Episodic Disabilities and Post-Secondary Education in Canada

A Review of the Literature

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The Canadian Working Group on HIV and Rehabilitation (CWGHR) is a national charitable organization working to improve the quality of life of people living with HIV and related conditions through rehabilitation research, education, and cross-sector partnerships. CWGHR members are individuals and organizations that have an interest in HIV, disability and rehabilitation. These include: community-based HIV/AIDS, disability and rehabilitation organizations; national professional associations and individual clinicians; unions; private-sector companies; people living with HIV and other disabilities; health care, social care and human resources professionals; and other people who are interested in HIV, disability and rehabilitation.

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INTRODUCTION

Purpose and Scope of Review
The purpose of this review is to synthesize the most relevant academic and grey literature on the topic of episodic disabilities and post-secondary education in Canada. The value of promoting meaningful education for all Canadian students, including disabled students, has been increasingly recognized from the 1980s onward (Kohen et al., 2006; Mullins & Preyde, 2013). As this review will discuss, legislation mandating access to education for students with disabilities has typically focused on access to the primary and secondary levels of education, and does not directly address access to post-secondary education (Multiple Sclerosis Society of Canada, 2014; National Educational Association of Disabled Students, 2012). Further, laws and policies promoting access to education for students with disabilities have tended to be designed to address the needs of students with permanent disabilities, which has excluded many students with episodic disabilities (Baur, Parker & Dufflet, 2014). For these reasons, students with conditions now recognized as associated with episodic disability have faced many barriers to accessing post-secondary education and to remaining in their program of study and ultimately graduating, which has serious implications for their opportunities to find adequate employment.

While a large amount of information exists concerning disability more generally in relation to education in Canada, the fact that the concept of episodic disability has emerged only recently means that relatively little of the literature addresses the implications of episodic disability in relation to post-secondary education. Often students with episodic disabilities have been understood, and treated as ill rather than as disabled. This medical model understanding of episodic disability has meant that students with episodic disabilities are often regarded as “too unwell,” or their conditions as “too unpredictable” to allow them to continue to participate in education. Students with episodic disabilities have typically been expected to withdraw from education until their health improves and stability is achieved (Becker et al., 2002; Jung, 2002; Lippincott, 2007; Martin & Oswin, 2010; Werth, 2008). For many – if not most – people with episodic disabilities, this is not possible, which means that many students in this group are permanently excluded from education. As a result of this, students with episodic disabilities are less likely than other students to graduate from post-secondary education with a diploma or degree (Fichten et al., 2003; Garchynski-Liparini, 2008; Maslow et al., 2011; Weckwerth, 2010).

Increasingly, an understanding of episodic disabilities as impacting Canadians at all stages of life is emerging. While many episodic disability-associated conditions are somewhat more common among older people, most conditions also affect significant numbers of youth. This is particularly true for mental health concerns, which have been recognized as especially prevalent among younger people and therefore as requiring particular attention from postsecondary institutions (Colleges Ontario, 2012; Zimmerman, 2004). Many other episodic disability-associated conditions are currently less well recognized in relation to questions of access to education. For example, HIV affects many young people, including students, and some literature on access to education for elementary and secondary school students with HIV exists (McKeown, 2013), but information as to whether students with HIV encounter barriers to participating in post-secondary education is scant. Instead of considering access, the literature
tends to address issues such as HIV transmission risk behavior among post-secondary students (Teague, 2009); HIV prevention strategies promoted on campuses (Warren-Jeapiere, Jones & Sutton, 2011; Mixer, 2011); anti-stigma campaigns targeting post-secondary students (Locke, 2013; Millimet et al., 2013); and studies of attitudes toward clients with HIV among students in health care and social work training programs (Clarke, 2013; Hoffart et al., 2012).

As this review will show, the new recognition of episodic disability has begun to shape some policies and practices to promote educational access for all students, including those with episodic disabilities. The increased focus on student mental health among policy makers, across the academy and throughout the education sector is undoubtedly the most prominent of these developments, although some academic research and policy development has also been undertaken concerning education access for students with non-mental health episodic disabilities. That noted, much work remains to be done in order to ensure that students with episodic disabilities have fully equal access to post-secondary education.

This review will define and discuss the emergence of the concept of episodic disability, and provide an overview of the prevalence of episodic disability-associated conditions among Canadian youth. While older adults attend post-secondary institutions, young people are considered traditional-age post-secondary attendees, and make up the majority of post-secondary students in Canada (Berger, Motte & Parkin, 2009). The review will then turn to a discussion of episodic disability and access to post-secondary education. Topics addressed will include: the importance of post-secondary education for youth with episodic disabilities; graduation rates of students with episodic disabilities; bias against students with episodic disabilities; legislation and regulations concerning episodic disability and access to education in Canada; accommodations and episodic disabilities; post-secondary institution infrastructure issues pertaining to episodic disabilities; financial issues for post-secondary students with episodic disabilities; the implications of intersecting identities for post-secondary students with episodic disabilities; and potential changes to accommodation strategies identified as helpful for students with episodic disabilities.

Canadian sources are emphasized in this review, but due to the scarcity of literature on this topic, relevant material is also drawn from the United States, the United Kingdom, Ireland and Australia, as appropriate. The absence of information available on this topic results in several blank spots: For instance, as discussed above, information is lacking in regard to the post-secondary education experiences and needs of students with many specific episodic disability-associated conditions. Additionally, the available information primarily focuses on universities (particularly undergraduate programs – there is little mention of graduate programs) and community colleges. Some information is available concerning episodic disabilities and CEGEPs, but very little material about episodic disabilities and post-secondary apprenticeship positions can be found. Some literature concerning apprenticeship does address disability generally, primarily to point toward efforts being undertaken to connect transition-age youth with disabilities to apprenticeship opportunities (Canadian Apprenticeship Forum, 2009), and to mention that disability accessibility remains an ongoing concern for apprenticeship programs (Sharpe & Gibson, 2005).
**Methodology**

ProQuest, GALE and EBSCO databases were searched, using a variety of terms in order to capture the greatest breadth of relevant articles possible.

To retrieve articles concerning episodic disability and chronic illness about post-secondary education generally, the following terms were employed:

\[
\text{ab(“episodic disabilit*” OR “episodic illness” OR “recurrent illness” OR “chronic illness”)} \\
\text{AND ab(post-secondary OR postsecondary OR “post secondary” OR college* OR CEGEP OR universit* OR apprentice*)}
\]

\[
\text{ab(post-secondary OR postsecondary OR “post secondary” OR college* OR CEGEP OR universit* OR apprentice*) AND all(accommodat*)}
\]

A French language search was undertaken using the following terms:

\[
\text{ab(incapacit* OR handicap*) AND ab(college OR universit* OR postsecondaire OR CEGEP)}
\]

Additionally, searches using the names of each of the specific 27 episodic disability-associated conditions identified by Furrie (2010) were undertaken, using the following terms in order to better narrow the results to articles concerning the experiences of students:

\[
\text{ab([episodic disability-associated condition and synonyms]) AND ab(student*) AND}
\]

\[
\text{(ab(disab*) OR ab(accommodat*))}
\]

Although newspaper, professional journal and magazine sources were included in the database search, to better capture the grey literature on this topic, Google searches using the following terms were also conducted and the results screened for sources pertaining to episodic disabilities:

- disabilities Canada college
- disabilities Canada university
- disabilities Canada CEGEP
- disabilities Canada post-secondary
- disabilities Canada apprenticeship

Additional database and Google searches were undertaken to address some of the gaps in the materials retrieved through the main searches.
DEFINING EPISODIC DISABILITIES

Medical and Social Models of Disability

Until the late 20th century, disability was most often understood as a medical problem. This notion went largely unchallenged until the 1970s, when theorists and activists with physical impairments drew on their experiential knowledge to develop the social model of disability (Oliver, 1983; Union of the Physically Impaired Against Segregation and the Disability Alliance, 1975). The social model makes a distinction between impairment (a bodily difference, lack or defect), and disability, which can only arise in relation to the non-accommodation of impairment. For example, a person who has paraplegia has an impairment. That person would be disabled without access to a wheelchair, as well as an environment that accommodates wheelchair users, such as one in which sidewalks have curb cuts and buildings can be accessed using ramps and elevators. Even as the disability rights movement has grown, and legal and social change promoting the inclusion of people with disabilities have been undertaken in more jurisdictions, the medical model has in many regards retained its dominant status, promoting an understanding of impairment as inherently disabling and individual disabled people’s bodies as the site of adaptation (Erevelles, 2011).

The Medical Model, Chronic Illness and Episodic Disability

The dominance of the medical model has been particularly significant in relation to what is now coming to be recognized as episodic disability. At this time, episodic disability-associated conditions are still primarily understood as “chronic illnesses,” and therefore as medical conditions in need of individual cure, rather than as impairments that can be accommodated in order to prevent disablement and promote inclusion and participation. As a result of a lack of awareness of the application of disability rights to chronic illness symptoms, as well as resistance to the stigma that is sometimes associated with disability, many people with chronic illnesses do not identify themselves as disabled, making them less likely to seek accommodations and full inclusion on the basis of disability rights claims (Jung, 2000; Davis, 2012; Mullins & Preyde, 2013; Nicholls & Li, 2012; Salzer, Wick & Rogers, 2008). This is particularly the case for students with mental health difficulties, as they tend to face increased stigma, and often believe that accommodations are reserved for students with physical disabilities (Lin, 2013; Meredith, 2014; Wilgosch et al., 2010). Boyd (2012) points out that in the post-secondary education context, the construction of episodic disabilities as “health problems” at the level of the institution contributes to students’ rejection of the label of disability, and the rights it can confer.
Episodic Disability-Associated Conditions and Impairment Effects
Thomas’ (1999) work on the social-relational model of disability introduced the notion of “impairment effects.” Thomas drew from feminist work on chronic illness to highlight the fact that impairments can themselves cause difficulties for people, independently of processes of disablement. For example, a person with a chronic fatigue syndrome may be disabled by a non-accommodating class schedule, but their ability to participate in work or education may also be directly impacted by the effects of fatigue and pain. Further, pain management treatments may also have impairing effects.

Because most episodic disability-associated conditions involve the direct effects of impairment, such effects undoubtedly play a role in diminishing access to education; however, the dominance of the medical model of disability in understanding episodic disability-associated conditions means that the relative importance of impairment effects as barriers to accessing education have been overemphasized, or have served as justifications for non-accommodation (Morris, 2005).

Definition of Episodic Disability
Episodic disabilities are characterized by fluctuating periods and degrees of illness and wellness, or in the language of the social model of disability, impairment and non-impairment. Episodic disabilities are typically unpredictable. Because most disability accommodation policies and practices were developed with the needs of people with permanent, non-fluctuating disabilities in mind, they are often unsuitable for people with episodic disabilities, and in many cases, people with episodic disabilities are explicitly barred from accessing them (Baur, Parker & Dufflet, 2014; Canadian Working Group on HIV and Rehabilitation, 2012; Cohen et al., 2008; Lightman et al., 2009).

Recognition of Episodic Disability
Canadian disability advocacy organizations and researchers have been at the forefront of the development of a rights-focused understanding of episodic disability. CWGHR and partners in the Episodic Disabilities Network and Episodic Disabilities Employment Network were among the first to recognize the common experiences of non-accommodation that many people with seemingly disparate chronic health conditions experienced, and to begin the process of raising awareness to support the accommodation of episodic disabilities, especially in the workforce (Boyd, 2012). Research on the implications of episodic disability for workers has uncovered serious problems regarding lack of access to appropriate accommodations, as well as a disability insurance and income replacement regime that generally excludes those with episodic disabilities (Lysaght, Krupa & Gregory, 2011). This review of the current literature shows that people with episodic disabilities in Canada are encountering similar problems of exclusion in the realm of education. This is especially problematic, given the crucial role of education in enabling people with episodic disabilities to obtain employment and a good quality of life.

An important development in the conceptualization of episodic disabilities is found in O’Brien’s (2008) “episodic disability framework,” an instrument conceptualizing disability in terms of three interlocking components: 1) Symptoms/impairments leading to difficulties with activities
of daily life, lack of social inclusion, uncertainty; 2) Factors that exacerbate or alleviate disability, such as level of support and stigma, as well as personal characteristics; 3) Triggers of major disability episodes, such as diagnosis, medication change, or illness (iii). While O’Brien’s work has not been widely taken up in relation to the issue of episodic disability in post-secondary education, the usefulness of recognizing episodic disability as comprising multiple co-constructed dimensions is clear: As the scope of this review will demonstrate, as a result of the converging dynamics explained by O’Brien, the lives of Canadian students with episodic disabilities are impacted across many areas, both inside and outside the classroom. Relationships with family, friends, fellow students, academic faculty and staff are affected, as are interactions with systems and policy frameworks at the institutional, provincial and national levels.

**Episodic Disability-Associated Conditions**

Furrie (2010) has identified a list of 27 conditions recognized as associated with episodic disability:

ALS (Amyotrophic Lateral Sclerosis), arthritis, asthma, cancer, chronic bronchitis, chronic fatigue syndrome, diabetes, emphysema, epilepsy, fibromyalgia, Guillain-Barre syndrome, hepatitis B, hepatitis C, HIV, long-term pain, lupus, major depression, Meniere’s disease, mood disorders, multiple sclerosis, muscular dystrophy, Parkinson’s disease, personality disorders, repetitive strain injury, schizophrenia, severe migraines, tuberculosis.

Because this is an emerging area of research, this list is likely not exhaustive. This review uncovered some other conditions associated with episodic disability, including severe allergies (Royster & Marshall, 2008), Crohns/colitis (Baur, Parker & Dufflet, 2014; Crohns and Colitis UK, 2013; UCB Canada, 2009), heart disease (Lightman et al., 2009; Royster & Marshall, 2008), hemophilia (Davis, 2012), and sickle cell disease (Davis, 2012; Murphy, 2007). Notably, most of the condition-specific literature does not take up the language of “episodic disability” or apply related concepts although some of the literature on “chronic illness” more generally does identify intersections with established disability perspectives (Davis, 2012; Jung, 2000, 2002, 2003; Morris, 2001, 2005; Murphy, 2007; Werth, 2008).
EPISODIC DISABILITIES AND POST-SECONDARY EDUCATION LITERATURE REVIEW

EPISODIC DISABILITIES AND YOUTH IN CANADA

Defining Youth

As Gaudet (2007) notes, the meaning of “youth” shifts across time and place, as it is constructed in relation to a complex and changing set of social and cultural ideologies and circumstances:

The definition of youth has always been somewhat ambiguous, as the boundaries from childhood to adolescence or from adolescence to adulthood depend on a multitude of such factors. These standards change according to macro-social contexts (socioeconomic conditions, rules of law or policy), meso-social contexts (group or community values) and micro-social contexts (family and personal values) (p. 4).

The United Nations (2014) defines youth as “persons between the ages of 15 and 24” (p. 1) but points out that member states may utilize differing definitions for this category. Most traditional-age post-secondary students are captured by the UN definition. In Canada, a variety of definitions of youth are operationalized (C. Crawford, 2012). Some are consistent with the UN definition, while others are more expansive. For example, Public Health Agency of Canada (2010) data on youth with HIV includes people from age 15 to 29.

Prevalence of Episodic Disability-Associated Conditions among Canadian Youth

While some episodic disability-associated conditions (like ALS [National Institute of Neurological Disorders and Stroke, 2014], arthritis [Centers for Disease Control and Prevention, 2014], cancer [Frank, 2007], and Parkinson’s [Parkinson Society Canada, 2010]) tend to affect older adults at higher rates than younger people, they also affect significant numbers of younger people. Other episodic disability-associated conditions are very common among younger people (major depression and mood disorders [Lippincott, 2007]), or are most frequently diagnosed in childhood (asthma [National Heart, Lung, and Blood Institute, 2014], some types of muscular dystrophy [US National Library of Medicine, 2014]) or during adolescence or early adulthood (bipolar disorder, schizophrenia, personality disorders [Centre for Addiction and Mental Health & Canadian Mental Health Association, 2010; Lippincott, 2007; Smith Fowler & Lebel, 2013], migraine [Mayo Clinic, 2013]). Youth are recognized as especially vulnerable to HIV, due to engagement in risk-associated behavior and a lack of knowledge concerning transmission prevention (Public Health Agency of Canada, 2010). From 1979 to 2008, youth aged 15 to 29 have comprised 26.5% of positive HIV test reports. In 2008, youth between the ages of 15 and 29 accounted for 28% of new HIV diagnoses, and comprised 11.8% of people diagnosed with AIDS (Public Health Agency of Canada, 2010).
Table 1: Estimated Prevalence of Episodic Disability-Associated Conditions in the Canadian Population

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Persons</th>
<th>Prevalence (%)</th>
<th>Age Range</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALS (Amyotrophic Lateral Sclerosis)</td>
<td>4,067E</td>
<td>--</td>
<td>All Ages</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Arthritis</td>
<td>14,436E</td>
<td>0.7E</td>
<td>12-19</td>
<td>2011-2012</td>
</tr>
<tr>
<td></td>
<td>197,707</td>
<td>2.9</td>
<td>20-34</td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>356,249</td>
<td>11.0</td>
<td>12-19</td>
<td>2011-2012</td>
</tr>
<tr>
<td></td>
<td>650,157</td>
<td>9.4</td>
<td>20-34</td>
<td></td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td></td>
<td></td>
<td>All Ages</td>
<td></td>
</tr>
<tr>
<td>Lifetime</td>
<td>177,597</td>
<td>4.0</td>
<td>15 to 24</td>
<td>2012</td>
</tr>
<tr>
<td>12-mo</td>
<td>109,967</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>15,492E</td>
<td>0.5E</td>
<td>12-19</td>
<td>2011-2012</td>
</tr>
<tr>
<td></td>
<td>59,603</td>
<td>0.9</td>
<td>20-34</td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td>128,581</td>
<td>0.4</td>
<td>All Ages</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>111,800</td>
<td>0.4</td>
<td>14-79</td>
<td>2007-2011</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>138,600</td>
<td>0.5</td>
<td>14-79</td>
<td>2007-2011</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>78,511,1</td>
<td>--</td>
<td>All Ages</td>
<td>1985-2013</td>
</tr>
<tr>
<td>Major depression</td>
<td></td>
<td></td>
<td>All Ages</td>
<td>1979-2013</td>
</tr>
<tr>
<td>Lifetime</td>
<td>474,311</td>
<td>10.7</td>
<td>15 to 24</td>
<td>2012</td>
</tr>
<tr>
<td>12-mo</td>
<td>315,928</td>
<td>7.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migraine</td>
<td>604,000</td>
<td>8.1</td>
<td>12 to 29</td>
<td>2010/2011</td>
</tr>
<tr>
<td>Mood disorders</td>
<td></td>
<td></td>
<td>All Ages</td>
<td></td>
</tr>
<tr>
<td>Lifetime</td>
<td>565,175</td>
<td>12.8</td>
<td>15 to 24</td>
<td>2012</td>
</tr>
<tr>
<td>12-mo</td>
<td>362,604</td>
<td>8.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple sclerosis</td>
<td>93,535</td>
<td>0.3</td>
<td>All Ages</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Muscular dystrophy</td>
<td>23,350</td>
<td>0.1</td>
<td>All Ages</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Pain or discomfort by</td>
<td>128,813</td>
<td>4.0</td>
<td>12-19</td>
<td>2011-2012</td>
</tr>
<tr>
<td>severity, moderate or severe</td>
<td>546,235</td>
<td>7.9</td>
<td>20-34</td>
<td></td>
</tr>
<tr>
<td>Parkinson’s disease</td>
<td>54,897</td>
<td>0.2</td>
<td>All Ages</td>
<td>2010-2011</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>63,568E</td>
<td>1.4E</td>
<td>15 to 24</td>
<td>2012</td>
</tr>
</tbody>
</table>

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified as follows: (E) use with caution.

1 A cumulative total of 78,511 HIV cases have been reported to Public Health Agency of Canada (PHAC) since HIV reporting began in Canada in 1985
2 From 1979 to December 31, 2013, a cumulative total of 23,111 AIDS cases have been reported to PHAC.


Statistics Canada. Table 105-0502 - Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups, occasional. CANSIM (database).

Statistics Canada. Table 105-1101 - Mental Health Profile, Canadian Community Health Survey - Mental Health (CCHS), by age group and sex, Canada and provinces, occasional (number unless otherwise noted). CANSIM (database).

Statistics Canada. Table 105-1300 - Neurological conditions, by age group and sex, household population aged 0 and over, 2010/2011, occasional (number unless otherwise noted). CANSIM (database).

Prevalence of Episodic Disability-Associated Conditions among Canadian Post-Secondary Students

Of course, the prevalence of episodic disability-associated conditions among Canadian youth is not necessarily equivalent to the prevalence of episodic disability-associated conditions among Canadian post-secondary students. A study by Fichten et al. (2003) considered whether enrollment rates of disabled students differed between post-secondary institution types, and between provinces. The results showed some disparities, perhaps reflecting differing levels of disability accommodation. Most notably, Quebec had a much lower rate of enrollment of students with disabilities than all other provinces. This demonstrated that the education outcomes of students with disabilities – including episodic disabilities – are shaped, at least in part, by policies promoting or hindering inclusion.
EPISODIC DISABILITIES AND ACCESS TO POST-SECONDARY EDUCATION

Importance of Post-Secondary Education for Youth with Episodic Disabilities

As Canada transitions to a “knowledge based economy,” undertaking post-secondary education has become particularly important for all students (Fichten et al., 2003). Human Resources and Skills Development Canada estimates that in the period from 2008-2017, 75% of new jobs in Canada will require applicants to have post-secondary education, and 70% of positions replacing retired workers will require post-secondary education (Association of Universities and Colleges of Canada, 2011). Students with post-secondary education can access better-paying jobs than those who do not have university degrees or college diplomas (Lin, 2013). Madaus, Grigal & Hughes (2014) notes that in the United States, those holding a Bachelor’s degree will earn on average 84% more over the course of their working lives than those who only have a high school diploma.

The importance of post-secondary education is perhaps even greater for students with disabilities. In most jurisdictions, employment rates for people with disabilities are lower than those of the general population, but research suggests that this disparity can be mitigated by education (Madaus, Grigal & Hughes, 2014; Stepien, 2001). According to data from the 2011 National Household Survey and the 2012 Canadian Survey on Disability, Canadians with disabilities between the ages of 25 and 64 had an employment rate of 49%, compared with a 79% employment rate among non-disabled Canadians in that age group; however, the employment rates of university graduates with a mild or moderate disability “did not significantly differ” from the employment rates of non-disabled university graduates, and ranged from 77-83% (Statistics Canada, 2014). University graduates with a severe or very severe disability had an employment rate of 59%. At the same time, while 65% of non-disabled Canadians 25-64 who did not have a high school diploma were employed, only 20% of people with a severe or very severe disability who did not hold a high school diploma were employed (Statistics Canada, 2014). Madaus, Grigal & Hughes (2014) and Garczynski-Liparini (2008) point out that similar trends have also been found in data from recent US-based surveys and studies.

The salience of these statistics for people with episodic disabilities is reflected throughout the literature on episodic disabilities and education. For instance, discussing the impacts of education on the lives of people with mental health difficulties, Lin (2013) writes:

> Research has […] indicated that better access and achievement in postsecondary education improved both the rate and quality of employment for adults with disabilities. […] For individuals with psychiatric disabilities, attending postsecondary education can bring a purpose in life and pride in oneself. College students with psychiatric disabilities also reported that attending postsecondary education institutions can provide a chance to transfer their life roles from “patients” to “workers” (p. 1).

Applying a gender analysis, Jung (2000) explains the importance of education for people with chronic illness, and specifically for women:
Post-secondary education has been identified as an especially important social determinant of health in that it provides disabled individuals – particularly women, who are especially vulnerable to the downward mobility that accompanies the onset of chronic incurable illnesses – with opportunities to find more flexible, well-paid and professional employment. More importantly, it provides the means by which people with disabilities can eventually participate in the production of knowledge that reflects their own interests and experiences (2).

Graduation Rates of Students with Episodic Disabilities

US-based research has shown that students with chronic illness have a rate of graduation from the secondary level that is comparable to that of students without chronic illness (Herts, Wallis & Maslow, 2014). Unfortunately, the secondary school graduation rate for students with mental health difficulties is typically lower than average (Corrigan et al., 2008; Massey, 2004), and the post-secondary enrollment and graduation rates for students with episodic disability-associated conditions are often much lower than those of non-disabled students (Fichten et al., 2003; Herts, Wallis & Maslow, 2014; Maslow et al., 2012; Maslow et al. 2013; Morgan, 2004; Royster & Marshall, 2008; Weckwerth, 2010). The lower enrollment rate of students with episodic disabilities could be associated with impairment effects as well as problems with non-accommodation at the secondary level, which may make some students with episodic disabilities less likely to win places in competitive admission programs. In Canada, most college and universities admit students on the basis of grades and the completion of prerequisites, but a few universities (such as Queen’s University and the University of British Columbia) require every applicant to complete a supplementary application personal essay or profile. Some other universities require similar essays or profiles from students applying to specific programs. Additionally, supplementary application materials are often required for applications for scholarships, as well as for admission to graduate and professional program applications (GoStudy.ca, 2011). Because students with episodic disabilities may not be able to engage in the extracurricular activities valued by post-secondary institutions, they may be disadvantaged in admission decisions.

The problem of high non-completion rates among students with episodic disability-associated conditions is noted throughout the literature. Describing the experiences of students enrolled in the Chronic Illness Initiative (CII) at DePaul University in Chicago, which is designed to improve graduation rates among chronically ill students, Royster and Marshall (2008) write:

Students frequently end up distressed academically, financially and emotionally, having made multiple attempts to attend school that have resulted in strings of withdrawals, incompletes or failing grades despite often outstanding academic capabilities. Most of the CII students are low-income; yet they have spent thousands trying to attend college, losing much of it because they could not finish courses within the traditional constraints of time and place (p. 121).

Similarly, Garczynski-Liparini (2008), drawing from US research, found a dropout rate of two thirds for students with mental health difficulties, whereas students with other disabilities had a dropout rate of half, and non-disabled students a dropout rate of one third. Despite the fact that
US disability education access laws mandate transition planning for disabled students (Bhakta, 2008; Massey, 2004; Ramsdell, 2014) many barriers to access confront students with invisible disabilities at the very beginning of their post-secondary education, greatly reducing their chances of success (Garczynski-Liparini, 2008). Some Canadian provinces, such as Ontario and Prince Edward Island, have similar laws (ARCH Disability Law Centre, 2004; Costa, 2007). This highlights the importance of improving support for students with episodic disabilities.

**Bias Against Students with Episodic Disabilities**

Boyd (2012) writes that attitudes toward episodic disabilities in post-secondary institutions mirror “perspectives prevalent in wider society that attach suspicion and a lack of validity to fluctuating or recurring impairments” (149). Literature focusing on the experiences of students with mental health difficulties, which include several episodic disability-associated conditions, shows that the vast majority of such students do not identify themselves to disability services staff, in part due to concern about stigma (Collins & Mowbray, 2005; Lin, 2013; Meredith, 2014; Salzer, Wick & Rogers, 2008; Werth, 2008). In essence, the pervasive and systemic bias that students with episodic disabilities confront across post-secondary institutions forms an attitudinal barrier to accessing education. Specific ways in which this problem is manifested are detailed below:

**Bias against episodic disability among fellow students**

Students with episodic disabilities report that they are concerned that their fellow students have negative attitudes toward people with disabilities, and therefore avoid disclosing their disability to peers (Grégoire, 2014; Miller, Ross & Cleland, 2009; Wilgosh et al., 2012). Other students with episodic disabilities have mentioned that they are sometimes excluded from group work opportunities because of their classmates’ negative perceptions of their competence and reliability (Boyd, 2012). Some students with episodic disabilities have expressed concerns that fellow students will regard accommodations they receive as preferential, unfair treatment (Boyd, 2012; Erten, 2011; Martin, 2010).

**Bias against episodic disability among faculty**

Studies have shown that faculty members’ attitudes toward students with episodic disabilities play a large role in such students’ academic success. Students with episodic disabilities emphasize the importance of feeling supported by instructors, advisors, chairs and deans (Boyd, 2012; Erten, 2011; Maslow et al., 2012; Maslow et al., 2013; Murphy, 2007; Wilgosh et al., 2012). Murphy (2007) quotes a student with cancer in his US-based study about disability accommodations for students with chronic illness as saying:

> The professors have been great. One professor let me take two tests in his office so that I could have as much time as I needed. [The disability service coordinator] arranged this because I told him that since my chemo I work a little slower, although that is getting better every day. I really didn’t expect all of this help (p. 179).
Similarly supportive and sympathetic faculty responses to students with cancer are noted elsewhere in the literature (Smith-Stoner, Halquist & Calcagnie Glaeser, 2011). The tendency of employers to be forthcoming with accommodations for workers with cancer, or other conditions perceived as outside of the control of the individual is also well-documented (Florey & Harrison, 2000). However, the literature suggests that people with conditions associated with stigma, such as mental health difficulties, often receive less sympathetic treatment (Becker et al., 2007; Meredith, 2014; Ontario Human Rights Commission, 2009).

Jung (2000) argues that this attitude of skepticism is foundational to the provision of individually-focused disability accommodations in post-secondary institutions:

> Where an individual is seen to have control over the disability, or where the disability is not seen to be immutable, the social obligation to satisfy [their accommodation] needs is diminished. Indeed, as the reasoning from this assumption follows, to satisfy the needs of those who are malingering, fraudulent, undeserving, or who have brought particular conditions upon themselves, is to “dilute or pervert the benefits provided by anti-discrimination legislation” and to trivialize the human rights protections for those who are “truly disabled, but genuinely capable” (Bickenbach, 1994, p. 119).

Post-secondary faculty informants in Dion’s (2013) study of the integration of students with mental health and learning disabilities in Quebec (where such students are labeled as an “emerging clientele”) uncovered some positive, pro-inclusion perspectives among faculty. A professor who was asked whether inclusion of students with mental health difficulties or learning disabilities should be included in post-secondary education responded:

> Oui définitivement et sans hésitation! Je ne vois pas vraiment pourquoi ils n’auraient pas leur place et ils ont la même chance que les autres de réussir avec l’aide et le bon encadrement [Yes, absolutely and without hesitation. I don’t really see why they wouldn’t belong, and they have the same opportunity to succeed as the others with help and good support] (p. 114).

Unfortunately, the examples like the above are not universal. The literature shows that faculty members tend to have limited knowledge about disability and disability accommodations generally, and may have even less understanding of episodic disability and accommodations for students with episodic disabilities (Jung, 2000; Morris, 2001). Some professors also demonstrate a limited understanding of their legal responsibility to facilitate disabled students’ accommodations (Dion, 2013). As a result of this lack of knowledge, faculty members are sometimes resistant to ensuring the availability of accommodations for students requiring them (Baur, Parker & Dufflet, 2014). In some cases, faculty members’ resistance to promoting access for students with disabilities results from a negative perception of episodic disabilities, and a belief that students with episodic disability-associated conditions do not belong in the academy or in the professions for which their education is preparing them (Brockelman, 2007; Dion, 2013; Howlin, Halligan & O’Toole, 2014; Martin, 2010; Martin & Oswin, 2010; Olkin, 2010). In some instances, faculty members have confronted students about their disabilities, challenging them to
explain their condition or justify their accommodations, sometimes even doing so in front of other students (Baur, Parker & Dufflet, 2014), which is a serious violation of privacy laws. The literature shows that many academic faculty regard common accommodations for episodic disabilities – including flexible deadlines, flexible scheduling and flexible attendance – as posing a threat to standards of “academic integrity,” and are resistant to implementing them on that basis (Baur, Parker & Dufflet, 2014; Boyd, 2012; Jung, 2000). Further, faculty members often conceptualize accommodations for students with episodic disabilities as “unfair” to students who are not in receipt of accommodations (Mullins & Preyde, 2013). A participant with arthritis in Jung’s (2000) study explained:

There are some teachers who are really fair, and then there are others that aren’t. And they constantly use the rhetoric of having to do what is fair for the other students. You know, they keep saying that. And I would say – well, those other students don’t have a disability, and those other students don’t face this whole mess, you know. And they still come back to the same issue of fairness, you know. They just don’t understand, the awareness isn’t there (p. 105).

The National Educational Association of Disabled Students (2012) recommends that for this reason, post-secondary accessibility policies should clarify that accommodations are designed to “eliminate barriers for students with disabilities and are not to provide an unfair academic advantage over students without disabilities,” and that “[m]aintaining academic standards and the integrity of programs is a priority (p. 6).

Students with invisible episodic disabilities face additional bias, in the form of accusations of faking or exaggerating symptoms (Dion, 2013; Jung, 2000; Wilgosh et al., 2012). A participant in Boyd’s (2012) study of the experiences of students with episodic disabilities at a UK post-secondary institution is quoted as saying:

I don’t think the lecturers understand what it’s like to be a student with health problems. Some of them seem to think that anyone who has a problem is putting it on to get out of going to classes. Just because I look okay, doesn’t mean I’m not in tremendous pain. I’ve lived with this for 10 years so looking okay is something that I’ve perfected (p. 133).

Bias against episodic disability among disability services staff
Just as with faculty, students with disabilities report that having the support of disability services staff is a major contributor to their academic success (MacKean, 2011; Nicholls & Li, 2012; Ontario Human Rights Commission, 2009). To quote another student with cancer from Murphy’s (2007) study:

[The disability services coordinator, Mr. Sands] has pretty much been my mentor. I would say that he probably puts in as much work into keeping me in school as I do myself. […] I couldn’t walk up stairs so it was hard for me to get to my classes even when I got back. I swore there was no way I was going to be able to finish the semester. But Mr. Sands told my professors everything that they needed to
know and the professors were very helpful. The communication between Mr.
Sands, the professors, and me was very good. Mr. Sands got me some
extension[s] and I was able to finish the work after the semester. He does a great
job of just seeing that I have the same normalcy that every other student has. He
keeps everything very discreet with my professors but at the same time lets them
know that I have to miss some classes (p.119).

Unfortunately, disability services staff members are not always as supportive of students with
episodic disabilities as the above quotation shows. Disability services staff sometimes lack
knowledge about episodic disability-associated conditions, and do not feel confident in their
ability to provide appropriate services to students with episodic disabilities (Boyd, 2012;
Redpath et al., 2013; Weckwerth, 2010).

Harrison and Wolfth’s (2012) study of university and college disability service offices across
Canada found widely divergent perceptions of students with disabilities among disability
services staff, including 10% of staff who believed that between 10 and 25% of students were
lying about their impairments or exaggerating the severity of their symptoms in order to gain an
inappropriate advantage. The conditions most often perceived by disability service office staff as
susceptible to misrepresentation are attention deficit hyperactivity disorder and learning
disabilities, which are not episodic disability-associated, but staff also reported a belief that some
students were feigning or exaggerating other “invisible” psychiatric and medical disorders, some
of which are episodic disability-associated. This air of suspicion was also remarked upon by
Jung (2000), who discusses the “investigative” approach (p.108) adopted by disability services
staff when addressing students with invisible conditions. Brockelman (2007) notes similar
tendencies among disability services staff in the United States.

**Legislation and Regulations Concerning Episodic Disability and Access to Education**

Disability-focused law and policy in Canada has tended to focus on the needs of working-age
adults, and therefore often pertains to issues around employment and income support (Kohen et
al., 2006). Further, as Vick (2012) explains, Canadian legislation about disability has tended to
address the situation of people with permanent, physical disabilities, and has generally excluded
those with chronic illness, fluctuating or invisible impairments, such as episodic
disability-associated conditions:

Traditionally and to date, Canadian legislative interpretations of disability remain
faithful to normative images of the disabled person as someone with a visible,
long-term, considerably impairing physical and/or mental condition who is unable
to engage in employment in a consistent, productive, and valued manner (Prince,
2009). This political ascription, denoting the most acutely impaired, vulnerable,
and needy bodies, reinforces the marginalization and inequities of individuals
whose embodiment contravenes these ontological and epistemic borders (p. 54).
Legislation granting the right of access to education for students with disabilities came into effect in Canada from the early 1980s onward (Kohen et al., 2006), but like employment-focused disability law and policy, it did not specifically address the needs of people with episodic disabilities.

Because no standard legal definition of disability has been established in Canada (Baur, Parker & Dufflet, 2014), and education is a provincial responsibility, legislation and regulations concerning the right of disabled students to access to education have been developed by each province. While each province’s laws must be consistent with human rights codes and with the Charter of Rights and Freedoms, this requirement has been interpreted differently between jurisdictions, resulting in an assortment of widely varied disability programs, services and accommodations from province to province (Baur, Parker & Dufflet, 2014; Erten, 2011; Multiple Sclerosis Society of Canada, 2014; Olding & Yip, 2014). All provinces prohibit discrimination in post-secondary education on the basis of disability, but most make the implementation of this law a matter of discretion for each individual post-secondary institution, resulting in wide disparities in the availability of services and programs, as well as significantly divergent eligibility requirements (National Educational Association of Disabled Students, 2012). Discussing Nova Scotia-based examples, Baur, Parker and Dufflet (2014) note that even at the level of the institution, inconsistent definitions of disability are often employed, sometimes in ways that are particularly disadvantageous to students with episodic disabilities. They write:

> Although all DRFs [Disability Resource Facilitators] will state that they follow the NSHRA [Nova Scotia Human Rights Act] definition of disability when asked, from our research they much more commonly reference the “permanent” requirement set forth by the CSLP (Canada Student Loans Program) and the NSSAP [Nova Scotia Student Assistance Program] when actually working with students (p. 53).

The impacts of a similarly inconsistent policy regime in the UK are explained by Boyd (2012), who describes the experience of one student who suffered from chronic pain: At the first institution she attended, the student was told that disability services were primarily geared toward students with dyslexia, and she was ineligible for service in any regard, because her back “might get better” (p. 130). The student later transferred to a second institution, where she was told that she was eligible for accommodations.

In their review of disability services at post-secondary institutions, the Multiple Sclerosis Society of Canada notes the many disparities and inconsistencies in disability services and accommodations:

> Because accessibility issues are handled primarily at the institutional level, it is difficult to find general patterns. Surprisingly, the size of the institution is not a reliable indicator of how many services it is likely to offer. For example, the University of Prince Edward Island, one of the smallest institutions reviewed, provides a large number of accommodation services while Humber College [in Toronto, ON], one of the larger institutions, provides a much smaller number and variety of accommodation services. Similarly, provincial generalizations are
difficult to make as there are extreme variances in services provided at universities within each province. For example, the University of Calgary offers less than half of the large number of accommodations offered by the University of Alberta. It is also worth noting that British Columbia’s institutions appear to offer the greatest number of accommodation services while those in Nova Scotia offer the least. It is also significant that universities, on average, fare better than colleges in offering a greater number of services (p. 15).

Thus, students with all types of disabilities encounter unpredictability when seeking access to education. Boyd (2012) argues that the unpredictability and inconsistency of post-secondary institutions’ responses to accommodating students with episodic disabilities directly and indirectly (through their contribution to negative attitudes toward episodic disability among staff) present a significant barrier to educational access for this group.

While all provinces have developed regulations concerning disability access for the primary and secondary levels of education, only a few have specifically addressed the post-secondary level. British Columbia, Alberta and New Brunswick have developed more detailed documents outlining institutional responsibilities toward students with disabilities at the post-secondary level, but have implemented these documents as recommended – but non-binding – standards, rather than as enforceable laws or regulations (Multiple Sclerosis Society of Canada, 2014). Ontario is an exception to this, as the Access for Ontarians with Disabilities Act requires post-secondary institutions to create accessibility plans (Multiple Sclerosis Society of Canada, 2014; National Educational Association of Disabled Students, 2012).

Case law has determined that Canadian post-secondary educational institutions are obligated to accommodate students with disabilities to the point of undue hardship (ARCH Disability Law Centre, 2004). Baur, Parker and Dufflet explain that legal precedents have established that accommodation refusals on the grounds of undue hardship are “incredibly hard to justify” (p. 9) and would likely have to entail multiple significant impacts upon the institution in order to be upheld as legally valid. Because many of the types of accommodations needed by students with episodic disabilities are low- or no-cost (such as flexible deadlines), or are useful for a broad range of students with disabilities, including the kinds of permanent disabilities that have been more well recognized in disability rights and accessibility legislation (such as buildings and classrooms accessible to those with mobility impairments) (Royster & Marshall, 2008), it might seem that the rights of students with episodic disabilities would generally be respected by post-secondary institutions. Unfortunately, this is not yet the case. The Multiple Sclerosis Society of Canada (2014) explains:

While discriminatory practices are prohibited by law, the onus falls on the individual experiencing the discrimination to file a complaint through the Commission which can be a lengthy, onerous process during which time the individual may not have access to the services or facilities they require (p. 13).
Legal obligations to accommodate students with disabilities are grounded in the Canadian Charter of Rights and Freedoms and in provincial human rights legislation (ARCH Disability Law Centre, 2004; Harrison & Wolfforth; 2012). ARCH Disability Law Centre (2004) explains that academic disability accommodations are underpinned by two primary principles: individualization (meaning that accommodations must be tailored to the needs of the individual), and human dignity (meaning that accommodations must be respectful of human values while promoting integration and participation). Unfortunately, the current state of disability accommodation for students with episodic disabilities often fails to uphold these principles, as this review discusses.

**ACCOMMODATIONS AND EPISODIC DISABILITIES**

Most of the literature on episodic disability and post-secondary education emphasizes the importance of accommodations for ensuring access to education for students with all types of episodic disability-associated conditions (Colleges Ontario, 2012; Royster & Marshall, 2008), explaining that without accommodations, academic performance, quality of life and health all suffer (Martin, 2000; Morris, 2001, 2005; Salzer, Wick & Rogers, 2008). Jung (2000, 2002, 2003), in contrast, understands individually-focused accommodations as placing the burden for negotiating access on individual students with disabilities, and argues that larger, systemic changes in support of inclusivity would lead to more equitable outcomes for all students. (Possibilities for broader change to facilitate equity and inclusion will be discussed at the end of this review.) The problem of placing the onus for negotiating accommodations upon students with episodic disabilities is discussed by Royster and Marshall (2008), who write:

> Often, students themselves have little understanding of their illness or how to address their illness needs, are not skilled at self-advocacy, and do not know how to find a postsecondary option that will meet their needs (p. 121).

The stress associated with navigating complex accommodation processes is not only frustrating (Mullins & Preyde, 2013), but it may also exacerbate the effects of many episodic disability-associated conditions. This poses an additional barrier to educational access, as well as a risk to the health and the quality of life of students with episodic disabilities (Morgan, 2004; Morris, 2005; Wilgosh et al., 2010).

Because episodic disability-associated conditions are so varied, the types of accommodations required by students with episodic disabilities are similarly diverse. Given the generally low level of understanding of episodic disability found among disability service staff, the extremely wide range of possible supports, the lack of awareness of possible supports among students (Herts, Wallis & Maslow, 2014), and the fact that institutional provisions are so inconsistent it is not surprising that accessing accommodations is problematic for students with episodic disabilities. Describing the Australian situation, Morgan (2004) writes:
For academic staff teaching students with a chronic illness it can be difficult to assess the impact of the illness on the student and what may be a reasonable concession to make. The same illness can affect different students in different ways and to different extents. There are no ‘rules of thumb’ and each decision is often made on a case-by-case basis. This can lead to great inconsistencies in the way chronically ill students may be received by the various staff they encounter (673).

Types of Accommodations for Students with Episodic Disabilities

To give a sense of the breadth of episodic disability-applicable accommodations, here is a list compiled by Lin (2013) of possible accommodations for students with mental health difficulties:

Classroom accommodations: preferential seating, coach/mentor, assigned classmate as volunteer assistant, beverages permitted in class.

Lecture accommodations: pre-arranged breaks, tape recorder, notetaker, photocopy or email attachment of another’s notes.

Examination accommodations: change in test format and frequency, permit use of technological assistance or exams to be individually proctored, extended time, or permit read orally, dictated, scribed or typed.

Assignment accommodations: substitute assignments, advance notice of assignments, delay in assignment due dates, handwritten rather than typed papers, assignment assistance during hospitalization, use alternative forms for students to demonstrate course mastery, textbooks on tape.

Administrative accommodations: provide modifications, substitutions, or waivers of courses, major fields of study, or degree requirements on a case-by-case basis; orientation to campus and administrative procedures; assistance with registration/financial aid, flexibility in determining “Full Time” status (for purposes of financial aid and health insurance), assistance with selecting classes and course load, parking passes, elevator key, access to lounge, incompletes rather than failures or withdrawals if relapse occurs, identified place to meet on campus that feels “safe” before or after class (pp. 17-18).

Many of these accommodations would also be helpful for students with other episodic disability-associated conditions, especially those involving chronic fatigue or pain. Some other episodic disability-associated conditions may require the accommodation of sensory impairments, or changes to the built environment. Careful scheduling of classes and exams may be necessary (for instance, some students with chronic fatigue or pain cannot write lengthy exams [Morris, 2005], and as a result of medication side-effects, some students with mental health difficulties may require later classes and exams [Werner, 2001]). Good classroom location planning may also be needed (for example, students with digestive disorders may need classes scheduled in proximity to washrooms [Črohns and Colitis UK, 2013], and students with mobility
Impairments or chronic pain may not be able to move as quickly as others between distantly-located classrooms [Jung, 2000]). Students with episodic disabilities may also need access to additional resources and equipment (such as refrigerators for the cold storage of medications [Crohns and Colitis UK, 2013]), or information technologies (to enable students to view recorded lectures, or remotely access library resources [Boyd, 2014; Grabinger, 2010; Morgan, 2004]).

The National Educational Association of Disabled students explains that overly-specific disability accommodation policies should be avoided, recommending that post-secondary institutions “Ensure that policies are broad in scope as policies that are too specific or narrow can quickly become outdated or not allow for individualized accommodation” (p. 4). Similarly, Boyd (2012) recommends a more general and individualizable approach to accommodations:

A strategy on making provision for disabled students, which constructs disability in terms of access, flexibility and equity in participation is essential in challenging ambiguities and ambivalence. The existence of a policy which outlines an institution’s approach to inclusion and provides an overview of the underpinning principles offers a route to legitimising some forms of disability as variable and long term, as opposed to reinforcing health-related constructions which imply recovery. Procedural guidance on supporting disabled students could promote flexibility as a key part of making “reasonable adjustments,” and counter perspectives that this compromises “academic integrity” (p. 169).

**Eligibility for Accommodations Among Students with Episodic Disabilities**

Eligibility for disability accommodations tends to be quite strictly limited at the post-secondary level. Extensive documentation of disability is typically required, in the form of an up-to-date psychoeducational assessment (for students with learning disabilities and conditions such as ADHD), psychiatric assessments and records (for students with mental health difficulties), and official medical records (for students with physical or sensory disabilities) (Baur, Parker & Dufflet, 2014; Harrison, Nichols & Laroche, 2008; Zimmerman, 2004). Some of these types of documentation can be difficult to acquire, especially for students in communities underserved by medical and psychological professionals. This can result in long periods of time during which students awaiting medical assessment lack documentation of their impairment (Penton, 2010). While institutions have varied requirements for documentation, students lacking approved documentation often find themselves unable to access any formal disability accommodations, even if they have a demonstrable need (Baur, Parker & Dufflet, 2014).

Some post-secondary institutions limit access to disability services to students with permanent disabilities arguing that the needs of students with episodic disabilities are already met by regulations allowing for accommodations on the basis of medical or personal crises. As Baur, Parker and Dufflet (2014) argue, this is not a workable or equitable solution for students with episodic disabilities, who are heavily burdened by the documentation requirements of these programs, which are intended for use by students in unforeseeable, anomalous situations, not by those with conditions that are recurring, or ongoing but fluctuating in severity:
For the most part, students with episodic illnesses (such as Crohn’s Disease, Epilepsy, and mental health problems) are unable to anticipate when they will experience difficulties, so their need for extended timelines is not for lack of planning. Denying students with episodic illnesses extended timelines ensures that every time they experience severe symptoms that result in missing exams or being unable to complete the coursework, they have to bring in another copy of the same medical documentation the school already has on file, and complete the same stack of paperwork over again to obtain a medical extension (pp. 57-58).

Patterson and Kline (2008) explain that post-secondary students – with and without disabilities – who are experiencing stress and anxiety may avoid seeking supports until a crisis emerges. This tendency is noted among students with episodic disabilities, many of whom avoid seeking formal supports or accommodations until they become absolutely necessary, rather than registering with disability services prior to the onset of a period of impairment (Ellis-Claypool, 2009). When students request accommodations at the onset of a period of impairment, they frequently face “strong resistance” (ARCH Disability Law Centre, 2004, p. 3) from faculty, who may perceive their requests as motivated by poor organization rather than disability-related issues (Dion, 2013; Morris, 2005; Mullins & Preyde, 2013).

**POST-SECONDARY INSTITUTION INFRASTRUCTURE AND EPISODIC DISABILITIES**

**Disability and Health Services Capacity**

Students with episodic disabilities may have requirements for accessible infrastructure similar to students with other types of disabilities, like accessibility features in the built environment. While some disabilities are not associated with health issues, many are, and this is particularly true of episodic disability-associated conditions. For this reason, the availability of health services is an important part of making post-secondary education accessible to students with episodic disabilities and other disabilities (Cockroft, 2013; Lemly et al., 2014; Royster & Marshall, 2008).

Writing in 2004, ARCH Disability Law Centre noted that in Ontario, all post-secondary institutions had established disability services for students. Across Canada, most post-secondary institutions now offer disability services; however, many such programs are inadequately funded. This is becoming recognized as increasingly problematic, given the rising demands placed on the programs (Nicholls & Li, 2012).

**On-Campus Housing Capacity and Expense**

While many students with episodic disability-associated conditions live off campus (Cockroft, 2013), some students with episodic disability-associated conditions report that they would prefer to live in on-campus housing, because it would be more accessible for them (for instance, students with fatigue conditions may be able to get more rest; transportation concerns would be
fewer, which would be helpful for students with mobility impairments). However, on-campus housing options are often very limited and out of budgetary range for students who may already face many additional disability-related expenses (Wilgosh et al., 2008).

**Mental Health Difficulties and Service Capacity**

What has been referred to as a “mental health crisis” (Lunau, 2012) has recently emerged on Canadian post-secondary campuses, with growing numbers of students reporting significant emotional distress (Hanlon, 2012; MacKean, 2011; Reid, 2013; Smith Fowler & Lebel, 2013; Tibbetts, 2008; Weckwerth, 2010; Wong, 2011). Lunau (2012) cites a study undertaken in 2011 at the University of Alberta that showed that 51% of students had felt that “things were hopeless” at least once during the previous year, and more than 50% had felt “overwhelming anxiety.” As a result of this trend, more students are seeking mental health services and disability accommodations for mental health reasons (Hanlon, 2012; MacKean, 2011; Whitaker, 2013).

There are a number of theories as to why this is occurring. Some argue that students have always found the competitive atmosphere of universities stressful (Becker et al., 2002; Martin, 2010), but as awareness of mental health has risen and stigma has lessened, more students feel comfortable seeking assistance (T. Crawford, 2009; Hanlon, 2012). Others argue that the intensification in feelings of stress experienced by students are related to changes in the Canadian labour market that have resulted in an intensification of competition for employment (Lunau, 2012). Because of this, post-secondary students are under increasing pressure to perform to a high academic standard, often while undertaking resume-enhancing volunteer or internship opportunities, if possible. Students also face higher than ever tuition fees, and concomitant pressure to take on more paid work (Babbage, 2014; Berger, Motte & Parkin, 2009). Tibbetts (2008) cites the director of Concordia University’s student health service as saying that she encounters many students who have “grandiose ideas as to what any one person can accomplish” (A8), noting that the high pressure to which students are subjected contributes to stress, burnout and increased risk of developing or exacerbating mental health difficulties. This trend appears to be matched by employer expectations for workers in a workforce whose “depth” is decreasing as employers seek to promote maximum productivity, conditions which are recognized as particularly problematic for workers with episodic disabilities (Lysaght, Krupa & Gregory, 2011). Reid (2013) points out that much of literature on the mental health “crisis on campus” (p. 21) focuses on improving access to campus-based mental health services, rather than addressing problems of inequality and injustice – such as poverty and homelessness – that often contribute to Canadian students’ mental health difficulties. Because people with disabilities are more likely to live in poverty than the general population, this is particularly problematic for students with disabilities (Wilgosh et al., 2010).

Reid’s observation is consistent with the contents of the literature retrievable on this topic, most of which focuses on service provision, rather than the amelioration of conditions that may give rise to mental health difficulties. For example, Ellis-Claypool (2009) writes that across the country, Canadian disability and campus health services “are strained to help treat students who identify as experiencing mental health concerns” (p. 6) as a result of having inadequate resources generally, as well as a lack of mental health-focused programs and services in a context in which increasing numbers of students identify as having mental health difficulties (Lemly et al., 2014;
Recently, some provinces have taken action to address this: Most notably, British Columbia directly funds disability services programs at public post-secondary institutions (Multiple Sclerosis Society of Canada, 2014), but the problem persists generally. In Quebec, a large increase in the number of students with learning disabilities, ADHD and other mental health disabilities enrolled in CEGEPs has taken place (Grégoire, 2014). In response, the provincial government has earmarked $3 million in the 2011-2012 budget to assist in providing disability services to these students, marking the first “official recognition” of such students in that province (Branswell, 2011).

MacKean (2011) explains that “student services in many Canadian post-secondary institutions function within silos” (p. 30), with disconnects and poor communication and integration between disability services, health services, counseling, and “student services.” She argues that meeting the accommodation and health needs of students with mental health difficulties will require a more integrated and systematic approach than is currently being undertaken by most Canadian post-secondary institutions. The National Educational Association of Disabled Students (2012) writes:

Students with mental health disabilities often require both academic accommodations and medical or therapeutic treatment. For this reason, it is extremely important to facilitate collaboration between disability services and counseling services regarding these students as individuals with mental health disorders who present at one can quickly and easily be referred to the other when necessary (p. 28).

McGlynn (2007) argues that the needs of post-secondary students with chronic illness are best served by a “collaborative approach” (p. 247) to the provision of on-campus services, including counseling, disability and health services. A “systemic approach” to mental health promotion at Canadian colleges and universities is advocated by Washburn et al. (2013, p. 7), who argue in favour of a “shift in culture that recognizes that the entire post-secondary community is responsible for the mental health of its members and that mental health affects learning” (p. 10). Working to decrease the emphasis on competition that occurs at many institutions would likely help contribute to this objective (Jung, 2000).
FINANCIAL ISSUES FOR POST-SECONDARY STUDENTS WITH EPISODIC DISABILITIES

Several significant financial issues for post-secondary students with episodic disabilities appear in the literature.

Non-Accommodating Tuition Fee Policies

Many students with episodic disabilities have noted that during periods of impairment, they have needed to take a reduced course load. This can add substantially to tuition fee costs, especially at institutions at which fees are assessed on a per-semester basis, rather than a per-credit or per-course basis. A disabled participant in Erten’s (2011) study of the experiences of disabled women at a Canadian university explains her feelings of frustration concerning this issue:

I think they minimize what you’ve gone through if you succeed. I am told I am lucky all the time because I am doing a program part-time. Are you kidding me? I am working twice as hard as other people and I pay twice the tuition, that’s lucky? I don’t think so! (p. 107).

Students who are forced to quit their courses due to a resurgence of symptoms taking place after withdrawal deadlines are sometimes ineligible for a refund of tuition fees, although some institutions offer partial refunds for cases of medical withdrawal, and others make an appeals process available to students withdrawing from courses or from the institution for documented medical reasons. Withdrawal for medical reasons can also have academic consequences (Baur, Parker & Dufflet, 2014).

Non-Accommodating Scholarship Policies

Nicholls and Li (2012) point out that at many universities, scholarships are reserved for full-time students, making students attending part-time, ineligible for consideration for these funding sources, regardless of their disability status or their academic merit. Some scholarships specifically supporting students with ED-associated conditions are available (Crohns and Colitis UK, 2013; UCB Canada, 2009), although these do not appear to be as numerous or as well-funded as more general scholarship programs.

Non-Accommodating Student Loan Program Policies

Students who withdraw from courses unexpectedly and who are in receipt of provincial student loans may also find themselves in an “overpayment” situation, making them ineligible for further loans until the full amount of the overpayment is repaid to the lender (ARCH Disability Law Centre, 2004). In Ontario, students who have received one “over-award” may return to school without penalty, but are not permitted to enroll after a subsequent overpayment, and no procedure for taking disability circumstances into consideration exists (Ontario Human Rights Commission, 2003). Overpayment totals can amount to thousands of dollars for a single
semester, which is beyond the capacity of many students to pay, making it unlikely that students in this situation will be able to return to their studies within a reasonable timeframe.

If students withdraw from post-secondary education for a medical reason and their loans are forgiven on that basis, some provincial lenders – such as the Ontario Student Assistance Program – require that forgiven loans be repaid before a student who has recovered can receive new loans (ARCH Disability Law Centre, 2004). This policy has negative implications for students with episodic disability-associated conditions that can have extremely unpredictable courses of progression, and widely divergent treatment outcomes, such as cancer or HIV.

**Increased Costs for Students with Disabilities**

As ARCH Disability Law Centre (2004) and Nicholls & Li (2012) point out, the cost of attending a post-secondary institution is often markedly higher for students with disabilities than for non-disabled students. Students with disabilities – including episodic disabilities – often face higher costs for housing (especially if on-campus housing is required for accessibility reasons), transportation, dietary requirements, medications, as well as adaptive equipment and services.

**Non-Accommodating Health Insurance Eligibility Policies**

Many Canadian post-secondary institutions (or their student associations) offer supplementary health insurance to their students, to offset out-of-pocket costs for health services and products not covered by provincial health insurance plans, such as medications, dental care, eye care, chiropractic, massage and physiotherapy. At some institutions, insurance is available only to full-time students, and at others, insurance available to part-time students may offer lower quality coverage (Nicholls & Li, 2012). Graduate students sometimes have access to health insurance on the basis of being employed as a research or teaching assistant. Because students with episodic disabilities may be less likely than other students to be capable of doing paid work while studying (Brockelman, 2007; Nicholls & Li, 2012), this means that they may not have access to employer-sponsored insurance.

**Non-Accommodating Disability Bursary Program Policies**

The Canada Student Grant for Services and Equipment for Persons with Disabilities contributes up to $8000/year in non-repayable assistance to students with disabilities, but it is only available to students with a “permanent” disability, excluding many with episodic disabilities (Nicholls & Li, 2012). Some provinces offer bursaries or other forms of financial support to offset some the increased costs facing students with disabilities, total disability-associated costs often exceed the available funding, or the funding may be restricted for specific uses that may not meet the needs of all students. For instance, in Ontario, the Bursary for Students with Disabilities may provide students who meet provincial student loan requirements with additional non-repayable funding of up to $2,000 each year, on top of any loan amounts for which they are eligible (Nicholls & Li, 2012), but this funding is also restricted to students who are identified as having “permanent” disabilities, and it can only be applied to specific types of accommodation-related expenditures, with many expenses (such as medication, for instance) classed as ineligible. For these reasons,
disability bursaries have been criticized as excluding students with psychiatric disabilities (Ontario Human Rights Commission, 2003). A student with mental health difficulties interviewed by Nicholls and Li (2012) discusses the impact of ineligibility for disability bursaries:

Medication is not cheap... Right now I have to pay full price for my medication and I am on four medications and sometimes five depending on episodic things because I have one episodic disability. I get $1000 from this grant per semester, which is really helpful because sometimes I need to seek outside help. Most programs are free but if I need to see […] a psychologist immediately... They are not cheap... I think people with episodic disabilities should be able to get grants because at the time they are still going through something harsh and less often than not they have less time to cope with it because it comes out of nowhere. I have been dealing with this for so long I have highs and lows but for the most part I have exercises, I know what to do and I am medicated otherwise I would not be able to be sitting here with you right now (p. 10).

Without access to additional private sources of funding – whether through family support, which is not available to all, or private loans, which are much more costly than provincial/federal student loans (Berger, Motte & Parkin, 2009) – students with episodic disabilities requiring financial outlays that are not covered by disability bursaries, or that exceed the “reasonable” budgets established by provincial student loan programs face severe financial hardship, may suffer from decreased academic performance due to the inaccessibility of needed assistive devices and services (Berger, Motte & Parkin, 2009), and may be unable to continue their studies (Wilgosh et al., 2010).

**Tuition Fee Increases and Lack of Access to Employment for Students with Episodic Disabilities**

In many provinces, tuition fees have risen much more quickly than the rate of inflation, making post-secondary education more expensive than it was for previous generations (Babbage, 2014; Berger, Motte & Parkin, 2009), many students must also maintain part-time employment in order to pay for their education (Tibbetts, 2008). Students receiving student loan assistance often need to have a part-time job in order to meet their budget requirements, especially if their families are not able to provide financial support (Tibbett, 2008). Students with disabilities – including episodic disabilities – are often less able than non-disabled students to work part time while attending school, as many episodic disabilities involve physical and energy limitations, or can contribute to overall levels of stress, which can be especially problematic for students with mental health difficulties. Brockelman (2007) notes that a study of American post-secondary students with mental health difficulties showed that balancing school and work was a “struggle” for most (p. 17). Notably, research shows that even for non-disabled students, the burden of undertaking paid employment at the same time as full-time studies leads to decreased academic performance, as well as other problems (Berger, Motte & Parkin, 2009).
Students are also typically expected to work full time during the summer to earn money to contribute to tuition fees and living costs for their upcoming year of study. This expectation is built in to the lending formulas established by provincial student loan programs (Nicholls & Li, 2012). Students with episodic disabilities may be less able than other students to take on full-time employment if they are experiencing a period of reduced work capacity as a result of an intensification or recurrence of impairment (Brockelman, 2007; Nicholls & Li, 2012). Students with episodic disabilities, and particularly those stemming from stigma-associated conditions, may also be unable to find or retain work as a result of discrimination (Beatty, 2011; Stuart, 2007). For example, a participant with epilepsy in McCool’s US-based research on the post-secondary education and employment experiences of students with disabilities recounted how she was fired from a job by a supervisor who told her “to stop having seizures” because they were “scary” (p. 49).
INTERSECTING IDENTITIES, EPISODIC DISABILITIES AND POST-SECONDARY EDUCATION

Opini (2008) points out that generally, approaches to promoting access to education for disabled students address disability as “a unitary concept” (p. 132), and do not look at the intersection of disability with other dimensions of identity or social location. Her comments are consistent with the literature on this topic, most of which took a general approach to issues around episodic disability and education, sometimes mentioning intersectional oppression in passing (i.e. Ontario Human Rights Commission, 2002), but seldom centering on these issues.

Although an enormous body of literature concerning issues of race, ethnicity and culture in education exists, these topics seldom appeared in the literature on episodic disability and post-secondary education. The few mentions of these issues suggested that they are much more important than their non-appearance in the literature would seem to imply. For example, Lin (2013) pointed out that racialized students with mental health difficulties face more barriers to accessing education than white students, including a “lack of cultural competence” (p. 27) among faculty and disability service staff, as well as social isolation on campus. The positive impact of increased staff diversity on the mental health of racialized students is noted by Washburn et al (2013).

Some consideration of gender issues in relation to episodic disability is apparent in the literature, which is likely a function of the central role of feminist theorists of disability in redefining chronic illness as a form of disability/impairment. Jung (2000, 2002, 2003) addresses gender in her work, noting that episodic disability/chronic illness is more prevalent among women, and that disability discrimination impacts women more than men.

Opini (2008) discusses the problematic impacts for women of the lack of recognition of the gendered dimensions of disability experiences at the institutional level:

In the educational context […] disabled women continue to struggle to take part in higher education. Although it is claimed that education gives women with disabilities opportunities for social and economic integration and offers a stepping-stone toward independence […] such opportunities are limited. As Boylan (1991) noted, education remains an uphill struggle for women with disabilities and society seems to take for granted that disabled men should be employed but that disabled women are to remain dependent throughout their lives (p. 28). More disheartening is the fact that post-secondary education institutions are among the many spaces that have not yet fully acknowledged the combined discrimination of gender and disability experienced by disabled women (Chouinard, 1996). This is evidenced in, among other ways, administration and in much of the curriculum, whereby gender and disability continue to be treated distinctly (p. 132).
CONCLUSION: EPISODIC DISABILITIES, SYSTEMIC CHANGE AND UNIVERSAL DESIGN

This review has shown that the post-secondary education system often fails to meet the needs of Canadian students with episodic disabilities. The diminished access to post-secondary education faced by youth with episodic disabilities will have serious consequences for the life outcomes of those in this group, preventing them from reaping the personal benefits of engaging in post-secondary education, and severely diminishing their chances of career success. The reason for the persistent exclusion of this group of students is discussed by a participant in Mullins & Preyde’s (2013) study with undergraduate students with invisible disabilities, who explains:

Schooling’s very one dimensional. It’s very – you know, testing is all the same, how they test knowledge, how they, how they structure the classrooms. Like it’s for every, [...] every situation is usually the same. So it’s not like they branch out and try and figure out how best people learn. So you know, a person with an [invisible disability] has to fit in that, in that environment (p. 156).

Similarly, Baur, Parker & Dufflet (2014) argue, “institutions must take ownership of the fact that the PSE system has been developed based on a ‘typical’ student, and that [there] will always be deviations from the norm.” Much of the literature on episodic disability-associated conditions and post-secondary education suggests that opening up accessibility measures in order to respond to a broader range of needs would be helpful. The National Educational Association of Disabled Students (2012) suggests that accommodation policies should be written in such a way as to maximize their applicability to the diverse needs of students with disabilities, for instance, by making a distinction between policy (which is formalized) and procedure (which can be more adaptable) so as to enable greater flexibility. This will enable institutions to follow “guidelines while taking into consideration individual circumstances and differences” (p. 5).

Morris (2005) explains that because the needs of students with episodic disabilities are so diverse, accommodations need to be tailored to each individual. She explains that most Australian post-secondary institutions “offer set adjustments to the student – trying to ‘fit’ the student[’s] need to pre-existing acceptable offerings of accommodation written in guidelines for disability” (223). She suggests that for students with chronic fatigue syndrome, traditional written examinations may be assessing students’ capacity for physical endurance rather than their understanding of course material, and recommends that alternative assessment methods be made available to such students.

Some especially promising programs have been identified in the literature as potential models for disability accommodation, support and accessibility initiatives at other institutions. The most prominent US-based example is the Chronic Illness Initiative (CII) at DePaul University, which is described by Royster and Marshall (2008) as promoting the inclusion of students with chronic illness. The CII involves administrative support for the various accommodations that students with chronic illness might require. This includes liaising with faculty and assisting students with navigating university departments such as financial aid. The program also incorporates social
integration and mentoring programs and events and an outreach program, which has succeeded in growing the program from an initial enrollment of 50, to an enrollment total of 200 in two years. Royster and Marshall explain that the CII is particularly well supported and well integrated into the infrastructure of the university, which has significantly contributed to its success and stability. Students enrolled in the program were more likely than those outside the program (disabled and non-disabled) to continue from first year to second year, and has helped several students to complete their degree programs.

Some argue that increasing access to individual accommodations would be prohibitively costly and burdensome: For instance, Olding and Yip (2014) explain that the recent increase in disability service utilization among Canadian university students has “drawn into question the sustainability of the traditional ‘accommodation model’ and inspired calls for paradigm shifts towards more universal approaches” (p. 13).

Universal design as an alternative to individual accommodations is identified as potentially helpful for post-secondary students with episodic disabilities, whose needs are often not met by current accommodation strategies and programs. Nicholls and Li (2012) explain:

Universal instructional design (UID) is a system that would allow undiagnosed students and students who choose not to self-identify, the chance to succeed. The goal of UID is to allow educators to maximize the learning opportunities of all their students […] Under UID, students don’t necessarily need to face the need to seek accommodation; instead, classrooms will take into account all sides of access. Currently the onus is put on the student to seek accommodation; however, UID would put the onus on the institution and the professor to make universities accessible to a broader audience (p. 18).

A universal design approach provides benefits to all students, not only those formally identified as having disabilities or illnesses. For example, Redpath et al. (2013) explain that because students have different learning styles, a course structure that involves a choice of assessment methods results in improvements in the quality of all students’ work, and fewer requests for accommodations from students with disabilities. Similarly, Burgstahler (2005) writes:

[Universal design] benefits students with disabilities but also benefits others. For example, captioning course videos, which provides access to deaf students, is also a benefit to students for whom English is a second language, to some students with learning disabilities, and to those watching the tape in a noisy environment. Delivering content in redundant ways can improve instruction for students with a variety of learning styles and cultural backgrounds (p. 3).

As yet, universal design principles have not made significant inroads in Canadian post-secondary institutions, but their potential is clear, as is the urgency of moving toward genuinely inclusive post-secondary education for students with episodic disabilities. Forrest (2003) quotes Canadian disability and education expert Catherine Fichten as saying, “I think we owe it to our students, we owe it to ourselves, and because it is cost effective, we also owe it to our society to educate students with disabilities in the same way we educate the rest of our population.” (p. 275).
REFERENCES


Branswell, B. (2011, August 22). An education in special needs; Cegeps are finding ways to accommodate an increasing number of students who have learning disabilities and mental health issues. *Montreal Gazette* p. A4.


Jung, K.E. (2000). *The social organization of power in the academy’s disability policy: Chronic illness, academic accommodation and “equity.”* (Master’s thesis). University of Victoria, Victoria BC.


Massey, S.A. (2004). *Young adults with mental illness who are transitioning into adulthood and the specific needs common to this population: A critical review of the literature*. (Doctoral dissertation). Alliant International University, San Diego CA.


Penton, V.M. (2010). *Assistive technology provision: An assessment of services and supports for people with disabilities in Newfoundland and Labrador.* (Master’s thesis). Memorial University, St. John’s NL.


Stepien, A. (2001). *Accessing technology: Paving the way to academic success for students with disabilities*. (Master’s thesis.) University of Guelph, Guelph ON.


Werner, K.M. (2001). Transitioning and adapting to college: A case-study analysis of the experience of university students with psychiatric disabilities. (Doctoral dissertation.) Western Michigan University, Kalamazoo MI.


Zimmerman, G.M. (2004). A study of the organizational factors influencing the access of students with psychiatric disabilities to disability support services. (Doctoral dissertation). University of Massachusetts, Boston, Boston MA.