THE IMPACT OF CHRONIC DISEASE ON STUDENTS’ QUALITY OF LIFE

In 2020, there were about 18 million tertiary students in Europe (1). The average of those reporting chronic health conditions was around 18% in Switzerland, with the highest level of 39% in Iceland and the lowest of 7% in Romania, Albania and Serbia (2). The health status of students should be a concern for health professionals, alongside academics, as higher education plays an important role in society, increasing people’s well-being, fostering development and economic growth. However, our knowledge of the impact of chronic illness on university life is limited (3), with minimal research on the differences and similarities of the academic experience of students with chronic illness compared to students without health difficulties (4) but also how universities can support these students (5). As a result, through this exploratory narrative review we aim to synthesize some key ideas about the impact of chronic illness on students’ quality of life and formulate a series of recommendations that can be followed by university support services to encourage quality of life and academic adjustment for this group of students.

Chronic diseases are medical conditions with implications on the main dimensions of a person’s life, felt on a long-term or even lifelong basis, accompanied by a series of emotional, social and lifestyle challenges (6). Young people with a chronic illness often report feeling that their chronic illness prevents them from living a normal life (7).

Chronic diseases are diverse and can cause varying degrees of impairment, but thanks to advances in medicine, increasingly young adults are pursuing higher education and can even achieve very good health outcomes (8). However, unlike students without significant health problems, students with chronic conditions have lower graduation rates and quality of life (9). All students, especially first-year (10) and final-year (11) students, experience challenges in adjusting to the academic environment, such as difficulties with sleep, learning, engagement, homesickness, and difficulties with roommates (12), but for those with chronic illnesses, health care challenges are also added (13). In general, students with chronic illnesses may face more difficulties in pursuing and completing higher education (3), experience stress related to adapting to academic and social demands, and also feelings of loneliness and isolation (9).

Despite the well-known idea that studenthood is a very challenging time, and the fact that quality of life assessment has been evolving since the 1970s, too little attention has been paid to the quality of students’ lives (14). The World Health Organization (15) defines quality of life as “people’s perception of their position in life in the context of the culture and value systems in which they live and in relation
to their goals, expectations, standards and concerns”. It is, therefore, a subjective perception of the degree of contentment, satisfaction, towards four domains: physical, psychological, social and environmental, not just the absence of illness or disability (16). According to Li and Zhong (17), factors that can negatively impact on quality of life in university students can be grouped into six categories. The above authors conducted a narrative review and identified the following variables for the six categories of factors: (a) demographic factors: gender, age, religion, ethnicity, urban/rural origin, family income, only-child status, family type and parent-child relationship; (b) physiological factors: musculoskeletal pain and chronic diseases; (c) psychological factors: anxiety/depression, social phobia, attention deficit disorder, and childhood neglect/abuse; (d) social factors: experiences of neglect; (e) lifestyle and behavioral factors: physical activity, sedentariness, and exercise; and (f) academically relevant factors: major, interest in learning, academic stress, and academic performance.

In general, the support provided by universities is appropriate for good or permanent, predictable and stable health conditions, which is at odds with the unpredictability of chronic diseases. Diseases such as asthma, lupus and multiple sclerosis are notorious for periods of crisis, when symptoms are actively manifest, followed by periods of remission, for example. Such changes, amidst the rigidity of educational institutions, lead to reduced employability and reduced chances of completion for students (18). Moreover, there are also situations under which educational institutions may be rigid, undesirable or unable to adapt services to the specifics of chronic illness and the needs arising from it (3). In university settings, according to the study by Hamilton et al. (4), students face misconceptions about chronic illness, feelings of inequality and being undervalued. They have the perception that many staff members do not understand them and therefore ‘politicize’ academic regulations rather than adapt them for their chronic illnesses. Toller and Farrimond (3) identified three main difficulties faced by chronically ill students in their undergraduate studies, namely the reorganization of daily activities according to the difficulties of the sick body, institutional support that is not adapted to the unpredictability of the demands of a sick body, and poor awareness of chronic diseases. Added to all of these there are also financial difficulties, as some chronically ill students are dependent on loans specifically for students (7). Thus, it appears that the challenges faced by students with chronic diseases in the university environment are particular, with the need for knowledge and adaptation on the part of universities being a pressing one, especially amidst the increasing prevalence of chronic diseases among students (19, 20).

The aim of the review is to synthesize a range of relevant information about students’ quality of life, with a focus on the quality of life and university experience of those with chronic diseases.

**QUALITY OF LIFE OF STUDENTS VERSUS QUALITY OF LIFE OF THE GENERAL POPULATION BEFORE AND AFTER COVID-19 PANDEMIC**

Compared to the general population, both before and during the COVID-19 pandemic, students had a lower quality of life (21), being extremely vulnerable to
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mental health problems (22). Interestingly, this result is concluded even though they associate university studies with improving their quality of life in the future. One possible explanation may be that during their years of study they are stressed and anxious because of academic obligations, their own and their parents’ high expectations of performance and their desire to meet them (23).

According to the survey conducted by UNESCO (24), in April 2020, as a result of the COVID-19 pandemic, 1.5 billion learners, a large proportion of them students (25), had to stay at home and take online courses as educational institutions were closed. This, along with other restrictions, led to reduced or even no social interaction, worries about finances, fear, the need to adapt to online learning and new ways of assessment, frustration and boredom (26, 27). Cheah et al. (25) identified that the psychological dimension of students’ quality of life suffered most as a result of movement restrictions in the pandemic. Although, the social dimension was also affected as a result of social distancing, communication via technology was a buffering coping (25).

Leong Bin Abdullah et al. (28) assessed students’ quality of life and associated factors during the COVID-19 pandemic and identified that student scores on the psychological and social dimensions of quality of life were lower than non-pandemic norms of the general population, while scores on the physical health and environmental dimensions of quality of life were comparable. A positive effect on the quality of life of the students investigated by the previously mentioned authors was the higher number of hours of classes attended online, along with higher social support from significant others when demographic, personal, and clinical variables were controlled. For the same students, quality of life was negatively impacted by the high prevalence of COVID-19, high levels of depression, stress, and frustration arising from study discontinuation (28). Other factors that could explain the impairment of students’ quality of life during the pandemic were high levels of distress, anxiety, depression and suicidal thoughts (22, 29).

On a more specific level, both relative to the general population and to other categories of students, medical students appear to have a worse quality of life, mainly due to lack of leisure time and fatigue (14, 30). At the same time, there are also research studies in which medical students have better, or comparable, quality of life outcomes to other categories of students (31). These differences could be explained by some specific characteristics of the investigated populations (14). Although no clear trend can be identified in this regard, it is certain that, regardless of their major, students have a lower quality of life than the general population.

QUALITY OF LIFE OF CHRONICALLY ILL STUDENTS COMPARED TO STUDENTS WITHOUT SIGNIFICANT HEALTH DIFFICULTIES

According to the scientific literature (21, 30), students have a lower quality of life than the general population. Those with chronic illnesses even have significantly lower quality of life and higher levels of anxiety and experiential avoidance than students without significant health difficulties (32). One explanation may be the ma-
Major changes that occur in a young person’s life when they acquire student status. They either start commuting or move away from home and have to take care of themselves, from housework to paying the bills, they have to adapt to a new city, a new social and educational environment. All these challenges mobilize a person’s resources and can be associated with significant distress, which explains the lower quality of life. On top of all this, for people diagnosed with a chronic illness, the demands and restrictions of experienced medical conditions are added, leading to an even more noticeable decrease in quality of life (33).

Chronic diseases are diverse and can have varying degrees of impairment, which will be further associated with different levels of quality of life and, in general, school absenteeism. Wikels and Markelz (8) argue that the more a student misses classes, the more their academic performance will be affected, with this correlation being particularly common among students with chronic illnesses. Chronic illness predominantly causes a negative impact on students’ quality of life, with acute feelings of loneliness and poorer academic performance (34), compared to students without chronic medical conditions, who perform better on both variables (9). Thus, chronic illness may also have significant effects at the academic level, in addition to those determined at the physiological level, as sick students have lower retention and graduation rates (9), while students without chronic illness and with a better quality of life are able to access resources and services available at the university, thus having a better integration into the social and academic environment. Gazibara et al. (35) also found that students with chronic diseases have a worse quality of life than healthy students, with female students scoring lower on the physical and mental functioning dimensions compared to male students. Similarly, students with irritable bowel syndrome have lower quality of life than students without this chronic health condition (14, 36).

Concluding, regardless of the health status of students, universities could design and implement health promotion and prevention activities. These institutions should ensure that they use useful channels of information so that the whole academic community is made aware of the resources available for students with chronic diseases on campus and in the community. Better screening to identify students with chronic illnesses in their first year of study and including them in a mentoring programme where students with experience of managing chronic illnesses support new ones can improve their sense of belonging and integration into the academic community. Universities may consider including in their academic regulations some flexibility in academic work, such as extending deadlines for projects and exams, to allow students with chronic illnesses to better manage their medical needs and meet their academic obligations at the same time. Last but not least, financial support is important, given that some students are dependent on loans specifically targeted for them in order to support themselves and cover the costs of treatments.

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