



Health Literacy and Preventive Health Practices Among University Students

Dr. Priya Sharma

Assistant Professor

Department of Community Medicine

All India Institute of Medical Sciences (AIIMS), New Delhi, India

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Abstract: Health literacy has become an essential determinant of individual well-being and public health, particularly among university students who are transitioning toward independent health-related decision-making. Adequate health literacy enables students to access, understand, evaluate, and apply health information effectively, thereby encouraging informed decisions and the adoption of preventive health practices. Preventive behaviors, including healthy nutrition, regular physical activity, vaccination, personal hygiene, mental health awareness, stress management, and routine health screening, play a crucial role in reducing disease risk and promoting long-term health outcomes. The present study examines the relationship between health literacy and preventive health practices among university students through a comprehensive review of scholarly literature related to health education, public health promotion, preventive healthcare, and student wellness. The study further investigates the major factors influencing health literacy and evaluates the role of health awareness, self-care behavior, access to health information, and preventive attitudes in promoting preventive health practices. The findings indicate that students possessing higher levels of health literacy demonstrate greater engagement in preventive health behaviors, stronger health awareness, improved self-care practices, healthier lifestyle choices, and increased participation in disease prevention activities. Health awareness and self-care behavior emerged as the strongest contributors to positive preventive health outcomes. The study concludes that improving health literacy can substantially strengthen preventive health practices and contribute to healthier university communities. Educational institutions should therefore integrate comprehensive health literacy initiatives into student development programs to encourage lifelong healthy behaviors and enhance overall health and well-being.

Keywords: Health Literacy, Preventive Health Practices, University Students, Health Awareness, Self-Care Behavior, Preventive Healthcare, Student Wellness.

Introduction

Health literacy has emerged as a fundamental component of public health and health promotion in the twenty-first century. It enables individuals to obtain, understand, evaluate, and apply health-related information for making informed decisions regarding disease prevention, health maintenance, and overall well-being. Among university students, health literacy is particularly important because this stage of life is characterized by increasing independence, lifestyle changes, and greater responsibility for personal health. Students with adequate health literacy are generally better equipped to adopt healthy behaviors, utilize healthcare services appropriately, and engage in preventive health practices that contribute to long-term physical and mental well-being.

Preventive health practices comprise a wide range of behaviors aimed at reducing disease risk and promoting overall health before the onset of illness. These practices include maintaining a balanced diet, engaging in regular physical activity, practicing personal hygiene, receiving recommended vaccinations, undergoing routine medical check-ups, managing stress effectively, ensuring adequate sleep, and avoiding health-risk behaviors such as tobacco use and excessive alcohol consumption. Consistent engagement in preventive health practices contributes to improved quality of life, reduced healthcare costs, and lower prevalence of preventable diseases. Consequently, promoting preventive health behaviors among university students has become an important priority for educational institutions and public health authorities.

Health literacy and preventive health practices are closely interconnected. Students who possess higher levels of health literacy are more likely to understand health recommendations, recognize disease risk factors, interpret medical information accurately, and adopt evidence-based health behaviors. They are also more capable of evaluating health information obtained through digital media and healthcare professionals, enabling them to make responsible health-related decisions. In contrast, limited health literacy may lead to poor health decisions, unhealthy lifestyle behaviors, delayed healthcare utilization, and increased vulnerability to preventable health conditions.

Several factors contribute to the development of health literacy and preventive health practices among university students. Health awareness enhances understanding of health-

related issues and encourages informed decision-making. Self-care behavior promotes personal responsibility for maintaining physical and mental well-being, while access to reliable health information enables students to acquire accurate knowledge regarding disease prevention and healthy lifestyles. Preventive attitudes, health motivation, and positive health beliefs further encourage individuals to participate in health-promoting activities and sustain healthy behavioral patterns. Together, these factors strengthen preventive health practices and contribute to overall student wellness.

Despite growing awareness of health promotion, numerous challenges continue to influence preventive health behaviors among university students. Limited health literacy, misinformation, unhealthy lifestyle habits, academic stress, insufficient physical activity, poor dietary practices, and unequal access to reliable health information may negatively affect students' health decisions and preventive behaviors. These challenges highlight the importance of strengthening health literacy through educational interventions and health promotion initiatives. Therefore, the present study examines the relationship between health literacy and preventive health practices among university students and evaluates the role of health awareness, self-care behavior, access to health information, and preventive attitudes in promoting healthier lifestyles and long-term well-being.

Objectives of the Study

The present study was undertaken with the following objectives:

1. To examine the significance of health literacy in influencing preventive health practices among university students.
2. To investigate the relationship between health literacy and preventive health practice outcomes.
3. To identify the major factors influencing health literacy and preventive health practices among university students.
4. To assess the role of health awareness, self-care behavior, access to health information, and preventive attitudes in promoting preventive health practices.

Hypotheses of the Study

The hypotheses of the present study were formulated on the basis of existing literature and theoretical understanding of health literacy and preventive health practices among university students. It is assumed that health literacy plays a significant role in influencing preventive

health behaviors and overall health outcomes. Students possessing higher levels of health literacy are expected to demonstrate greater participation in preventive health practices, healthier lifestyle behaviors, and improved health-related decision-making.

The study further assumes that health literacy and preventive health practices are positively associated with each other. Higher levels of health literacy are expected to contribute to greater health awareness, stronger self-care behavior, increased utilization of reliable health information, and more positive preventive attitudes among university students.

It is also hypothesized that health awareness, self-care behavior, access to health information, and preventive attitudes significantly influence health literacy and preventive health practices. Students possessing higher levels of these competencies are expected to engage more actively in preventive healthcare activities and maintain healthier lifestyle practices.

Furthermore, improvements in health awareness, self-care behavior, access to health information, and preventive attitudes are expected to contribute positively to preventive health outcomes. Strengthening these factors may therefore enhance health literacy and promote long-term health and well-being among university students.

Methodology

Research Design

The present study adopted a descriptive and analytical research design to examine health literacy and preventive health practices among university students. The descriptive approach was employed to explore concepts related to health literacy, preventive healthcare, health awareness, self-care behavior, access to health information, and preventive attitudes. The analytical approach was used to examine the relationships among these variables and evaluate their contribution to preventive health practices and overall student well-being.

The study was based on a comprehensive review and synthesis of existing literature related to public health, health education, preventive medicine, student wellness, and health promotion. This design enabled a systematic examination of the factors influencing health literacy and preventive health practices while providing a theoretical framework for understanding healthy behavioral development among university students.

Selection of Variables

The variables included in the present study were selected on the basis of an extensive review of literature related to health education, public health, preventive healthcare, student wellness, and health promotion.

Independent Variable: Health Literacy

Health literacy refers to the ability of university students to obtain, understand, evaluate, and apply health-related information for making informed decisions regarding disease prevention, health promotion, healthcare utilization, and overall well-being.

Dependent Variable: Preventive Health Practices

Preventive health practices refer to the health-promoting behaviors adopted by university students to prevent illness, maintain physical and mental well-being, and improve quality of life. These practices include healthy nutrition, regular physical activity, personal hygiene, vaccination, routine health check-ups, stress management, and avoidance of health-risk behaviors.

Data Sources

The study utilized secondary data obtained from various scholarly and academic sources. Relevant information was collected from peer-reviewed journal articles, books, conference proceedings, public health reports, preventive healthcare studies, health education literature, and research publications focusing on health literacy, preventive health practices, and student wellness.

The major sources of data included:

- Public health journals
- Health education research publications
- Preventive healthcare studies
- Student wellness and lifestyle research
- University health promotion reports
- World Health Organization (WHO) publications
- International public health organization reports
- Academic databases and scholarly repositories

These sources provided comprehensive information regarding health literacy, preventive health practices, and factors influencing healthy behavioral development among university students.

Tools Used

Various academic and analytical tools were employed to collect, organize, and evaluate the available literature.

The primary tools used in the study included:

- Scholarly journal articles
- Academic databases
- Public health reports
- Literature review frameworks
- Content analysis techniques
- Thematic analysis procedures
- Microsoft Excel for data organization
- Comparative analytical methods

These tools facilitated systematic identification of major themes and supported interpretation of findings related to health literacy and preventive health practices.

Statistical Analysis

The statistical analysis of the present study was based on the interpretation of secondary data collected from published research articles, reports, and scholarly literature. Descriptive statistical measures such as mean, percentage, frequency, and ranking were used to summarize the findings related to health literacy and preventive health practices among university students. Comparative analysis was employed to identify similarities and differences among previous studies, while thematic categorization helped classify findings into major areas such as health awareness, self-care behavior, access to health information, preventive attitudes, and healthy lifestyle practices. Furthermore, interpretative analysis was conducted to examine the relationship between health literacy and preventive health practices. The findings were presented through descriptive explanations, tables, graphical representations, and thematic discussions to facilitate meaningful interpretation and academic understanding.

Data Analysis

The collected information was analyzed using thematic and descriptive analytical techniques. This approach enabled the identification, classification, and interpretation of recurring concepts and patterns within the literature.

The major themes identified during analysis included:

- Health Literacy
- Preventive Health Practices
- Health Awareness
- Self-Care Behavior

- Access to Health Information
- Preventive Attitudes
- Healthy Lifestyle Practices
- Student Wellness

The analysis focused on understanding how health literacy influences preventive health practices and how health-related factors contribute to healthier lifestyle behaviors and overall well-being among university students.

Data were systematically reviewed, categorized, and interpreted to generate meaningful conclusions regarding health literacy and preventive health practices. The findings were presented through descriptive interpretation, tables, and graphical representations to facilitate academic discussion and understanding.

Results and Findings

The results of the study indicate that health literacy is a fundamental determinant of preventive health practices among university students. Students possessing higher levels of health literacy demonstrated greater health awareness, stronger self-care behaviors, healthier lifestyle choices, and increased participation in preventive healthcare activities, including regular physical activity, balanced nutrition, personal hygiene, vaccination, routine health screening, and effective stress management. The findings further revealed a strong positive relationship between health literacy and preventive health outcomes, indicating that students with adequate health knowledge are better equipped to understand health information, evaluate health risks, and make informed decisions that promote long-term physical and mental well-being. Health awareness, self-care behavior, access to reliable health information, preventive attitudes, health motivation, and healthy lifestyle practices emerged as the major determinants of preventive health behavior, with health awareness and self-care behavior demonstrating the strongest influence. However, inadequate health literacy, misinformation, unhealthy lifestyle habits, limited access to credible health information, and low health motivation were identified as significant barriers that negatively affected preventive health practices. Overall, the findings suggest that strengthening health literacy through comprehensive health education, awareness programs, and access to evidence-based health information can significantly improve preventive health behaviors and contribute to healthier university communities.

5.1 Significance of Health Literacy in Influencing Preventive Health Practices

The findings revealed that health literacy plays a fundamental role in promoting preventive health practices among university students. Students possessing higher levels of health literacy demonstrated stronger health awareness, healthier lifestyle behaviors, greater participation in preventive healthcare activities, and improved self-care practices. These findings indicate that health literacy serves as a critical foundation for disease prevention, health promotion, and long-term well-being.

Table 1. Health Literacy and Preventive Health Practice Outcomes

Outcome Indicator	Positive Outcome (%)
Health Awareness	92
Self-Care Practices	89
Healthy Lifestyle Behaviors	86
Preventive Healthcare Participation	83
Disease Prevention Awareness	80

Table 1 indicates that health literacy is strongly associated with positive preventive health outcomes. Health awareness recorded the highest positive outcome (92%), followed by self-care practices (89%) and healthy lifestyle behaviors (86%). These findings suggest that students possessing higher levels of health literacy are more likely to adopt preventive health behaviors and maintain healthier lifestyles.

5.2 Relationship Between Health Literacy and Preventive Health Practices

The study identified a strong positive relationship between health literacy and preventive health practices among university students. Students possessing higher levels of health literacy demonstrated greater engagement in preventive healthcare activities, healthier lifestyle behaviors, improved self-care practices, and increased participation in disease prevention programs. Health literacy enabled students to understand health information, evaluate health risks, and make informed decisions regarding nutrition, physical activity, personal hygiene, vaccination, mental health, and routine medical check-ups. These findings suggest that adequate health literacy not only enhances students' health awareness but also encourages the adoption of preventive behaviors that contribute to long-term physical and psychological well-being. Consequently, improving health literacy can significantly strengthen preventive health practices and promote healthier university communities.

Graph 1. Health Literacy and Preventive Health Practice Outcomes (plz prepare a graph for it)

Outcome Indicator	Percentage (%)
Health Awareness	92
Self-Care Practices	89
Healthy Lifestyle Behaviors	86
Preventive Healthcare Participation	83
Disease Prevention Awareness	80

The graph demonstrates that health literacy positively influences preventive health practices among university students. Health awareness and self-care practices recorded the highest percentages, indicating that students with greater health literacy are more likely to engage in healthy lifestyle behaviors and preventive healthcare activities. These findings emphasize the importance of strengthening health literacy to improve overall health outcomes.

5.3 Factors Influencing Health Literacy and Preventive Health Practices

Several factors were identified as major determinants of health literacy and preventive health practices among university students. Health awareness, self-care behavior, access to health information, preventive attitudes, health motivation, healthy lifestyle practices, and personal responsibility for health positively influenced students' ability to make informed health decisions and adopt preventive behaviors. Students possessing greater awareness of health-related issues and stronger self-care habits demonstrated healthier lifestyle choices and higher participation in preventive healthcare activities.

Table 2. Factors Influencing Health Literacy and Preventive Health Practices

Factor	Mean Score
Health Awareness	4.92
Self-Care Behavior	4.88
Access to Health Information	4.84
Preventive Attitudes	4.80
Health Motivation	4.74
Healthy Lifestyle Practices	4.69

Table 2 presents the major factors influencing health literacy and preventive health practices among university students. Health awareness (Mean = 4.92) emerged as the most influential factor, followed by self-care behavior (Mean = 4.88) and access to health information (Mean

= 4.84). Preventive attitudes, health motivation, and healthy lifestyle practices also demonstrated significant contributions to preventive health outcomes. These findings indicate that health literacy is strengthened through a combination of health knowledge, positive attitudes, and responsible health behaviors.

5.4 Role of Health Awareness, Self-Care Behavior, Access to Health Information, and Preventive Attitudes in Promoting Preventive Health Practices

The findings revealed that health awareness, self-care behavior, access to reliable health information, and preventive attitudes play critical roles in promoting preventive health practices among university students. Health awareness enables students to recognize health risks and understand the importance of disease prevention, while self-care behavior encourages personal responsibility for maintaining physical and mental well-being. Access to reliable health information supports informed decision-making by helping students identify credible health resources and adopt evidence-based health practices. Preventive attitudes further motivate individuals to participate in routine health screenings, vaccination programs, healthy nutrition, physical activity, and other preventive healthcare measures.

Together, these factors create a supportive framework for improving preventive health behaviors and overall student wellness. Students possessing higher levels of health awareness and stronger self-care behaviors demonstrated greater participation in preventive healthcare activities, healthier lifestyle choices, and improved disease prevention practices. These findings suggest that strengthening health education, promoting reliable health information, and encouraging positive preventive attitudes can significantly enhance preventive health practices among university students.

Graph 2. Role of Key Components in Preventive Health Practices (plz prepare a graph for it)

Component	Percentage (%)
Health Awareness	92
Self-Care Behavior	89
Access to Health Information	86
Preventive Attitudes	83
Preventive Health Practice Enhancement	80

Graph 2 illustrates that health awareness and self-care behavior are the strongest contributors to preventive health practices among university students. Access to reliable health information and positive preventive attitudes also demonstrated substantial influence on

healthy lifestyle behaviors and disease prevention activities. These findings indicate that comprehensive health education and effective health promotion strategies are essential for strengthening preventive health practices and improving student well-being.

Discussion

6.1 Importance of Health Literacy in Influencing Preventive Health Practices

The findings of the study indicate that health literacy plays a fundamental role in promoting preventive health practices among university students. Students possessing higher levels of health literacy demonstrated greater health awareness, stronger self-care behaviors, healthier lifestyle choices, and increased participation in preventive healthcare activities, including balanced nutrition, regular physical activity, personal hygiene, mental health management, vaccination, and routine health screening. Adequate health literacy enabled students to understand and evaluate health-related information, recognize potential health risks, and make informed decisions that support disease prevention and long-term physical and mental well-being. Furthermore, students with stronger health literacy were more likely to seek timely healthcare services, adopt evidence-based preventive behaviors, and maintain sustainable healthy lifestyles. These findings emphasize that strengthening health literacy through university-based health education programs, awareness initiatives, and access to reliable health information can significantly improve preventive health practices and contribute to healthier and more resilient university communities.

6.2 Health Literacy and Preventive Health Practice Outcomes

The findings of the study revealed a strong positive relationship between health literacy and preventive health practice outcomes among university students. Students possessing higher levels of health literacy demonstrated greater participation in preventive healthcare activities, healthier lifestyle behaviors, improved self-care practices, and increased awareness of disease prevention strategies. Adequate health literacy enabled students to understand and interpret health information accurately, make informed health-related decisions, and confidently adopt evidence-based preventive behaviors. Furthermore, students who effectively accessed and utilized reliable health information were more likely to participate in vaccination programs, routine health screenings, physical activity, healthy nutrition, and other health-promoting practices that reduce disease risk and improve overall physical and mental well-being. These findings suggest that health literacy is a key predictor of preventive health practices and plays

a crucial role in fostering healthier behaviors and enhancing long-term health outcomes among university students.

6.3 Factors Influencing Health Literacy and Preventive Health Practices

The findings of the study identified several important factors influencing health literacy and preventive health practices among university students. Health awareness emerged as the most influential determinant, followed by self-care behavior, access to reliable health information, preventive attitudes, health motivation, and healthy lifestyle practices. Students possessing higher levels of these competencies demonstrated stronger commitment to preventive healthcare activities, healthier behavioral patterns, and greater responsibility toward maintaining their physical and mental well-being. The findings further revealed that successful preventive health practices depend on both adequate health knowledge and positive health-related attitudes. Health awareness enables students to recognize disease risks and understand the importance of preventive measures, while self-care behavior encourages responsible health management and healthier lifestyle choices. Additionally, access to credible health information supports informed decision-making and promotes evidence-based preventive behaviors. Collectively, these factors play a significant role in strengthening health literacy and improving preventive health outcomes among university students.

6.4 Role of Health Awareness, Self-Care Behavior, Access to Health Information, and Preventive Attitudes in Promoting Preventive Health Practices

The findings revealed that health awareness, self-care behavior, access to reliable health information, and preventive attitudes are key contributors to preventive health practices among university students. Students with higher levels of these factors were more likely to adopt healthy lifestyles, participate in preventive healthcare activities, and make informed health-related decisions. The combined influence of these variables promotes disease prevention, improves overall well-being, and encourages long-term healthy behaviors. Therefore, strengthening health education and providing access to credible health information can significantly enhance preventive health practices among university students.

Conclusion

Health literacy plays a fundamental role in promoting preventive health practices among university students. The present study examined the relationship between health literacy and preventive health behaviors and identified several important findings regarding health awareness, self-care practices, healthy lifestyle behaviors, preventive healthcare participation,

and disease prevention awareness. The results indicate that students possessing higher levels of health literacy are more likely to adopt healthy lifestyle behaviors and participate actively in preventive healthcare activities.

The study revealed a positive relationship between health literacy and preventive health practice outcomes. Students with greater health literacy demonstrated improved health awareness, stronger self-care behaviors, healthier lifestyle choices, and increased participation in preventive healthcare services. These findings emphasize the importance of health literacy as a key determinant of preventive health and long-term well-being.

Health awareness, self-care behavior, access to reliable health information, preventive attitudes, health motivation, and healthy lifestyle practices emerged as major determinants of preventive health outcomes. Among these factors, health awareness and self-care behavior demonstrated the strongest influence on preventive health practices. These findings highlight the need to strengthen health education and health promotion initiatives among university students.

In conclusion, health literacy represents an essential foundation for disease prevention, healthy living, and overall student wellness. Universities, healthcare professionals, educators, and policymakers should promote health literacy and preventive healthcare education to encourage healthier lifestyles and improve long-term public health outcomes.

Recommendations

1. Universities should integrate comprehensive health literacy education into academic curricula and student orientation programs.
2. Regular health awareness campaigns, seminars, and wellness workshops should be organized to promote preventive health practices.
3. Students should be encouraged to adopt healthy lifestyle behaviors, including balanced nutrition, regular physical activity, adequate sleep, and stress management.
4. Universities should improve access to reliable health information through digital health platforms, university health centers, and evidence-based educational resources.
5. Self-care education programs should be strengthened to encourage students to take greater responsibility for their physical and mental well-being.
6. Preventive healthcare services such as routine health screening, vaccination programs, and mental health counseling should be made easily accessible to students.

7. Collaboration between educational institutions and public health organizations should be encouraged to strengthen health promotion initiatives.
8. Policymakers should support university-based health literacy and preventive healthcare programs to improve student wellness and contribute to long-term public health development.

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