levels of heavy metals and carcinogens, and most contain the addictive substance nicotine, which has been shown to impact on brain development.[57, 58] The World Health Organisation and the Thoracic Society of Australia and New Zealand regard e-cigarettes as not safe; the long-term effects of e-cigarettes are unknown.[59, 60] This further highlights the need for new interventions, including integrated interventions, targeting all forms of cigarette smoking in young people, especially for those with co-occurring mental health issues.

Summary

Overall, there is currently insufficient research into integrated interventions for the treatment of co-occurring problems in young people to inform clinical practice. Nonetheless, CBT, family-based therapies and motivational interventions appear to be the most promising to date. There are several studies currently underway. [61, 62] While integrated interventions continue to be developed and evaluated, preliminary guidance on the screening, assessment and treatment of co-occurring problems can be drawn from empirical research that focuses on the detection and treatment of AOD issues in young people, irrespective of whether or not they have a mental health issue.

More from this suite

See Part 2 for recommendations on screening, assessment and treatment of young people with co-occurring problems.

See Part 3 for practical tips on how to integrate screening, assessment and treatment of AOD issues into clinical practice.

References

1. Lancaster K, Ritter A, Matthew-Simmons F. Young people's opinions on alcohol and other drugs issues. Australian Capital Territory: Australian National Council on Drugs; 2013.
2. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2019. Drug Statistics series no. 32. PHE 270. Canberra: Author; 2020.
3. Georgiades K, Duncan L, Wang L, Comeau J, Boyle MH, 2014 Ontario Child Health Study Team. Six-month prevalence of mental disorders and service contacts among children and youth in Ontario: evidence from the 2014 Ontario Child Health Study. Can J Psychiatry. 2019;64(4):246-55.
4. Reavley NJ, Cvetkovski S, Jorm AF, Lubman DI. Help-seeking for substance use, anxiety and affective disorders among young people: results from the 2007 Australian National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry. 2010;44(8):729-35.
5. Squeglia LM, Gray KM. Alcohol and drug use and the developing brain. Curr Psychiatry Rep. 2016;18(5):46.
6. Castellanos-Ryan N, O'Leary-Barrett M, Conrod PJ. Substance-use in childhood and adolescence: a brief overview of developmental processes and their clinical implications. J Can Acad Child Adolesc Psychiatry. 2013;22(1):41-6.
7. Brown S, Tapert SF. Health consequences of adolescent alcohol involvement. In: Bonnie RJ, O'Connell ME, editors. Reducing underage drinking: a collective responsibility. Washington, DC: The National Academies Press; 2004.
8. Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer M, Ainley 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.
9. Guerin N, White V. ASSAD 2017 Statistics & trends: Australian secondary students' use of tobacco, alcohol, over-the-counter drugs, and illicit substances. 2nd ed. Melbourne: Cancer Council Victoria; 2020.
10. Halladay J, Woock R, El-Khechen H, Munn C, MacKillop J, Amlung M, et al. Patterns of substance use among adolescents: a systematic review. Drug Alcohol Depend. 2020;216:108222.
11. Purcell R, Jorm AF, Hickie IB, Yung AR, Pantelis C, Amminger GP, et al. Demographic and clinical characteristics of young people seeking help at youth mental health services: baseline findings of the Transitions Study. Early Interv Psychiatry. 2015;9(6):487-97.
12. Karanges E, Malignaggi S, Van Dam N, Turnball J, Bedi G. Data-driven subgroups of help-seeking youth based on patterns of substance use. (in preparation).
13. Chapman C, Slade T, Hunt C, Teesson M. Delay to first treatment contact for alcohol use disorder. Drug Alcohol Depend. 2015;147:116-21.
14. Kessler RC, Aguilar-Gaxiola S, Berglund PA, Caraveo-Anduaga JJ, DeWit DJ, Greenfield SF, et al. Patterns and predictors of treatment seeking after onset of a substance use disorder. Arch Gen Psychiatry. 2001;58(11):1065-71.
15. Marel C, Mills K, Kingston R, Gournay K, Deady M, Kay-Lambkin F, et al. Guidelines on the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings. 2nd ed. Sydney, Australia: Centre of Research Excellence in Mental Health and Substance Use, National Drug and Alcohol Research Centre, University of New South Wales; 2016.
16. Alcohol and Drug Foundation. Alcohol and other drugs and mental health [Internet]. North Melbourne: ADF; 2020 [cited 2020 Jan 25]. Available from: https://cdn.adf.org.au/media/documents/MiniBulletin_AODandMH.pdf.
17. Baker KD, Lubman DI, Cosgrave EM, Killackey EJ, Yuen HP, Hides L, et al. Impact of co-occurring substance use on 6 month outcomes for young people seeking mental health treatment. Aust N Z J Psychiatry. 2007;41(11):896-902.
18. Stockings E, Hall WD, Lynskey M, Morley KI, Reavley N, Strang J, et al. Prevention, early intervention, harm reduction, and treatment of substance use in young people. Lancet Psychiatry. 2016;3(3):280-96.
19. McGorry P, Trethowan J, Rickwood D. Creating headspace for integrated youth mental health care. World Psychiatry. 2019;18(2):140-1.
20. Department of Health. National Drug Strategy 2017–2026. Canberra, ACT: Author; 2017.
21. Deady M, Teesson M, Mills K, Kay-Lambkin F, Baker A, Baillie A, et al. One person, diverse needs: living with mental health and alcohol and drug difficulties. Sydney, Australia: NHMRC Centre of Research Excellence in Mental Health and Substance Use; 2013.
22. Cleary M, Hunt GE, Matheson S, Walter G. Psychosocial treatments for people with co-occurring severe mental illness and substance misuse: systematic review. J Adv Nurs. 2009;65(2):238-58.
23. Kola LA, Kruszynski R. Adapting the integrated dual-disorder treatment model for addiction services. Alcohol Treat Q. 2010;28:437-50.
24. Richardson LP, McCarty CA, Radovic A, Suleiman AB. Research in the integration of behavioral health for adolescents and young adults in primary care settings: a systematic review. J Adolesc Health. 2017;60(3):261-9.
25. Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. JAMA Pediatr. 2015;169(10):929-37.
26. Hetrick SE, Bailey AP, Smith KE, Malla A, Mathias S, Singh SP, et al. Integrated (one-stop shop) youth health care: best available evidence and future directions. Med J Aust. 2017;207(10):S5-S18.

27. Correll CU, Galling B, Pawar A, Krivko A, Bonetto C, Ruggeri M, et al. Comparison of early intervention services vs treatment as usual for early-phase psychosis: a systematic review, meta-analysis, and meta-regression. JAMA Psychiatry. 2018;75(6):555-65.
28. Early Psychosis Guidelines Writing Group and EPPIC National Support Program. Australian clinical guidelines for early psychosis. 2nd ed. Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health; 2016.
29. Settipani CA, Hawke LD, Cleverley K, Chaim G, Cheung A, Mehra K, et al. Key attributes of integrated community-based youth service hubs for mental health: a scoping review. Int J Ment Health Syst. 2019;13:52.
30. Victorian Government Department of Human Services. Dual diagnosis: key directions and priorities for service development. Melboune, Victoria: Author; 2007.
31. National Centre for Education and Training on Addiction (NCETA) Consortium. Alcohol and other drugs: a handbook for health professionals. Canberra, ACT: Australian Government Department of Health and Ageing; 2004.
32. Richardson J, Ingoglia C. Bridging the addiction treatment gap: certified community behavioral health clinics Washington, DC.: National Council for Behavioral Health; 2018.
33. National Institute on Drug Abuse. Principles of drug addiction treatment: a research-based guide. 3rd ed. Bethesda, MD: National Institutes of Health U.S. Department of Health and Human Services; 2012.
34. Watson GK, Carter C, Manion I. Pathways to care for youth with concurrent mental health and substance use disorders. Ontario, Canada: Ontario Centre of Excellence for Child and Youth Mental Health; 2014.
35. Yule A, Kelly JF. Integrating treatment for co-occurring mental health conditions. Alcohol Res. 2019;40(1):07.
36. Lubman DI, Hides L, Elkins K. Developing integrated models of care within the youth Alcohol and Other Drug sector. Australas Psychiatry. 2008;16(5):363-6.
37. Savic M, Grynevych A, Best D, Lubman D. Review of integrated working strategies. Victoria, Australia: Turning Point; 2014.
38. Baker D, Kay-Lambkin F. Two at a time: alcohol and other drug use by young people with a mental illness. Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health; 2016.
39. Libby AM, Riggs PD. Integrated substance use and mental health treatment for adolescents: aligning organizational and financial incentives. J Child Adolesc Psychopharmacol. 2005;15(5):826-34.
40. Hall SM, Prochaska JJ. Treatment of smokers with co-occurring disorders: emphasis on integration in mental health and addiction treatment settings. Annu Rev Clin Psychol. 2009;5:409-31.
41. Marel C, Mills K. The importance of identifying, managing, and appropriately treating comorbidity in young people. Adv Dual Diagn. 2017;10(4):125-9.
42. Priester MA, Browne T, Iachini A, Clone S, DeHart D, Seay KD. Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. J Subst Abuse Treat. 2016;61:47-59.
43. Szirom T, King D, Desmond K. Barriers to service provision for young people with presenting substance misuse and mental health problems: a report for National Youth Affairs Research Scheme. Canberra, ACT: Australian Government Department of Family and Community Services; 2004.
44. DeHay T, Morris C, May MG, Devine K, Waxmonsky J. Tobacco use in youth with mental illnesses. J Behav Med. 2012;35(2):139-48.
45. McGorry P, Bates T, Birchwood M. Designing youth mental health services for the 21st century: examples from Australia, Ireland and the UK. Br J Psychiatry Suppl. 2013;54:s30-5.
46. Bender K, Springer DW, Kim JS. Treatment effectiveness with dually diagnosed adolescents: a systematic review. Brief Treatment & Crisis Intervention. 2006;6:177-205.
47. Babowitch JDA, K. M. Adolescent treatment outcomes for comorbid depression and substance misuse: a systematic review and synthesis of the literature. J Affect Disord. 2016;201:25-33.
48. Brewer S, Godley MD, Hulvershorn LA. Treating mental health and substance use disorders in adolescents: what is on the menu? Curr Psychiatry Rep. 2017;19(1):5.
49. Hunt GE, Siegfried N, Morley K, Brooke-Sumner C, Cleary M. Psychosocial interventions for people with both severe mental illness and substance misuse. Cochrane Database Syst Rev. 2019;(12):CD001088.
50. Hides L, Quinn C, Stoyanov S, Kavanagh D, Baker A. Psychological interventions for co-occurring depression and substance use disorders. Cochrane Database Syst Rev. 2019;(11):CD009501.
51. Bellew B, Greenhalgh EM, Winstanley MH. The global tobacco pandemic. In: Scollo MM, Winstanley MH, editors. Tobacco in Australia: facts and issues. Melbourne: Cancer Council Victoria; 2015.
52. Catchpole REH, McLeod SL, Brownlie EB, Allison CJ, Grewal A. Cigarette smoking in youths with mental health and substance use problems: prevalence, patterns, and potential for intervention. J Child Adolesc Subst Abuse. 2017;26(1): 41-55.
53. Bryant J, Bonevski B, Paul C, McElduff P, Attia J. A systematic review and meta-analysis of the effectiveness of behavioural smoking cessation interventions in selected disadvantaged groups. Addiction. 2011;106(9):1568-85.
54. Witt DR, Patten CA. Treatment of tobacco use disorder and mood disorders in adolescents. Curr Addict Rep. 2018;5:346-58.

55. Spears CA, Jones DM, Weaver SR, Pechacek TF, Eriksen MP. Use of electronic nicotine delivery systems among adults with mental health conditions, 2015. Int J Environ Res Public Health. 2016;14(1):10.
56. Cummins SE, Zhu SH, Tedeschi GJ, Gamst AC, Myers MG. Use of e-cigarettes by individuals with mental health conditions. Tob Control. 2014;23 Suppl 3:iii48-53.
57. Grana R, Benowitz N, Glantz SA. E-cigarettes: a scientific review. Circulation. 2014;129(19):1972-86.
58. Chadi N, Hadland SE, Harris SK. Understanding the implications of the "vaping epidemic" among adolescents and young adults: a call for action. Subst Abus. 2019;40(1): 7-10.
59. McDonald CF, Jones S, Beckert L, Bonevski B, Buchanan T, Bozier J, et al. Electronic cigarettes: a position statement from the Thoracic Society of Australia and New Zealand. Respirology. 2020;25(10):1082-9.
60. World Health Organisation. Tobacco [Internet]. 2020 [updated 2020 May 27; cited 2021 April 8]. Available from: https://www.who.int/news-room/fact-sheets/detail/tobacco.
61. Australian Clinical Trials: National Health and Medical Research Council. INTEGRATE: An integrated treatment for young people with psychological distress [Internet]. 2019 [cited 2021 April 1]. Available from: https://www.australianclinicaltrials.gov.au/anzctr/trial/ACTRN12619001522101.
62. ClinicalTrials.gov. Bethesda (MD): National Library of Medicine (US). Integrated Collaborative Care Teams for Youth With Mental Health and/or Addiction Challenges (YouthCan IMPACT). [Internet]. 2016 [updated 2019 July 23; cited 2021 April 1]. Available from: https://clinicaltrials.gov/ct2/show/NCT02836080.

Author

Dr Cali Bartholomeusz
Orygen and the Centre for Youth Mental Health, University of Melbourne

Expert Reviewers

Alicia Randell
Orygen and the Centre for Youth Mental Health, University of Melbourne

Allie Bailey
Orygen

Desirée Smith
Orygen

Dr Eddie Mullen
Orygen, Melbourne Health, The University of Melbourne and the National Centre for Clinical Research on Emerging Drugs, The University of New South Wales

Dr Enrico Cementon
Orygen and The University of Melbourne

Associate Professor Gill Bedi
Orygen and the Centre for Youth Mental Health, University of Melbourne

Helen Nicoll
Orygen

Dr Steve Leicester
eheadspace

Susan Preece
Orygen

Youth Consultant

Emily Unity
Orygen

We would like to recognise individuals who responded to our online survey which informed the development of this resource.

Date approved: May 2021
Version 1.0

headspace centres and services operate across Australia, in metro, regional and rural areas, supporting young Australians and their families to be mentally healthy and engaged in their communities.


headspace would like to acknowledge Aboriginal and Torres Strait Islander peoples as Australia's First People and Traditional Custodians. We value their cultures, identities, and continuing connection to country, waters, kin and community. We pay our respects to Elders past and present and emerging and are committed to making a positive contribution to the wellbeing of Aboriginal and Torres Strait Islander young people, by providing services that are welcoming, safe, culturally appropriate and inclusive.

headspace is committed to embracing diversity and eliminating all forms of discrimination in the provision of health services. headspace welcomes all people irrespective of ethnicity, lifestyle choice, faith, sexual orientation and gender identity.

headspace National Youth Mental Health Foundation is funded by the Australian Government Department of Health

For more details about headspace visit headspace.org.au

headspace National
p +61 3 9027 0100
f +61 3 9027 0199
info@headspace.org.au

Acknowledgements
This Evidence to Practice was produced by Orygen for headspace National Youth Mental Health Foundation, and funded by the Australian Government Department of Health. The series aims to highlight for service providers the research evidence and best practices for the care of young people with mental health and substance abuse problems. The content is based on the best available evidence that has been appraised for quality. Experts on the topic have reviewed the summary before publication. The authors would like to thank all consultants for their input on this resource.

Disclaimer
This information is not medical advice. It is generic and does not take into account your personal circumstances, physical wellbeing, mental status or mental requirements. Do not use this information to treat or diagnose your own or another person's medical condition and never ignore medical advice or delay seeking it because of something in this information. Any medical questions should be referred to a qualified healthcare professional. If in doubt, please always seek medical advice.

headspace
National Youth Mental Health Foundation