

Assessing The Dual Influence Of Academic Burden And Lifestyle On Mental Well-Being Among Pharmacy Students

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ABSTRACT

Introduction: Mental health among university students, particularly in demanding fields like pharmacy, is affected by both academic stress and lifestyle factors. While academic stressors such as workload, exams, and career concerns have been extensively studied, there is a lack of research on how lifestyle behaviors like exercise, diet, and sleep affect mental health outcomes in this group. This study aims to assess the combined impact of academic stress and lifestyle behaviors on the mental health of pharmacy students. **Methods:** A cross-sectional survey was conducted at a pharmacy college with 219 students (106 from B. Pharm and 113 from M. Pharm courses) aged 15–40 years. Participants were assessed using standardized questionnaires, including the CES-D for depression, the GAD-7 for anxiety, and the PSS for stress. Lifestyle factors such as physical activity, diet, sleep patterns, and substance use were also evaluated. Additionally, coping strategies, including peer support and seeking professional help, were assessed. Data were analyzed using descriptive statistics to explore correlations between academic stress, lifestyle behaviors, and mental health outcomes. **Results:** The study found that 31.1% of students reported feeling frequently overwhelmed by academic responsibilities, with 23.6% experiencing depressive symptoms and 51.9% reporting anxiety. Among lifestyle behaviors, 48.7% engaged in regular exercise, while 26.5% practiced yoga and 31.9% meditated. Poor diet (40.1%) and irregular sleep patterns (22%) were associated with higher stress levels. Interestingly, students who engaged in regular physical activity or meditation reported significantly better mental health outcomes. While 81.1% of students were aware of mental health resources, only 67% were comfortable seeking professional help. **Conclusion:** The findings demonstrate that both academic stress and lifestyle factors significantly impact the mental health of pharmacy students. To mitigate stress and improve mental well-being, universities should implement holistic wellness programs that integrate academic support with lifestyle interventions such as promoting physical activity, healthy eating, and sleep hygiene. Increased awareness of mental health resources and reducing the stigma surrounding seeking help are also essential components of such programs.

Keywords

Academic stress, coping strategies, lifestyle, mental health, pharmacy students.

INTRODUCTION

Mental health has become a focal issue in higher education, particularly for students in demanding programs like pharmacy. The pressures of academics, coupled with lifestyle factors

such as diet, physical activity, and sleep, can significantly influence student well-being. While university education equips students with the knowledge and skills needed for professional success, it also exposes them to a range of stressors that can adversely affect their mental health. Academic stress, in particular, has been shown to be a major contributor to anxiety, depression, and overall psychological distress among students. However, lifestyle factors, such as physical activity, sleep patterns, and diet, also play a significant role in shaping mental health outcomes.

Pharmacy students, in particular, face unique challenges due to the demanding nature of their coursework, which often includes a heavy load of exams, assignments, and practical training. These academic pressures are compounded by lifestyle factors, as many students struggle with maintaining a balanced diet, engaging in regular exercise, and managing their sleep schedules. Despite the high level of academic stress experienced by pharmacy students, few studies have integrated academic stress with lifestyle factors to examine their combined effect on mental health.

Academic stress among students has been widely documented in the literature. Studies have shown that a significant proportion of university students experience high levels of stress related to exams, deadlines, and future career uncertainties. For instance, research conducted by Smith et al. (2018) revealed that 50% of college students report being overwhelmed by academic stress, which can lead to symptoms of depression and anxiety. The academic burden placed on students is often compounded by the pressure to perform well academically, which can create a cycle of stress that affects both mental and physical health.

On the other hand, lifestyle behaviors such as diet, exercise, and sleep have also been identified as critical factors influencing mental health. Physical activity, for example, has been shown to have a positive impact on mental well-being, as exercise releases endorphins that promote feelings of happiness and reduce stress. Studies such as those by Greenberg (2017) have highlighted the benefits of exercise and mindfulness practices like yoga and meditation in reducing anxiety and depressive symptoms. Conversely, poor dietary habits, lack of physical activity, and irregular sleep patterns can exacerbate feelings of stress and anxiety.

Despite the wealth of research on academic stress and lifestyle factors individually, few studies have explored the combined impact of both on student mental health. This research aims to fill this gap by investigating how academic stress and lifestyle behaviors interact to influence the mental health of pharmacy students. Understanding this interplay is crucial for developing effective interventions that address both academic and lifestyle-related factors in improving student well-being.

The primary objectives of this study are:

- To assess the prevalence of depression, anxiety, and stress among pharmacy students.
- To evaluate the relationship between lifestyle behaviors (such as physical activity, diet, and sleep) and mental health outcomes.
- To explore students' coping strategies and their awareness of mental health resources.
- To provide recommendations for universities to develop holistic interventions that address both academic and lifestyle-related factors affecting student mental health.

This study is significant because it will provide insights into how universities can support students by addressing both the academic and lifestyle factors that contribute to mental health problems. By focusing on pharmacy students, who are often under unique academic pressures, the study will contribute to the broader understanding of student mental health in higher education.

MATERIALS AND METHODS

Study Design:

This research utilized a cross-sectional survey design to examine the relationship between academic stress, lifestyle behaviors, and mental health outcomes among pharmacy students. A cross-sectional approach is ideal for capturing a snapshot of the current mental health status of students and understanding the factors contributing to it.

Participants:

The study involved 219 pharmacy students aged between 15 and 40 years. These students were enrolled in B. Pharm, M. Pharm, and D. Pharm courses at a pharmacy college. The sample was divided into two groups, with 106 participants from Survey 1 and 113 participants from Survey 2. The majority (95.6%) of participants were between the ages of 15–25 years. Inclusion criteria included students currently enrolled in the pharmacy program, while those with previous psychiatric diagnoses or who were not actively enrolled in the courses were excluded.

Data Collection:

Data were collected using structured questionnaires administered both online via Google Forms and through direct questionnaires distributed during class sessions. The questionnaires were designed to assess various factors:

- **Demographics:** Age, gender, course level (B. Pharm, M. Pharm, or D. Pharm).
- **Academic Stress:** A series of questions assessing academic burden, including workload, examination stress, and career anxiety.
- **Mental Health Indicators:** The study measured depression, anxiety, and stress using standardized scales such as the CES-D scale for depression, the GAD-7 scale for anxiety, and the Perceived Stress Scale (PSS) for stress.
- **Lifestyle Behaviors:** Participants were asked about their physical activity levels, dietary habits, sleep patterns, and substance use (e.g., smoking, alcohol, drugs).
- **Coping Strategies:** A section of the questionnaire assessed the types of coping mechanisms students use, such as peer support, professional help, exercise, meditation, or avoidance.
- **Awareness of Mental Health Resources:** Participants were asked whether they were aware of the mental health resources available at the university and whether they felt comfortable seeking professional help.

Data Analysis:

Data collected from the questionnaires were entered into Microsoft Excel for analysis. Descriptive statistics were used to summarize demographic information, prevalence of mental health symptoms, lifestyle behaviors, and coping strategies. The prevalence of depression,

anxiety, and stress was calculated by determining the percentage of students who met the criteria for each condition. Correlation analysis was used to explore the relationship between lifestyle factors and mental health outcomes.

OBSERVATION AND RESULTS

Demographics:

Of the 219 participants, 59% were female, and 41% were male. Most participants (95.6%) were between the ages of 15–25 years. The majority of the sample were enrolled in B. Pharm courses (82.8%), with smaller proportions enrolled in M. Pharm (12.3%) and D. Pharm (4.9%).

Academic Stress:

31.1% of students reported feeling frequently overwhelmed by academic responsibilities, reflecting high levels of academic stress. When asked about the sources of stress, the majority of students identified examinations (40.2%) and the heavy workload (35.6%) as the most significant contributors.

Mental Health Indicators:

- **Depression:** 23.6% of students reported frequent depressive symptoms, as measured by the CES-D scale.
- **Anxiety:** 51.9% of students reported experiencing symptoms of anxiety, as measured by the GAD-7 scale.
- **Stress:** 40.3% of students reported moderate to high levels of perceived stress, based on the PSS scale.
- **Sleep Disturbances:** Approximately 22% of students reported experiencing sleep disturbances, which were correlated with higher levels of stress.

Lifestyle Behaviors:

- **Physical Activity:** 48.7% of students engaged in regular physical exercise (at least three times a week), which was associated with lower levels of depression and anxiety.
- **Yoga and Meditation:** 26.5% practiced yoga, and 31.9% engaged in meditation, both of which were linked to improved mental health outcomes.
- **Dietary Habits:** 40.1% of students reported poor dietary habits, including irregular meal times and excessive consumption of junk food. Poor diet was associated with higher levels of stress and anxiety.
- **Substance Use:** Only 10.5% of students reported regular use of alcohol or tobacco, with substance use being positively correlated with depressive symptoms.

Coping Strategies and Support:

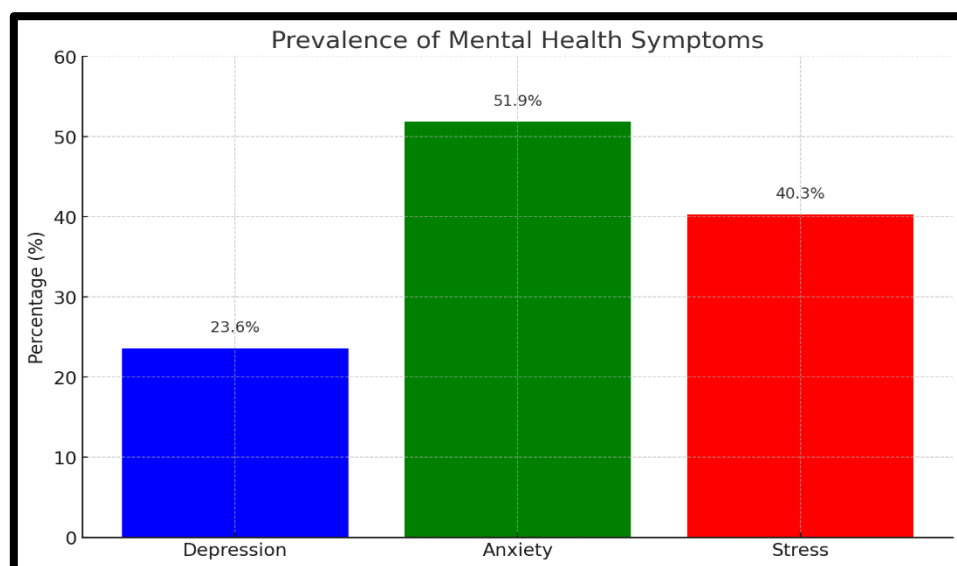
- 87.7% of students reported strong peer support, which was associated with better mental health outcomes.
- 67% of students were comfortable seeking professional help for mental health issues.
- 81.1% of students were aware of mental health resources available at the university.

Overall Well-being:

- 52.8% of participants rated their overall well-being as excellent.
- 37.7% rated it as good, and 9.4% rated it as average.

Table 1: Demographics of Participants

Variable	Percentage (%)
Female	59%
Male	41%
Age 15–25	95.6%
B. Pharm	82.8%
M. Pharm	12.3%
D. Pharm	4.9%

Figure 1: Prevalence of Mental Health Symptoms

A bar graph illustrating the prevalence of depression, anxiety, and stress among participants.

**Figure 2: Lifestyle Behaviors and Mental Health**

A scatter plot showing the correlation between regular physical activity and reduced symptoms of depression and anxiety.

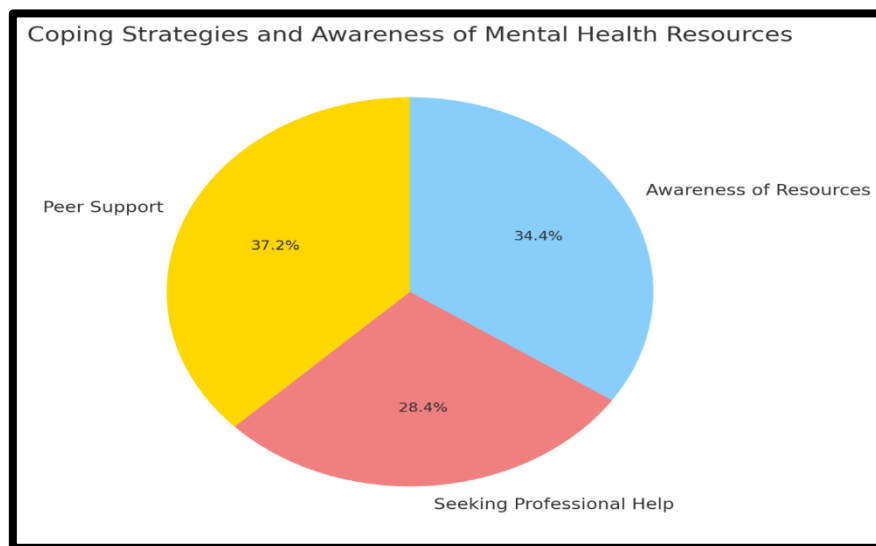


Figure 3: Coping Strategies and Awareness of Mental Health Resources The pie chart represents the coping strategies and awareness of mental health resources. A significant majority of students reported strong peer support and were aware of mental health resources available at their university.

DISCUSSION

This study highlights the dual impact of academic stress and lifestyle behaviors on the mental health of pharmacy students. The results indicate that academic stress, particularly from examinations and workload, is a significant contributor to depression, anxiety, and stress. These findings align with previous research showing that academic pressure is a major source of distress for students in demanding fields such as pharmacy. Moreover, the study confirms the important role of lifestyle factors in influencing mental health outcomes. Regular physical activity, yoga, and meditation were protective factors against depression and anxiety, supporting the findings of prior studies that emphasize the benefits of exercise and mindfulness practices in improving psychological well-being.

However, the study also reveals that a significant proportion of students do not engage in regular stress-relieving activities, suggesting that lifestyle interventions should be a key focus of university wellness programs. Poor dietary habits and irregular sleep patterns were also linked to higher levels of stress, further emphasizing the need for universities to promote healthy lifestyle behaviors among students.

Peer support and awareness of mental health resources emerged as important protective factors. The fact that 87.7% of students reported strong peer support and 67% felt comfortable seeking professional help suggests that stigma surrounding mental health may be decreasing. This is a positive trend, as reducing the stigma associated with seeking help is essential for improving mental health outcomes among students.

The findings underscore the need for universities to implement holistic wellness programs that address both academic stress and lifestyle factors. These programs should focus on promoting healthy lifestyle behaviors such as regular physical activity, balanced nutrition, and adequate sleep, as well as providing academic support to reduce stress.

CONCLUSION

This study demonstrates that both academic stress and lifestyle behaviors significantly affect the mental health of pharmacy students. Academic stress, particularly from exams and workload, contributes to high levels of anxiety, depression, and stress. Lifestyle factors such as exercise, diet, and sleep play crucial roles in moderating these effects. The study also highlights the importance of peer support and awareness of mental health resources in reducing psychological distress.

Given the findings, universities should adopt comprehensive wellness programs that address both academic and lifestyle-related factors. These programs should incorporate stress-management workshops, time-management training, and initiatives to promote physical activity, healthy eating, and better sleep habits. Peer support networks should be fostered, and counseling services should be made more accessible to reduce the stigma surrounding mental health care.

By taking a holistic approach to student well-being, universities can help students develop resilience, reduce stress, and improve their overall mental health. This, in turn, will enhance academic performance and life satisfaction, supporting the long-term success and well-being of students.

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