



Mental Health Needs of Medical Students in Cameroon

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ABSTRACT

Original Research Article

Background: Medical students are exposed to high levels of psychological distress, while institutional support systems remain limited in sub-Saharan Africa. Understanding their mental health needs is essential for guiding effective interventions.

Objective: To describe the perceived mental health support needs of medical students at the University of Yaoundé I, and to identify factors associated with the expression of these needs.

Methods: A cross-sectional study was conducted using self-administered questionnaires assessing students' needs. Associations with sociodemographic and academic variables were analyzed.

Results: One-third of participating students (34.9%) explicitly expressed a need for mental health support across three dimensions. Emotional needs were predominant (77%); master's and doctoral students were three times more likely to report such needs. Academic (46.1%) and socio-economic (3.4%) needs were also significant, particularly among students at master's and doctoral levels. Despite reported distress, only 41.1% of students sought professional help.

Conclusion: Medical students present multidimensional psychological support needs that intensify as their training progresses. Addressing these needs could strengthen resilience, well-being, and the future professional performance of students.

Keywords: Mental health, Medical students, Needs assessment, Cameroon.

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Introduction

The mental health of medical students is a major public health concern both in Africa and globally. The worldwide prevalence of psychological disorders among this population is estimated at 30.3%, according to systematic reviews and multinational studies (Jahrami et al., 2023; Coombes, 2018). Yet university-based support structures often remain insufficient to provide adequate assistance. This gap is particularly worrying, as psychological distress can affect not only the well-being of future physicians but also the quality and safety of the care they provide.

Stress among students can be understood through the transactional model of Lazarus and Folkman (2008), which posits that individuals continuously assess academic, personal, and social demands and mobilize coping strategies to maintain psychological balance. The "coping reservoir" model complements this framework by emphasizing that positive and rewarding experiences replenish adaptive resources, whereas emotionally taxing clinical rotations, academic pressure, and financial instability deplete them (Stanislawski, 2019).

Despite extensive literature addressing symptoms, predictors, and consequences of distress, students perceived support

needs remain underexplored, particularly in low- and middle-income countries. Fewer than 20% of distressed students actively seek professional help, often due to the lack of accessible institutional services, limited mental health literacy, or stigma (Stirparo et al., 2024). In this context, identifying students' support needs is a critical prerequisite for informing institutional interventions. The present study aims to describe these needs among medical students at the University of Yaoundé I and to identify factors associated with their expression.

Materials and Methods

This was a descriptive cross-sectional study conducted between October 2020 and June 2021 at the Faculty of Medicine and Biomedical Sciences (FMBS) of the University of Yaoundé I. The FMBS was selected as the study site due to its status as the main public medical training institution in Cameroon and the diversity of its student population. Ethical approval was obtained from the Institutional Ethics Committee of the FMBS. All students enrolled for the 2020–2021 academic year who provided informed consent were eligible.

Participants were recruited using a convenience sampling method. Data collection took place during on-site academic activities, and self-administered questionnaires were distributed directly to students after a brief explanation of the study objectives. Participation was voluntary and anonymous. In total, 600 questionnaires were distributed; 61 students declined to participate, yielding a response rate of 89.8%. Thirty-eight incomplete questionnaires were excluded from the analysis. The minimum sample size was calculated based on an estimated prevalence of psychological distress of 30.6% [2], resulting in a required minimum sample of 326 students.

Psychological distress was screened using the 28-item General Health Questionnaire (GHQ-28). Perceived mental health support needs were assessed using a study-specific

module developed for this research, informed by a review of the literature on student mental health needs and consultations with public health and mental health professionals. The module explored perceived needs across three domains: emotional, academic, and socio-economic. Emotional needs included requests related to psychological support, access to listening or counseling services, and stress management. Academic needs encompassed difficulties related to academic pressure, learning conditions, and experiences of academic harassment. Socio-economic needs referred to financial difficulties and the need for material support. This needs assessment tool was exploratory and descriptive in nature and was not designed as a validated psychometric instrument.

Data was analyzed using SPSS version 24. Categorical variables were described as frequencies and compared using the Chi-square test ($p < 0.05$).

Results

Sociodemographic Characteristics

A total of 501 students were included in the study, comprising 303 (60.3%) enrolled in general medicine, 137 (27.3%) in dentistry, and 61 (12.2%) in pharmacy. The sex ratio was 0.77. The 20–25 age group was the most represented (67.3%), with a median age of 23 years and an interquartile range of 2.88 years. Most participants were single (76.2%), and studies were predominantly financed by family support (98.4%). Most students were enrolled in higher academic cycles (master's and doctoral levels) (77.4%), and 47.1% perceived their academic performance as good.

Pathological Profile

The main disorders identified were anxiety (60.3%), somatic symptoms (53.7%), social dysfunction (30.3%), and depression (19.4%). Figure 1 presents the distribution of the pathological profile according to the academic level.

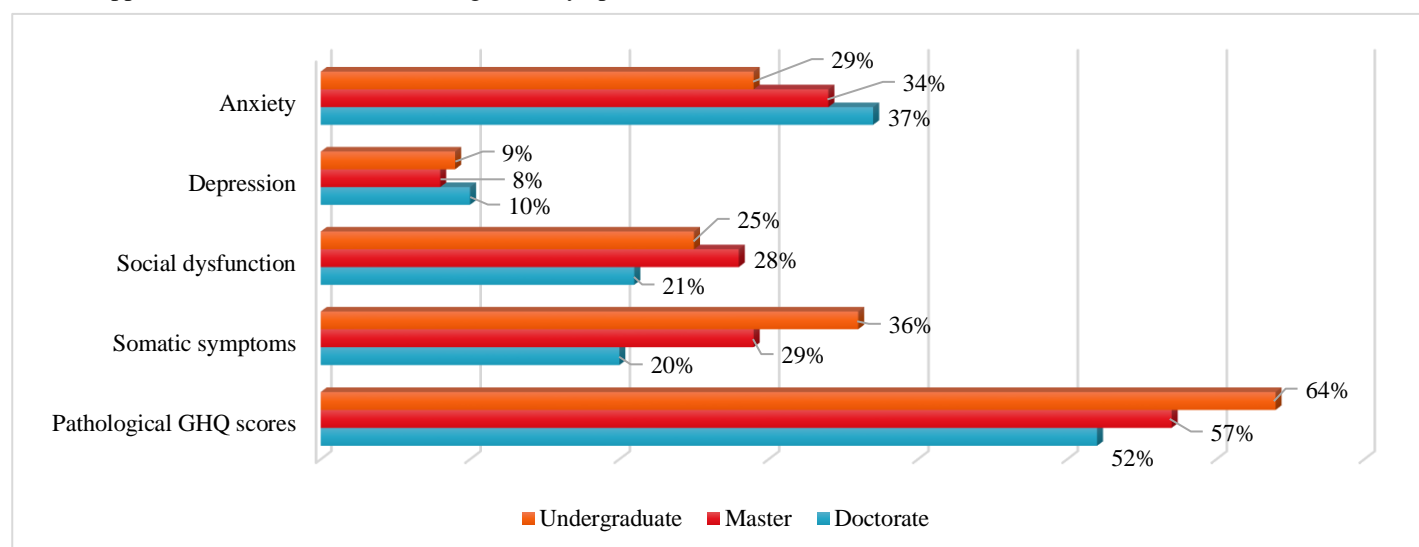


Figure 1: Distribution of psychological distress profiles according to academic level.

As shown in Figure 1, undergraduate students exhibited significantly higher levels of psychological distress, which tend to decrease over the years but remain at pathological levels. This trend suggests that students gradually develop their own coping mechanisms. Despite the high prevalence of mental health disorders, nearly all students (96%) reported being unaware of available support services, and 34.9%

explicitly expressed a need for mental health support at the time of the survey.

Typology of Needs

Data analysis identified three main categories of needs reported by students: emotional (77%), academic (46.1%), and socio-economic (3.4%). Table 1 presents their distribution within the study sample.

Table 1: Distribution of students' reported needs

Variables	Modalities	n (%)
Nature of request (N=438)	Listening/counselling unit	344 (47)
	Extracurricular support	133 (18.2)
	Psychoeducation in medical life	233 (31.9)
	Symposium on managing academic harassment	3 (0.4)
	Grant / Financial assistance	15 (2)
	Extracurricular activities	4 (0.5)

Nearly 87% of students reported a need for an on-campus psychological support system. The most frequent requests concerned managing stress from academic demands (37.8%) and addressing academic harassment (24.9%), while economic difficulties accounted for 19.5% of reported needs.

Link Between Perceived Need and Help-Seeking

Although 71.6% of students experiencing psychological distress reported needs in at least one domain, only 41.1% actively sought professional support. Figure 2 illustrates how these support needs are distributed across different academic levels.

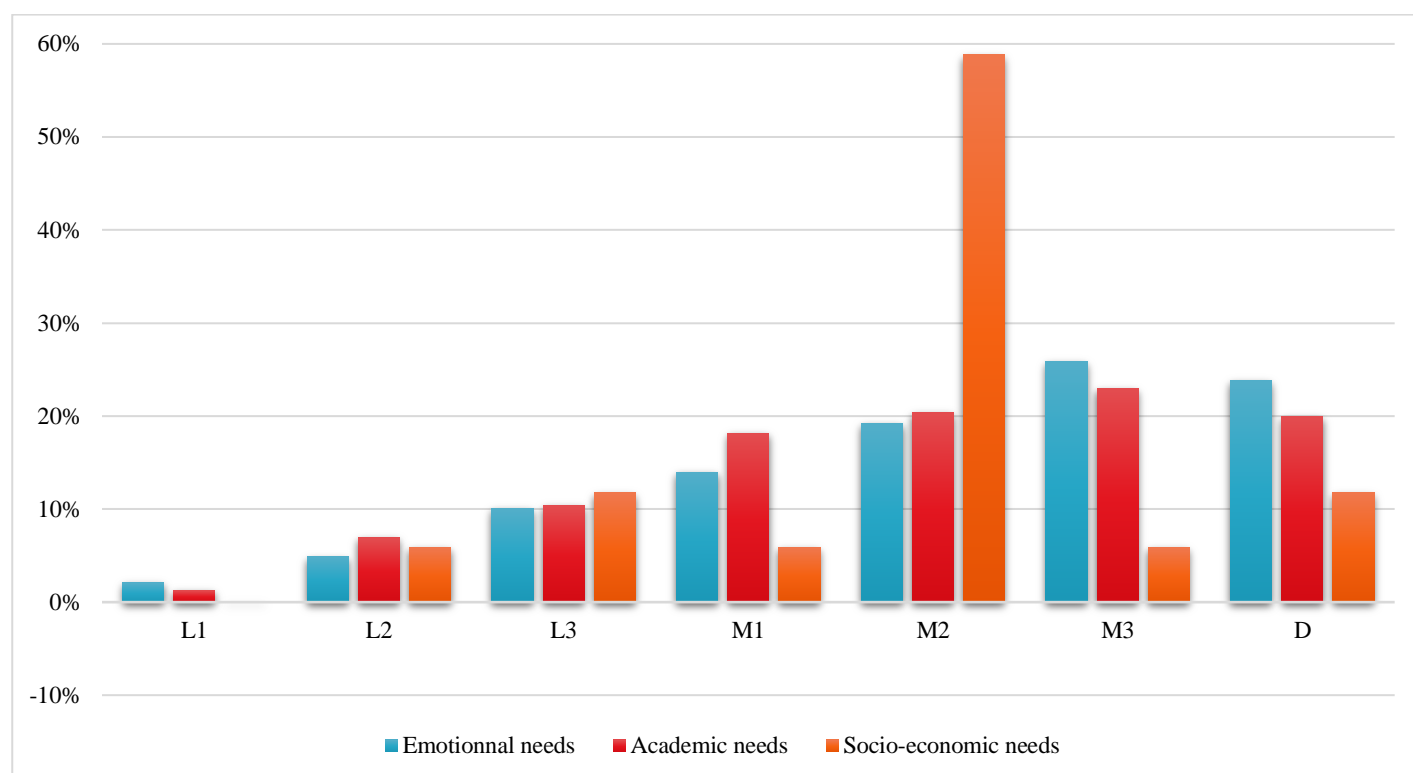


Figure 2: Distribution of students' mental health support needs across academic levels

This figure illustrates the proportion of students reporting emotional, material, and academic support needs across medical school years. In first-year medical students, reported support needs were relatively low. These needs progressively increased, reaching a peak in fifth-year students. Emotional needs ($p < 0.001$; OR = 3.0, 95% CI: 2.045–5.0) and material needs ($p < 0.001$; OR = 1.24, 95% CI: 1.86–4.12) were

significantly associated with academic level, indicating that students in higher years were at greater risk of experiencing these needs. In contrast, academic support needs were not significantly associated with academic level ($p = 0.063$). Additionally, emotional and academic needs showed a similar distribution across different study programs (see Figure 3).

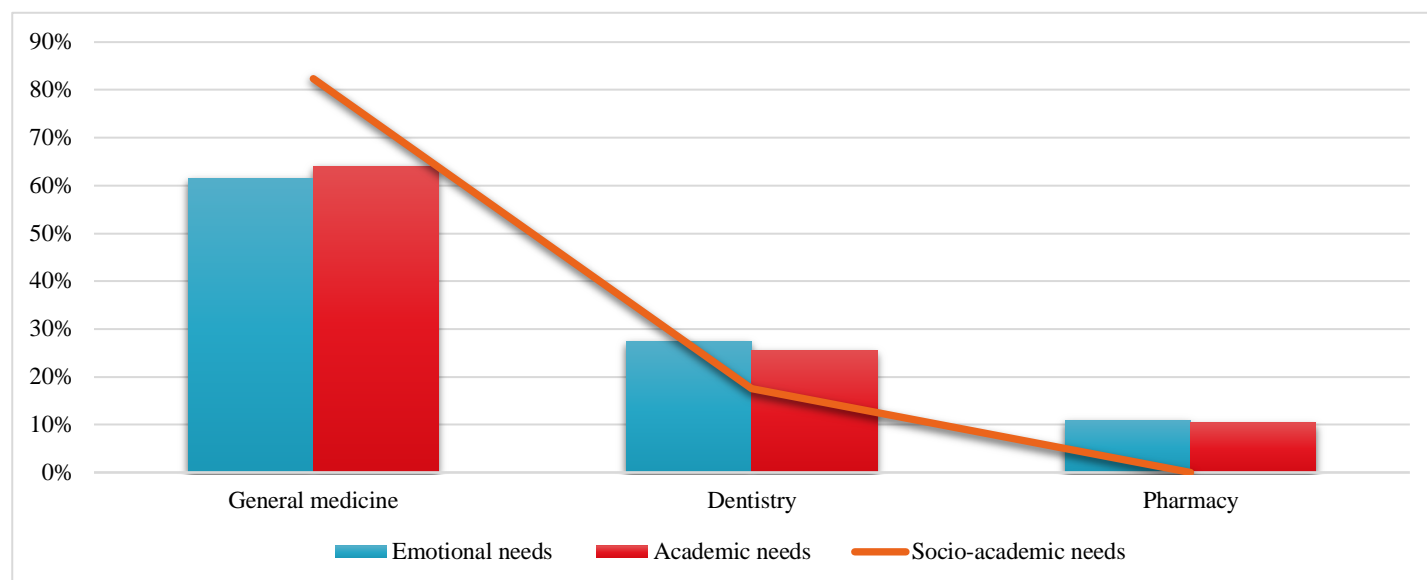


Figure 3: Distribution of students' support needs by study program

Students enrolled in programs involving hospital internships reported higher support needs compared with pharmacy students. Despite nearly seven out of ten students (69.3%) being unaware of mental health practices, only 34.9% expressed interest in learning more. This finding highlights a notable gap between awareness of mental health resources and actual engagement with them.

Discussion

This study has several limitations that should be considered. First, it did not allow for an in-depth examination of barriers to help-seeking, which limits the analysis of demand dynamics and the understanding of factors that hinder access to support. Second, the self-reported nature of the data exposes the findings to potential biases, including social desirability and underreporting, particularly for sensitive topics such as mental health or academic harassment. Finally, this study employed a cross-sectional design, which allows for the identification of associations between variables but does not permit causal inferences. Therefore, while the findings highlight relationships between academic level, study program, and students' mental health support needs, it cannot be concluded that one factor directly causes another.

Despite these limitations, the results revealed a strong demand for mental health support, organized around three main dimensions. This structure confirms that student distress extends beyond the expression of psychological symptoms and reflects multidimensional vulnerabilities previously described in the medical education literature (Jenet et al., 2025; Yusefi et al., 2025; Winter & Olivia, 2024). The predominance of emotional needs, primarily focused on listening, emotional ventilation, and psychological support, reflects cumulative exposure to stress, burnout, and anxiety disorders. Similar findings have been reported in Namibia (Mhata et al., 2023) and Nigeria (Ayinde et al., 2021),

highlighting the persistent need for institutional psychosocial support.

The finding that students in higher academic cycles were more likely to report these needs aligns with international observations showing a progressive increase in emotional exhaustion and burnout throughout medical training (Kihumuro et al., 2022; Carrard et al., 2024; Kiss & Piko, 2025; Frajermet al., 2019). This progression reflects the intensification of academic, clinical, and professional responsibilities as students advance in their training.

Academic needs, primarily focused on managing academic stress and harassment, indicated that psychological difficulties are closely linked to learning conditions. In Southern Africa, research on learning environments has highlighted abusive behaviors and forms of academic harassment that can affect mental health. At Stellenbosch University in South Africa, Crombie et al. (2024) documented experiences of verbal mistreatment and humiliation by faculty and clinicians. In Tanzania, Mashauri et al. (2024) reported that one-third of students had been subjected to academic mistreatment. In the present study, the fact that these needs did not vary by academic level suggests that pedagogical constraints remained relatively constant throughout the curriculum. This stability aligns with findings from a systematic review showing the persistent and cross-cutting nature of academic violence (Chávez-Rivera et al., 2016). The presence, even marginal, of harassment-related requests in this study indicates a likely underreported phenomenon and underscores the need for institutional responses, including reporting mechanisms, faculty training, and awareness campaigns.

Socio-economic support needs were reported by only a small proportion of students, with just 2% explicitly indicating a need for financial assistance. However, this low prevalence should be interpreted with caution. It is possible that students underreported their socio-economic needs due to social

desirability bias or concerns about confidentiality. Despite this low reporting, the presence of requests related to economic difficulties suggests that the socio-economic dimension contributes directly to psychological distress among students (Fentahun et al., 2025). The higher expression of socio-economic needs in advanced academic cycles may reflect the accumulation of financial burdens associated with clinical internships, study materials, and living expenses. In contrast, the absence of material-related requests among pharmacy students could be explained by specific curricular or structural factors unique to that program.

The observed gap between experienced distress and help-seeking suggests low mental health literacy. This phenomenon, also reported in other university contexts (Negash et al., 2020), may be explained by the normalization of stress and a tendency to minimize psychological symptoms. As observed in the study by Alsalman et al. (2024), many students prefer to manage their difficulties independently due to stigma or a limited perception of the benefits of available services. This dynamic may also reflect an overestimated sense of self-efficacy, in which expressing vulnerability is perceived as academically or socially risky (Hawsawi et al., 2024).

Finally, a substantial gap was observed between the mental health and psychosocial needs expressed by students and the institutional support currently available. While emotional needs were particularly pronounced, only a minority of students reported being aware of or utilizing existing services, suggesting the presence of barriers such as lack of awareness, perceived stigma, concerns about confidentiality, or limited accessibility of support programs. Developing listening and psychological support structures should therefore be a priority. Strengthening psychoeducation and implementing training programs, such as workshops, seminars, and stress management initiatives, could enhance students' coping capacities and facilitate help-seeking. Similarly, the integration of policies aimed at preventing and addressing academic harassment remains essential. The implementation of targeted social support measures, particularly in contexts of economic instability, would help mitigate a cross-cutting vulnerability factor. Future research should further explore these barriers and assess strategies to improve both awareness and accessibility of mental health services among students.

Conclusion

Medical students at the University of Yaoundé I exhibit significant mental health needs, primarily emotional, academic, and socio-economic. These needs increase as students advance through their training, while the use of support services remains limited. These findings highlight the urgent need for institutional interventions combining psychological support, harassment prevention, psychoeducation programs, and targeted socio-economic

assistance, to strengthen the resilience and well-being of future healthcare professionals.

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