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Training and support needs of youth substance
use and mental health workers in relation to
comorbidity

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TRAINING AND SUPPORT NEEDS OF YOUTH SUBSTANCE USE AND MENTAL HEALTH WORKERS IN RELATION TO COMORBIDITY

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Australian Government

Department of Health



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Executive Summary

Background

The top 10 causes of burden of disease in young Australians (15–24 years) are dominated by mental health (MH) and alcohol and other drug use (AOD) disorders (Begg et al., 2007; Gore et al., 2011). In addition to the enormous costs and harms of these conditions on personal, family, and societal levels (Patel, Flisher, Hetrick, & McGorry, 2007) there is growing evidence of associations between MH and AOD disorders and significant functional and structural brain abnormalities during adolescence and young adulthood (Zeigler et al., 2005). These abnormalities have in turn been linked to considerable impairments in learning, memory, planning, impulse control, and emotional regulation (Lubman, Allen, Rogers, Cementon, & Bonomo, 2007). Furthermore, young people who develop both MH and AOD disorders have been found to exhibit significantly greater internalising and externalising problems including academic and vocational impairment, anxiety, depression, suicidality, poorer physical health, family and social dysfunction, aggression, and criminal behaviour, when compared to individuals without these disorders (Suarez, Belcher, Briggs, & Titus, 2012). These problems can persist well into adulthood and are linked with increased risk for morbidity and mortality (Brown et al., 2009).

Given the multitude of adverse outcomes described above, it is not surprising that young people with comorbid disorders frequently come to the attention of a diverse range of service systems (e.g., health, social welfare, educational, and criminal justice systems; Suarez et al., 2012) and present a significant challenge to service providers. Little research has been conducted examining the confidence of workers in responding to young clients with comorbidity; the evidence that does exist suggests they lack appropriate training and support. Early work in the area found that workers felt “overwhelmed and fearful” when dealing with young people experiencing co-occurring MH and AOD problems (McDermott & Pyett, 1993), and reported difficulty accessing appropriate training or supervision (Kavanagh et al., 2000).

In order to address this issue, the Australian Government Department of Health funded researchers at the Centre of Research Excellence in Mental Health and Substance Use at the National Drug and Alcohol Research Centre to conduct a scoping exercise to evaluate the training and support needs of clinicians working with young clients who have AOD and/or MH conditions. The primary aim of the scoping exercise was to provide recommendations for workforce development. By improving the capacity of the workforce to intervene with this population, the standard of care may be improved, and the enduring disability associated with MH and AOD disorders may be reduced.

Methods

The scoping exercise involved a two-stage process:

Stage 1: An expert panel meeting with national representatives from Headspace, the key service provider for youth mental health in Australia.

Stage 2: A national online survey of youth AOD and/or MH workers.

Results

Stage 1: Expert panel

The expert panel discussion highlighted a number of specific challenges faced by people who work with youth, all of which related specifically to workers capacity to address AOD either when it occurs alone or when it occurs with comorbid MH conditions. Challenges identified included: lack of practitioner confidence, poor expectations surrounding AOD outcomes, concerns regarding rapport and engagement, organisational cultures, organisational structures, lack of models/pathways of care, lack of training, support, and supervision within organisations.

Stage 2: Practitioner survey

One-hundred and eighty-six surveys were completed. The mean age of respondents was 44.4 years (SD 11.50) and 65.6% were female. Respondents represented a range of occupations, most commonly nurses (21.5%), psychologists (16.7%), counsellors (8.6%), social workers (8.1%), case workers (7.5%), and manager/leader/coordinator roles (5.9%).

More than half of the services were government (56.5%), followed by non-government (33.3%) and private organisations (4.8%). The primary focus of more than half of respondents' work settings was MH (57.0%) and AOD (38.2%).

The vast majority of respondents had undergone some level of training across many areas of MH and AOD. In the past 12 months, 67.2% had completed some form of MH training, 48.9% had completed some form of AOD training. Although 40.3% of respondents reported having received training on co-occurring MH and AOD disorders in the last 12 months, approximately 15% had never completed any training of this kind. The majority of the sample (86.0%) claimed that they accessed up-to-date, evidence-based research and resources to assist with their work. The sample was highly experienced in the fields of both MH and AOD problems, with almost half the sample reporting over 10-years'

experience in AOD (49.5%), MH (44.6%), and comorbidity (42.4%). Three quarters of the sample (73.7%) reported often working with young people with co-occurring MH and AOD problems.

Approximately half of respondents (49.5%) claimed most or almost all the young people they saw in their current role had a comorbid MH and AOD problem. Overall, youth eating disorder symptoms made up a relatively small proportion of respondents' caseloads. While for approximately half the sample, most or almost all of their caseload consisted of youth trauma symptoms (46.8%), substance use symptoms (51.1%), or comorbid presentations (47.3%). Youth depressive, anxiety, and posttraumatic stress disorder (PTSD) were each fairly evenly spread in respondents' caseloads.

Almost all the sample reported that they regularly assessed for MH symptoms (91.9%) and AOD (89.8%) in young people in their practice. Half the sample (48.9%) believed treatments designed for MH to be insufficient for clients who also experience AOD disorders. Similarly, half of the sample (50.0%) also believed that treatments designed for AOD disorders are insufficient for clients who also experience MH disorders.

Although approximately 90% of respondents felt moderately or extremely confident, and moderately or extremely prepared, in treating depression (87.1%) and anxiety (87.6%), less than half the sample felt confident (44.1%) or prepared (43.4%) with regards to treating eating disorders. Depression alone and anxiety alone were least challenging with approximately two-thirds of the sample reporting these issues to be not at all challenging or a little challenging. Conversely, a quarter of respondents (24.2%) found eating disorders extremely challenging. Co-occurring MH and AOD problems (22.0%), psychosis/schizophrenia alone (17.7%), co-occurring MH problems (15.1%), and self-harm (12.9%) were also commonly viewed as extremely challenging. Respondents were generally moderately or extremely confident in treating co-occurring MH problems (81.2%), and comorbid MH and AOD problems (79.0%). This was also true for preparedness with these two comorbidities (82.8% and 78.5%, respectively).

More than three quarters of the sample (79.0%) felt training in evidence-based treatments for co-occurring MH and AOD disorders would be extremely beneficial, with an additional 17.7% feeling it would be somewhat beneficial. Almost the entire sample (96.2%) felt access to a treatment manual for co-occurring MH and AOD would be at least somewhat beneficial. Similarly, 96.2% of the sample felt clinical supervision in the area would be at least somewhat beneficial. Half the sample (52.7%) felt it would be extremely beneficial to have more guidance in prioritising treatment goals/objectives (e.g., whether to focus on the AOD or MH). An additional 39.8% felt it would be somewhat beneficial. The majority of respondents (90.3%) felt training in MH and/or AOD disorders (features, causes, etc.) would be somewhat or extremely beneficial.

When asked what other resources would be helpful, there was a range of responses. Most consistently the need for better liaison between services was mentioned. The need for more (and better access to current) online resources for both for clients and clinicians was also raised. The need for more staff, more treatment/referral options, and lists of current local services were also frequently mentioned.

Discussion

Historically workers have been found to feel "overwhelmed and fearful" when dealing with young people experiencing co-occurring MH and AOD problems (McDermott & Pyett, 1993). Similarly, Stage 1 of the present study indicated that practitioner confidence was a key issue in the field. Interestingly, this was not borne out in the Stage 2 of the present study. It should be noted, that while overall confidence was found to be high, this does not necessarily reflect competence. Answers to questions regarding beliefs about the treatment of comorbidity indicated that a significant proportion of respondents were not aware of, or did not practice, in accordance with the evidence-base. This is in spite of the fact that 86% claimed that they accessed up-to-date, evidence-based, research and resources.

Practitioners reported an overwhelming desire for greater availability, and access to, current evidence-based information and resources (including access to treatment manuals, training in MH and/or AOD disorders and comorbidity), along with more training in evidence-based treatments for comorbidity. Finally, in line with Stage 1 and the extant literature in the area (Howard & Holmshaw, 2010; Roche & Pidd, 2010; Roche, White, Duraisingam, & Adams, 2012; Schulte et al., 2010), the Stage 2 practitioner survey revealed the desire for more support and supervision around comorbidity. Specific areas of need included case management, client anger, emotional dependency, self-harm, and de-escalation in comorbid populations. Additionally, guidance in prioritising treatment goals/objectives appeared to be a key area of need.

Recommendations

Further work is needed to address a number of key issues raised in this scoping exercise. Based on the findings, we provide the following recommendations to improve the capacity of youth workers to respond to MH and AOD comorbidity:

1. Provision of education and training for youth workers in MH and AOD comorbidity

Consistent with the broader literature, this scoping exercise identified that comorbidity is the norm rather than the exception for youth presenting to services. It is essential that education and training

opportunities be available for youth workers to enhance their skills in responding to comorbidity. In particular, this training should focus on the assessment and treatment of MH and AOD use (including early intervention). At a minimum, all youth workers should be able to competently screen and assess for the presence of possible MH and AOD problems, and have knowledge of evidence-based prevention, early intervention, and treatment responses.

This training/education should be provided through academic coursework undertaken through tertiary education, and be maintained through ongoing professional development activities. In addition to face-to-face training, it is recommended that a series of short training modules be developed for online delivery as this would maximise reach and enhance accessibility. Modules could be devised such that individual workers could tailor a program to specifically meet their training needs.

2. Improved access to up-to-date evidence-based information on MH and AOD use

a) Development of evidence-based resources

As identified in through this scoping exercise, there is a considerable amount of information available on MH and AOD use, particularly through the internet. However, it is difficult for practitioners (and clients) to discern the accuracy and credibility of that information. Access to evidence-based information, available in peer reviewed journal articles, is limited. Furthermore, most practitioners (and clients) lack the time and skills needed to be able to accurately interpret and synthesise the evidence base. Resources such as guidelines and treatment manuals provide practical recommendations for practitioners based on a critical evaluation of the existing evidence, and are fundamental in translating research findings into practice. The continued development of resources for clients may also help young people identify possible MH and AOD problems (for themselves and their friends), increase help-seeking, and assist young people in advocating to receive evidence-based interventions.

It is crucial that practitioner resources be made available in formats that enhance their use. In addition to hard-copies and electronic copies that can be downloaded from the Internet, it is recommended that other e-health mechanisms be utilised. The development and modification of existing resources as applications ('apps') for smartphones and tablets, for example, may enhance implementation by their ease of use, portability, and ability to be used without the need for Internet access (apart from the initial download). Furthermore, apps can easily be updated with new information as necessary, thereby providing a cost-efficient means by which to provide practitioners with the most up-to-date evidence.

b) Communication of evidence-base information via online and social media

It is also vital that practitioners are made aware of new research findings as they become available, in a manner that is useful, relevant, and acceptable to this audience. It is also essential that this information be provided by credible organisations. Increasing evidence from multiple disciplines has shown the benefits of social media for increasing the reach and impact of scientific findings. The funding provided to the NHMRC Centre of Research Excellence in Mental Health and Substance Use (by the Australian Government Department of Health as part of this Comorbidity Project) to employ a communications officer dedicated to communicating up-to-date evidence based information on MH and AOD using various mediums including online and social media has been effective in this regard. It is recommended that this funding be continued to ensure the continued availability of this valuable resource to the field.

3. Provision of clinical supervision for youth workers in MH and AOD comorbidity

The benefits of clinical supervision, for both practitioners and clients, have long been recognised. In order for youth workers to be able to successfully implement what they learn through education, training, and access to up-to-date evidence-based information, it is essential that they have access to clinical supervision.

4. Clear delineation of referral pathways and shared care arrangements with other services

A lack of awareness of available services, an absence of clearly referral pathways, and uncertainty regarding shared care arrangements between services was identified as a barrier to providing care to youth with MH and AOD comorbidity. It is recommended that all services undertake a scoping exercise to ascertain the services that are available within their geographical area, and make formalised links with them. Optimally, this information would be also be accessible via a central database that could also provide details of services located in other areas.

It is not possible for youth workers to address the diversity of client needs, however, they are in primary positions to coordinate care, and incorporate the many services that may be needed to address clients' needs. The clear delineation of referral pathways and shared care arrangements are essential in order to ensure that young people do not 'fall through the gaps' of our health and welfare systems. Well-defined managerial guidance around prioritisation of different service goals/objectives are also central to ensuring effective care coordination.

Summary

Ultimately, many of these recommendations are largely dependent on funding in an underfunded sector (Roche et al., 2012). Nevertheless, many resources are currently available and simply require better dissemination and translational models in order to address these gaps. This review has highlighted particular areas of difficulty among practitioners working with young people including case management, client anger, emotional dependency, self-harm, and de-escalation. In addition to comorbidity, specific disorders may also warrant increased attention in regards to training resources (e.g., eating disorders, psychosis, PTSD).

Overall this study highlights both areas of success and a number of key areas for further attention in order to improve the capacity of the workforce to intervene with young populations (particularly those with comorbid disorders). It is believed that in addressing some of these shortfalls the standard of care is likely to be improved, and the enduring disability associated with MH and AOD disorders may be reduced.

1. Introduction

The top 10 causes of burden of disease in young Australians (15–24 years) are dominated by mental health (MH) and alcohol and other drug use (AOD) disorders (Begg et al., 2007; Gore et al., 2011). In addition to the enormous costs and harms of these conditions on personal, family, and societal levels (Patel, Flisher, Hetrick, & McGorry, 2007) there is growing evidence of associations between MH and AOD disorders and significant functional and structural brain abnormalities during adolescence and young adulthood (Zeigler et al., 2005). These abnormalities have in turn been linked to considerable impairments in learning, memory, planning, impulse control, and emotional regulation (Lubman, Allen, Rogers, Cementon, & Bonomo, 2007). Furthermore, young people who develop both MH and AOD disorders have been found to exhibit significantly greater internalising and externalising problems including academic and vocational impairment, anxiety, depression, suicidality, poorer physical health, family and social dysfunction, aggression, and criminal behaviour, when compared to individuals without these disorders (Suarez, Belcher, Briggs, & Titus, 2012). These problems can persist well into adulthood and are linked with increased risk for morbidity and mortality (Brown et al., 2009).

Given the multitude of adverse outcomes described above, it is not surprising that young people with comorbid disorders frequently come to the attention of a diverse range of service systems (e.g., health, social welfare, educational, and criminal justice systems; Suarez et al., 2012) and present a significant challenge to service providers. Little research has been conducted examining the confidence of workers in responding to young clients with comorbidity; the evidence that does exist suggests they lack appropriate training and support. Early work in the area found that workers felt “overwhelmed and fearful” when dealing with young people experiencing co-occurring MH and AOD problems (McDermott & Pyett, 1993), and reported difficulty accessing appropriate training or supervision (Kavanagh et al., 2000). More recent work has found that UK staff working in the area lack training, have difficulty accessing support structures, and report issues with multidisciplinary decision making and processes (Howard & Holmshaw, 2010; Schulte, Meier, Stirling, & Berry, 2010). However, Australian findings are lacking.

In order to address this issue a scoping exercise to evaluate the training and support needs of clinicians working with young clients who have AOD and/or MH conditions was conducted with a view to providing recommendations for workforce development. By improving the capacity of the workforce to intervene with this population, the standard of care may be improved, and the enduring disability associated with MH and AOD disorders may be reduced.

2. Methods

The scoping exercise involved a two-stage process:

Stage 1: An expert panel meeting with national representatives from Headspace, the key service provider for youth mental health in Australia.

Stage 2: A national online survey of youth AOD and/or MH workers.

2.1 Stage 1: Headspace expert panel

Headspace is Australia's biggest MH provider for young people, with 84 centres across Australia. The number of centres continues to grow, and by 2017-18, there will be 100 centres across Australia. In 2014, Headspace saw 50,000 face-to-face clients and 15,000 via e-health. Eight Headspace experts were approached to provide input on i) the challenges faced by youth workers managing comorbid MH and AOD disorders; ii) appropriate topics and questions to be covered in an online survey for youth workers (Stage 2); and iii) organisations the survey should be distributed to Australia-wide.

Five experts agreed to take part. These experts held a range of roles within the Headspace organisation including: Head of Clinical Services, Senior Policy Advisor, Chief Scientific Advisor, Alcohol and Other Drugs (AOD) development manager, and senior AOD project officer.

2.2 Stage 2: Online practitioner survey

2.2.1 Recruitment

Based on feedback from the expert panel in Stage 1, we defined 'youth workers' as any practitioner who had worked with young people with MH and/or AOD problems. To be eligible to participate in the online survey, participants had to be classified as a youth worker according to this definition, and be 18 years of age or older. An advertisement was distributed Australia-wide, through organisations to which practitioners who work with young people with MH and AOD conditions were likely to subscribe (e.g., major regional hospitals, peak NGO bodies, youth MH and AOD charities). Eligible practitioners were directed to a hyperlink for the survey. The survey was made available for completion on the Internet for a period of one month (28 May to 30 June 2015).

Ethical approval was obtained from the University of New South Wales (UNSW) Human Research Ethics Committee (HC15320). The survey was anonymous (no identifying information was collected), and completion of the survey was deemed to be indicative of consent to participate. All participants who completed the survey were invited to enter a lottery draw to win one of three \$100 Westfield

vouchers. This form was accessed via a separate link from the survey so as to ensure that all completed questionnaires were not identifiable.

2.2.2 Online survey

Online data collection was employed due to the scope, convenience, and cost efficiency of this method. Furthermore, this method is likely to provide participants with greater anonymity, thereby reducing the likelihood of social desirability bias (Evans & Mathur, 2005; Rhodes, Bowie, & Hergenrather, 2003). The 20-minute survey was developed by the authors and utilised additional items from previous health worker surveys (Mills, Deady, et al., 2012). The survey gathered key demographic information about respondents, their experience in the field, and the service where they were currently employed. A series of questions also asked respondents to what extent they agreed with a series of statements pertaining to the treatment of comorbidity and youth (six-point Likert scale), the utility of a variety of resources (three-point Likert scale), and difficulty and related factors of treating a variety of presentations (five-point Likert scale). There were also a range of open-response items. A copy of the survey has been appended to the end of this report.

2.2.3 Analysis

Key points and themes arising from the expert panel meeting (Stage 1) were identified and are summarised. Data collected from the online survey (Stage 2) were analysed using PASW Statistics 18 for Windows, release 18.0.0 (PASW Statistics, 2010). Descriptive statistics on the proportion of respondents nominating each response option on the ordinal Likert scales are presented.

3. Results

3.1 Stage 1: Headspace expert panel

The expert panel discussion highlighted a number of specific challenges faced by people who work with youth, all of which related specifically to workers capacity to address AOD either when it occurs alone or when it occurs with comorbid MH conditions. Challenges identified included:

- Lack of practitioner confidence
- Poor expectations surrounding AOD outcomes
- Concerns regarding rapport and engagement
- Organisational cultures
- Organisational structures
- Lack of models/pathways of care
- Lack of training, support, and supervision within organisations

3.1.1 Lack of practitioner confidence

The panel identified a lack of practitioner confidence as a significant issue impacting youth workers ability to adequately address clients presenting with single or comorbid AOD. In particular, a lack of confidence regarding the:

- Assessment and treatment of AOD: A lack of knowledge and confidence in relation to how AOD should be assessed and treated results in AOD being avoided as a topic, and lack of routine screening and assessment, even in situations where routine screening for AOD is part of organisational policy. Workers perceive that it is better not to open this 'can of worms' when they do not feel equipped to respond to it. This avoidance was likened to historical attitudes towards the screening and assessing for suicidal ideation.
- Breadth and depth of information available on AOD and treatment: There is a considerable amount of information available on AOD and treatments for different types of AOD, particularly through the Internet. However, the panel indicated that it is very difficult for youth workers to determine which information is credible and evidence-based.
- Lack of confidence around referral: In line with the points raised in relation to a lack of knowledge and confidence regarding the assessment and treatment of AOD, and where to find relevant evidence-based information, the panel identified a lack of confidence among youth workers regarding referrals for AOD treatment. Without being confident in one's knowledge of the availability and efficacy of treatments for various types of AOD, it is not surprising that youth workers are not confident in making referrals to other services. This lack of confidence is, however, also related to a lack of knowledge regarding services that are available locally, and what shared care/referral arrangements are in place (if any) between services.
- A lack of lived experience: The panel also identified a misperception among youth workers that you need to have lived experience of AOD in order to treat it, and discomfort and uncertainty surrounding the appropriateness of disclosure of one's own drug use, as challenges to addressing AOD.

3.1.2 Poor expectations surrounding AOD outcomes

The panel highlighted nihilistic attitudes/beliefs about AOD outcomes among youth workers as a significant issue. These attitudes/beliefs may also be linked back to a lack of knowledge surrounding efficacious treatments. Despite evidence supporting the efficacy of several treatments for a variety of substances, the panel perceived that the majority of youth workers do not believe that AOD can be treated effectively, particularly if the person is not motivated to do so. It was suggested that greater

knowledge of the evidence-base surrounding the treatment of AOD, and AOD comorbid with MH, may help to alter these attitudes /beliefs.

3.1.3 Concerns regarding rapport and engagement

The panel expressed concern that many youth workers mistakenly believed that raising the issue of AOD and discussing it with clients may impact negatively on rapport and client engagement of treatment. This belief further contributes to a reluctance to address AOD.

3.1.4 Organisational culture

Organisational cultures that place less weight on the need to address youth AOD use was raised as a significant issue. Panel members felt that a considerable number of youth workers did not view AOD to be a treatment priority, particularly if the young person presents in crisis. Additionally, the misuse of substances is widely accepted to be developmentally appropriate in adolescents – a phase of experimentation that most young people go through, and mature out of, in the move towards young adulthood. Such a culture of acceptance, and consequently disregard, of youth AOD leads to missed opportunities for early intervention and prevention of both the acute and long-term negative consequences of adolescent AOD discussed in the background of this report.

3.1.5 Organisational structure

Separation between the MH and AOD sectors was identified as a barrier to providing care for young people. This separation makes integrated care contentious, and made it difficult for youth workers to discern when and where to refer clients to a specialist service.

3.1.6 Lack of models/pathways of care

Panel members identified the need for models/pathways of care for youth workers to provide guidance on appropriate care for young people with AOD (and AOD comorbid with MH) that present at different stages (i.e., prevention, early intervention, and treatment).

3.1.7 Lack of training, support, and supervision within organisations

The need for broader training, support, and supervision for youth workers addressing AOD and AOD comorbid with MH was emphasised by the panel. It was suggested that the provision of these would help rectify a number of challenges raised, by precipitating improved knowledge and confidence in addressing AOD and comorbidity, allowing for the modification of several misperceptions youth workers have regarding the assessment and treatment of AOD, and allowing for continued education regarding evidence-based practice.

3.2 Stage 2: Practitioner survey

3.2.1 Respondent characteristics

One-hundred and eighty-six surveys were completed. The mean age of respondents was 44.4 years (SD 11.50) and 65.6% were female. Respondents represented a range of occupations, most commonly nurses (21.5%), psychologists (16.7%), counsellors (8.6%), social workers (8.1%), case workers (7.5%), and manager/leader/coordinator roles (5.9%). Other occupations included doctor, health education/promotion officer, intake officer, psychiatrist, support worker, youth worker, drug and alcohol worker, and occupational therapist.

In general, morale around work was high with respondents consistently reporting that they enjoyed their work (median 9, range 2–10), would choose the same career again (median 9, range 2–10), and felt stimulated (median 8, range 2–10) and effective in their role (median 8, range 3–10). However, provider fatigue was an issue, with respondents reporting a tendency to feel moderately ‘burned-out’ by their work (median 5, range 1–10).

3.2.2 Service characteristics

The greatest proportion of respondents worked in services from New South Wales (44.6%), followed by Victoria (23.7%), Queensland (10.2%), Western Australia (8.6%), Tasmania (3.8%), South Australia (2.7%), Northern Territory (2.7%) and the Australian Capital Territory (2.7%). The majority of services were located in major urban areas (52.7%), with 40.9% from other urban or country area (population between 1,000 and 99,999), 3.8% from small country or rural areas (population between 200 and 999) and 1.6% from rural or remote areas (population less than 200).

More than half of the services were government (56.5%), followed by non-government (33.3%) and private organisations (4.8%). The primary focus of more than half of respondents’ work settings was MH (57.0%) and AOD (38.2%). The only other focuses reported were child advocacy/welfare (4.8%), juvenile justice (4.8%), and school/education (3.8%).

3.2.3 Service characteristics

The vast majority of respondents had undergone some level of training across many areas of MH and AOD (Table 1). More than three quarters of respondents (79.0%) had educational qualifications at the level of university undergraduate degree or higher. The majority of MH and AOD disorder training was via academic coursework. Other forms of training were completed less frequently, with a consistent spread across a range of training sources. Almost all respondents had received training/education

regarding depression (97%). Lowest levels of training/education were found in relation to eating disorders (78.0%).

In the past 12 months, 67.2% had completed some form of MH training, 48.9% had completed some form of AOD training. Although 40.3% of respondents reported having received training on co-occurring MH and AOD disorders in the last 12 months, approximately 15% had never completed any training of this kind. The majority of the sample (86.0%) claimed that they accessed up-to-date, evidence-based research and resources to assist with their work. Attending workshops, seminars, training, and conferences, was the most popular source (30.6%); online resources (including journals) made up 27.4%, while 12.4% stated they used a combination.

The sample was highly experienced in the fields of both MH and AOD problems (Figure 1) with almost half the sample reporting over 10-years' experience in AOD (49.5%), MH (44.6%), and comorbidity (42.4%).

Figure 1: Years of experience in the field

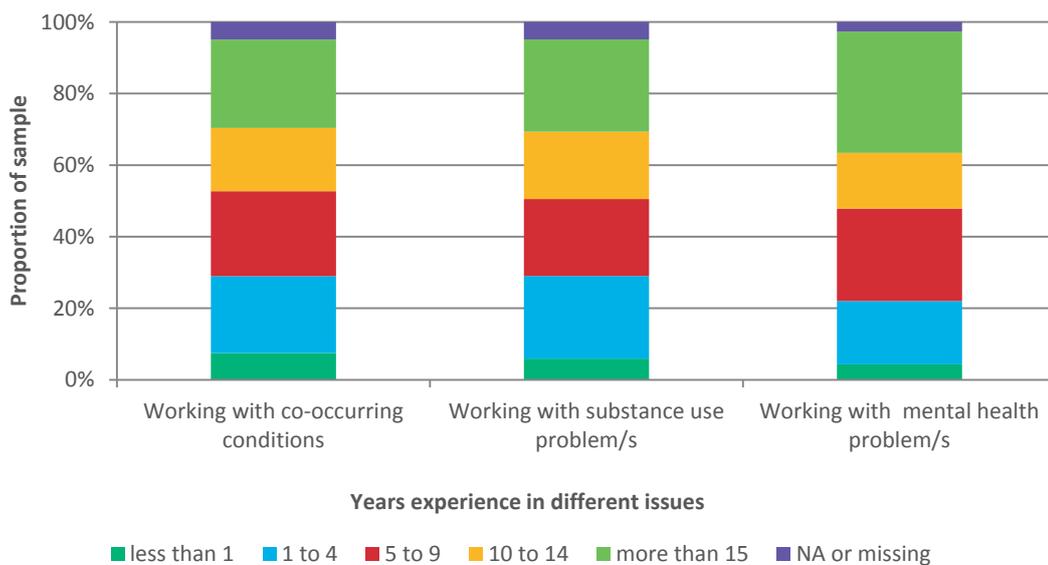
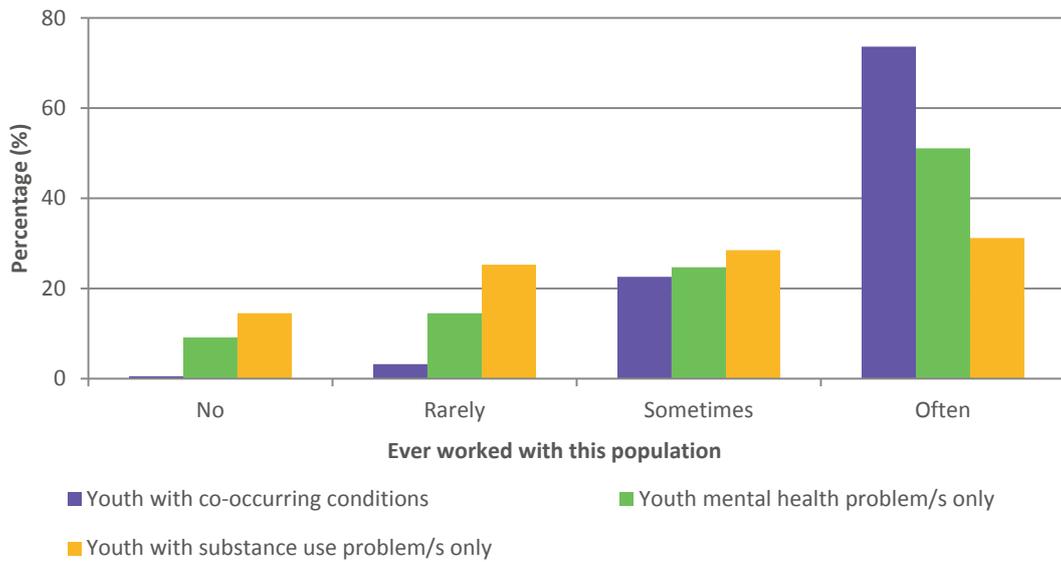


Table 1: Training and education courses completed

	Academic coursework	External training (not provided by employer)	Workplace	Conferences/seminars	Workshops	Any training/education
<i>Disorder (%)</i>						
Depression	63.4	38.2	40.9	42.5	47.3	97.3
Anxiety	63.4	36.0	38.2	39.2	39.8	96.2
Trauma or PTSD	51.6	36.0	36.0	36.6	43.5	94.1
Bipolar	55.9	23.7	32.8	29.6	24.7	87.6
Psychosis/schizophrenia	54.8	27.4	36.0	28.0	27.4	83.9
Eating disorders	40.3	24.7	29.6	25.8	22.0	78.0
Self-harm	46.8	37.6	42.5	27.4	34.9	88.7
AOD alone	57.0	33.9	45.2	41.9	39.8	93.0
Co-occurring MH problems	52.2	32.8	39.2	35.5	37.6	88.2
Comorbid MH & AOD problems	47.8	35.5	40.3	38.2	39.2	86.6

Three quarters of the sample (73.7%) reported often working with young people with co-occurring MH and AOD problems (Figure 2). When respondents were asked to list their three most common roles (when responding to comorbidity), the most frequently reported was assessment and screening (86.0%), followed by counselling/therapy (30.6%), referral (27.4%), case management (27.4%), education (22.6%), early/brief intervention (22.6%), and crisis management (16.1%). Almost half of respondents (45.7%) reported cognitive behavioural therapy to be their main theoretical approach. Other popular approaches included humanistic (12.9%) and integrative/combination (14.0%).

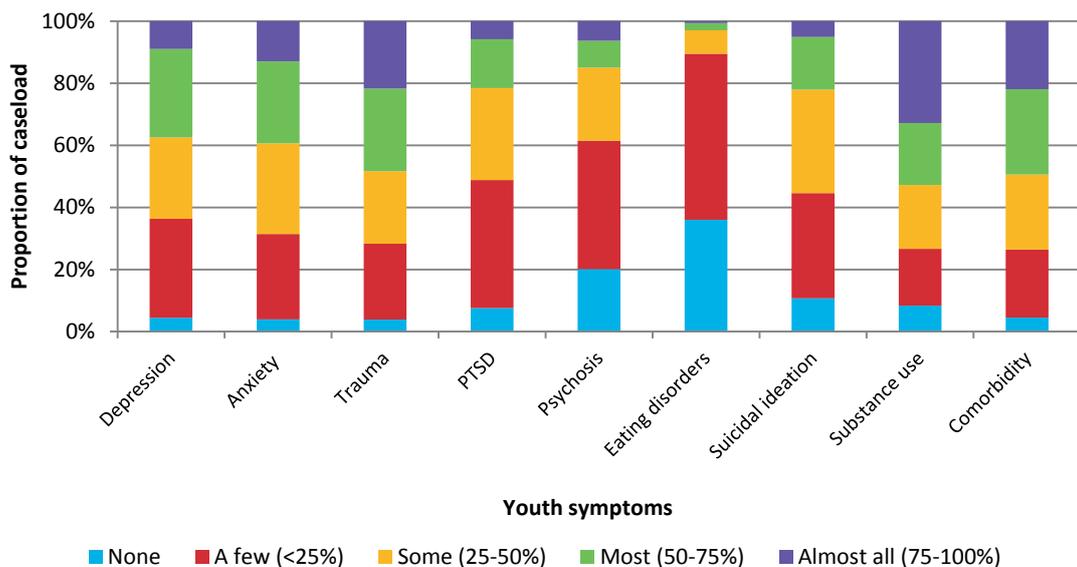
Figure 2: Experience working with differing youth populations



3.2.4 Caseload

Approximately half of respondents (49.5%) claimed most or almost all the young people they saw in their current role had a comorbid MH and AOD problem. Overall, youth eating disorder symptoms made up a relatively small proportion of respondents' caseloads (Figure 3). While for approximately half the sample, most or almost all of their caseload consisted of youth trauma symptoms (46.8%), substance use symptoms (51.1%), or comorbid presentations (47.3%). Youth depressive, anxiety, and posttraumatic stress disorder (PTSD) were each fairly evenly spread in respondents' caseloads.

Figure 3: Proportion of caseload per disorder



3.2.5 Beliefs around comorbidity treatment

Almost all the sample reported that they regularly assessed for MH symptoms (91.9%) and AOD (89.8%) in young people in their practice. Half the sample (48.9%) believed treatments designed for MH to be insufficient for clients who also experience AOD disorders. Similarly, half of the sample (50.0%) also believed that treatments designed for AOD disorders are insufficient for clients who also experience MH disorders. The majority of respondents (70.4%) believed that two treatment providers/therapists were not required to treat a client with co-occurring MH and AOD disorders. However, approximately one third of respondents (31.2%) claimed that, as a general rule, their agency tended to refer clients with co-occurring MH and AOD disorders to another provider or agency.

Almost three quarters of respondents (72.0%) disagreed with the statement, “A client’s MH symptoms must be treated before treatment for their AOD can be effective”, while 61.3% disagreed with the statement, “A client’s AOD symptoms must be treated before treatment for their MH can be effective.” However, a third of respondents (36.6%) agreed that it was important that a client be abstinent from substance use before starting trauma-focused treatments, such as prolonged exposure. Approximately half the sample (45.7%) disagreed and 16.1% did not know.

3.2.6 Working with young people

3.2.6.1 Current approach to youth comorbidity

Clinicians were asked about the first steps they would take with a young comorbid client. Almost half (41.2%) claimed that they would address both MH and AOD conditions concurrently, personally. Approximately a quarter (22.0%) claimed they would address the MH condition and connect the client with an AOD service provider for their AOD. Slightly fewer (16.7%) would address the AOD and connect the client with a MH service provider for their MH condition. Just over 5% (5.3%) claimed they would immediately refer on. In the open-ended response section respondents tending to purport that their actions would depend on factors such as the client and their presenting issues, consultation and supervision, and condition severity.

3.2.6.2 Personal experiences of treating youth

As indicated in Table 2, although approximately 90% of respondents felt moderately or extremely confident, and moderately or extremely prepared, in treating depression (87.1%) and anxiety (87.6%), less than half the sample felt confident (44.1%) or prepared (43.4%) with regards to treating eating disorders. Depression alone and anxiety alone were least challenging with approximately two-thirds

of the sample reporting these issues to be not at all challenging or a little challenging. Furthermore, only 1.6% and 1.1% respectively reported these issues to be extremely challenging. Conversely, a quarter of respondents (24.2%) found eating disorders extremely challenging. Co-occurring MH and AOD problems (22.0%), psychosis/schizophrenia alone (17.7%), co-occurring MH problems (15.1%), and self-harm (12.9%) were also commonly viewed as extremely challenging. Respondents were generally moderately or extremely confident in treating co-occurring MH problems (81.2%), and comorbid MH and AOD problems (79.0%). This was also true for preparedness with these two comorbidities (82.8% and 78.5%, respectively).

Eating disorders were rarely viewed as extremely rewarding to treat (34%), while over half the sample found working with co-occurring MH and AOD problems (58.6%), co-occurring MH problems (55.9%), and AOD disorders alone (52.2%) to be extremely rewarding. With the exception of eating disorders, over 75% of respondents rated all conditions as moderately or extremely rewarding.

Table 2: Personal experiences of treatment when working with young people

	Depression alone	Anxiety alone	PTSD alone	Bipolar alone	Psychosis/ schizophrenia alone	Eating disorders alone	Self-harm/ self-injurious behaviours alone	AOD alone	Co-occurring problems alone	Co-occurring MH & AOD
<i>Challenging (%)</i>										
Not at all	24.7	23.1	11.3	11.3	9.1	4.3	9.7	16.1	10.2	6.5
A little	38.7	43.5	32.8	29.6	24.7	21.0	25.8	31.2	23.7	24.2
Moderately	27.4	24.7	39.2	36.0	36.6	34.9	42.5	39.8	46.8	45.7
Extremely	1.6	1.1	7.0	11.8	17.7	24.2	12.9	7.5	15.1	22.0
Not applicable	7.5	7.5	7.5	10.8	11.3	15.1	7.5	4.8	2.7	1.1
<i>Rewarding (%)</i>										
Not at all	1.1	.5	0	0	1.1	4.3	.5	2.2	.5	1.1
A little	8.6	6.5	7.0	9.7	7.0	18.3	11.3	9.1	5.9	6.5
Moderately	37.6	36.0	35.5	34.9	30.1	26.9	40.3	29.0	33.9	31.2
Extremely	44.1	47.8	48.4	43.5	50.0	34.9	38.7	52.2	55.9	58.6
Not applicable	8.1	8.1	8.1	11.3	11.3	12.9	8.1	5.9	2.7	1.1

Table 2: Personal experiences of treatment when working with young people (continued)

	Depression alone	Anxiety alone	PTSD alone	Bipolar alone	Psychosis/ schizophrenia alone	Eating disorders alone	Self-harm/ self-injurious behaviours alone	AOD alone	Co-occurring problems alone	Co-occurring MH & AOD
<i>Confident (%)</i>										
Not at all	1.1	.5	4.8	4.8	6.5	11.8	2.2	1.6	.5	.5
A little	3.8	3.8	16.7	13.4	16.7	33.3	14.0	16.1	13.4	16.7
Moderately	47.3	48.4	44.1	45.2	39.8	31.2	47.3	34.4	48.9	44.1
Extremely	39.8	39.2	25.3	26.3	28.0	12.9	29.0	40.3	32.3	34.9
Not applicable	5.9	5.9	6.5	7.0	7.0	8.6	5.4	3.8	2.7	.5
<i>Prepared (%)</i>										
Not at all	1.6	1.6	4.8	4.3	8.1	12.9	3.8	4.3	1.6	2.7
A little	3.2	3.8	18.8	14.5	17.7	31.7	11.3	15.6	11.3	16.1
Moderately	44.6	43.5	42.5	44.1	36.0	28.5	46.8	38.2	48.4	45.2
Extremely	43.0	43.5	24.7	27.4	28.0	15.1	30.6	36.6	34.4	33.3
Not applicable	6.5	6.5	7.5	7.5	7.5	9.1	5.9	3.2	3.2	1.1

3.2.6.3 Client and treatment factors

Approximately one third of respondents reported client emotional dependence as a moderately or extremely difficult client-oriented factor when working with young clients (Table 3). This was true when dealing with MH problems alone, AOD problems alone, as well as dealing with comorbid MH and AOD disorder clients. Similarly, a third of respondents also rated client anger as a moderately or extremely difficult factor when working with young clients. Approximately 30% felt this way about client self-harm. Overall, client-oriented factors tended to be rated as more difficult in comorbid clients, but few other factors showed marked differences, with the exception of de-escalation, which appeared to be more difficult with comorbid and AOD alone than with MH only clients. Least difficult factors included client crying/sadness and setting boundaries, which were rated as not at all difficult or only a little difficult by approximately 80% of respondents.

Table 3: Difficulty of client-oriented factors

	Client anger	Client crying/ sadness	De-escalation	Hearing about trauma	Client self-harm	Client emotional dependency	Setting boundaries	Client relationship problems	AOD
MH problems alone (%)									
Not at all	16.7	33.9	23.1	18.8	21.5	17.7	38.7	29.6	30.1
A little	44.1	51.1	50.0	50.5	42.5	41.4	41.4	44.1	42.5
Moderately	30.6	10.2	22.0	24.2	26.9	31.2	14.0	16.7	20.4
Extremely	5.4	1.6	1.6	3.2	5.4	5.4	2.2	5.9	1.6
AOD problems alone (%)									
Not at all	19.4	33.3	25.8	23.7	25.3	19.4	43.0	32.8	32.8
A little	41.9	52.2	42.5	51.1	41.9	40.3	38.2	41.4	41.4
Moderately	25.3	10.2	24.2	18.3	22.0	31.2	12.9	18.3	18.3
Extremely	10.8	1.1	4.8	3.8	8.1	5.9	3.2	4.8	4.8
Comorbid problems (%)									
Not at all	14.5	29.6	21.5	22.0	19.9	20.4	39.2	30.1	31.2
A little	46.2	53.2	41.4	51.1	47.8	44.6	41.4	43.0	40.3
Moderately	27.4	12.4	30.6	20.4	24.2	25.8	16.1	18.8	19.4
Extremely	9.7	2.7	4.8	4.3	6.5	6.5	1.6	4.8	6.5

Overall, case management was reported as one of the more difficult treatment-oriented factors (Table 4). Over 10% of respondents rated case management as extremely difficult when dealing with MH problems alone (13.4%), AOD problems alone (10.8%) and comorbid MH and AOD problems (12.9%; Table 3). Conversely, approximately 75–80% of the sample reported "no difficulty" or "very little difficulty" in dealing with all other treatment-oriented factors when working with young people whether MH problems alone, AOD problems alone, or comorbid MH and AOD problems.

Approximately one quarter of respondents reported working with young people (with MH problems alone, AOD problems alone, or comorbid MH and AOD problems) to be only "a little" or "not at all" rewarding in helping them obtain insight about themselves (Table 5). Working with clients' parents and families also tended to be less rewarding than other factors (approximately 15%). However, approximately 90% of respondents found other factors (such as "helping clients achieve AOD goals," "teaching clients new coping skills," "developing expertise," and "working with challenging/complex clients") to be moderately or extremely rewarding.

Overall, respondents tended to report comorbid problems to be slightly more challenging than single disorder problems. However, they also tended to find working with such problems particularly rewarding. This was also indicated in the free response section. When asked for general comments on their experience working with young people with comorbid MH and AOD problems, a common response was, "challenging, but rewarding." Nevertheless, this section also saw a number of concerns and frustrations around clinician burnout.

In open response, the main issues raised tended to be similar when dealing with AOD alone, MH alone, or comorbid problems. A lack of resources was consistently mentioned. This included personal resources such as knowledge and expertise, along with time, and financial resources. External resources were another major issue; respondents consistently reported a lack of appropriate referral pathways, secondary support services, and age/culturally appropriate referral options. A lack of support was also raised as a need.

Client engagement and motivation was also an issue with young clients, particularly when dealing with AOD alone. When dealing with comorbid presentations respondents made specific mention of stigma as an issue. Additionally, service coordination and the bouncing of clients from service-to-service were also raised as major issues in this population.

Table 4: Difficulty of treatment-oriented factors

	Not knowing what to do	Not wanting to disrupt rapport	Case management	Clients parents/ carers	Prioritising treatment components/goals	Deciding what kind of treatment approach to use	Not feeling knowledgeable about AOD	Not feeling knowledgeable about MH
<i>MH problems alone (%)</i>								
Not at all	45.7	39.8	37.1	31.7	40.9	31.7	47.8	52.7
A little	37.1	38.2	31.2	40.9	40.3	46.8	30.6	31.7
Moderately	11.3	15.1	14.5	18.8	12.4	12.9	13.4	9.1
Extremely	2.2	3.2	13.4	4.3	2.2	3.2	3.8	2.2
<i>AOD problems alone (%)</i>								
Not at all	39.8	38.2	34.9	32.8	39.8	34.4	47.8	53.2
A little	40.3	45.7	38.2	39.8	38.7	40.3	33.9	32.8
Moderately	14.0	9.7	12.9	19.9	15.1	18.3	10.8	8.6
Extremely	2.7	2.7	10.8	4.3	2.7	3.2	4.3	2.2
<i>Comorbid problems (%)</i>								
Not at all	30.1	36.0	29.0	29.6	34.4	30.6	45.2	49.5
A little	47.3	48.9	36.6	40.9	39.8	43.5	34.9	36.6
Moderately	16.1	11.3	19.4	24.2	18.8	18.3	14.0	10.2
Extremely	4.8	2.2	12.9	3.8	3.8	5.4	3.2	1.6

Table 5: Rewarding factors

	Helping clients achieve AOD goals	Teaching clients new coping skills	Developing expertise	Obtaining insight about yourself	Working with clients' parents and families	Working with challenging/complex clients
<i>MH problems alone (%)</i>						
Not at all	1.6	.5	1.1	5.4	1.6	.5
A little	8.1	3.2	7.5	16.1	13.4	8.1
Moderately	19.4	23.1	22.6	23.7	32.3	31.2
Extremely	66.7	68.8	64.0	50.0	46.8	55.4
<i>AOD problems alone (%)</i>						
Not at all	1.1	1.6	1.6	7.5	2.7	1.1
A little	8.6	4.8	9.1	17.7	13.4	9.1
Moderately	17.7	21.0	20.4	19.4	34.4	27.4
Extremely	69.4	68.8	65.6	52.2	46.2	58.6
<i>Comorbid problems (%)</i>						
Not at all	.5	1.1	1.6	8.6	2.2	1.1
A little	7.0	5.4	5.9	14.0	12.4	6.5
Moderately	19.9	19.9	23.7	23.1	33.3	30.1
Extremely	71.5	72.6	67.2	53.2	50.5	60.8

3.2.7 Utility of resources

More than three quarters of the sample (79.0%) felt training in evidence-based treatments for co-occurring MH and AOD disorders would be extremely beneficial, with an additional 17.7% feeling it would be somewhat beneficial. Almost the entire sample (96.2%) felt access to a treatment manual for co-occurring MH and AOD would be at least somewhat beneficial. Similarly, 96.2% of the sample felt clinical supervision in the area would be at least somewhat beneficial. Half the sample (52.7%) felt it would be extremely beneficial to have more guidance in prioritising treatment goals/objectives (e.g., whether to focus on the AOD or MH). An additional 39.8% felt it would be somewhat beneficial. The majority of respondents (90.3%) felt training in MH and/or AOD disorders (features, causes, etc.) would be somewhat or extremely beneficial.

When asked what other resources would be helpful, there was a range of responses. Most consistently the need for better liaison between services was mentioned. The need for more (and better access to current) online resources for both for clients and clinicians was also raised. The need

for more staff, more treatment/referral options, and lists of current local services were also frequently mentioned.

4. Discussion

This study represents one of the first attempts to evaluate the training and support needs of clinicians working with young people who have AOD and MH conditions. This study aimed to better understand the experiences of clinicians dealing specifically with young people with MH and/or AOD problems in order to develop recommendations for the development of resources and training for practitioners and services who work with this population. The two-stage process revealed much about the experiences and needs of clinicians working in this population.

Historically workers have been found to feel "overwhelmed and fearful" when dealing with young people experiencing co-occurring MH and AOD problems (McDermott & Pyett, 1993). Similarly, Stage 1 of the present study indicated that practitioner confidence was a key issue in the field. Interestingly, this was not borne out in the Stage 2 of the present study. This is likely due to the substantial efforts in recent years to bring this issue to the fore (e.g., National Comorbidity Initiative; Improved Services and Dual Diagnosis initiatives; the Centre of Research for Mental Health and Substance Use; national and state based comorbidity guidelines). Although managing comorbidity was still particularly challenging, confidence and preparedness among practitioners was comparatively high. Furthermore, although there was a tendency for treatment and client factors to be more difficult in comorbid populations, there was also a tendency for the rewarding components to be more pronounced in these populations.

It should be noted, that while overall confidence was found to be high, this does not necessarily reflect competence. Answers to questions regarding beliefs about the treatment of comorbidity indicated that a significant proportion of respondents were not aware of, or did not practice, in accordance with the evidence-base. This is in spite of the fact that 86% claimed that they accessed up-to-date, evidence-based, research and resources.

Interestingly, although Stage 2 respondents were only required to work in MH or AOD, almost three quarters claimed they "often" worked with co-occurring conditions. This lends further support to the assertion that in many treatment services comorbidity is the rule rather than the exception (Chan, Dennis, & Funk, 2008; van Loo, Romeijn, de Jonge, & Schoevers, 2013). Nevertheless, in both Stage 1 and Stage 2, issues were raised regarding difficulties relating to organisational structures, client engagement, pathways of care, and support were common themes. Additionally, the practitioners highlighted a lack of resources, lack of referral options, and lack of service coordination as major issues.

Although practitioners were consistently found to lack training, confidence, preparedness, and reward in dealing with conditions such as eating disorders and psychosis, these conditions tended to make up a far smaller proportion of client caseloads compared to comorbidity. Although a large proportion of the sample claimed to have received comorbidity training in the last year, a considerable proportion of the sample had never received any training of this kind. Nevertheless, in comparison to a recent UK study (Schulte et al., 2010) which found 80% had received training in comorbidity, the trained proportion of the current sample was slightly higher. It should be noted however that much of this training consisted of seminars/conference presentations and thus was likely to be brief. Furthermore, the quality of the training provided is unclear. It is therefore unsurprising that practitioners reported an overwhelming desire for greater availability, and access to, current evidence-based information and resources (including access to treatment manuals, training in MH and/or AOD disorders and comorbidity), along with more training in evidence-based treatments for comorbidity.

Finally, in line with Stage 1 and the extant literature in the area (Howard & Holmshaw, 2010; Roche & Pidd, 2010; Roche, White, Duraisingam, & Adams, 2012; Schulte et al., 2010), the Stage 2 practitioner survey revealed the desire for more support and supervision around comorbidity. Specific areas of need included case management, client anger, emotional dependency, self-harm, and de-escalation in comorbid populations. Additionally, guidance in prioritising treatment goals/objectives appeared to be a key area of need.

4.1 Limitations

As with any study of this kind there is the potential for limitations. In particular, while the expert panel members were national representatives from the largest provider of youth services in Australia, their views may not be reflective of the broader field. Similarly, respondents to the online survey may not be representative of youth workers more broadly. Although attempts were made to attain all relevant feedback from respondents (e.g., open-response items, preliminary stage to direct survey content) there is always the possibility that some issues were not covered. Similarly, such surveys may be susceptible to self-report bias, in particular, social desirability bias. It has been suggested however, that computer administration of surveys may produce a sense of disinhibition in respondents, and this sense of disinhibition may lead to more accurate reports of certain behaviours (Booth-Kewley et al., 2007).

4.2 Recommendations

Further work is needed to address a number of key issues raised in this scoping exercise. Based on the findings, we provide the following recommendations to improve the capacity of youth workers to respond to MH and AOD comorbidity:

1. Provision of education and training for youth workers in MH and AOD comorbidity

Consistent with the broader literature, this scoping exercise identified that comorbidity is the norm rather than the exception for youth presenting to services. It is essential that education and training opportunities be available for youth workers to enhance their skills in responding to comorbidity. In particular, this training should focus on the assessment and treatment of MH and AOD use (including early intervention). At a minimum, all youth workers should be able to competently screen and assess for the presence of possible MH and AOD problems, and have knowledge of evidence-based prevention, early intervention, and treatment responses.

This training/education should be provided through academic coursework undertaken through tertiary education, and be maintained through ongoing professional development activities. In addition to face-to-face training, it is recommended that a series of short training modules be developed for online delivery as this would maximise reach and enhance accessibility. Modules could be devised such that individual workers could tailor a program to specifically meet their training needs.

2. Improved access to up-to-date evidence-based information on MH and AOD use

a) Development of evidence-based resources

As identified in through this scoping exercise, there is a considerable amount of information available on MH and AOD use, particularly through the internet. However, it is difficult for practitioners (and clients) to discern the accuracy and credibility of that information. Access to evidence-based information, available in peer reviewed journal articles, is limited. Furthermore, most practitioners (and clients) lack the time and skills needed to be able to accurately interpret and synthesise the evidence base. Resources such as guidelines and treatment manuals provide practical recommendations for practitioners based on a critical evaluation of the existing evidence, and are fundamental in translating research findings into practice. The continued development of resources for clients may also help young people identify possible MH and AOD problems (for themselves and their friends), increase help-seeking, and assist young people in advocating to receive evidence-based interventions.

It is crucial that practitioner resources be made available in formats that enhance their use. In addition to hard-copies and electronic copies that can be downloaded from the Internet, it is recommended that other e-health mechanisms be utilised. The development and modification of existing resources as applications ('apps') for smartphones and tablets, for example, may enhance implementation by their ease of use, portability, and ability to be used without the need for Internet access (apart from the initial download). Furthermore, apps can easily be updated with new information as necessary, thereby providing a cost-efficient means by which to provide practitioners with the most up-to-date evidence.

b) Communication of evidence-base information via online and social media

It is also vital that practitioners are made aware of new research findings as they become available, in a manner that is useful, relevant, and acceptable to this audience. It is also essential that this information be provided by credible organisations. Increasing evidence from multiple disciplines has shown the benefits of social media for increasing the reach and impact of scientific findings. The funding provided to the NHMRC Centre of Research Excellence in Mental Health and Substance Use (by the Australian Government Department of Health as part of this Comorbidity Project) to employ a communications officer dedicated to communicating up-to-date evidence based information on MH and AOD using various mediums including online and social media has been effective in this regard. It is recommended that this funding be continued to ensure the continued availability of this valuable resource to the field.

3. Provision of clinical supervision for youth workers in MH and AOD comorbidity

The benefits of clinical supervision, for both practitioners and clients, have long been recognised. In order for youth workers to be able to successfully implement what they learn through education, training, and access to up-to-date evidence-based information, it is essential that they have access to clinical supervision.

4. Clear delineation of referral pathways and shared care arrangements with other services

A lack of awareness of available services, an absence of clearly referral pathways, and uncertainty regarding shared care arrangements between services was identified as a barrier to providing care to youth with MH and AOD comorbidity. It is recommended that all services undertake a scoping exercise to ascertain the services that are available within their geographical area, and make formalised links with them. Optimally, this information would be also be accessible via a central database that could also provide details of services located in other areas.

It is not possible for youth workers to address the diversity of client needs, however, they are in primary positions to coordinate care, and incorporate the many services that may be needed to address clients' needs. The clear delineation of referral pathways and shared care arrangements are essential in order to ensure that young people do not 'fall through the gaps' of our health and welfare systems. Well-defined managerial guidance around prioritisation of different service goals/objectives are also central to ensuring effective care coordination.

4.3 Summary

Ultimately, many of these recommendations are largely dependent on funding in an underfunded sector (Roche et al., 2012). Nevertheless, many resources are currently available and simply require better dissemination and translational models in order to address these gaps. This review has highlighted particular areas of difficulty among practitioners working with young people including case management, client anger, emotional dependency, self-harm, and de-escalation. In addition to comorbidity, specific disorders may also warrant increased attention in regards to training resources (e.g., eating disorders, psychosis, PTSD).

Overall this study highlights both areas of success and a number of key areas for further attention in order to improve the capacity of the workforce to intervene with young populations (particularly those with comorbid disorders). It is believed that in addressing some of these shortfalls the standard of care is likely to be improved, and the enduring disability associated with MH and AOD disorders may be reduced.

5. °

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6. References

- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. (2007). The burden of disease and injury in Australia 2003. Canberra, Australia: Australian Institute of Health and Welfare.
- Booth-Kewley, S., Larson, G. E., & Miyoshi, D. K. (2007). Social desirability effects on computerized and paper-and-pencil questionnaires. *Computers in Human Behavior, 23*(1), 463-477.
- Brown, D. W., Anda, R. F., Tiemeier, H., Felitti, V. J., Croft, J. B., & Giles, W. H. (2009). Adverse childhood experiences and the risk of premature mortality. *American Journal of Preventive Medicine, 37*(5), 389-396.
- Chan, Y.-F., Dennis, M. L., & Funk, R. R. (2008). Prevalence and comorbidity of major internalizing and externalizing problems among adolescents and adults presenting to substance abuse treatment. *Journal of Substance Abuse Treatment, 34*(1), 14-24.
- Evans, J., & Mathur, A. (2005). The value of online surveys. *Internet Research, 15*, 195-219.
- Gore, F. M., Bloem, P. J. N., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., . . . Mathers, C. D. (2011). Global burden of disease in young people aged 10-24 years: A systematic analysis. *The Lancet, 377*(9783), 2093-2102.
- Howard, V., & Holmshaw, J. (2010). Inpatient staff perceptions in providing care to individuals with co-occurring mental health problems and illicit substance use. *Journal of Psychiatric and Mental Health Nursing, 17*, 862-872.
- Kavanagh, D. J., Greenaway, L., Jenner, L., Saunders, J. B., White, A., Sorban, J., &
- Hamilton, G. (2000). Contrasting views and experiences of health professionals on the management of comorbid substance misuse and mental disorders. *Australian and New Zealand Journal of Psychiatry, 34*(2), 279-289.
- Lubman, D. I., Allen, N. B., Rogers, N., Cementon, E., & Bonomo, Y. (2007). The impact of co-occurring mood and anxiety disorders among substance-abusing youth. *Journal of Affective Disorders, 103*(1), 105-112.
- McDermott, F., & Pyett, P. (1993). Not welcome anywhere - people who have both a serious psychiatric disorder and problematic drug or alcohol use. Melbourne, Australia: Victorian Community Managed Mental Health Services.

Mills, K. L., Deady, M., Teesson, M., Sannibale, C., Proudfoot, H., Burns, L., & Mattick, R. (2012). Guidelines on the management of co-occurring mental health conditions in alcohol and other drug treatment settings: How useful are they? *Mental Health and Substance Use*, 5(2), 160-172.

Mills, K. L., Teesson, M., Back, S. E., Brady, K. T., Baker, A. L., Hopwood, S., . . . Ewer, P. L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: A randomized controlled trial. *Journal of the American Medical Association*, 308(7), 690-699.

PASW Statistics. (2010). *SPSS: An IBM program version 18.0.2*. Chicago: PASW Statistics.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. D. (2007). Mental health of young people: A global public-health challenge. *Lancet*, 369, 1302-1313.

Rhodes, S. D., Bowie, D. A., & Hergenrather, K. C. (2003). Collecting behavioural data using the world wide web: Considerations for researchers. *Journal of Epidemiology and Community Health*, 57(1), 68-73.

Roche, A. M., & Pidd, K. (2010). *Alcohol and other drugs workforce development issues and imperatives: Setting the scene*. Adelaide, Australia: National Centre for Education and Training on Addiction, Flinders University.

Roche, A. M., White, M., Duraisingam, V., & Adams, V. (2012). *Trainers talking training: An examination of vocational education and training for the alcohol and other drugs sector in Australia*. Adelaide, Australia: National Centre for Education and Training on Addiction, Flinders University.

Schulte, S. J., Meier, P. S., Stirling, J., & Berry, M. (2010). Dual diagnosis competency among addiction treatment staff: Training levels, training needs and the link to retention. *European Addiction Research*, 16, 78-84.

Suarez, L. M., Belcher, H. M. E., Briggs, E. C., & Titus, J. C. (2012). Supporting the need for an integrated system of care for youth with co-occurring traumatic stress and substance abuse problems. *American Journal of Community Psychology*, 49, 430-440.

van Loo, H., Romeijn, J., de Jonge, P., & Schoevers, R. (2013). Psychiatric comorbidity and causal disease models. *Preventive Medicine*, 57(6), 748-752.

Zeigler, D. W., Wang, C. C., Yoast, R. A., Dickinson, B. D., McCaffree, M. A., Robinowitz, C. B., & Sterling, M. L. (2005). The neurocognitive effects of alcohol on adolescents and college students. *Preventive Medicine, 40*(1), 23-32.