

Challenges and Difficulties of First-Year Students: A Case Study at Borneo Tarakan University

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ABSTRACT. This study aimed to explore both the academic and non-academic challenges encountered by first-year medical students. Students in health programs, especially medical programs, face significant academic and non-academic challenges during their first year. The transition from high school to university, including the possibility of living away from home, presents a unique challenge that demands strong adaptability. Additionally, analytical skills are important for managing the rigorous academic workload of the first year. The block-based learning system for medical students, which combines various activities such as lectures, tutorials, practicums, and medical skills across diverse topics within a limited timeframe, further increases the academic burden. Method: An exploratory case study was applied, and the unit of analysis was carried out at the Faculty of Medicine at Borneo Tarakan University (UBT), and the subjects included both academic and non-academic data from students. Qualitative data were collected using interviews and observations with students, while the informants were selected from the first and second semesters. Results: This study effectively identified the challenges and difficulties faced by first-year medical students. Non-academic challenges include adapting from high school to college, shifting from teacher-centered learning in high school to student-centered learning, and adjusting to living in a boarding house far from parents. The academic challenge involves entering medical school, where the academic workload is high, and the timeframe is shortened due to the implementation of a block-based curriculum. Conclusion: Students encounter numerous challenges and difficulties during their first year, and their ability or failure to adapt will influence their progress in subsequent years. Therefore, academic, psychological, and social support are essential.

Keywords: *First-year students, Medical study program, Challenges and difficulties, Academic, Case study*

ABSTRAK. Tujuan dari penelitian ini adalah untuk mengeksplorasi tantangan dan kesulitan, baik nonakademik maupun akademik, mahasiswa kedokteran pada tahun pertama. Mahasiswa program studi kesehatan pada umumnya dan program studi kedokteran pada khususnya pada tahun pertama mengalami tantangan nonakademik dan akademik yang cukup besar. Transformasi dari siswa Sekolah Lanjutan Tingkat Atas (SLTA) menjadi seorang mahasiswa, termasuk kemungkinan hidup terpisah dari orang tua, menjadi salah satu tantangan tersendiri yang membutuhkan kemampuan adaptasi yang tinggi. Selain itu, kemampuan analitis juga sangat dibutuhkan pada saat menghadapi tuntutan akademis tahun pertama yang sangat menentukan. Pembelajaran dengan sistem blok pada mahasiswa kedokteran yang memadukan berbagai aktivitas pembelajaran seperti kuliah, tutorial, praktikum dan keterampilan medik dengan topik beragam pada waktu terbatas menjadi beban tersendiri. Metode: Jenis penelitian ini adalah studi kasus eksploratif. Unit analisis adalah Fakultas Kedokteran UBT. Subjek penelitian adalah data-data akademik ataupun nonakademik mahasiswa. Data kualitatif diperoleh dari wawancara, hasil masukan survei dan esai pendek tugas mahasiswa serta hasil observasi. Informan adalah sejumlah 18, terdiri dari 17 mahasiswa dan 1 dari Prodi. Hasil Penelitian: Penelitian ini berhasil mengidentifikasi tantangan dan kesulitan bagi mahasiswa kedokteran tahun I. Tantangan nonakademik yang ada antara lain: adaptasi dari siswa SMA menjadi mahasiswa, gaya belajar yang masih Teacher-centered learning di SMA menjadi student-centered learning, adaptasi dengan kehidupan kos/kontrakan yang jauh dari orang tua. Tantangan akademik

adalah masuk ke kedokteran, di mana beban akademik yang tinggi dengan waktu yang lebih pendek sebagai implementasi kurikulum blok. Tantangan dan kesulitan mahasiswa pada tahun pertama cukup banyak dan kemampuan atau kegagalan dalam proses adaptasinya akan menentukan perjalanan di tahun-tahun berikutnya.

Kata kunci: *Mahasiswa tahun I, Prodi kedokteran, Tantangan dan Kesulitan, Akademik, Studi Kasus*

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INTRODUCTION

The heavy academic workload faced by health sciences and medical students such as lectures, practicums, skills laboratories, and various types of examinations makes the first year a critical period in determining whether their academic journey will proceed smoothly in subsequent years. This is particularly important because the challenges encountered by first-year students often become a determining factor in whether they remain consistent with their initial aspirations. As is widely known, entering a health or medical study program is usually driven by the dreams or ambitions of high school graduates to become healthcare professionals, such as midwives, nurses, or doctors. Various motivations, including the opportunity to serve the community, prestige, and positive perceptions of healthcare and medical professions, make health and medical study programs among the most favored choices for prospective students (Dewi et al., 2014). Consequently, different admission pathways into faculties of health sciences and medicine at public universities such as the Merit-Based National Selection (SNBP), the Test-Based National Selection (SNBT), and independent admission schemes are consistently highly competitive. Despite slightly different admission systems, similar competition also occurs in private universities.

However, the difficulty of gaining admission to these programs does not guarantee that students will graduate automatically over time. Many processes still need to be undertaken. Upon acceptance, medical students are immediately confronted with complex academic and non-academic challenges (Ahisya et al., 2020; Demak et al., 2018). Non-academic challenges include social and cultural adjustments within the campus environment, lifestyle changes due to living independently away from parents, and the need to adapt to interactions with lecturers and peers. Meanwhile, academic challenges involve a dense curriculum, complex material, and the demand to acquire clinical or medical skills from the first year (Ahisya et al., 2020; Demak et al., 2018).

First-year medical students are also vulnerable to physical health issues. Daily activities such as lectures, practicums, and clinical skills training require good physical fitness. However, many students fall into sedentary lifestyles due to excessive screen time, which can negatively affect physical fitness (Setiawan & Lontoh, 2023; Mustakim & Surury, 2020). Students often lack sufficient rest because of the large volume and variety of academic materials and assignments, which require extended study time. Inadequate rest, disrupted sleep patterns, and irregular eating habits can lead to suboptimal physical health conditions (Malau, 2024).

Both academic and non-academic challenges and difficulties also have the potential to trigger mental health issues, ranging from stress, burnout, and emotional exhaustion to mild or severe depression (Olson et al., 2025; Neufeld-Kroszynski et al., 2024). Academically, medical students today face a dense, complex curriculum oriented toward achieving learning outcomes in knowledge, skills, and attitudes, as outlined in the Indonesian Medical Competency Standards (2012) and the National Standards for Medical Professional Education (2019).

One widely implemented model in medical faculties is the block curriculum with problem-based learning (PBL) and case-based methods. This system requires students to actively solve problems independently and collaboratively while integrating multiple disciplines within a relatively short period. The block curriculum with PBL differs from traditional curricula in that it is modular and subject-focused, whereas traditional curricula are continuous and long-term in nature.

Assessments in block curricula are conducted at the end of each block, while traditional curricula use periodic cross-subject examinations. Learning in a block curriculum demands strict time management and active engagement, whereas non-PBL learning can proceed more gradually due to its cumulative nature. These differences contribute to higher stress levels in PBL-based curricula due to compressed workloads, while traditional curricula tend to produce moderate stress levels because tasks are distributed over time (Bamuhair et al., 2015).

Sources of stress in the block curriculum system are evident, including self-directed learning, consecutive examinations, shorter time frames, and highly dense material, all of which can be classified as academic stressors. On a personal level, students also face various specific stressors, such as general academic demands, financial difficulties, family problems, sleep disturbances, anxiety about the future, being far from family, conflicts with family or parents, interpersonal conflicts, lack of parental support, exposure to distressing news, changes in appetite, feelings of inferiority, issues with roommates, and transportation problems. These can be categorized into academic issues (related to learning) and non-academic issues, including social relationships, family dynamics, financial concerns, and supporting facilities such as transportation and housing (Bamuhair et al., 2015).

Stressors in the form of pressures and difficulties, whether external or internal, have the potential to disrupt academic achievement, which is typically reflected in students' grade point averages (GPA). In addition, psychological well-being and quality of life may also decline (Tao et al., 2019). In reality, academic achievement is influenced not only by psychological conditions but also by study duration, learning styles, learning strategies, and learning motivation (Chandra et al., 2022).

Therefore, self-adjustment and adaptation are essential in addressing the various challenges, difficulties, and stressors encountered by medical students during their learning process. A study has shown a significant relationship between self-adjustment and stress levels among new students, where improved adjustment efforts are associated with lower stress levels (Nola et al., 2025). On the other hand, coping strategies refer to the ways individuals manage and deal with challenges, difficulties, and stressors in a more adaptive manner (Joseph et al., 2021). Coping strategies are generally divided into two types: adaptive and maladaptive (Fullerton et al., 2021; Cherkil et al., 2013). It is expected that students employ adaptive coping strategies as part of their efforts to adjust, persist, and even excel in medical education.

This paper aims to explore the various academic and non-academic challenges and difficulties faced by first-year medical students, as well as to identify the factors influencing their academic achievement. This research is important because adaptation during the early years of study plays a crucial role in determining students' academic trajectories in subsequent years. Therefore, the findings are expected to serve as a basis for identifying the challenges and difficulties experienced by first-year students, enabling the development of learning strategies that support academic success without neglecting student well-being.

METHODE

This study employs a case study approach to explore the various challenges and difficulties experienced by first-year medical students at Borneo Tarakan University. The data were collected through interviews and observations involving multiple stakeholders, with a primary focus on students. A total of 18 informants participated in this study. They were selected using a purposive sampling technique based on specific criteria established by the researcher, such as individuals who hold authority in implementing activities or those who have direct knowledge of how the activities are carried out. The data were analyzed using content analysis, which involved organizing the summarized results of in-depth interviews and field observations into tables or matrices. These data were then analyzed and presented in a narrative form for interpretation.

To ensure validity, source triangulation was applied by cross-checking information obtained from different informants. In addition, methodological triangulation was conducted through the use of multiple data collection methods, including in-depth interviews and observations.

RESULT AND DISCUSSION

Pembelajaran di Prodi Kedokteran

The Medical Study Program at the Faculty of Medicine, Borneo Tarakan University, is a relatively new program that was officially established in 2024. In general, the learning process in this program requires a longer duration each semester compared to other study programs. A semester is defined as an effective learning period of 16 weeks, including the Mid-Semester Assessment (PTS) and Final Semester Assessment (PAS) for each course. However, within the same academic timeframe, the duration of study in the medical program whose learning outcomes are aligned with the Indonesian Medical Competency Standards and the National Standards for Indonesian Medical Professional Education generally extends an additional 4 to 5 weeks beyond that of other programs. The curriculum adopts a block system (equivalent to courses), in which each semester typically consists of three thematic blocks, each focusing on a specific topic. In addition, there are several non-block courses, which may be offered by the study program, the university, or as part of national requirements.

Each block is conducted over a period of approximately six weeks, meaning that the completion of three blocks requires about 18 weeks, culminating in the final block examination within the semester. Furthermore, each semester includes medical skills courses that are assessed through the Objective Structured Clinical Examination. The implementation of non-block courses whether at the program, university, or national level runs in parallel with the block system. However, the OSCE is typically conducted after all block and non-block learning activities have been completed. As a result, the total duration of a semester, starting from the first block through to the third block and concluding with the OSCE, reaches approximately 21 weeks, which is about five weeks longer than in other study programs.

Based on findings from literature reviews, interviews, and field observations, there are notable differences between the learning system in the Medical Study Program and those in other programs, as summarized in the following table.

Tabel 1. Differences in Learning Between the Medical Study Program and Other Study Programs

Statement	Medical Study Program	Non-Medical Study Program
Block Curriculum	Available	Not Available
Block Implementation in the Medical Study Program	Block I: Weeks 1–6; Block II: Weeks 7–12; Block III: Weeks 13–18	Not Available
Duration of Activities per Semester	20–21 weeks (until the completion of the final block and OSCE)	All courses follow the same schedule (16 weeks), including midterm (PTS) and final (PAS) assessments
Types of Non-Block Courses	General Courses (MKWU); Core Courses (MKWK); Several Program-Specific Courses	General Courses (MKWU); Core Courses (MKWK); Almost All Program-Specific Courses
Implementation of Non-Block Courses (MKWU/MKWK) in the Medical Program	16 weeks	16 weeks

Skills Lab / Medical Skills Course Learning Activities	Available at UBT as a standalone course; in some other universities, it is integrated into the block system	Typically available only in health-related programs (such as midwifery and nursing)
Duration of Medical Skills Course (Skills Lab) Implementation	Specifically follows the block schedule (can extend up to 18 weeks)	Not applicable
Implementation of Medical Skills Course Examination (OSCE)	Conducted after all block-based learning is completed	Not applicable
Lecture-Based Learning Activities	Available, both integrated within block and non-block systems	Available
Practicum-Based Learning Activities	Available, usually integrated within specific blocks	Typically, available in science-based programs
Tutorial-Based Learning Activities Using the Seven/Triple Jump Approach as an Implementation of Problem-Based Learning	Always available. Each block includes at least four tutorial scenarios, with each scenario requiring two sessions	Rarely available
Case Method: Daily Case-Based Approach	Applied across tutorials, medical skills training, and OSCE; all are based on case scenarios involving diseases or clinical conditions	Available but limited
Number of Sessions/Topics per Course or Block in Teaching	The number of topics in each block can exceed 14, depending on the block's requirements. Certain blocks are specifically dedicated to instruction and may include up to 25 topics	The average number of sessions/topics is around 14 per course
Source: Observations and Interviews		

Challenges and Difficulties of First-Year Medical Students

Based on observations, survey results, and validation through interviews, the following findings were identified:

Heavy Academic Workload

"When I first entered medical school, I immediately felt how intense and demanding the pace of life was. Every day was filled with a large amount of material, report assignments, practicums, and group discussions." (Inf 1)

"I am also afraid of failing and making mistakes, especially since people around me have very high expectations of me." (Inf 2)

"The first semester felt like a completely new world. Every day there was something new to learn: from understanding basic anatomy and unfamiliar medical terms to learning a clinical way of thinking that is very different from high school." (Inf 3)

"The overwhelming academic pressure, long study hours, and intense competition are realities we face every day." (Inf 4)

Academic Stress

Factors influencing academic stress can generally be classified into two categories: external and internal factors. Some responses include:

"I have failed the multiple-choice question (MCQ) exam three times in a row. There is too much material, making it difficult to manage my time. I've started to lose confidence in my abilities and still haven't found an effective study method." (Inf 5)

"I feel that academic issues are a major source of stress because the schedule is extremely packed. After lectures, there are continuous exams, and it becomes difficult to fully understand the material. Time management feels very challenging." (Inf 6)

Impact on Physical Health

"I experience sleep disturbances, and sometimes I feel confused about which material I should focus on because there is just too much to study." (Inf 7)

"The dense lecture schedule, consecutive exams, and ineffective study methods have disrupted my sleep pattern. It becomes even more difficult because I live alone in a boarding house." (Inf 8)

"I feel that the academic workload is very high, the schedule is tight, and as a result, I don't get enough rest." (Inf 2)

Motivation for Entering Medical School and Learning Motivation

"My motivation to study fluctuates because I entered medical school mainly due to my parents' encouragement." (Inf 9)

"I usually study outside of class for only about one to two hours, but my grades are still not satisfactory. I will try to increase my study time." (Inf 10)

Learning Adaptation, Study Patterns, and Time Management

Due to the demanding workload in the Medical Study Program and the relatively shorter duration for completing each block, one of the main challenges faced by students is adapting their learning strategies and managing their time effectively. While learning in high school is generally teacher-centered, higher education has shifted toward a Student-Centered Learning (SCL) approach.

The wide range of medical subjects requires students to be capable of conducting effective self-directed learning (Panjaitan & Isnayanti, 2020). In addition to the diversity of topics, the volume of material is also substantial. In a single block, students often encounter more than 16 topics, and in some cases up to 25 topics, all of which must be completed within approximately six weeks before the final examination.

Several student responses regarding adaptation, study habits, and time management indicate that while some have begun to adjust, others are still questioning certain learning methods, particularly tutorials:

"To make sure I cover all the material, I usually spend up to six hours a day studying outside campus." (Inf 4)

"I have completed my first six weeks as a medical student, and during that time I could really feel the rhythm of change." (Inf 11)

"I learned how to manage my time, set priorities, and find the study methods that work best for me." (Inf 1)

"I realized that adaptation is not just about surviving, but also about finding new ways to learn. I started getting used to making my own study schedule, discussing with friends, and trying different learning methods." (Inf 12)

"I turn off my phone while studying so I can focus better." (Inf 13)

"I deactivate social media applications throughout the semester to stay focused on studying. I only access them during holidays." (Inf 14)

In responding to Problem-Based Learning (PBL), which emphasizes independence and case-based discussions, students expressed varying perspectives. Some responded positively, while others questioned the effectiveness of tutorials as an implementation of PBL:

"Through Problem-Based Learning (PBL) and skills lab sessions, the learning process becomes more engaging, and I feel the positive impact, as students are encouraged to practice, think like doctors, and explore each case in depth." (Inf 11)

"Tutorials are not very important; they only benefit those who are good at speaking." (Inf 15)

Coping Strategies

Various ways of dealing with stressful and demanding conditions are referred to as coping strategies (Adaramola et al., 2022; Salam et al., 2019). The following are some student responses regarding how they cope with stress:

"I actively participate in religious activities as a way to heal and relieve stress." (Inf 16)

"Without good self-management, it is very easy to feel exhausted and lose motivation along the long journey of medical education." (Inf 1)

Learning Outcomes

Final block scores and the Grade Point Average (GPA) are the primary indicators of academic achievement among medical students. These measures not only reflect students' mastery of the material but also serve as benchmarks for the effectiveness of the learning process and their readiness to progress to the next stage of education. Learning outcomes are not determined solely by the amount of study time; they are also influenced by various other factors, such as learning strategies, motivation, and students' psychological conditions. Several studies have shown that longer study hours are positively associated with better academic performance, particularly in terms of GPA (Melati Sinaga et al., 2023).

"I feel satisfied with my GPA results. Although they are not optimal, given my condition, I am content." (Inf 14)

"I am not yet satisfied because it seems there is still room for improvement." (Inf 17)

The academic and non-academic challenges and difficulties are summarized in Table 2.

Tabel 2 Classification of Challenges and Difficulties Among First-Year Medical Students

No.	Challenges / Difficulties	Classification
1	Curriculum adaptation: transition from high school learning styles to a more independent/self-directed learning system	Academic Challenge
2	Difficulty in keeping up with the pace of block-based learning	Academic Challenge
3	Very high volume of material; not accustomed to reading in advance before lectures or tutorials	Academic Challenge
4	Learning methods: lectures, laboratory practicums, group discussions, and problem-based learning (PBL)	Academic Challenge
5	Exam pressure: block MCQ exams, practicum exams, OSCE (Objective Structured Clinical Examination), along with remedial exams	Academic Challenge
6	Still searching for effective study strategies	Academic Challenge
7	Stress and anxiety: resulting from academic workload and high expectations	Psychological and Emotional Challenge
8	Feelings of inferiority: comparing oneself to peers who grasp the material more quickly	Psychological and Emotional Challenge

9	Homesickness or feeling lonely in boarding accommodation (for students studying away from home)	Psychological and Emotional Challenge
10	Life balance: difficulty in managing time between studying, resting, and socializing	Psychological and Emotional Challenge
11	Campus environment adaptation: new culture, student organizations, and interactions with lecturers	Social and Environmental Challenge
12	Student competition: a competitive atmosphere that can create pressure	Social and Environmental Challenge
13	Limited social support: the absence of a well-established and solid peer network	Social and Environmental Challenge
14	Extracurricular activities: the dilemma between academic focus and personal development	Social and Environmental Challenge
15	Lack of sleep: due to a dense academic schedule and studying late into the night	Physical and Mental Health Challenge
16	Irregular eating patterns: often neglecting proper nutrition due to busy schedules	Physical and Mental Health Challenge
17	Physical fatigue: long practicums, clinical activities, and field assignments	Physical and Mental Health Challenge
18	Mental health risks: burnout, mild depression, or emotional exhaustion	Physical and Mental Health Challenge

Source: Observations and Interviews

The numerous challenges, difficulties, and stressors experienced by first-year medical students highlight the need for comprehensive support across academic, psychological, and social domains. The following are students' expectations and perspectives from the academic side:

"Due to the high academic pressure, I feel that the faculty should provide easily accessible mental health counseling services for students." (Inf 4)

"From an academic perspective, the early-semester blocks are designed to help students become more adaptive and resilient, as they include materials and topics that guide them in developing the qualities needed to succeed as medical students." (Inf 18)

KESIMPULAN

The primary challenges, difficulties, and stressors faced by first-year medical students largely fall into both academic and non-academic categories. The non-academic aspects can be further divided into psychological and emotional challenges, social and environmental challenges, as well as physical and mental health challenges, all of which may ultimately influence academic performance, particularly students' grade point averages. Therefore, comprehensive support from academic, psychological, and social perspectives is considered essential. Such support is expected to help students adapt effectively and develop into resilient future doctors. Further research is recommended to empirically examine the challenges and difficulties of first-year medical students through case studies, action research, or mixed-method approaches across different regions.

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