Mental Health and Transitions from Adolescence to Emerging Adulthood: Developmental and Diversity Considerations

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ABSTRACT

This paper provides a review of mental health and developmental issues specific to the phases of adolescence and emerging adulthood. Prevalence estimates highlight the frequency and severity of mental health difficulties in this age cohort, and point to the pressing need to integrate a developmental perspective in planning support, prevention, and intervention services. A brief overview of common mental health issues is provided, as well as a consideration of relevant developmental trajectories and variations. Using a health equity lens, we discuss diversity issues in relation to transition-aged youth. Conclusions include recommendations to enhance the system of care for transition-aged youth.

Keywords: mental health, adolescence, emerging adulthood, transition-aged youth, health equity, diversity

RÉSUMÉ

Cet article fait le point sur les questions de santé mentale et de développement particulières aux phases de l'adolescence et d'émergence de l'âge adulte. Les estimations de prévalence font ressortir la fréquence et la gravité des troubles de santé mentale dans cette cohorte d'âge et le besoin pressant d'intégrer une perspective de développement dans la planification des services d'appui, de prévention et d'intervention. Nous présentons un bref aperçu des troubles mentaux les plus courants, en y incorporant les trajectoires de développement et les variations pertinentes, et abordons les questions de diversité dans une optique d'équité en matière de santé. Nous concluons avec des recommandations pour améliorer le système des services pour les jeunes en transition vers l'âge adulte.

Mots clés : santé mentale, adolescence, émergence de l'âge adulte, jeunes en transition vers l'âge adulte, équité en matière de santé, diversité

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There has been increased recognition in recent years of the unique characteristics and needs of individuals during the developmental stage when adolescents transition into adulthood (Holmbeck, Bauman, Essner, Kelly, & Zebracki, 2010; Schulenberg, O'Malley, Bachman, & Johnston, 2005). More than one in five children and youth experience mental health difficulties, and youth aged 15 to 24 are more likely to report mental illness and/or substance use disorders than other age groups (Health Canada, 2007; Ontario Ministry of Health and Long-Term Care, 2010). These estimates do not include undiagnosed or subclinical mental health difficulties, which can cause significant impairment, with combined prevalence estimates for adolescents exceeding 40% (Lewinsohn, Shankman, Gau, & Klein, 2004).

Such numbers highlight the need to incorporate a developmental perspective into our understanding of mental health to best support youth in transitioning to become healthy, comfortable, positive members of our society. The concept of developmental "cascades" points to the ways in which functioning in one domain of life influences other domains over time (Lewin-Bizan, Bowers, & Lerner, 2010), particularly in the crucial early developmental periods of childhood and adolescence (Masten et al., 2005). Left unattended, mental health difficulties can have a wide-ranging impact on the lives of young people and those around them, touching the interdependent spheres of social, behavioural, and family functioning and educational functioning and attainment (Farrell, Barrett, & Piacentini, 2006; Health Canada, 2007). Mental health issues can increase risk for youth involvement in the criminal justice system (Odgers, Burnette, Chauan, Moretti, & Reppucci, 2005) and are responsible for significant costs to the health care system that continue into adulthood (Ontario Ministry of Health and Long-Term Care, 2010). These impacts underscore the need to support mental health with developmentally targeted prevention and intervention strategies that are fully integrated into our policy frameworks. In addition, a developmental and contextualized understanding of mental health issues in adolescence and emerging adulthood may decrease stigma associated with mental health needs.

MENTAL HEALTH IN ADOLESCENCE AND EMERGING ADULTHOOD

Adolescence is the most common period for mental health difficulties to materialize and, along with emerging adulthood, is the peak onset period for a number of mental health disorders including bipolar disorder, eating disorders, and schizophrenia (Health Canada, 2007). Rates of substance use, depression (for girls), and antisocial behaviours increase in adolescence (Smith & Smith, 2010). Depression, anxiety, and substance use disorders are the most common mental health issues in adolescence and emerging adulthood.

Depression and anxiety are often discussed together because of their high degree of overlap. An estimated 15% to 20% of adolescents experience clinical levels of depression or anxiety, with up to 40% of youth experiencing "subclinical" but distressing levels of difficulties in these areas (Barrett & Turner, 2004). Diagnosed depression is more common in females than males, particularly in adolescence. Mid-to-late adolescence is the most common age for depression to emerge (Young, Fang, & Zisook, 2010). Bipolar disorder most often emerges in late adolescence to early adulthood (Health Canada, 2007). Emerging adults aged 20 to 29 show the highest rate of anxiety symptoms (Health Canada, 2007). Experiencing an anxiety disorder in adolescence increases the risk for anxiety disorders in adulthood (Malcarne, Hansdottir, & Merz, 2010).

As individuals move through adolescence, the likelihood of drug and/or alcohol use increases with increased levels of autonomy, identity experimentation, rebellion, and seeking to fit in socially (Essau,

2004). Some experimentation with substance use is not uncommon in late adolescence and early 20s, and it most often does not lead to substance use disorders (Waldron & Kern-Jones, 2004). However, problematic drug and alcohol use among adolescents has become a major public health concern, and the age of onset of substance use disorders has decreased (Essau, 2004; Waldron & Kern-Jones, 2004). Substance use that begins in childhood or early adolescence is associated with a higher risk of developing a long-term substance use disorder (Waldron & Kern-Jones, 2004). Substance use disorders affect up to 15% of adolescents. The prevalence and level of use peak in early adulthood, then subside after the mid-20s (Chassen, Ritter, Trim, & King, 2003). Concurrent mental health and substance use concerns are more common among youth than among adults (Roberts, Roberts, & Xing, 2007). Rates for mood, anxiety, eating, and behaviour disorders are two to three times higher among youth with substance use disorders (Chassen et al., 2003; Essau, 2004). Concurrent disorders are associated with increased risk for homelessness, incarceration, HIV infection, and suicide, and contribute to continued social impairment and mental health concerns into adulthood (Essau, 2004; Office of the Auditor General of Ontario, 2008).

Eating disorders most often begin in mid-to-late adolescence, though concerns have been raised about increasingly young ages of onset (Sancho, Arija, Asorey, & Canals, 2007). Eating disorders are more common in females than males, with prevalence estimates ranging from 3% to 17% for females, and somewhat lower for males (Sancho et al., 2007). Eating disorders can be associated with serious and long-term health problems (Bell, 2010). Other mental health issues affecting adolescents and young adults include attentional disorders such as attention-deficit/hyperactivity disorder (ADHD), conduct disorders, tic disorders, bipolar disorder, and psychosis.

Trauma (e.g., abuse, neglect, domestic violence) experienced during childhood can continue to affect youth into adolescence and adulthood. Exposure to child maltreatment and other traumas is linked to increased incidence of behaviour and emotion regulation difficulties, peer rejection, and suicidal ideation; as well as attentional, substance use, mood, eating, and personality disorders, post-traumatic stress disorder (PTSD), and sexual adjustment problems (Cicchetti, Rogosch, Sturge-Apple, & Toth, 2010).

Suicide and self-harm (deliberate self-injury) are serious unfortunate outcomes that can be associated with mental health difficulties in adolescence and emerging adulthood. Suicide is the second leading cause of death among youth in Canada (Kutcher & Szumilas, 2008) and up to 47% of adolescents reported some history of suicidal thoughts (Sarkar et al., 2010). Estimates suggest that 14% to 39% of adolescents have engaged in self-harm (e.g., cutting themselves). The highest incidence is among adolescent girls (Sarkar et al., 2010); however, up to 17% of college students of both genders have also reported engaging in self-harm (Franklin et al., 2010).

DEVELOPMENTAL FACTORS AND MENTAL HEALTH

Developmental issues and mental health are intertwined in a myriad of ways. Maturing neurochemistry has an impact on mental health, as do specific developmental tasks. For example, eating disorders may be related to heightened body image concerns around puberty (Holmbeck, Greenley, & Franks, 2004).

Developmental level is an important factor in interpreting and responding to concerns about a youth's functioning (Eyberg, Schuhmann, & Rey, 1998). Explorations of autonomy, independence, and identity

are common in adolescence and emerging adulthood. For some youth, a certain degree of rebelliousness, mood swings, family conflict, and experimentation with substance use or antisocial behaviours are related to a transient exploration or maturation "phase"; for others, these behaviours may indicate a more serious concern, such as abuse or a mood, conduct, or substance use disorder (Eyberg et al., 1998).

Increases in cognitive capacity, reasoning ability, communication skills, emotional capacity, and independence during adolescence and young adulthood affect the ways in which mental health concerns are expressed or exhibited. For example, although a 7-year-old child with ADHD may struggle to stay seated at school, the same child at age 17 may be less physically restless but continue to struggle with more subtle organizational and impulsivity difficulties affecting schoolwork and relationships, or with secondary problems such as substance abuse (Willens, 2011). Youth with conduct difficulties may engage in more covert activities rather than overt oppositional behaviours as they develop the capacity for planning and perspective taking; more serious antisocial behaviours and criminality may emerge for a small subset (McMahon & Kotler, 2004).

Developmental levels can also affect mental health interventions (Weisz & Hawley, 2002). Interventions need to be geared towards a youth's cognitive level and other developmental capacities, and incorporate the issues that are most prominent in their lives, such as peer and dating relationships, independence, employment, and parenting issues. Caregivers and school systems become less involved in treatment with adolescents and are often entirely uninvolved with young adults' treatment. Transitions to new roles may mean that preexisting mental health issues need to be readdressed—for example, young adults may find they need to revisit previously treated trauma-related issues as they enter a serious dating relationship or become parents.

DEVELOPMENTAL TRAJECTORIES

There is considerable continuity in mental health and psychosocial functioning from childhood through to emerging adulthood. In most (but not all) cases, high-functioning emerging adults were functioning well in childhood and adolescence; conversely, emerging adults with difficulties often have had problems previously (Masten et al., 2005). Although some difficulties may be "outgrown" or resolved with age, in many instances the expression of difficulties simply shifts while the impacts persist (Holmbeck et al., 2004).

Early Risk and Protective Factors

A wide range of early risk and protective factors influence mental health outcomes. These factors are interactive and bidirectional, reflecting links between environmental experiences and brain development (Cicchetti et al., 2010).

Early risk factors associated with greater chance of developing significant mental health difficulties include: (a) *individual factors* such as prenatal insults (e.g., prenatal exposure to alcohol), neurochemical imbalances, cognitive or language/learning disabilities, and chronic illness; (b) *life experiences* such as abuse or other traumas, loss of loved ones, poverty, and residential instability; (c) *family factors* such as exposure to domestic violence, poor supervision, harsh discipline, parental mental illness, and disrupted attachment; (d) *social factors* such as peer rejection or conflict and antisocial peer role models; (e) *school factors* such as bullying, frequent school changes, and lack of connection to school; and (f) *community characteristics*

such as lack of access to recreational facilities and support services, poor housing conditions, exposure to community violence, and social or cultural discrimination or isolation (Barrett & Turner, 2004; Essau, 2004; Hussong, & Chassin, 2004; Roberts, Roberts & Chan, 2009).

Counterbalancing these risk factors, however, are protective factors that help shield youth from mental health difficulties in the face of adversity. Protective factors are important avenues for fostering positive mental health in youth, and include: (a) *individual factors* such as intact cognitive abilities, "easy" temperament, positive self-esteem, and proactive coping skills; (b) *life experiences* such as residential stability, positive mentoring, and supports at transition points; (c) *family factors* such as secure attachment to a caregiver, parental warmth and monitoring, and family stability; (d) *social factors* such as prosocial peer group, supportive relationships with an adult other than parents, and good social skills; (e) *school factors* such as a positive school climate, a sense of belonging in school, opportunities for success, and school achievement; and (f) *community characteristics* such as access to support services, community norms against violence, economic security, attachment to community networks, and cultural identity and pride (Barrett & Turner, 2004; Essau, 2004; Hussong & Chassin, 2004; Lewin-Bizan et al., 2010; Masten et al., 2005; Roberts et al., 2009).

Continuity of Mental Health Concerns

Mental health concerns may persist into emerging adulthood for a number of reasons: First, there can be *continuity of risk*, with early risk factors continuing into adulthood. Second, *untreated mental health problems* can continue to have a negative impact on functioning. Most youth with mental health disorders or problematic substance use do not receive treatment (Office of the Auditor General of Ontario, 2008), and as many as half of adolescent behaviour disorders are continuations of those seen in childhood (Holmbeck et al., 2004). For example, up to 60% of youth with ADHD may continue to experience related symptoms and impairment into adulthood (Halmoy, Fasmer, Gillbeg, & Haavik, 2009). Other behaviour disorders are associated with later conduct problems, health risks, and increased service use, particularly if they have not been addressed (Holmbeck et al., 2004). Third, *family relationships may be negatively affected* when youth have high levels of problem behaviours. When combined with punitive or controlling parenting styles, aversive parent-child interactions can develop, leading to significant family conflict and escalation of behaviour problems and/or mental health concerns (Patterson, Reid, & Dishion, 1998). Fourth, early mental health concerns may increase *vulnerability to future stressors*. For example, youth with anxiety disorders have higher prevalence and severity of post-traumatic stress disorder after a traumatic experience in early adulthood (Storr, Ialongo, Anthony, & Breslau, 2007). Fifth, *problematic behaviours may become entrenched*. Peer and school problems may result in involvement in social contexts and relationships that support problematic behaviour through adolescence into adulthood (Roisman, Aguilar, & Egeland, 2004). Problem behaviours also increase risk for events that consolidate negative behaviours and interfere with positive change, such as early school withdrawal or incarceration (Hussong & Chassin, 2004). Finally, *reduced opportunities for skill development* may result from ongoing mental health concerns or behaviour problems. For example, mental health and behaviour problems are associated with decreased school attendance, which limit opportunities in emerging adulthood (Masten et al., 2005). Problem behaviours also make it more difficult to make positive transitions into adult relationships and careers, which might otherwise lead to positive change (Schulenberg et al., 2005).

Emergence of New Mental Health Concerns

During emerging adulthood, new mental health disorders develop for some individuals without previous mental health concerns. Individuals with genetic predisposition may begin to show signs of disorders such as schizophrenia. In addition, most emerging adults face new, potentially stressful educational and work situations, and are often inexperienced in their new roles; the related stress may result in mental health concerns (Melchior, Berkman, Niedhammer, Zins, & Goldberg, 2007). Youth with histories of adversity and disadvantage are particularly vulnerable to these kinds of stressors (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002).

HEALTH EQUITY, DIVERSITY, AND TRANSITIONS TO ADULTHOOD

From a health equity perspective, youth in certain circumstances have increased vulnerability to mental health concerns in the transitions to adulthood. These groups include youth with fewer socioeconomic resources or those who are living in poverty (McDonough & Berglund, 2003); Aboriginal and racial- and ethnic-minority youth (Wickrama, Noh, & Bryant, 2005); trans, lesbian, gay, and bisexual youth (Toomey, Ryan, Diaz, Card, & Russell, 2010); youth who are street-involved (Whitbeck, 2009), justice-involved (Odgers et al., 2005), or child welfare system–involved (Dworsky & Courtney, 2009); and some youth with dis/abilities (Chaudhry, Perlman, & Waldman, 2009).

It is important to recognize the complexities and variability within these categories, the substantial diversity in outcomes within populations, and the effect on individuals of intersections of identities and social locations. Below are examples of determinants of mental health concerns in transitions to adulthood in diverse populations. Issues related to socioeconomic status are discussed elsewhere in this issue (Tilleczek, Ferguson, & Campbell, 2014).

Reduced Access to Opportunities and Resources

Stresses related to adult transitions are increased when resources and opportunities are limited. For instance, youth in the child welfare system often receive limited support for educational and other endeavours, and are required to take on independence based on their age rather than readiness for adult roles (McMillen & Tucker, 1999). These challenges increase the risk of outcomes associated with poorer mental health such as underemployment, low educational attainment, and homelessness (Reid & Dudding, 2006).

Barriers to Self-Determination and Autonomy

Autonomy is central in emerging adult development. Adult transitions related to independent residence, education, employment, marital status, and parenthood may present challenges to emerging adults with disabilities or chronic health conditions (Holmbeck et al., 2010).

Harassment, Discrimination, and Oppression

Lesbian, gay, bisexual, and trans youth often reach emerging adulthood after having experienced considerable stress during adolescence. Experiences of discrimination, harassment, and hostile school climates

can be exacerbated by decreased family support due to conflicts around the youth's sexual orientation or gender identity (Toomey et al., 2010). People of minority ethnic backgrounds, including youth, tend to experience increased stress due to marginalized social locations and experiences of racism and discrimination (Wickrama et al., 2005). The historical context of oppression and trauma is an important factor in mental health for Aboriginal youth in Canada (First Nations Centre, 2006).

Trauma and Maltreatment

Sexual abuse is experienced by girls more commonly than boys, and is associated with negative outcomes including mental health disorders (Maikovich-Fong & Jaffee, 2010). In emerging adulthood, young women are more likely to experience sexual assault than men whereas men are more likely to experience physical violence (Schulenberg et al., 2005). Street-involved youth and child welfare system–involved youth are more likely to have experienced maltreatment and/or disrupted relationships with caregivers, and may experience further trauma while living in care and/or on the streets (Whitbeck, 2009). Aboriginal youth are often exposed to the impacts of intergenerational trauma related to residential schools (First Nations Centre, 2006).

Access to Services

Mental-health and related services are often unavailable to justice-involved youth. Practical barriers decrease access for street-involved youth (Whitbeck, 2009). Services for youth in child welfare care become less available as youth enter adulthood. Aboriginal communities and some ethno-specific communities may not share the worldview of available treatment services (First Nations Centre, 2006). Various populations of transition-aged youth also face economic, language, and other barriers.

CONCLUSIONS: PROMOTING POSITIVE MENTAL HEALTH IN ADOLESCENCE AND EMERGING ADULTHOOD

It is vital that mental health concerns are addressed during the complex transition from adolescence to adulthood. Community mental health services for this rapidly changing population need to be developmentally informed (Holmbeck et al., 2004). Neither the "child" nor the "adult" service system is optimally designed for youth in late adolescence and the early stages of emerging adulthood. Further, access to services is hindered by system-level problems in coordinated service delivery. Timely access to services is crucial to reduce the cascades of problematic outcomes when difficulties are not promptly addressed. Recent mental health and social policy directions show a promising trend towards integration and a holistic recovery approach to planning and services (Ontario Ministry of Health and Long-Term Care, 2010). The recommendations below, which are based on the research literature reviewed, have been made before (e.g., Health Canada, 2007; Ontario Ministry of Health and Long-Term Care, 2010; Ronald & Henderson, 2000) but continue to require attention:

1. Ensure ongoing education of service providers, developmentally informed programming, and availability of supports at crucial developmental periods and transition points.
2. Increase services for transition-aged youth. In the longer term, processes and services tailored to the unique developmental, adaptive, and mental health needs of the transition-aged population

should be developed. In the short term, the "child" and "adult" systems need to work together to bridge gaps to support young people with mental health issues as best as possible as developmentally specific services are established.

3. Enhance prevention and early intervention to address needs early in the developmental trajectory.
4. Eliminate stigma surrounding mental health issues, which can be a barrier to help-seeking, through education and increasing awareness of mental health as a core component of overall health.
5. Facilitate youth access to services by increasing flexibility in service delivery, meeting youth "where they are at." Cut across traditional service "silos" to allow youth with mental health needs to access supports "through any door," be it an educational, medical, social, religious, or community setting.
6. Increase access to supports through enhanced collaboration across sectors (e.g., education, youth justice, child welfare, mental health), and integration of mental health services within the overall system of care.
7. Incorporate a health equity lens in both prevention and intervention. Population-specific prevention may target social determinants of health and social inequities. Intervention may include community and family support in addition to addressing individual-level goals.
8. Identify and disseminate "best practices" for prevention and intervention services targeting transition-aged youth. Bridge the gap between research and applied mental health services through improved knowledge exchange and applied clinical research.

Through a collaborative effort across sectors and disciplines, a stronger and more responsive system of care can be built for future generations.

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