Section: Biochemistry

Original Research Article

TIME MANAGEMENT SKILLS IN FIRST-YEAR MBBS STUDENTS: PERCEIVED BENEFITS OF A STRUCTURED TRAINING SESSION

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Received : 23/12/2024
Received in revised form : 12/02/2025
Accepted : 27/02/2025

Keywords:
Time Management, National Medical Council, foundation course, Action Priority Matrix

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DOI: 10.47009/jamp.2025.7.1.225

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2025; 7 (1); 1155-1160

Abstract

Background: Time management is an essential skill for medical students to effectively balance academic, personal, and social responsibilities. This study assesses the time management skills of first-year MBBS students and examines the perceived benefits of a structured training session introduced as part of the foundation course mandated by the National Medical Council. **Materials and Methods:** A cross-sectional study was conducted during the foundation course at Government Medical College, Mahabubnagar, involving 128 first-year MBBS students (69.53% female). The training session, aligned with the competency FC 4.9, consisted of a time management questionnaire, an interactive lecture, group discussions, and activities using the Eisenhower Action Priority Matrix. Data analysis included descriptive statistics for questionnaire scores and qualitative content analysis of student feedback. **Result:** The study revealed an average student age of 18.26 ± 0.96 years. Over a third of participants scored in the average or below-average range for time management, with female students scoring significantly higher (50.48 ± 9.22) than males (45.41 ± 9.01, p = 0.0049). While students demonstrated awareness of prioritization strategies, over 50% admitted to not using planners or waiting time productively. Social media and excessive socializing emerged as common distractions. The use of the Action Priority Matrix was highly appreciated, with students reporting improved understanding and practical application of time management strategies. Feedback indicated a 96.09% positive impact on students' perceptions and skills. **Conclusion:** Structured time management training significantly enhances students' skills and awareness, emphasizing the importance of such interventions early in medical education. These findings highlight the need for tailored, long-term strategies to address demographic-specific needs and further improve time management practices among medical students.

INTRODUCTION

Time management is the ability to effectively utilize time through careful planning and mindful control to enhance efficiency and productivity. Time management is a crucial skill for medical students who face intense academic requirements while needing to balance personal and social responsibilities.[1,2] Recent research has focused on understanding the factors that influence students' time management abilities and the role of targeted training in enhancing these skills.[3,4]

Students face a variety of academic, social, and extracurricular responsibilities, making effective time management essential. This includes allocating sufficient time for daily routines, learning activities,[3] and sociocultural, and sport-related engagements.[4] Studies indicate that effective time management positively impacts academic performance and reduces stress in medical students, thereby supporting their overall well-being.[5,6] Studies have shown that early interventions can significantly impact students' ability to organize, prioritize, and execute tasks, setting the foundation for long-term success.[7]

Unfortunately, the importance of time management has not traditionally been emphasized in undergraduate or postgraduate medical education

ISSN (O): 2687-5365; ISSN (P): 2753-6556

curricula.[8] This has often resulted in poor time-management practices among students. Recognizing this, the National Medical Council (NMC) includes time management training within its foundation course to cultivate professional skills early in medical education.[9]

Various Time management techniques have been developed, such as minimizing time wastage, prioritizing tasks, creating structured task lists, tackling challenging tasks first, and recognizing individual and social factors that influence Time Management.[7] Setting priorities, planning both short- and long-term activities, and determining optimal strategies are crucial for achieving goals.[10,11] One effective self-management tool for improving time management is the Action Priority Matrix, also known as the Eisenhower Matrix or Urgent-Important Matrix.[12]

The present study intends to explore the perceived benefits of time management training, examining both strengths and gaps in students' current skills and introduce them to practical techniques such as the Action Priority Matrix to enhance their time-management skills.

MATERIALS AND METHODS

This cross-sectional study was conducted at Government Medical College, Mahabubnagar, involving 128 first-year MBBS students (89 females and 39 males). They joined the foundation course after securing a medical seat through the NEET entrance exam and provided consent for their participation. In accordance with National Medical Council guidelines, the foundation course included a 2.5-hour session on time management under the Professional Development and Ethics Module (4H), targeting the competency FC 4.9. This session was designed as both an interactive lecture and activity-based learning, aligning with the objectives and methodology outlined in the guidelines.

The session began with students completing a standardized "Time Management Questionnaire" consisting of 20 questions, each rated on a 5-point Likert scale, to self-evaluate their time management skills. The questionnaire scores ranged from 0 to 80, with ratings as follows: good time management skills (54 or higher), average time management skills (46–53), skills that need improvement (36–45), and poor (35 or below). Following this, an activity titled “What They Did Yesterday” engaged students by having them list three accomplishments from the previous day and one unproductive activity. This icebreaker aimed to highlight the relevance of time management.

An interactive 30-minute lecture then covered the importance of time management in the medical field and key strategies for effective time management. Following this the students were asked to list their academic and non-academic activities and to prioritize them using the “Action Priority Matrix (Eisenhower Matrix)” which is a task management tool that helps in organizing and prioritizing tasks by urgency and importance. Students also worked in groups of 10 to identify common distractions and interruptions faced by MBBS students, discuss them, and present possible solutions. The session concluded with a summary of key takeaways, followed by a feedback collection on the session.

Data from the session were entered into an MS Excel spreadsheet. Descriptive data analysis was performed on the time management assessment scores, and a qualitative content analysis was conducted on the responses from the action priority matrix and the feedback provided by the students.

RESULTS

A total of 128 students participated in the study, with ages ranging from 17 to 21 years and an average age of 18.26 ± 0.96 years. Of these, 69.53% were female (n = 89), while 30.47% were male (n = 39) [Figure 1].

About 34.38% of students scored in the average or below-average range on the time management assessment. Time management score analysis under various grades is showed in [Table 1].

The overall mean time management score was 48.94 ± 9.45, with scores ranging from 19 to 74. Female students had a higher mean score of 50.48 ± 9.22 compared to male students, whose mean score was 45.41 ± 9.01. This difference was statistically significant, with a p-value of 0.0049 ($p < 0.05$, calculated using Student's unpaired t-test). More than 50 % of the students agreed to not making daily task lists, not reviewing their planners regularly, and not using waiting time productively [Table 2].

Mean scores were highest (above 3) for items 4, 9, and 16 i.e., I prioritize the tasks according to their importance and urgency, I do the most important tasks at my best time during the day and I finish at least one thing every day. On the other hand, mean scores were low (less than 2) for item numbers 2, 6, 8, 12, 14 i.e., I make a list of tasks to accomplish each day, I make a list of short five- or ten-minute tasks to do, I review my planner each day after I complete my tasks, I periodically evaluate the use of my time while using my academic calendar/ time log, I do something productive whenever I am waiting [Table 3].

Content analysis of task prioritization done by the students using Eisenhower’s action priority matrix was done with results presented in tabular form across different categories [Table 4].

Feedback Summary: A vast majority (99.22%, n = 127) of the students agreed that time management is an essential skill to be trained in. Only one student disagreed, stating that time management should be self-driven rather than formally taught. Additionally, 96.09%(n=123) of students reported that the session enhanced their understanding and perspective on time management, and 89.06%(n=114) expressed

ISSN (O): 2687-5365; ISSN (P): 2753-6556

that they plan to apply the techniques discussed in their daily lives.

Open-Ended Feedback:

The feedback included two open-ended questions:

1. What challenges or obstacles do you anticipate in applying the training knowledge/skills, and how do you plan to overcome them?
2. What aspects of the session did you find most valuable or beneficial?

Challenges: Many students anticipated obstacles like social media distractions (movies, Instagram, etc.), procrastination, laziness, peer influence, excessive socializing, overthinking, lack of motivation, and homesickness (for those in hostels). Suggested solutions included setting limits on screen and socializing time, turning off phones, practicing meditation for focus and self-control, making daily to-do lists, prioritizing activities, setting deadlines, and maintaining strict personal boundaries.

Most Valuable Aspects: The most frequently cited benefits of the session included:

- "Realizing the importance of early sensitization to time management."
- "Understanding the role of time management in securing a successful future."
- "Learning that time management can help reduce stress and conserve energy."
- "Developing the discipline to stick to a time plan."
- "Using the Action Priority Matrix (Eisenhower Matrix) to prioritize tasks."
- "Identifying personal time management habits through the assessment form."
- "Recognizing distractions and learning strategies to overcome them, such as saying 'no' and limiting social media."
- "Gaining tools to overcome procrastination."

These reflections indicate that the session effectively raised awareness and equipped students with strategies to manage time effectively.

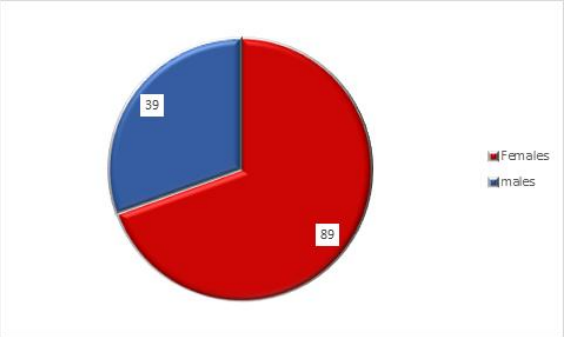

Figure 1: Gender Distribution of students

Table 1: Time management assessment score of the study participants.

Time management assessment grading	Poor	Can do some work	Average	Good
	35 and below	36 – 45	46 – 53	54 or higher
Females	4	22	30	33
Males	7	11	14	7
Total	11	33	44	40

Table 2: Responses for items of time management skills assessment by students (n=128)

Item No	Item	Responses – number (%)				
		0- Never	1-Seldom	2-Sometimes	3-Often	4-Always
1	I read selectively, skimming the material until I find what is important, then highlighting it.	4(3.13)	11(8.59)	40(31.25)	45(35.16)	28(21.88)
2	I make a list of tasks to accomplish each day	19(14.84)	32(25)	40(31.25)	24(18.75)	13(10.16)
3	I keep everything in its proper place	12(9.38)	18(14.06)	26(20.31)	35(27.34)	37(28.91)
4	I prioritize the tasks I have to do according to their importance and urgency.	1(0.78)	0(0)	8(6.25)	49(38.28)	70(54.69)
5	I concentrate on only one important task at a time, but I do multiple trivial tasks at once (such as writing home work while talking on the phone).	4(3.13)	14(10.94)	36(28.13)	49(38.28)	25(19.53)
6	I make a list of short five- or ten-minute tasks to do	59(46.09)	26(20.31)	23(17.97)	14(10.94)	6(4.69)
7	I divide large projects into smaller, separate stages	2(1.56)	9(7.03)	29(22.66)	51(39.84)	37(28.91)
8	I review my planner each day after I complete my tasks	40(31.25)	19(14.84)	29(22.66)	23(17.97)	17(13.28)
9	I do the most important tasks at my best time during the day.	4(3.13)	2(1.56)	22(17.19)	45(35.16)	55(42.97)
10	I have some time during each day when I can work uninterrupted	11(8.59)	14(10.94)	43(33.59)	39(30.47)	21(16.41)
11	I do today what needs to be done. I don't procrastinate	5(3.91)	26(20.31)	52(40.63)	36(28.13)	9(7.03)
12	I periodically evaluate the use of my time while using my academic calendar/ time log	32(25)	20(15.63)	30(23.44)	29(22.66)	17(13.28)
13	I set deadlines for myself if they are not provided for me	11(8.59)	15(11.72)	29(22.66)	42(32.81)	31(24.22)

ISSN (O): 2687-5365; ISSN (P): 2753-6556

14	I do something productive whenever I am waiting	30(23.44)	35(27.34)	37(28.91)	16(12.5)	10(7.81)
15	I avoid time wasters	4(3.13)	23(17.97)	57(44.53)	32(25)	12(9.38)
16	I finish at least one thing every day	1(0.78)	5(3.91)	11(8.59)	35(27.34)	76(59.38)
17	I schedule some time during the day for personal time alone (for planning, meditation, prayer, exercise).	14(10.94)	19(14.84)	23(17.97)	28(21.88)	44(34.38)
18	I set goals for the academic year. (Academic, Personal, Spiritual) –Long Term	5(3.91)	8(6.25)	24(18.75)	39(30.47)	52(40.63)
19	I set goals for myself each semester. (Academic, Personal, Spiritual…etc.)	4(3.13)	8(6.25)	30(23.44)	34(26.56)	52(40.63)
20	I continually try to find little ways to use my time more efficiently.	5(3.91)	12(9.38)	37(28.91)	43(33.59)	31(24.22)

Table 3: Mean score of time management skills

Item No	Item	Mean ±SD	MODE
1	I read selectively, skimming the material until I find what is important, then highlighting it.	2.64±1.01	3
2	I make a list of tasks to accomplish each day	1.84±1.19	2
3	I keep everything in its proper place	2.52±1.29	4
4	I prioritize the tasks I have to do according to their importance and urgency.	3.46±0.68	4
5	I concentrate on only one important task at a time, but I do multiple trivial tasks at once (such as writing home work while talking on the phone).	2.60±1.02	3
6	I make a list of short five- or ten-minute tasks to do	1.08±1.22	0
7	I divide large projects into smaller, separate stages	2.88±0.96	3
8	I review my planner each day after I complete my tasks	1.67±1.41	0
9	I do the most important tasks at my best time during the day.	3.13±0.96	4
10	I have some time during each day when I can work uninterrupted	2.35±1.14	2
11	I do today what needs to be done. I don't procrastinate	2.14±0.95	2
12	I periodically evaluate the use of my time while using my academic calendar/ time log	1.84±1.37	0
13	I set deadlines for myself if they are not provided for me	2.52±1.22	3
14	I do something productive whenever I am waiting	1.54±1.20	2
15	I avoid time wasters	2.20±0.94	2
16	I finish at least one thing every day	3.41±0.86	4
17	I schedule some time during the day for personal time alone (for planning, meditation, prayer, exercise).	2.54±1.37	4
18	I set goals for the academic year. (Academic, Personal, Spiritual) –Long Term	2.98±1.09	4
19	I set goals for myself each semester. (Academic, Personal, Spiritual…etc.)	2.95±1.08	4
20	I continually try to find little ways to use my time more efficiently.	2.65±1.06	3

Table 4: Content analysis of Eisenhower's Action priority matrix

DO Urgent and important	Decide Not urgent but important
1. Choosing and purchasing text books for first year subjects 2. Buy essential for academics 3. Make a study schedule 4. Study every day topics covered in the lectures 5. Complete my records 6. Wake up early 7. Exercise everyday 8. Play cricket every day for half an hour 9. Do Meditation and yoga everyday 10. Calling parents daily 11. Organizing study space 12. Join a literature club 13. Make a healthy diet schedule 14. Making friends	1. Scoring good marks in first year 2. Getting distinctions in at least 3 subjects 3. Getting a gold medal 4. Cracking the NEET PG exam in first attempt 5. Become a good surgeon 6. Research in oncology 7. Publish article in journal 8. Improve vocabulary 9. Develop communication skills 10. Learning to ride a bike 11. Lose weight 12. Maintain fitness 13. Growing hair 14. Control anger issues 15. To learn to create apps 16. Learn stress management 17. Start a you tube channel 18. Explore the places across the country 19. Work and changes in behavioural aspects 20. Getting a good name in the society 21. Becoming independent 22. Learning cooking and driving
Delegate Urgent but not important	**Delete Neither urgent nor important**
1. Watering plants 2. Washing and Ironing clothes 3. Hostel room cleaning 4. Scholarship work 5. Creating UPI account 6. Clearing memory in phone 7. Calling relatives 8. Packing bags 9. Attend family functions	1. Stop scrolling videos on social media 2. Watching Instagram reels 3. Watching movies, web series 4. Playing online/ video games 5. Excessive sleeping 6. Excessive caring for facial appearance 7. Interfering in others fights 8. Getting overexcited 9. Chitchatting with friends 10. Stop day dreaming

ISSN (O): 2687-5365; ISSN (P): 2753-6556

	11. Reading novels 12. Listening to music for more than an hour 13. Browsing through profiles/IDs 14. Window shopping

DISCUSSION

The findings of this study highlight both the strengths and areas for improvement in time management skills among students, emphasizing the potential of training to enhance these abilities. The demographic profile revealed that most participants were female, which aligns with a similar study by Misra & McKean in 2000 showing a higher female representation in studies on time management in academic settings.[3] The study's mean age and age range suggest that these students,[17-21] who are early in their academic careers, are at a critical stage for developing effective time management skills that may influence both their academic success and long-term productivity.[4,13]

The data on time management skills indicated that over a third of students scored in the average or below-average range, with female students generally scoring higher than male students. These results support existing research showing gender-based differences in time management, where females often score higher due to a greater focus on organizational skills and goal-setting.[14] The statistically significant difference between male and female scores ($p < 0.05$) highlights the need for targeted interventions that address these differences, potentially through tailored workshops or gender-sensitive time management strategies.

[Table 2] results indicate that over 50% of students do not regularly make task lists, review planners, or use waiting time productively—common time management practices. This finding is significant because effective task listing and daily planning have been positively correlated with academic achievement and lower stress levels among students.[7,13] Students in this study scored highest in prioritizing urgent tasks, completing tasks daily, and focusing on important tasks during peak productivity times (mean scores above 3), suggesting an awareness of prioritization but a lack of regular planning.

A substantial number of students acknowledged that distractions like social media and excessive socializing impact their productivity, echoing studies on the adverse effects of technology on time management.[15,16] However, the use of the Eisenhower Action Priority Matrix as a training tool appeared to resonate with students, with feedback indicating that many found it helpful in identifying and categorizing tasks. Students cited this method as a valuable aspect of the session, particularly for task prioritization and identifying time wasters. The open-ended feedback also highlighted that students plan to limit distractions, set boundaries, and develop discipline, demonstrating increased awareness of personal responsibility in managing time effectively.

Nearly all students agreed on the importance of time management training, with 96.09% reporting a positive change in their understanding of time management. This suggests that structured training is effective in not only enhancing awareness but also in equipping students with practical strategies, such as creating to-do lists and using task prioritization tools, to manage time more efficiently.[17]

This study reinforces the value of early time management training, showing that students who receive structured instruction in time management skills may better cope with academic demands, reduce stress, and enhance overall productivity. Future studies should consider longitudinal designs to assess the long-term impact of such interventions on academic and personal success, as well as tailored training programs to meet the specific needs of diverse student demographics.

CONCLUSION

This study underscores the critical role of time management training in equipping students with skills to navigate academic and personal challenges effectively. Students were able to recognize the significance of time management and the necessity of prioritizing their activities effectively. Thus, Integrating structured time management training early in academic programs can have far-reaching benefits, including enhanced academic performance, reduced stress, and improved productivity. The acknowledgment of distractions and the proactive steps students plan to take signal increased awareness and commitment to personal responsibility in time management. Future research can be directed to explore the longitudinal effects of these interventions, particularly how they influence students' long-term academic and professional outcomes.

Acknowledgement

The authors express our sincere gratitude to the management and the foundation committee members for successfully conducting the foundation course. We also thank the students who participated in this study for their valuable time and insights. Their active engagement and honest feedback were instrumental in understanding the dynamics of time management skills among students.

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ISSN (O): 2687-5365; ISSN (P): 2753-6556

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ISSN (O): 2687-5365; ISSN (P): 2753-6556