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Original Research Paper

Disabilities and Chronic Illnesses in Medical Faculty Undergraduates at a Sri Lankan University and what Support they expect from the University

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Abstract

Introduction: Despite a growing number of undergraduates with disabilities and chronic illnesses enrolling in tertiary education, their issues remain underexplored. This study investigates the prevalence of disabilities and chronic illnesses among students at the Faculty of Medicine, University of Colombo, their academic and socioeconomic challenges, and the support they expect from the university.

Methods: A descriptive cross-sectional study was conducted, using total population sampling of 1589 Medical Faculty undergraduates. Data was collected by a self-administered, online questionnaire featuring open and close-ended questions.

Results: A total of 408 undergraduates (mean age:22.2±1.80 years) participated. Among them, 9.6% had disabilities, 8.8% had chronic illnesses, and 9.6% had both. In the participants, visual disability (9.6%) and asthma (4.9%) were identified as the most prevalent disability and chronic illness respectively. The majority (61%,n=69) hesitated to disclose their conditions due to concerns like stigma and rejection. Common academic challenges included difficulties in completing assignments and academic work on time (34.2%, n=39), finishing exams within the allotted time (23.7%, n=27), medication side-effects affecting studies (14.0%, n=16), and poor attendance (12.3%, n=14). Financial difficulties were faced by 41.2%, n=47). Only 18.4% (n=21) were aware of existing university support systems. Students expressed a desire for better understanding and assistance from Faculty staff (14.9%) and facility enhancements (10.5%) to address their challenges.

Conclusion: Disability and chronic illnesses is a significant issue amongst the students and lead to academic and socioeconomic challenges. There is an urgent need to increase awareness of students about available university support systems and improve provision of the specific support requested by them to help them overcome these obstacles.

Keywords: Undergraduates, Disabilities, Chronic Illness, University Support System, Challenges

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Introduction

In 2011, World Health Organization (WHO) indicated the global disability prevalence percentage as 15% and that for Sri Lanka as 12.9% (World Report on Disability, 2021).

However, it is worth noticing that accurate prevalence of disabilities is hard to estimate in low and middle-income countries like Sri Lanka and it is likely to be higher than in high-income countries (Mitra & Sambamoorthi, 2021).

The number of students with disabilities enrolling in tertiary education globally and country wise has increased in the recent past (Parsons *et al.,* 2020). Public policies being introduced into the school education system along with direct access to higher education for disabled children could be considered as major contributors for this increment. USA, UK and Australian higher education centers mention that approximately 9%, 5% and 3% of students have some kind of disability respectively.

In Sri Lanka, disability is legally defined as "one who, as a result of any deficiency in his physical or mental capabilities, whether congenital or not, is unable by himself to ensure for himself" in the Protection of the Rights of Persons with Disabilities Act No 33 of 2003. Persons with chronic diseases, whether or not they could be included in the disability group, also belong to a disadvantaged minority. Centers for Disease Control and prevention defines chronic diseases as “conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both” (Centers for Disease Control and Prevention, 2022).

WHO illustrates that engaging in education enhances the knowledge, skills and experience of the students with disabilities and widens the opportunities to improve their lives, just like in the case of non- disabled students. Being qualified with tertiary education provides added advantages when considering the empowerment of disabled, which is also associated with numerous social and economic advantages. It revealed that a disabled individual with a degree has three to five times more chances in job opportunities than a person with a disability who has never attended college (World Report on Disability, 2021). These findings highlight the importance of promoting tertiary education among the disabled population.

Despite multiple reports indicating an increase in the enrollment of individuals with disabilities in higher education over the past decades, UNESCO and OECD have asserted that 90% of disabled children do not attend school. Furthermore, even within higher education, they remain underrepresented (Evans *et al*., 2017). Despite notable progress in facilitating access to higher education for undergraduates with disabilities, they frequently encounter various barriers. As a consequence, some of them drop out of their higher education in the middle of the curriculum, which is significant in comparison with non-disabled students. Often, universities primarily concentrate on the enrollment of students with disabilities, with little or no attention given to predicting, preventing barriers, and reducing dropout rates (Wessel, 2009).

Though multiple studies have evaluated the issues of undergraduates with disabilities and solutions to overcome those, most of them have been carried out in developed countries. The lack of infrastructure facilities, emergent facilities, financial and economic issues of a developing nation may lead to different issues from those of developed countries. Although the term ‘disability’ has gained much attention in the fields of research and policy making, ‘chronic diseases’, a major contributor to individuals either for a period of time or throughout life is disregarded. As they represent a certain part of the population who need special attention and support, it would be informative to explore the prevalence of chronic diseases among undergraduates just like the disabilities in order to enable us to improve the support and facilities. Therefore, a study exploring the situation of students with disabilities and chronic illnesses (SDCI) in Sri Lanka would generate insight to formulate appropriate recommendations for implementing support systems and facilities for them. Furthermore, the findings could serve as a valuable evidence base for other developing countries, especially in South Asia, sharing similar socio-cultural backgrounds.

The current study aimed to assess the prevalence of disabilities and chronic illnesses

among undergraduates of Faculty of Medicine, University of Colombo, their socioeconomic and academic challenges, and support they expected from the university to overcome them.

Methodology

A descriptive cross-sectional study was conducted using total population sampling of 1589 undergraduates registered at present for the MBBS programme and B. Sc. Physiotherapy programme at Faculty of Medicine, University of Colombo. The inclusion criteria encompassed undergraduates pursuing MBBS and B.Sc. Physiotherapy degrees who willingly provided their consent to participate in the study.

Ethics approval for the study was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo. With the necessary approvals and support from the Faculty administration, the study procedure was subsequently explained to all students. This information was also clearly outlined in the provided information sheet. Prior to enrollment, participants' consent was obtained.

A self-administered questionnaire was utilized as the data collection tool. The questionnaire underwent a validation process, involving review by experts in the field, and necessary corrections were made based on their comments. It was also pre-tested among a sample of undergraduates at the Faculty of Medicine. Since English serves as the medium of instruction for both programs, the questionnaire was administered in the English language. However, students were provided with the option to answer the questionnaire in Sinhala and Tamil languages, in addition to English.

In order to address potential social stigmas and to encourage more candid responses, the questionnaire was distributed as a Google Form. Students were requested to provide their university registration number only if they were willing to do so, with an aim to identifying and providing support to them in the future.

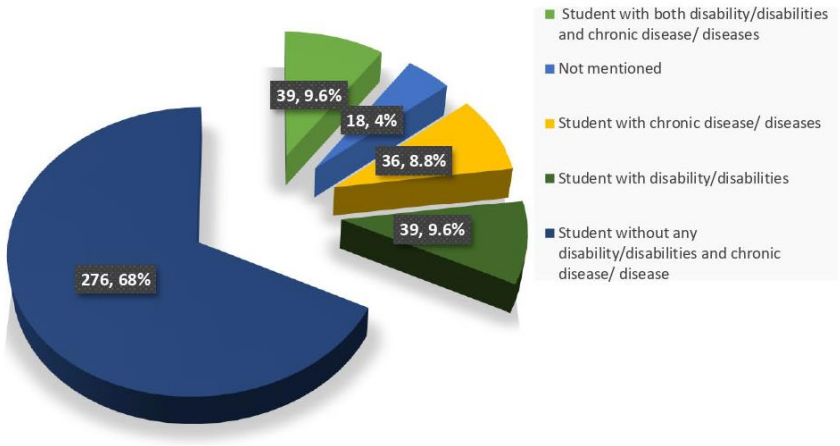
The quantitative data obtained from the study was analyzed and presented using frequency distribution.

Results

Socio-demographic Characteristics: One-fourth of the total number of undergraduates (408), participated in the study. Participants comprised 319 medical undergraduates and 87 B.Sc. Physiotherapy undergraduates, with a mean age of 22.2±1.80. Among all the participants, 62% were female.

Prevalence of the disabilities and chronic illnesses: Of the participants, 114 individuals (27.9%) reported having disabilities, chronic illnesses, or both. Within this subgroup, 43 individuals (37.7%) had been experiencing chronic illnesses for more than 5 years. The most prevalent disability reported was visual impairment (n=39), while asthma (n=20) emerged as the commonest chronic illness. Figure 1 illustrates the prevalence of disabilities and chronic illnesses among the participants. Additionally, figure 2 provides an illustration of the duration for which students have been dealing with these disabilities or chronic illnesses.

Willingness to disclose about the disabilities and chronic illnesses: According to the findings, the majority of SDCI (61%) did not disclose their disabilities or chronic illnesses to the Faculty due to several reasons; being reluctant to disclose the nature of their conditions (n=13), hesitancy and fear of discussing their needs for accommodations with lecturer (n=8), concerns regarding stigma (n=6), fear of losing opportunities (n=2) and fear of being stigmatized (n=2). Only 11% of SDCI disclosed their situations. A considerable number of participants (28%) did not provide information regarding whether they have disclosed their status or not. Among those who did disclose, the majority (n=8) opted to do so through the student mentor or student counsellor, who then conveyed the information to the administration.



Disability/ Disabilities	Frequency
Communication/Speech	2
Hearing disability	2
Intellectual/development	1
Multiple impairments	2
Physical	11
Psychological /Mental health disabilities unspecified	25
Visual impairments	39
Not Mentioned	38

Chronic disease/ diseases	Frequency
Allergic rhinitis	2
Autoimmune thyroiditis	1
Backache	1
Diabetes	3
Gastritis or Ulcer	15
Myopia	1
High blood pressure	1
Hypothyroidism	1
Asthma	20
Migraine	12
Skin diseases	4
Sleeping Disorders	2
Other	11

Figure 1: Prevalence of disabilities and chronic illnesses among the participants

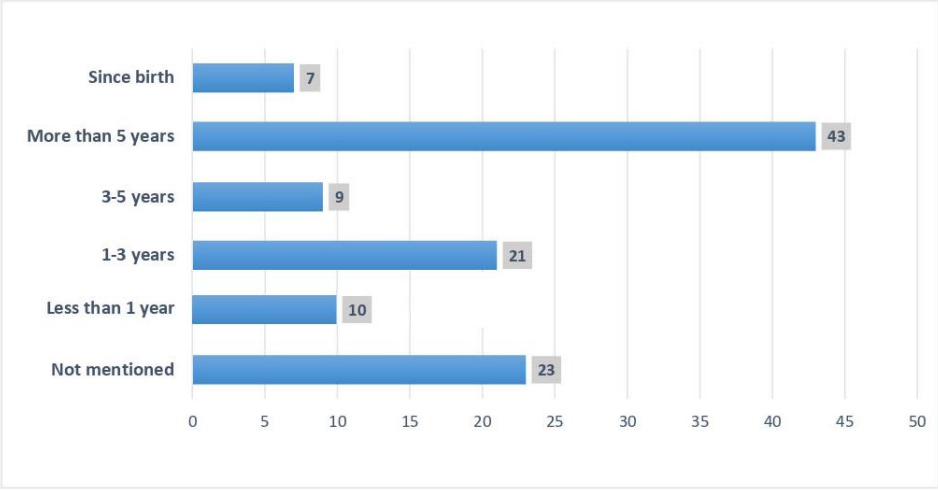


Figure 2: Duration of students' experience with disabilities and chronic illnesses

Challenges and Expectations

Socio-economic challenges: According to the findings the 114 SDCI have been facing various socio-economic challenges. The majority of these students (41.2%) reported facing financial and economic issues. In addition, a small percentage of students experienced communication or language barrier (1.8%), hectic university life (1.8%), struggling with adapting to the university environment (1.8%), having lack of friends (2.6%), or encountering accommodation issues (3.5%).

Furthermore, a significant number of SDCI (n=59, 51.8%) did not actively participate in extracurricular activities. The reasons for this included spending a lot of time to complete academic work (n=28), difficulty in initiating and maintaining social connections (n=10), fear of exposing disabilities/ chronic illnesses (n=5), negative attitudes from others (n=2), and their conditions hindering their participation in social activities (n=2).

Academic challenges: The most frequent academic challenges faced by SDCI were difficulty in completing examinations (n=27), assignments, and academic work (n=39) within the given time frame, challenges in carrying out studies due to side effects of medications (n=16), and poor attendance resulting from frequent follow-ups and deterioration of medical conditions (n=14), difficulty in attending lectures due to the absence of accessible classrooms/ lecture halls (n=8), the need for a front seat in lectures and group discussions to overcome sensory impairment, which could not always be accommodated due to the lack of reservation option (n=9), or dependence on others (colleagues, personal tutor, student counsellor) to carry out academic activities (n=6).

The expectations of SDCI from the university in order to overcome these challenges include: giving extra time to complete the examinations and assignments, spacing out the timetables and minimizing the academic stress, following flexible methods in counting attendances, providing relevant infrastructure facilities.

Additionally, these students have specific expectations from the university academic and non-academic staff, which include: reducing the academic content per term to manage workload, kind cooperation from the personal tutors and academic staff, support to understand the core areas and implementing methods to cover the missed academic work, and conducting online lectures.

Several SDCI encountered challenges in implementing learning methods required for their study programme. They used various strategies to address and overcome these difficulties. Among those experiencing difficulty in reading (n=18), strategies included wearing spectacles, attending lectures rather than reading independently, and sitting close to the screen during lectures. For SDCI facing challenges in listening (n=6), seeking assistance from friends, and engaged in group discussion were common strategies. Those experiencing difficulties in speaking (n=6) utilized methods such as speech therapy and practicing relaxation techniques. For those experiencing difficulty in writing (n=1), the strategy involved taking anti-spasmodic medications. Additionally, some SDCI did not face difficulties in reading, writing, speaking or listening but experienced difficulties due to their physical disabilities (n=6). Their strategies included taking medication, taking appropriate breaks when necessary, engaging in group discussion, and ensuring comfortable seating arrangements, such as using a cushioned chair.

The majority of SDCI (n=55, 48.2%), utilized assistive devices to overcome academic obstacles. However, some SDCI did not utilize any assistive devices citing reasons such as lack of awareness about suitable devices (n=12), unaffordability (n=2), fear of discrimination (n=1), lack of perceived need (n=2), and unspecified reasons (n=6).

When confronted with challenges, the majority of students sought help from family members (n=61,

53.5%) and peers (n=26, 22.8%), rather than seeking help from counsellors (n=3), student mentors (n=3), or lecturers (n=1). Moreover, only 18.4% of the participants (n=21) were aware of existing facilities and support systems available for SDCI at the university.

SDCI expressed their desires for improved understanding and support from the faculty staff (14.9%) and peers (19.2%), as well as for the enhancement of facilities within the faculty (10.5%) to effectively overcome their respective challenges.

Discussion

The current study indicated that 9.6% of the participants had disabilities, 8.8% had chronic illnesses and 9.6% had both. The combined prevalence of disabilities was 19.2%, and chronic illnesses was 18.4%. In the USA, approximately 19% of undergraduates reported having some form of disability during academic year 2015-2016 (National Center for Education Statistics. 2018). The prevalence of disabilities may be higher in Sri Lanka due to economic constrains. Accurate country-level data on disabilities in post-school higher education is lacking, making this study valuable for planning and implementing support measures.

Globally, little is known about chronic illness prevalence among higher education students. The current study identified asthma as the most prevalent chronic illness. Mental health issues were also common among the study participants. This is in agreement with the results of a systematic review by Ibrahim et al. (2013), which reported depression as the most prevalent chronic illness among university students. In the present study mental health issues were not the most prevalent disability or chronic illness and the students have not specifically mentioned the type of mental health issue they had. There is a possibility that the present study did not capture the entire student population with mental health issues. This could be attributed to several factors, including students expressing apprehension about disclosing their conditions due to fears of discrimination and stigmatization.

The current study highlights challenges faced by SDCI: These encompass physical, psychological, academic, financial and social challenges. Consequently, the willingness of SDCI to pursue their studies may be lower due to these difficulties, as suggested by Hong (2015). The majority of SDCI requested additional time to successfully complete their programs, manage the demands of a full course load, and meet the requirements for their degree programs, as highlighted in the study by Proctor et al. (2006). This consistency across studies emphasizes the recurring nature of challenges faced by SDCI in higher education and underscores the need for targeted support measures.

Furthermore, the finding of the current study revealed that financial and economic issues (41.2%) were the most significant socio-economic challenges faced by SDCI. These challenges involve managing monthly living expenses, healthcare costs related to their conditions, and difficulties in procuring essential materials such as textbooks, printed reading materials, and clinical equipment like stethoscopes, clinical scrubs, and masks. Despite existing student welfare mechanisms and financial assistance schemes at the Faculty of Medicine, University of Colombo, some participants seem to have lack of awareness of these support mechanisms.

Previous research has also highlighted the higher economic burden faced by disabled students due to their additional needs, such as spectacles, audio recorders, or specialized mobility aids etc. Many disabled students are dependent on their parents or caregivers and have limited opportunities for part-time employment, compounding the issue. Various financial systems, including disability education allowances, aim to alleviate this burden, but concerns persist about the adequacy of the amounts provided. Many students have reported the financial strain they face and the inadequacy of disability allowances, contributing to a higher

dropout rate among this population midway through their studies (Holloway, 2001). Holloway (2001) suggests addressing this issue by establishing effective coordination between disabled students in need of financial support and external agencies to enhance financial support and alleviate economic challenges for SDCI.

The present study found that, when encountering challenges, a majority of students primarily sought assistance from family members (53.5%, n=61) and peers (22.8%, n=26) rather than seeking professional assistance. Additionally, a substantial portion of students (61%) chose not to disclose their situations to the faculty, citing various reasons. Some students indicated a need for better understanding and support from faculty staff (14.9%), peers (19.2%), and improvements in the facilities provided by the faculty (10.5%) to address their challenges.

The study reveals a limited awareness among students regarding existing facilities and support systems for SDCI at the university, with only 18.4% (n=21) of participants being aware of them. This lack of awareness may stem from the fact that, although universities have support systems for SDCI, these are not automatically provided like common facilities for all students. Addressing these challenges necessitates increased awareness, streamlined processes, and improved understanding among university staff to create a more inclusive environment for SDCI.

The provision of necessary support is also hindered by students' reluctance to disclose their disabilities and chronic illnesses to the administration, even when requested. As noted by Holloway (2001), disabled students often encounter repeated challenges and awkward situations when arranging suitable facilities. For instance, they must continually inform and request specific facilities, such as extra time allocation, specialized seating arrangements, or assistive devices for each exam. This process is not only time-consuming and stressful but can also lead to discrimination. The situation is further complicated by the poor knowledge and understanding of university staff regarding disability-specific requirements and their attitudes toward disabled individuals (Holloway, 2001).

Several studies indicate that higher education institutions are often ill-prepared to address the requests and suggestions of SDCI, hindering their well-being. A study by Holben (2015) highlight a lack of familiarity among institutions with available technologies and their applications to support students with disabilities. Providing accessible education for these students requires addressing multiple factors, including trained staff for disability services, enhancing knowledge and awareness of assistive technologies among students with disabilities, and garnering university administration support for improving available technologies.

In developed countries, disability tests are typically required for disability claims during university admission. However, unwillingness to disclose, fear of negative consequences such as stigma, embarrassment, and resistance to the term "disability" can impede access to facilities and pose challenges during the curriculum (Konur, 2006). These mechanisms are less formalized and organized in Sri Lankan universities at present. Bridging these gaps in awareness, understanding, and support for SDCI is crucial for fostering an inclusive and accommodating environment within higher education institutions.

Limitations

The study has limitations, including a low participation rate of one-fourth of the selected student population, hindering the ability to generalize findings to the entire student body. Additionally, the study did not evaluate the degree of visual disability reported by students, limiting insights into its impact. The research focused solely on one prominent university in Sri Lanka, potentially limiting its applicability to other universities and private higher education institutes in the country.

Recommendations

Recommendations to enhance support for SDCI in higher education institutions include:

a) Strengthening the student support mechanisms
b) Create a dedicated database and registry for SDCI at the individual Faculties and the University.
c) Establish a special committee for SDCI, involving representatives from various relevant bodies.
d) Formalize links with clinicians for necessary student referrals.
e) Assign each student to a mentor for personalized support and coordination with institutional resources.
f) Appoint two student representatives (male & female) for each batch to assist SDCI.
g) Enhancing Faculty-level Oversight:
h) Implement bi-annual progress reports from student mentors to the student counselor, who would compile a comprehensive report for the Special Committee for SDCI (SC-SDCI).
i) Conduct a situational analysis to identify issues and implement tailored remedial measures.
j) Create awareness among students and staff regarding challenges faced by SDCI and available support structures.
k) Improve infrastructure of the institution to be accessible for SDCI by developing accessible facilities.
l) Ensure the curriculum implementation unit and the examination branch maintain records of SDCI and implement necessary support for teaching learning activities and examinations.
m) Develop special financial assistance schemes for SDCI, seeking support from donors and organizations.

Conclusion

The study reveals that a significant percentage of students at the Faculty faced disabilities and chronic illnesses, resulting in financial, academic, and social challenges. Based on these finding it is crucial to implement targeted support and interventions to enhance their academic pursuits and overall well-being.

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Conflicts of interest: None

Ethics committee approval: Ethical approval was obtained from Ethical Review Committee, Faculty of Medicine, University of Colombo (EC-21-136)

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