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Prevalence and Impact of Substance Use among Emerging Adults with Serious Mental Health Conditions

Maryann Davis, PhD [Associate Professor],
University of Massachusetts Medical School - Psychiatry

Ashli Sheidow, PhD [Associate Professor],
Medical University of South Carolina - Department of Psychiatry and Behavioral Sciences, Family Services Research Center

Kristyn Zajac, PhD [Associate Professor], and
Medical University of South Carolina - Department of Psychiatry and Behavioral Sciences, Family Services Research Center

Michael McCart, PhD [Associate Professor]
Medical University of South Carolina - Department of Psychiatry and Behavioral Sciences Family Services Research Center

Abstract

Topic—This critical review of the literature integrates findings across varied literatures and identifies areas for continued study on the prevalence, correlates, and impact of substance use (alcohol and illicit drugs) on social role functioning among emerging adults with serious mental health conditions.

Purpose—This population is of interest because of high comorbidity rates between substance use and serious mental health conditions and the added difficulties posed by their co-occurrence during the transition to adulthood. This critical review presents the epidemiology of substance use in emerging adults with serious mental health conditions compared to emerging adults without these conditions, as well as what is known about predictors and consequences of substance use in this population.

Sources Used—PsychINFO and PubMed along with relevant published literature.

Results—This review summarizes what is known about the impact of these co-occurring problems on the transition of emerging adults from school and training environments to adult work roles. Though this group presents with unique challenges, few programs have been developed to address their specific needs. This paper synthesizes what is known empirically about approaches with this population, discussing those that might be useful for emerging adults with comorbid serious mental health conditions and substance use problems, particularly in supporting their educational and vocational development.

CORRESPONDING AUTHOR: **MARYANN DAVIS**, PHD, ASSOCIATE PROFESSOR, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL - PSYCHIATRY, 55 LAKE AVENUE, WORCESTER, MA 01655, PHONE: 508-856-8718, *Maryann.Davis@umassmed.edu*.

Conclusions and Implications for Practice—Emerging adults with co-occurring serious mental health conditions and substance use problems are underserved by current mental health systems. Recommendations focus on how to promote mental health and social role functioning through comprehensive intervention programs that provide continuity of care through the transition to adulthood.

Keywords

co-occurring disorders; young adults; vocational rehabilitation; employment

Introduction

Emerging adulthood is a significant developmental period involving important role changes in multiple realms, including education, work, and interpersonal relationships (Arnett, 2000). Experimentation with alcohol and illicit drugs during emerging adulthood is statistically normative (Johnston, O'Malley, Bachman, & Schulenberg, 2004; Substance Abuse and Mental Health Services Administration [SAMHSA], 2005). However, as described subsequently, the impact of substance use is significant, and development of problematic substance use (i.e., abuse, dependence) is most likely to occur during emerging adulthood (SAMHSA, 2005). Further, comorbidity of problematic substance use with serious mental health conditions (SMHCs) is high (Armstrong & Costello, 2002), which can complicate outcomes for emerging adults. This critical review of the literature aims to: a) integrate findings from varied research literatures on substance use among emerging adults both with and without serious mental health conditions in order to describe the prevalence of the problem, impact of co-occurrence on psychiatric rehabilitation, malleable risk factors that could be the focus of interventions, and existing empirically-studied interventions, and b) identify areas for continued study.

We focused primarily on the emerging adult period from 18 to 25 years, consistent with the classic definition of emerging adulthood proposed by Arnett (2000). The term Transition Age Youth (TAY) sometimes is used to describe this age group, although TAY often refers to those as young as 15 or 16 and can stop at 21 or continue to 25 or 26. The term "young adult chronic patient" (Pepper, Kirshner, & Ryglewicz, 1981; Safer, 1987), clearly dated, was used to capture a young adult population with mental illness from a broader age range (generally 18-35 or 40). Because the literature specifically on emerging adulthood is limited, additional literatures from younger or older age groups were drawn upon to provide findings about "bookend" age groups from which extrapolations to 18 to 25 year olds might reasonably be made. The definition of serious mental health condition used for this critical review combines the Center for Mental Health Services' definitions of Serious Emotional Disturbance for those up to age 18 and Serious Mental Illness for those ages 18 and over (SAMHSA, 1993). Both conditions are defined as the presence of a diagnosable psychiatric disorder accompanied by significant functional impairment. These definitions exclude diagnoses that are not primarily mental health concerns (e.g., mental retardation, substance abuse). The scope of "significant functional impairment" differs for adolescents younger than 18 (developmentally appropriate skills) compared to adults (skills for major life roles and activities). Those with a primary diagnosis of a Disruptive Behavior Disorder will not be

considered as having a serious mental health condition for this review because of its substantial co-occurrence and overlap with substance use disorders. The definition of substance use disorders includes abuse of or dependence on alcohol or illicit substances but does not include cigarettes.

Methods

Several strategies were employed for reviewing the relevant literature used to integrate findings and identify areas for continued study. First, published papers were located through database searches of PsychINFO and PubMed for keywords, titles, abstracts, and text containing the words: “emerging adult,” or “transition age youth,” or “young adult” or “adolescent” cross referenced with a) “mental health,” or “mental illness” or “mental disorder” and “substance use,” or “drug use” or “alcohol use” and b) “dual diagnosis” or “co-occurring.” Next, the reference lists of relevant articles were reviewed to identify papers that might have been missed in the database searches. Preference was given to empirical papers published in peer-reviewed journals and, whenever possible, papers with the most recent and comprehensive data were summarized. Due to space limitations, not all papers identified as a result of this search are listed.

Results

Prevalence of Co-Occurring Substance Use Disorders among Emerging Adults with SMHCs

Emerging adulthood is a peak time for alcohol and drug use (SAMHSA, 2005). Generally, use increases between late adolescence and emerging adulthood and decreases towards the end of emerging adulthood (e.g., Johnston et al., 2004; Naimi et al., 2003). In a longitudinal study following adolescents into adulthood, over 50% of whom had at least one alcoholic biological parent, both alcohol and drug use increased during adolescence and peaked during emerging adulthood (Chassin, Flora, & King, 2004). Several patterns of substance use were identified. The most common was moderate alcohol use with low levels of drug use, followed by light alcohol use with rare drug use; however, both patterns showed increases in alcohol and drug use during emerging adulthood, peaking between ages 23 and 26 years. In a study using a normative sample, the National Survey on Drug Use and Health (NSDUH; SAMHSA, 2008) found that, of adults ages 21-25 years, 68% and 90% reported past-month and lifetime alcohol use, respectively, while 19% and 61% reported past-month and lifetime illicit drug use, respectively. Thus, experimentation with substances during emerging adulthood is normative. Notably, alcohol use is somewhat unique for this age group compared to other substance use, given that emerging adulthood encompasses the age at which alcohol use becomes legal. New legality may explain the peak rate of past-month binge drinking at age 21 (48% estimated) among emerging adults, with an overall estimated rate of 41% for 18-25 year olds (SAMHSA, 2005). In fact, leaving home after high school and attending college, presumably the paths of high-functioning emerging adults are both risk factors for increased alcohol use and binge drinking (White et al., 2006).

Prevalence rates of substance use disorders follow similar patterns during emerging adulthood (Chassin et al., 2004; Delucchi, Matzger, & Weisner, 2008). Findings from the

NSDUH indicate that the past-year prevalence of substance use disorders is higher among the 18-25 year old age group (21%) than it is in either the 12-17 year old age group (9%) or the 26 years of age and older group (7%) (SAMHSA, 2005). In a study examining risk factors and correlates of binge drinking behaviors, age 21 was identified as a turning point at which certain patterns of binge drinking led to higher rates of substance use disorders (Hill, White, Chung, Hawkins, & Catalano, 2000). These findings indicate that emerging adulthood is a crucial period for developing severe and enduring substance use problems, perhaps even more so than adolescence.

Less is known about the prevalence of substance use disorders among emerging adults with serious mental health conditions, but the available data suggest that rates are higher in this group compared to young adults without these conditions (Armstrong & Costello, 2002). Data from the NSDUH indicate that, among young adults ages 18-25 with a serious mental illness, 48% report past-year illicit substance use, and 36% meet criteria for a substance use disorder (SAMHSA, 2003). In a large sample of emerging adults utilizing mental health services, substance use disorders were the *principal* psychiatric diagnosis for 8% of 16- to 21-year-olds, 13% of 22- to 23- year-olds, and 15% of 24- to 25-year-olds (Pottick, Bilder, Vander Stoep, Warner, & Alvarez, 2007). Substance use disorders were *present*, however, in nearly 40% of this population. In addition, when compared to other developmental periods, co-occurrence of serious mental health conditions and substance use disorders is concentrated in the emerging adulthood period. Specifically, 36% of all adults with cooccurring serious mental health conditions and substance use disorders are ages 18-25 years, whereas only 20% of adults with serious mental health conditions but no substance use disorder fall in the emerging adulthood range (SAMHSA, 2003). Further, data from the National Comorbidity Study-Replication, a large epidemiological study of adults, indicate substantial comorbidity between substance use disorders and mental health problems, including mood and anxiety disorders (i.e., significant correlations ranging from .21 to .56; Kessler, Chiu, Demler, & Walters, 2005) and other specific mental health disorders (e.g., 26.8% lifetime prevalence among adults with non-affective psychotic disorders; Kessler, Birnbaum et al., 2005). Although few large-scale empirical studies have examined prevalence and risk in this group until recently, several scholars and professionals have noted the presence of this unique and challenging group in clinical settings since the early 1980s (e.g., Pepper, Kirshner, & Ryglewicz, 1981). In addition, other smaller studies have been conducted on specific subsets of co-occurring problems and report prevalence estimates. The specific percentages presented here represent data from the most recent and comprehensive studies, but these data are consistent with prior and less comprehensive studies (e.g., Caton, Gralnick, Bender, & Simon, 1989; Safer, 1987).

Correlates and Determinants of Substance Use Disorders among Emerging Adults

Correlates and determinants of substance use and substance use disorders help identify who is at risk and factors to target when developing interventions. Much of what we know about correlates and determinants of substance use comes from studies with adolescent populations rather than emerging adults per se, but many are likely to generalize to emerging adulthood. Studies with adolescent samples repeatedly find multi-systemic correlates of substance use (e.g., Disney, Elkins, McGue, & Iacono, 1999; Fergusson & Lynskey, 1998),

including male gender (e.g., SAMHSA, 2003; Seibenbruner, Englund, Egeland, & Hudson, 2006), parental rejection and low parental monitoring (e.g., Seibenbruner et al., 2006); negative peer groups (e.g., Windle & Wiesner, 2004); family history of substance use (Chassin, Pitts, & Prost, 2002); poor school achievement (Windle & Wiesner, 2004), and demographic factors (e.g., single-parent households). Positive peer relationships also have been related to *higher* levels of alcohol and marijuana experimentation among adolescents, presumably because membership in peer groups provides them access to substances (Hawkins, Catalano, & Miller, 1992). Developmental changes in peer and parental relations may further impact the contribution of these factors to substance use during emerging adulthood.

Consistent predictors have emerged for alcohol use during emerging adulthood, despite wide ranging operational definitions of problematic alcohol use across studies. For example, problematic alcohol use is associated with male gender (Bennett, McCrady, Johnson, & Pandina, 1999; Schulenberg, Wadsworth, O'Malley, Bachman, & Johnston, 1996), externalizing behavior problems (Bennett et al., 1999) and low self-efficacy (Schulenberg et al., 1996). Further, in a longitudinal study of individuals aged 12-23 years, problematic drinking was predicted by comorbid drug use, externalizing behavior problems, and parental alcoholism and antisocial traits (Chassin et al., 2002).

While a mental health diagnosis is a known risk factor for substance use, less is known about unique predictors of substance use problems for populations with serious mental health conditions. The few studies that speak to this issue have examined less severe mental health problems and have focused on adolescents. For example, Beitchman et al. (2005) conducted a longitudinal study of individuals ages 5 to 19 and examined clusters of comorbid mental health and substance use outcomes. They found several factors that differentiated adolescents who developed single mental health diagnoses from those who developed comorbid mental health and substance use disorders, including higher levels of perceived family support, higher income levels, and better parental marital adjustment.

Additional information can be gathered from studies of adults with serious mental health conditions. In a study of adults with schizophrenia, substance use and substance use disorders were more common among those who were male, had a history of conduct problems, experienced a recent exacerbation of symptoms, had low educational attainment, or a history of depression (Swartz et al., 2006). In a sample of adults with schizophrenia and bipolar disorder, lower pre-morbid academic and social functioning predicted higher levels of substance use (Ringen et al., 2008). Though additional research focusing specifically on emerging adults with serious mental health conditions is needed, these studies suggest that risk factors for substance use may be similar to those for emerging adults without these conditions.

Consequences of Substance Use among Emerging Adults

Substance use may complicate an already challenging transition to adulthood for emerging adults with serious mental health conditions. The presence of serious mental health conditions during this transition period can impede successful negotiation of developmental challenges (Davis & Vander Stoep, 1997), with potential for school dropout, unemployment,

and legal problems (Armstrong, Dedrick, & Greenbaum, 2003; Davis, Banks, Fisher, Gershenson & Grudzinskas, 2007). Substance use may be particularly harmful for these emerging adults, as it can compound existing problems. Co-occurring substance use and psychiatric disorders are associated with more functional impairment than either disorder alone (Vida et al., 2009) and are more difficult to treat. In a study of young adults followed until age 25, those presenting with certain clusters of comorbid mental health and substance use problems during adolescence had more difficulties in multiple life domains throughout emerging adulthood (e.g., high school non-completion, early parenthood) compared to those with single diagnoses (Vida et al., 2009). In an adult sample, substance use largely explained increased arrest rates among people with serious mental health conditions (Swartz & Lurigio, 2007).

A strong relationship between substance use and poor work outcomes is consistently found in non-serious mental health conditions populations (e.g., Ringel, Ellickson, & Collins, 2007). The presence of substance use disorders would be expected to worsen work outcomes in those with serious mental health conditions, yet the literature on vocational outcomes among individuals with co-occurring disorders is in-conclusive. Vida and colleagues (2009) found no differences between comorbid-disordered, single-disordered, and no diagnosis groups in likelihood of full-time employment or full-time schooling at age 25. However, there were significant methodological limitations (e.g., relatively small sample size, oversampling for speech and language impaired individuals) that preclude definitive conclusions on the basis of these results. We are unaware of any other studies that have examined these relationships in emerging adults.

The adult literature also fails to provide conclusive findings. In the National Comorbidity Study, among working individuals, those with single mental health or substance use disorders had better work productivity than those with comorbid disorders, but there were no differences in symptom-related work absences (Kessler & Frank, 1997). In randomized clinical trials of vocational support interventions among adults with SMHCs, current substance use problems contributed to worse outcomes in some studies (McGurk et al., 2009; Lehman et al., 2002) and were not a significant factor in another (Mueser et al., 1997). Other studies of adults with serious mental health conditions, using diverse samples (e.g., inpatient vs. outpatient), geographies (e.g., U.S., U.K., Scandinavia) and varied measures of work functioning and substance use, have found substance use disorders to be related to negative work functioning (e.g., Larsen et al., 2006), unrelated to work functioning (e.g., Sengupta, Drake, & McHugo, 1998; Goldberg et al., 2001), and related to positive work functioning (Drebing et al., 2002). Explanations of positive relationships have emphasized selection factors, such as referral source bias towards referring (to vocational programs) only individuals with comorbid conditions that are high functioning (Biegel et al., 2009) or that individuals with serious mental health conditions that engage in problematic substance use are those with better pre-morbid functioning, which may support better work functioning (McGurk et al., 2009). Given the mixed findings in adults, the single small study in emerging adults, the age-typical use of substances in emerging adulthood, and the emergence of work life in emerging adulthood, research focused on the role of substance use disorders in the development of mature vocational functioning in emerging adults with serious mental health conditions is greatly needed.

Substance Use Treatment for Emerging Adults

Treating populations with comorbid substance use problems and serious mental health conditions is complex. In both adolescent and adult studies, treatment outcomes tend to be worse for individuals with co-occurring problems, and serious mental health conditions predict increased risk for relapse following treatment (Havassy, Shropshire, & Quigley, 2000; McCarthy, Tomlinson, Anderson, Marlatt, & Brown, 2005). Experimental treatment research is difficult and expensive to conduct, so the development of an evidence base for interventions is tremendously challenging. Like many areas of treatment, empirical work on integrated treatments that simultaneously address both problems is scant, especially for emerging adults. Between 1987 and 1991, there was a promising series of non-experimental demonstration studies, which indicated that integrated treatment of dual diagnosis (as opposed to sequential or parallel treatment) among “young adults” is safe and appropriate (Mercer-McFadden, Drake, Brown, & Fox, 1997). However, these studies lacked random design, had small sample sizes, and uncovered few positive findings in the treatment of substance use, providing little direction about how to intervene effectively with this population. Further, the age range for these studies was 18 to 45 years, with an average age of 31. Albeit promising, follow-up studies of these treatment approaches have not been conducted; thus, much of what is known about treating dual diagnosis among emerging adults comes from the adolescent and adult literatures.

Most dual diagnosis programs developed for adolescents take one of two approaches: 1) coordination-of-care models; or 2) integrated therapeutic approaches supported by research. The aim of the first approach is to increase access to and coordinate services between mental health and substance use treatments, which are traditionally separate entities. Two types of coordination-of-care models (intensive case management and wrap-around services) have garnered some support for decreasing symptoms and retaining adolescents in less restrictive environments (Bruns, Rast, Walker, Peterson, & Bosworth, 2006; Evans, Armstrong, & Kuppinger, 1996), though neither specify the types of mental health and substance use services received by the individual. In addition, a small number of therapeutic approaches have proven effective for treating adolescent substance use problems (see Waldron & Turner, 2008). To date, there are *no* evidence-based treatments specifically for adolescents with co-occurring serious mental health conditions and substance use problems. While many clinical trials conducted for adolescent substance use problems included adolescents with comorbid mental health conditions, large-scale clinical trials have not yet *focused* on comorbid problems. Additional research is needed to determine the efficacy of these treatments for both comorbid problems and emerging adults.

Other treatments show potential for treating serious mental health conditions and substance use problems in adults and may be adapted to meet the needs of emerging adults. The Behavioral Treatment for Substance Abuse in Severe and Persistent Mental Illness (Bellack, Bennett, Gearon, Brown, & Yang, 2006) is a behaviorally-oriented substance abuse treatment using motivational interviewing, urinalysis contingency management, and social skills training. This treatment has produced decreased inpatient admissions and arrests and increased clean urine screens and daily activities compared to a group therapy control. Short-term outcomes for this intervention were promising; however, no data are available for

long-term outcomes, though a clinical trial is currently underway. Also of interest would be the secondary outcome of mental health symptoms, but no symptomatology data are available. Motivational interviewing also has garnered support for decreasing substance use in adults with serious mental health conditions, with sustained improvements observed at a 12-month follow-up (Kavanaugh et al., 2004), though this approach was modified to be longer and more intensive for this population. Further, this was a small pilot study that had several methodological limitations. Of note, researchers did not find significant changes for mental health outcomes (Kavanaugh et al., 2004). A larger, more rigorous study is necessary before drawing firm conclusions.

Moreover, the diminutive evidence for treatments that address comorbid problems and the lack of evidence for wide-ranging and sustained effects of such treatments highlight the additional research needed to determine whether these approaches could meet the needs of emerging adults with co-occurring problems. Though some overarching principles may be useful in this population (e.g., motivational interviewing, integration of services), emerging adults present with specific needs that are not addressed by these treatments, specifically in educational/vocational attainment and adjustment to new roles in academics and interpersonal relationships. Further, many family therapy approaches developed for adolescents may be less relevant to emerging adults, as they move away from and rely less on family and start their own families. Emerging adults with serious mental health conditions often face unique barriers to service while transitioning from child to adult systems of care. Those who also display substance use problems heighten the urgency for improved continuity of care, as untreated substance use problems in this group will likely lead to exponentially worse outcomes. Treatments for this age group must be comprehensive, not only in addressing symptoms, but also in promoting appropriate social roles (e.g., employment, educational outcomes) in order to increase sustainability of treatment gains (Clark & Unruh, 2009). Of note, psychopharmacological interventions target biological mechanisms that are unlikely to vary by developmental stage as substantially as psychotherapeutic interventions, so distinct research for medication efficacy in emerging adults may not be necessary. That is, medication trial findings for adolescents or adults could be considered when determining interventions for emerging adults. There are not, however, medications that have simultaneously treated both substance abuse and serious mental health conditions symptoms, so psychotherapeutic interventions are still required. Thus, to provide adequate coverage of psychotherapeutic interventions, medication trials are not reviewed as part of this critical review of the literature. Because substance use and mental health systems are separate, the needs of many emerging adults are unmet. In a large-scale national household survey, only 12% of adults with comorbid mental health and substance use problems were receiving services for both conditions (Epstein, Barker, Voburger, & Murtha, 2004). Given the high rates of comorbidity between these disorders, especially for emerging adults, providing integrated care in a single setting would be advantageous. Further, a recent study on patterns of utilization for mental health services reported a sharp decline in use of inpatient, outpatent, and residential services among emerging adults ages 16-25 years (Pottick et al., 2007), despite the rise in need for such services during this time period. Thus, for emerging adults in particular, special attention must be paid to the transition from child

to adult services with coordination of services being based on the individual's needs rather than his or her chronological age (Davis & Vander Stoep, 1997).

Discussion

Conclusions and Recommendations for Future Directions

The aims of the current review were to summarize the literature on substance use among emerging adults with and without serious mental health conditions. The overarching finding is the paucity of research on this important topic. Further, much of what we do know is drawn from the literatures on adolescents and adults. There is growing evidence that emerging adulthood is an important developmental period with goals and challenges that are unique from other age groups. Nonetheless, there are some tentative conclusions we can draw from this critical review of the literature.

First, it is likely that the prevalence of substance use disorders is higher among emerging adults with serious mental health conditions compared to those without these conditions, and higher in young adults than in mature adults with serious mental health conditions. This suggests that interventions for emerging adults should consider the higher likelihood of substance use problems and their impact. Second, it appears that, though there may be some overlapping correlates and predictors, the potential consequences of substance use are likely to be more severe for emerging adults with serious mental health conditions than for those without these conditions. Finally, though ideas about treatment approaches may be borrowed from adult and adolescent literatures, the needs of this population necessitate efforts in developing comprehensive treatments. Successful approaches must consider the unique developmental challenges faced by emerging adults, namely significant changes in educational, vocational, and relational roles and expectations in the face of reduced family influence and changing social networks.

This review also highlights areas for future investigation. First, epidemiological studies provide evidence that substance use and related problems may be more prevalent among emerging adults with serious mental health conditions compared to those without these conditions. However, methodological limitations of these studies preclude making strong conclusions about prevalence rates, as some used overly broad definition of serious mental health conditions, whereas others focused solely on treatment seeking populations. Further research is needed to provide accurate prevalence estimates for this group if the scope of the problem is to be understood fully. In addition, much of what we know about the correlates of substance use among emerging adults comes from studies with adolescent samples, and even fewer well-designed studies examine individuals with substance use and serious mental health conditions specifically. Future studies should aim to uncover any predictors or correlates of substance use that may be unique to this population, as these factors can inform prevention and treatment efforts.

Finally, the largest gap in the research lies in the development and examination of treatments for emerging adults with serious mental health conditions. There have been no treatments developed and tested to date that are specifically designed to meet the unique needs of emerging adults with serious mental health conditions and substance use problems. There

are several reasons to be cautious about assuming that evidence supported adult interventions that have included young adults in their clinical trials are effective for emerging adults. First, including young adults in adult clinical trials does not *test* whether the approach is equally effective in this age group. Such tests require a sufficient sample size in each age group to detect differences, as well as analyses that directly test these potential differences. While the study of age effects in adolescent research is more common (likely due to attention on marked developmental changes over a brief age range), comparisons of treatment efficacy for emerging adults to that for older adults in adult clinical trials are rare. However, at least one adult substance use treatment approach conducted an age comparison for clinical trials data and reported age by treatment interactions. The results indicated that the most effective alcohol treatment approach was different in young versus more mature adults (Rice, Longabaugh, Beattie, & Noel, 1993). These findings support the notion that effectiveness of adult interventions may differ in important ways for young adults.

Moreover, just as young children differ in important ways from adolescents and seniors from middle-aged adults, the important ways in which emerging adults differ from mature adults have strong implications for developmentally appropriate interventions (e.g., responsibility- and risk-taking, cognitive processing of therapeutic materials, peer group changes and contextual [school/vocation] changes, development of effective future planning skills and literacy, parental and legal authority, motivational incentives/contingencies). While it is unlikely that evidence supported approaches for adults are ineffective with emerging adults, it is likely that the most effective approaches may differ for young than mature adults and that approaches modified based on developmental differences would be more effective than unmodified adult approaches. Thus, a reasonable approach for practitioners is to consider elements of evidence informed approaches, while carefully considering elements that are likely to be less well suited to emerging adults. A thoughtful example of this type of approach in the vocational rehabilitation domain is the adaptation of the evidence-based vocational intervention, Individual Placement and Support model (IPS) for those early in the onset of schizophrenia (who are typically emerging adults) developed by Nuechterlein and colleagues (2008). This adaptation includes foci of refining young working capacities, substance use issues and working, supported education, and involving family members. Early analyses of data from this randomized clinical trial are impressive, with a high rate of returning to schooling or work (Nuechterlein, personal communication, August 29, 2011). The development of adaptations for emerging adults from adult approaches based on the research findings reviewed here and understanding of how emerging adults differ from mature adults, as well as examination of age differences in the effects of adult approaches, are research endeavors that should rapidly improve practice options to improve outcomes in emerging adults with co-occurring mental health and substance use disorders.

Until the research specific to this population is able to provide more precise guidance, it is reasonable for clinicians to utilize approaches informed by the research on similar populations. For example, the Northeast Addiction Technology Transfer Center describes a research-informed approach (“Co-Occurring Substance Use and Mental Health Disorders in Adolescents”), as does the Substance Abuse and Mental Health Services Administration (“Integrated Treatment for Co-Occurring Disorders”). Given the substantial challenges faced by young people with comorbid substance use and mental health disorders, as well as the

multiple developmental challenges faced during emerging adulthood, comprehensive and thoughtful approaches to treatment of this complicated set of problems are essential, and research aimed at identifying effective treatments for co-occurring conditions in this population is urgently needed.

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