ASSESSMENT OF LIFESTYLE PROFILE OF YOUNG NURSING STUDENTS IN PAKISTAN

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ABSTRACT
A healthy lifestyle is a way of living that promotes overall well-being and reduces the risk of chronic diseases. It encompasses a range of habits and choices that prioritize physical, mental, and emotional health. It further involves creating an environment that supports health and well-being. Indeed a constant and deliberate effort toward health maintaining and promoting activities is required. The sooner a healthy lifestyle is adopted, the greater the benefits. Healthcare professionals like nurses, despite being aware of the healthy lifestyle, are not following it. The objectives of this study are to assess the current lifestyle behavior of the nursing students.

Material and Methods: A quantitative cross-sectional study is carried out on BSc Nursing (4 years) students. Wellness lifestyle questionnaire is applied to assess the lifestyle characteristics of nursing students. Questionnaire is comprised of 32 questions and eight categories, each category represents a different domains of lifestyle.

Results: The results showed that Body Mass Index of 44.5% of the population deviate from the normal values. Only 5.9% of participants have satisfactory lifestyle score in all categories. Statistical analysis ANOVA showed that there is a significant association between all of the following variables like residential status, gender, physical activity, nutritional status, stress management, environmental health and well-being.

Conclusions: Most of the Nursing students need improvement in their lifestyle. The prevalence (95% confidence interval) of satisfactory score among different categories of lifestyle is as follows, physical activity 30%, disease prevention 42%, nutrition 50.2% and stress management 66% etc. Healthy lifestyle is essential for individuals and society to achieve the highest possible potential.

Key Terms: Health, Lifestyle, Nursing, Nutrition, Physical activity.

INTRODUCTION:
Lifestyle is a set of forms of human activities that are expressed in everyday life, work, cultural and behavioral patterns (S.A. Krylatov, 2013, Petrash, 2018). Related to health, lifestyle of an individual is a combination of different factors like dietary habits, physical activity, sleep hours, social activities, alcohol intake, tobacco consumption and weight management etc. (Khosravi, 2021) These lifestyle factors predict current as well as future health and disease status of individuals. To lead a healthy life and reach full potential, individuals need constant and deliberate effort toward health maintaining and promoting activities in their daily life. (Werner W.k. Hoeger, 2014, Musa, 2020). Like eating balance diet, participating in regular exercise, have positive interpersonal relationships, manage stressors appropriately and take care of the environment in day to day life (Mamurov, 2020). Adaptation of healthy lifestyle at younger age cast tremendous beneficial effect on human life. A healthy lifestyle enhances life expectancy from 6-8 years in human beings (Chudasama, 2020). It increases the life span free from major chronic diseases (Schwingshackl, 2018, Werner W.k. Hoeger, 2014). About 60% quality of life actually depends on lifestyle (Ziglio, 2004). For nursing students, it is their professional obligation to conserve health, prevent illnesses and shape health behavior of the individuals and society (Academy, 2016, Association, 2015). The student nurses' of today are the health practitioners of tomorrow. They can act as a role model for other individuals of the society (Wills, 2019).

Magnitude of the problem:
Today, A million of individuals are stumbling by the conditions which can be easily prevented through a healthy lifestyle. In Pakistan about 40 million individuals suffer from high blood pressure, 32 million from heart disease, 24 million from obesity, 18 million from high cholesterol, 8 million from diabetes and another 50 million from mental health disorders (WHO, 2015). Parallel image is depicted among nurses in the literature. There is prevalence of being overweight about 12.9%, obese 3.2%, hypertensive 13.7% and diabetics 5.6%, among nurses (Hegde, 2015). These conditions eventually lead to premature death and a high mortality rate. Every year, NCD kills 41 million people worldwide whereas diabetes alone kill 1472 thousands people in 2019 (Safiri, 2022, W.H.O, 2022). These numbers can be cut short through a healthy lifestyle. As healthy lifestyle prevents from a number of diseases, enhances immunity, reduce stress and improve the quality of life that eventually increase the average age. In case of nursing students, different studies revealed that lifestyle of most nursing adults students is not satisfactory and sometime even worse than the population to whom they provide health education (Perry, 2018) It make them prone to different health related issues, complication and also decreases the years of productive life (Hussein, 2020). After encountering different diseases, when individuals are counselled to modify their lifestyle, certain physical, psychological, socio-cultural and economical barriers hinder these changes. It is difficult for elder person to modify life so it is imperative to incorporate healthier lifestyle in young adults (Lee, 2010). No such study is conducted in Pakistan to assess the lifestyle behavior of young nursing students. So, the focus of my study are young nursing students. Hence the purpose of the study is to assess the youngster's existing lifestyle status, with respect to physical activity, dietary preferences, and stress management, personal and environmental hygiene. Further, it will identify the impact of young nurses' age, gender, educational level and economic status on lifestyle practices. It will boost their productivity, health and satisfaction with life. Moreover, there is no National, educational or workplace plans are implemented to guide and motivate for healthy lifestyle in developing countries like Pakistan, Findings of this study may help formulate the guideline.

1.4 Objective:
The objectives of the study is
1. To assess health related lifestyle profile of young nursing students in public and private nursing colleges of Punjab.

6 Research Question:
1. What is the young nursing student's health related lifestyle profile score regarding its different components?

Theoretical Framework:
The mandala of health: a model of the human ecosystem by prof. Trevor Hancock and Fran Perkins R.N was applied for this research (Hancock, 1985). It is a bio-psycho-socio-environmental model of health.

Methodology:
Quantitative cross sectional study was conducted on nursing students of age ranging from 18 to 25 years, currently enrolled in baccalaureate (4 years) degree program, in different public and private nursing colleges affiliated with University of Health Sciences in the Punjab.
Two stage simple random sampling technique was used. A total of 366 students were selected (Sample Size determination in health studies version 2.0.21 WHO).

The inclusion criteria:
Participants to be enrolled in BSc Nursing 4years program for more than six months, with the age ranging between 18-25 years till 26th birthday. Have no significant disease history. Students with apparent disability and pregnancy were excluded from the study.

Height and weight of each participant was measured using reliable and valid tools. Participants filled the structured wellness lifestyle questionnaire adopted from fitness and wellness lifestyle book,14th edition, by Werner W.K. Hoeger and Sharon A. Hoeger in 2014. The instrument was validated by the panel of experts. The CVR score for questionnaire was 0.86. This value indicated good content validity of the questionnaire.

The instrument was comprised of self-stated response to 32 items in 8 categories. The categories in the scale included physicalactivity, nutrition, Avoiding chemical dependency, stress management, personal hygiene, disease prevention, emotional well-being, environmental health and protection. Each category contained 4 questions. Responses to those questions were collected on the Likert scale and the scores were categorized into three possible outcomes that were need improvement, good and excellent.

Statistical analysis was carried out using software SPSS 22. Descriptive statistics was used to determine mean, median and mode. Further, ANOVA was applied to determine the association between different variables and categories..

Ethical Consideration:
Taking approval from Institutional Review Board (IRB) of University of Health Sciences (UHS), Lahore, all the selected colleges were approached for the administrative permission. After getting administrative permission, written informed consent was also signed from each participant.

Results
The table given below includes the description of General Characteristics of the Participants which include age, gender, marital status, family Income, educational level and residential status.

Table 1.1: Demographic characteristics of the participants:

| Age	Frequency	Percentage
18-20y	91	25%
21-23y	242	67%
24-25y	33	9%
Gender		
Female	353	96.4 %
Male	13	3.6 %
Marital Status		
Single	360	98.4 %
Married	6	1.6 %
Monthly Income		
➢ 50,000	256	70%
50,000-100,000	91	25%
<100,000	19	5%
Educational level		
1st Year	79	21.5 %
2nd Year	124	33.8 %
3rd Year	72	19.8 %
4th Year	91	24.9%
Residential Status		
Home resident	224	61.2 %
Hostel resident	142	38.8%

Age of students ranges from 18-25 years before 26th birthday. Here 242 (67%) students had age between 21-23 years of age. Gender of most of the nursing students 353 (98.4%) was female as there were only female nursing students in public institutes. However, private institutes have a few seats for male students. Monthly family income of the 256 (70%) students was less than 50,000. Majority of the nursing students belongs to poor families. Whereas, a large number 142 (38.8%) of nursing students live in the hostels during studies.

Fig 1.1: Body Mass Index of the participants:
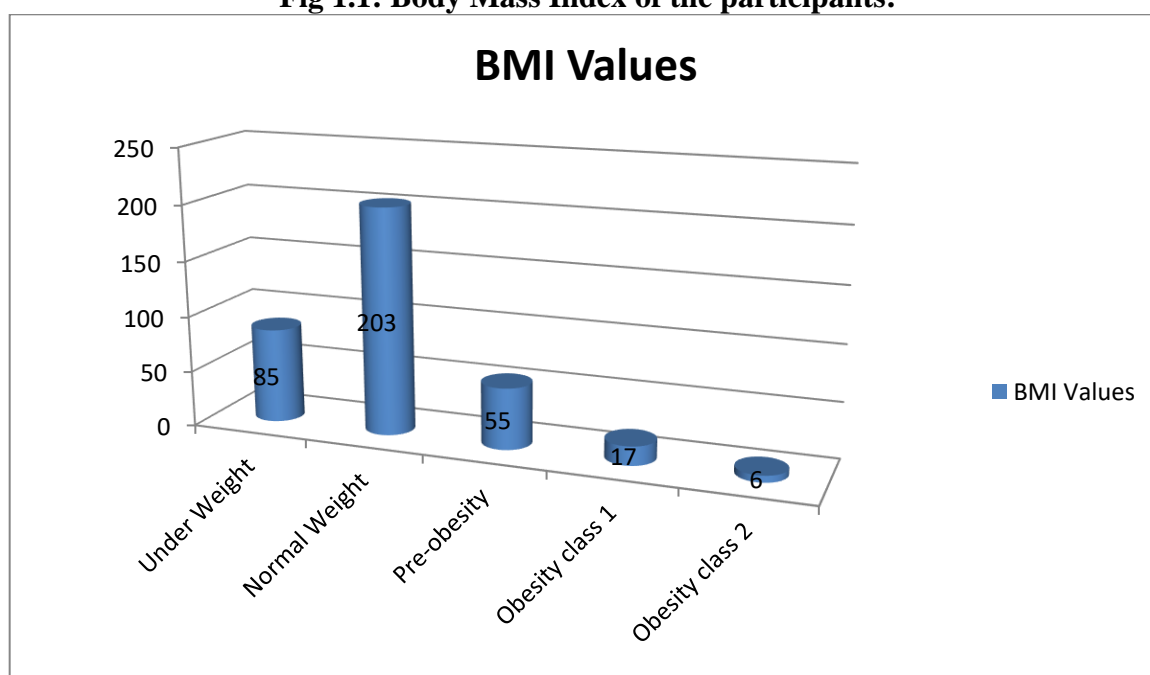
The analysis of body weight to height ratio (Body Mass Index) showed that about half of the students (55.5%) had BMI (Body Mass Index) within normal range (18.5-24.5kg/m2). However, BMI of other half of the students vary from normal value.

About 23.2% students had body mass index less than normal range (18.5-22.9), while 20.5% students had body mass index more than normal range. Pre-obesity was observed in 15% students. Total 5.5% students were found obese with 4.4% fell in class I obesity and 1.9% fell in class 2 obesity. Obesity was not prominent in that age group.

Fig 1.2: Physical activity
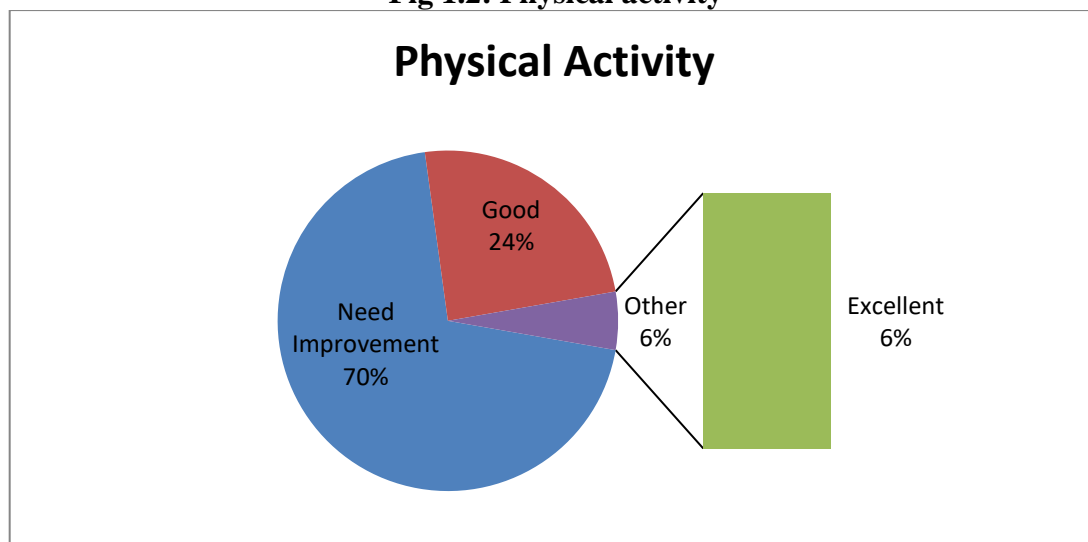
This category contained four questions that determine the extent and severity of exercise done by the participants.

Results showed that mostly nursing students have poor score in this category; about 256 (70%) respondents need improvement in it. There were only 88 (24%) participants good in it and only 22 (6%) participants showed excellent behavior related to exercise.

Fig 1.3: Nutritional status of the candidates
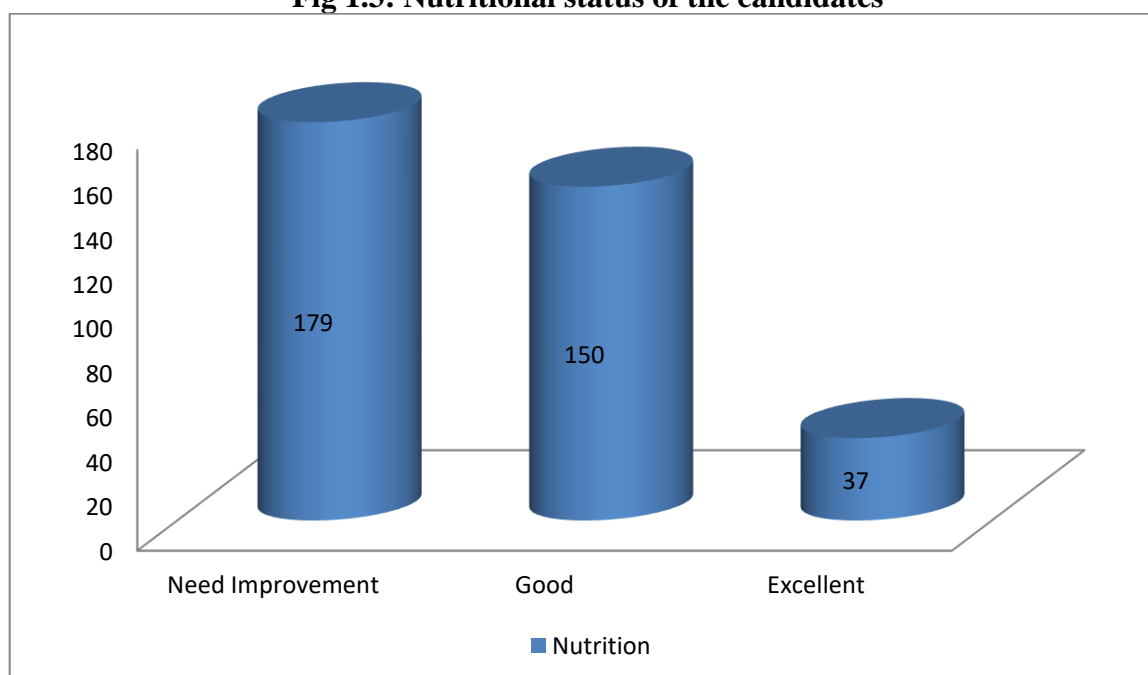
Considering the daily intake of different types of foods like meat, vegetables, fruits and oils along with maintenance of recommended body weight, it was noted that the maximum number of study participants' nutritional score was not satisfactory.

Almost half of the participants 179 (48.8%) needed to improve their nutrition. However 150 (40.9) % and 37 (10.2%) participants had good and excellent score for nutrition respectively.

Fig 1.4: Disease Prevention

Disease Prevention	Need Improvement	Good	Excellent
Disease Prevention	208	121	37
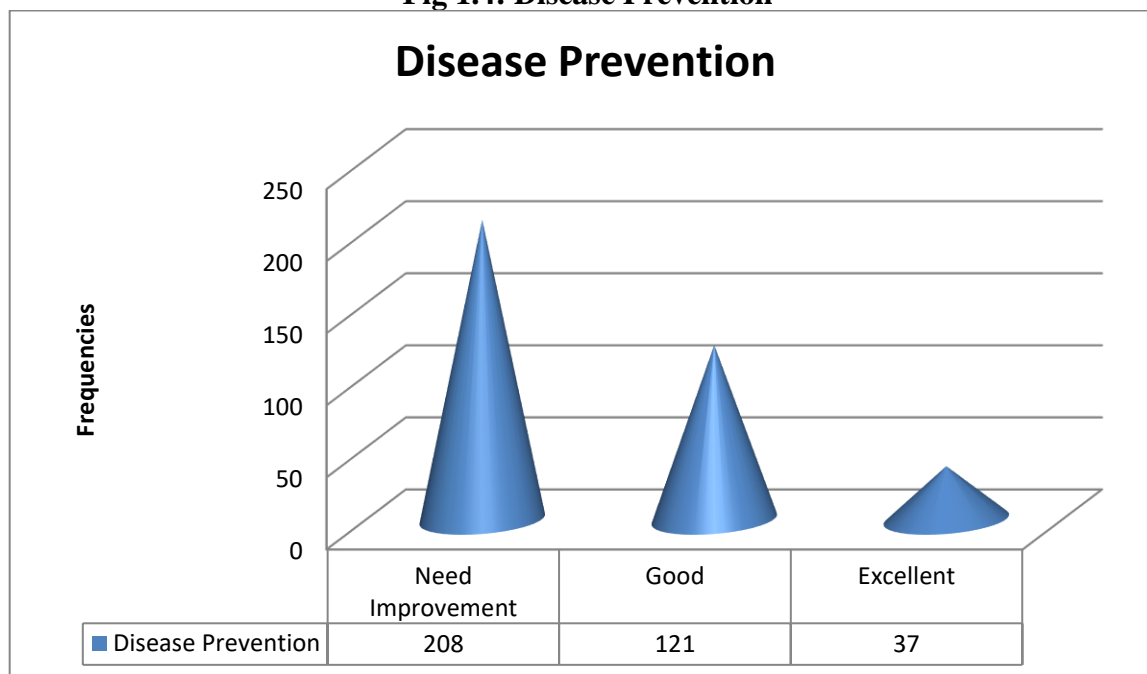
Disease prevention category encompasses knowledge about the warning signs of prevalent diseases, body self-examination and the recommended checkups by doctor. The analysis of disease prevention category revealed that 208 (57%) students needed improvement in it. Only 121 (33%) participants had good and 37 (10%) had excellent score in it. (Figure 4.18a)

Score in other five categories that are stress management, emotional wellbeing, chemical dependency, personal hygiene, environmental health and protection are given in the table 1.2 below.

Table 1.2: Score in different health related lifestyle categories.

Category Name	Scores		
	Need Improvement	Good	Excellent
Stress Management	34%	44%	22%
Emotional wellbeing	12%	45%	43%
Chemical Dependency	4%	11%	85%
Personal Hygiene	10%	42%	48%
Environmental health and protection	24%	50%	26%

There is need of improvement in all categories of health related lifestyle.
The association of different categories with each other is depicted through ANOVA in Table 1.4.

Table 1.3 Relationship of Nutritional status with other categories of factors affecting the healthy lifestyle

		Mean Square	F	Sig.
Chemical Dependency	Between Groups	8.909	1.326	.267
	Within Groups	6.719		
Stress Management	Between Groups	51.224	5.715	.004* (sig)
	Within Groups	8.964		
Personal Health	Between Groups	111.062	9.047	.000* (sig)
	Within Groups	12.277		
Disease Prevention	Between Groups	87.107	6.508	.002* (sig)
	Within Groups	13.385		
Emotional Wellbeing	Between Groups	18.921	2.596	.077
	Within Groups	7.288		
	Between Groups	86.579	11.471	.000* (sig)
Environmental.health and Protection	Within Groups	7.548		
Physical activity	Between Groups	80.164	6.583	.002* (sig)
	Within Groups	13.440		

d.f between groups: 359 d.f within groups: 2
* Significant value p < 0.05

The table shows that there is strong association of nutritional status with stress management, personal hygiene, disease prevention, physical activity, environmental health and protection. The change in one category also affects the other categories of lifestyle. To lead a healthy lifestyle, adequate score is needed in all the categories.

Discussion
Healthy Lifestyle profile included the balance of eating, sleeping and drinking choices along with physical activity, social interaction, stress management, emotional wellbeing, personal hygiene and environmental cleanliness. The variables assessed for healthy lifestyle in this study are congruent with the healthy lifestyle variables addressed in the previous literature (Kris, 2021, Khosravi, 2021). Assessment of lifestyle category of physical activity which included the frequency and intensity of the exercise revealed that a high percentage (70%) of the respondents needed improvement in that category. The findings of the current study are parallel with the findings of the W.H.O led study, where insufficient physical activity level is reported among adolescent (W.H.O, 2019).
In the second category of nutritional status, about half (48.8%) of the participants' eating behavior was not satisfactory. Same unhealthy eating pattern was observed among 33.4% of university students in a study conducted in Saudi Arabia (Algahtani, 2020). Current study revealed that most of the participants (85.4%) showed excellent behavior in avoiding the chemical dependency. The country report of the United Nations office on drug and crime with the title of "Female drug use in Pakistan" stated that the percentage of female drug users in Pakistan was rising. However, the number of drug users decreased with the rise in literacy level (Ali, 2021). The reason behind low substance abuse results might be that most of the nursing students (96.4%) are literate females in current study.
In the current study, about 34% of participants reported the need of improvement in their stress management strategies. Stress is found to be moderate to high among nursing students. Our findings are comparable to Nebhinani (2020) who reported the moderate level of stress among nursing students and documented the need of stress management training program.

It was noted after analysis of the data that the personal hygiene of 90.65% of students was satisfactory. No previous study is available on personal hygiene of nursing students. However Literature showed that about 88% of female nurses satisfactorily follow hand hygienic practices). The results of that study on hand hygiene could be used to infer the personal hygiene status of nursing students in present study. The reason of good hygiene practices could be frequent workshops and lectures on hand washing to break the chain of infection by healthcare workers (Asikime, 2020).

Regarding the disease prevention behavior, results revealed that higher percentage (57.1%) of students were those who needed to modify their behavior to sustain health. Disease prevention demands to keep abreast of common health issues, their risk factors and unusual body signs. The similar results were revealed by the other researches indicating that students had poor knowledge and negative attitudes toward addressing the risk factors of common diseases. Preventive measures are badly neglected (Alsaraireh & Darawad, 2018; Kan'an, 2018).

Results of emotional wellbeing category in healthy lifestyle assessment of nursing students found that most of the nursing students (88%) had good to excellent emotional wellbeing. The previous studies also recognized that emotional intelligence of the nursing students was better as compared to the students of other discipline (Stiglic,2018). Another study reported good psychological wellbeing of nursing students (Zhou, 2022).

Environment safety and protection behavior of 77.2% of the respondents was satisfactory. However, 22.8% of respondents need improvement in it. These results are contrary to the findings presented by Ahmad et al. who reported that certain human activities like urbanization, industrialization and economic growth destabilized the environment (Ahmed, 2020).

Conclusion

It is concluded from the findings of the current study that healthy lifestyle behaviour of young nursing students need improvement. Eating habits, physical activity, stress management, personal hygiene, environmental safety and protection, indeed all categories of healthy lifestyle need to be addressed. Satisfactory behaviour is mandatory in all the categories of healthy lifestyle to stay healthy to promote present as well as future health of the individuals as was supported by the study of Mayne et al (2020). Poor score even in one category can ruin the entire health of the individuals.

In daily life nursing students face a lot of challenges to carry through a healthy lifestyle. They have a busy schedule with the main focus on studies. A little concern is showed toward healthy lifestyle activities. This behaviour can put the health of individuals at risk. Government and institutions should play role in introducing a health promoting schedule to students.

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