

Assessment of the Impact of Lifestyle on Health Status among Nursing Students at a Selected College, Hosur.

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Abstract

Background: Lifestyle is the characteristic way an individual, group, or society lives. It refers to the individual day-to-day pattern of personal and social behaviour. Social interactions with parents, siblings, teachers, and social media influence lifestyle.¹ Nursing students face various challenges owing to the dual burden of academic demands and clinical responsibilities, which often disrupt their capacity to maintain healthy routines.

Objective: 1. To determine the relationship between lifestyle practices and health status, 2. To identify associations between lifestyle and selected demographic variables among nursing students.

Methods: A non-experimental descriptive research design was adopted. One hundred sixteen (116) Nursing students were selected using the simple random sampling technique. A structured self-administered questionnaire is used to assess lifestyle patterns and their health status. Data were analysed using Pearson's correlation coefficient and the Chi-square test.

Results: The study results revealed that more than 50% of students demonstrated good physical activity and dietary patterns. Regarding other lifestyle components, 62% exhibited average sleep patterns, 68% demonstrated average stress management, and 51% showed average social and emotional well-being. There was a statistically significant positive correlation found between overall lifestyle score and health status ($r = 0.360$, $p < 0.001$). An association was found between gender and health status at $p < 0.01$.

Conclusion: The study results showed that nursing students had good physical activity levels and dietary patterns. However, most students reported average levels of stress management, sleep patterns, and emotional well-being. These findings indicate a significant relationship between lifestyle behaviours and health status, suggesting that healthier lifestyle practices are associated with better overall health among nursing students.

Keywords: Lifestyle, Health Status, Nursing Students; Diet, Sleep Pattern

1. Introduction.

Everyone adopts healthy lifestyles according to their own choices and patterns. However, lifestyle patterns have significant effects on long-term morbidity and mortality, which is becoming increasingly evident [2]. According to the World Health Organisation (WHO), over 1.5 million adolescents and young adults aged 10–24 years died globally in 2021. The leading causes of death included injuries, violence, self-harm, and maternal conditions, many of which are linked to health-risk behaviours during adolescence. Therefore, promoting healthy lifestyle behaviours among students is crucial to reduce preventable deaths and improve long-term health outcomes.[3]

Scholarly articles report that college students often exhibit negative health behaviours due to their involvement in preparing for competitive exams, managing heavy assignment loads, and fulfilling other academic commitments. Consequently, their physical activity levels are minimal, while mental stress reaches its peak.[4] Students' lifestyle and health behaviours are known to affect their health status in later life.

Nurses are the largest group of healthcare professionals and play a vital role in promoting health and healthy lifestyles among their clients. To effectively educate and guide individuals toward healthier lifestyles, nurses must demonstrate healthy behaviours themselves. Since many lifestyle habits are developed during undergraduate education, nursing students need to adopt healthy lifestyle behaviours early in their training. Doing so not only supports their personal well-being but also prepares them to become competent nurses and effective health promoters.

Nurturing healthy lifestyle behaviours among nursing students enables them to serve as role models for healthy living and prepares them to become leaders who empower individuals, families, and communities to adopt and maintain healthy lifestyle practices. The present study aimed to assess the lifestyle practices and health status among students.[5]

2. Method

A non-experimental descriptive research design was adopted. The study was conducted at St. Peter's Nursing College and Research Institute, Hosur, Tamil Nadu, India. One hundred sixteen (116) nursing students from the B.Sc. Nursing and GNM programmes were selected using a simple random sampling technique. Students enrolled in any nursing programme who were present during the data collection period and willing to participate were included. Students who were absent during data collection or unwilling to participate were excluded.

Formal permission was obtained from the college authority, and written informed consent was obtained from all participants before data collection, with assurance of confidentiality and voluntary participation.

Data Collection.

The data were collected from students who fulfilled the inclusion criteria and were selected using simple random assignment. Proper interview techniques were used to collect data from the participants. A structured self-administered questionnaire was used, comprising two sections. Section A collected demographic data (age, gender, year of study, type of residence, and BMI calculated from self-reported height and weight). Section B assessed lifestyle practices through 15 items across five domains, such as

physical activity, diet, sleep pattern, stress and leisure, and social and emotional well-being and health status through 10 items across five health domains (headaches and fatigue, sleep quality and stress, digestive health and exercise motivation, body pain and weight management, and mood stability and overall health perception). The participants were given 45 minutes to complete the questionnaire. Items were scored on a five-point Likert scale (Always = 5 to Never = 1, with reverse scoring for negative items). Lifestyle and health status were interpreted as Good ($\geq 75\%$), Average (50–74%), and Poor ($< 50\%$). The participants were given 40 minutes.

Statistical Analysis

Data were coded and analysed using Jamovi software. Both descriptive statistics (frequencies, percentages, means, standard deviations) and inferential statistics were used. Pearson's correlation coefficient was used to determine the relationship between lifestyle factors and health status domains. Chi-square test was applied to determine associations between health status and selected demographic variables. The significance level was set at $p < 0.05$.

3. Results

The findings were organised under four sections: demographic profile, relationship between lifestyle and health status, distribution of lifestyle factors, and association between health status and demographic variables.

Table 1. Frequency and Percentage Distribution of Students According to Selected Demographic Variables (N = 116)

Variable	Categories	Frequency	Percentage (%)
Age	17–19 Years	49	42
	20–22 Years	62	54
	23–25 Years	5	4
Gender	Male	47	41
	Female	69	59
Year of Study	B.Sc. Nursing 1st Year	19	16
	B.Sc. Nursing 2nd Year	31	27
	B.Sc. Nursing 4th Year	42	36
	GNM	24	21
Type of Residence	House	22	19
	Hostel	65	56
	Paying Guest	29	25
BMI	Below 18.5 Underweight	31	27

Variable	Categories	Frequency	Percentage (%)
	(18.5–24.9) Normal	65	56
	(25 and Above) Overweight	20	17

Table 1 shows that the majority (54%) belonged to the 20–22 years age group, 42% were aged 17–19 years, and 4% were 23–25 years. The majority 59%, were female students. Most students belonged to B.Sc. Nursing programme, remaining 21% were GNM. Regarding residence, 56% were residing in hostels, 25% were paying guests, and 19% were residing at home. With respect to BMI, 56% had a normal BMI, 27% were underweight, and 17% were overweight.

Table 2. Relationship Between Lifestyle Factors and Health Status Domains Among Nursing Students (N = 116)

	Mean	SD	r	p-value
Lifestyle factors	49.9	7.09	0.360	< 0.001*
Health Status	29.7	6.08		

* Statistically significant at $p < 0.05$; Pearson's Correlation Coefficient

Table 2 depicts the correlation between overall lifestyle score and health status. The mean score of lifestyles was 49.9 ± 7.09 , and the mean score of health status was 29.7 ± 6.08 . There was a statistically significant positive correlation observed between lifestyle and health status ($r = 0.360$, $p < 0.001$),

Table 3. Frequency and Percentage Distribution of Lifestyle Factors Among Nursing Students (N = 116)

Lifestyle Factor	Good n (%)	Average n (%)	Poor n (%)
Physical Activity	58 (50)	53 (46)	5 (4)
Diet	55 (48)	56 (48)	5 (4)
Sleep Pattern	40 (35)	72 (62)	4 (3)
Stress and Leisure Time Management	32 (28)	79 (68)	5 (4)
Social and Emotional Well-being	57 (49)	59 (51)	0 (0)

Table 3 depicts the distribution of lifestyle factors among students. Regarding physical activity, 50% of students reported good activity levels, 46% average, and 4% poor. 48% of students reported average dietary practices. Most students, 62%, reported an average sleep pattern, 68% stress management, and 51% showed good social and emotional well-being.

Considering health status among nursing students, the majority 64%, reported an average overall health status. The student's overall health status was demonstrated as average in terms of body weight, physical illness and quality of sleep.

Table 4. Association Between Level of Health Status and Selected Demographic Variables Among Nursing Students (N = 116)

Demographic Variable	Categories	Good	Average	Poor	χ^2 Value	df	p-value
Age	17–19 yrs	11	33	5	3.99	4	0.407
	20–22 yrs	8	49	5			
	23–25 yrs	2	3	0			
Gender	Male	12	35	0	9.24	2	0.010*
	Female	9	50	10			
Year of Study	B.Sc. 1st Yr	6	13	0	9.49	6	0.148
	B.Sc. 2nd Yr	2	24	5			
	B.Sc. 4th Yr	8	32	2			
	GNM	5	16	3			
Type of Residence	House	8	13	1	6.67	4	0.155
	Hostel	8	51	6			
	Paying Guest	5	21	3			
BMI	Below 18.5	6	22	3	1.71	4	0.789
	18.5–24.9	13	46	6			
	25 and Above	2	17	1			

* Statistically significant at $p < 0.05$; χ^2 = Chi-Square value; df = Degrees of Freedom

Table 4 depicts the association between health status and selected demographic variables. There was significant association found between gender and health status ($\chi^2 = 9.24$), $p < 0.01$ level. And No association was shown between health status and demographic variables such as age, year of study, type of residence and BMI.

4. Discussion

The present study showed the nursing students had good to average lifestyle factors related to (50%) activity and (48%) diet. The results are consistent with another study conducted on nursing students' lifestyle and related factors, which reported that 92 (70.8%) adopted a healthy lifestyle, and 38 (29.2%) had a moderately healthy lifestyle. Also, negative correlations were found between the self-actualisation

domain and clinical variables.[6] which is not consistent with the study results showed a positive correlation between lifestyle and Health.

The present study results showed that the majority (54%) belonged to the 20–22 years age group, and 59%, were female students. The results are consistent with a study conducted on the Influence of Lifestyle on Health Status of Young People reported that most participants were female. In contrast, their age group was between 24 and 25 years. Also, the results revealed that 44% of students had average healthy eating practices, 30% of them reported irregular physical activity, and 70% reported a bad sleeping pattern.[7] The present study found that good lifestyle factors among students were as follows: physical activity (50%), healthy dietary practices (48%), and effective stress management (62%). These results align with a similar study on lifestyle factors influencing medical and nursing students, which reported that only 12.7%, 21.3%, and 27.8% of students exhibited unhealthy behaviours related to diet, physical activity, and stress levels, respectively. Additionally, the current study's average BMI was consistent, with a mean score of 22.12 ± 3.78 .[8]

A similar study done on lifestyle, quality of life and health status found that there was strongest correlation between health and lifestyle ($r = 0.5$, $p < 0.0001$) than between lifestyle ($r = 0.2$, $p < 0.0001$). [9] which is consistent with the present study results, proved that a positive correlation was observed between lifestyle and health status ($r = 0.360$, $p < 0.001$).[9] Another study done on the association of lifestyle factors and suboptimal health status: a cross-sectional study of Chinese students, evidenced that health status was significantly positively correlated with lifestyle ($r=0.563$).[10]

The association between health status and selected demographic variables. There was a significant association between gender and health status ($\chi^2 = 9.24$, $p < 0.01$). No association was shown between health status and demographic variables such as age, year of study, type of residence and BMI. The above present study's findings are not consistent with those reported in the study on the impact of socio-demographic factors, lifestyle, and health status on the nutritional status of older adults in Taiwan. Which found a significant positive association between nutritional status and health status, as well as several socio-demographic variables, including age, gender, and other selected characteristics.[11]

5. Conclusion

The study concludes that the overall lifestyle and health status of nursing students were predominantly average. While more than half of the students reported good physical activity levels and social and emotional well-being, most demonstrated average sleep patterns, dietary practices, and stress and leisure time management. Similarly, most students had an average overall health status, particularly with respect to body weight, physical illness, and quality of sleep.

A statistically significant positive correlation between lifestyle and health status indicates that healthier lifestyle practices are associated with better health outcomes among nursing students. Furthermore, the significant association between gender and health status suggests that gender may influence students' health status. These findings highlight the importance of promoting healthy lifestyle behaviours, including regular physical activity, balanced nutrition, adequate sleep, and effective stress management, to improve the overall health and well-being of nursing students.

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Conflict of Interest Statement

The authors declare that they have no conflicts of interest, financial or otherwise, that could inappropriately influence the findings or content of this article.

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