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Research Article

A STUDY TO EVALUATE KNOWLEDGE AND ATTITUDE OF MEDICAL STUDENTS TOWARDS DIETRY HABITS, PHYSICAL, MENTAL HEALTH AND LIFE STYLE IN SAHIWAL, PAKISTAN

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Abstract:

Purpose: This research was conducted to check the knowledge of medical students regarding the factors influencing their health and adapting behavioral changes that promote a sound health.

Introduction: Knowledge and behaviour are co-related. Being a medical student, we are taught to prioritize our health in order to live a successful life. This study shows the level of knowledge of medical students about their physical, mental health, dietary habits and their life style regarding the level of knowledge. It also shows the behavioural changes regarding these in relation to the gender and year of study. This study was conducted in a public sector medical college, Sahiwal Medical College, Sahiwal, Pakistan.

Methodology: This cross-sectional study involved 200 medical students. Due to ongoing pandemic, A google response form was used to collect student's personal data including knowledge and attitude about dietary habits, physical and mental health. All participants were students of the said college. An informed consent was taken. Data analysis was done using SPSS. The chi-squared test was used.

Results: In a sample of 55% male and 45% female medical students, 63.5% agreed that exercise is necessary for a healthy life style. 98% of students agreed that well hydrated body is important to maintain good health. Regarding mental health 78.5% students believe mental health is as important as physical health Regarding behavioural changes in relation to their knowledge, 80.5% were willing to give up junk food to maintain a good health, 4.5% were not willing. While Majority of students (45%) were willing to give-up smoking, if indulged, 42.5% were not sure about their decision and 7% were not willing to give-up smoking at all.

Conclusion: It was concluded from the data collected that the majority of the medical students have good knowledge and attitude regarding their health and general lifestyle. Most are willing to adapt a healthy life style. A need of motivation, regular physical and mental check-up is still required to maintain the health.

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INTRODUCTION:

Health, as defined by WHO, is a complete state of social, physical and mental well-being. It plays a major role in determining the course of an individual's life.

Not only physical health but mental health also is a major determinant of a healthy lifestyle. Although, often neglected, still it plays a major part.

Unfortunately, medical students are faced with a problem of ignoring their health while handling the educational pressures. They face a variety of health related problems, malnutrition being the most common. Also, excessive burden of studies is putting students under immense pressure and leading them to various psychological issues. Apart from above two problems, the dietary intake also poses a major problem. High prevalence of junk food is becoming common among the students.

This research aims at finding the knowledge and attitude of medical students towards all aspects of their health and aims to put forwards various measures that could improve the situation.

Literature Review:

Knowledge can influence health-related behaviours when informing attitude and beliefs[1]. It is acknowledged that nutrition forms an important part of health management. It has been reported that nutritional training of medical students is inadequate in both quality and quantity.[2][3].

It is often assumed that the medical students have a greater knowledge about healthy lifestyle and dietary habits when compared to non-medical students. However there is no evidence to indicate that this knowledge translates into maintaining good health practices [4]. Most authors found that these behaviours are unlikely to change without an increase in knowledge. Knowledge alone is insufficient to bring about significant improvement in preventive behavior[5]. Knowledge can, however, influence health-related behaviours when mediated by attitudes, beliefs, self-efficacy and effective call to action[1][6].

Exercise is important in maintenance of healthy lifestyle. Studies show that exercise prevents chronic diseases [7]. Life-style modification can also retard the onset of non-communicable diseases[8].

The relationship of this knowledge and its implementation was checked in this research. A good health can be maintained using exercise, proper

hydration and use of fruits. Behavioral changes to obtain good health can be seen by adopting new and healthy life-style and quitting unhealthy life-style. These include doing exercise, maintaining well hydration, eating fruits, avoiding unnecessary stressors, quitting smoking and junk food can impact a lot on physical and mental health of an individual.

A similar study was conducted in Pakistan, showing the knowledge and perception of healthy lifestyle and nutrition among medical students[9]. In comparison to that, this research shows the behavioral changes in relation to knowledge of students to achieve a healthy life style.

The aim of this research was to focus on amount of knowledge medical students have regarding their general health, life style and to check their willingness to adapt to a healthy life-style.

MATERIALS & METHODS:**Permission:**

Study permission was taken from Ethical Committee, Community Medicine Department, Sahiwal Medical College(SLMC), Sahiwal.

Study Design:

This was a cross sectional study design.

Data collection tool:

Only 200 students of SLMC were included. Due to ongoing pandemic, the information regarding attitude, knowledge of students towards their dietary habits, physical and mental health were obtained via a google response sheet (Questionnaire).

Division of questions:

A total of 20 questions were included. 4 questions were related to demographic details while 16 questions were related to the knowledge and behavioral changes about healthy life-style and included questions about exercise, going to gym, importance of mental health, hydration of body, use of fresh fruits and vegetables, drinking 6 glasses of water every day, 1 hour of exercise every day, willingness to quit smoking and to give up junk food to maintain healthy life.

The questionnaire was spread evenly, a total of 200 students filled the form. Response rate was 100%. No response was discarded.

Data Analysis Plan:

Data was analyzed using SPSS

RESULTS:

Among 200 participants, 110 were male (55%) and 90 were females (45%). 47 students (23.5%) were 15-20 years old, 139 students (69.5%) were 20-25 years old, 14 students (7%) were 25 years above. Regarding the class, 35 students (17.5%) belonged to 1st year, 20 students (10.5%) belonged to 2nd year, 19 students (9.5%) belonged to 3rd year, 82 students (40.5%) belonged to 4th year and 44 students (22%) belonged to final year (5th Year).

63.5% students strongly agree that exercise is necessary for proper health, 23.5% agree while 7% disagree as shown in figure 1. Gender wise distribution is shown in Table 1, 10% male students disagreed while only 3% female disagreed, showing female are

more willing to exercise. 97.5% students think well hydrated body is gateway to great health as shown in Table 2.

71.5% students are willing to drink 6 glasses of water per day as shown in Table 1.4. 71.5% students are willing to give 1 hour to exercise as shown in Table 1.3. 73% students are ready to quit smoking as shown in Table 1.6 and figure 4. 18.2% male who are indulged in smoking are ready to quit smoking while only 10% female who are indulged in smoking showed willingness to quit smoking. 63.5% students are willing to give up junk food. 86% students are willing to stay in a positive frame of mind as shown in Table 1.5.

Tables: 1.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Exercise is necessary for a healthy lifestyle? * GENDER	200	100.0%	0	0.0%	200	100.0%

Exercise is necessary for a healthy lifestyle? * GENDER Crosstabulation

		GENDER		
		Female	Male	Total
Exercise is necessary for a healthy lifestyle? Agree	Count	35	24	59
	Expected Count	26.6	32.5	59.0
	% within GENDER	38.9%	21.8%	29.5%
Disagree	Count	3	11	14
	Expected Count	6.3	7.7	14.0
	% within GENDER	3.3%	10.0%	7.0%
Strongly agree	Count	52	75	127
	Expected Count	57.2	69.9	127.0
	% within GENDER	57.8%	68.2%	63.5%
Total	Count	90	110	200
	Expected Count	90.0	110.0	200.0
	% within GENDER	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.876 ^a	2	.012
Likelihood Ratio	9.108	2	.011
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.30.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.211	.012
	Cramer's V	.211	.012
N of Valid Cases		200	

1.2**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GENDER * Well hydrated body is a gateway to healthy body?	200	100.0%	0	0.0%	200	100.0%

GENDER * Well hydrated body is a gateway to healthy body? Crosstabulation

			Well hydrated body is a gateway to healthy body?			
			Agree	Disagree	Strongly agree	Total
GENDER	Female	Count	34	0	56	90
		Expected Count	33.8	1.8	54.5	90.0
		% within GENDER	37.8%	0.0%	62.2%	100.0%
Male	Count	41	4	65	110	
	Expected Count	41.3	2.2	66.6	110.0	
	% within GENDER	37.3%	3.6%	59.1%	100.0%	
Total	Count	75	4	121	200	
	Expected Count	75.0	4.0	121.0	200.0	
	% within GENDER	37.5%	2.0%	60.5%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.356 ^a	2	.187
Likelihood Ratio	4.866	2	.088
N of Valid Cases	200		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.80.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.130	.187
	Cramer's V	.130	.187
N of Valid Cases		200	

1.3

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GENDER * Are you willing to give a minimum of 1 hour to exercise daily?	200	100.0%	0	0.0%	200	100.0%

GENDER * Are you willing to give a minimum of 1 hour to exercise daily? Crosstabulation

		Are you willing to give a minimum of 1 hour to exercise daily?				Total
		Maybe	No	Yes		
GENDER	Female	Count	28	17	45	90
		Expected Count	25.7	12.6	51.8	90.0
		% within GENDER	31.1%	18.9%	50.0%	100.0%
	Male	Count	29	11	70	110
		Expected Count	31.4	15.4	63.3	110.0
		% within GENDER	26.4%	10.0%	63.6%	100.0%
Total		Count	57	28	115	200
		Expected Count	57.0	28.0	115.0	200.0
		% within GENDER	28.5%	14.0%	57.5%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.786 ^a	2	.091
Likelihood Ratio	4.788	2	.091
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.60.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.155	.091
	Cramer's V	.155	.091
N of Valid Cases		200	

1.4

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GENDER * Do you plan to drink at least 6 glasses of water per day?	200	100.0%	0	0.0%	200	100.0%

GENDER * Do you plan to drink at least 6 glasses of water per day? Crosstabulation

			Do you plan to drink at least 6 glasses of water per day?			
			Maybe	No	Yes	Total
GENDER	Female	Count	14	6	70	90
		Expected Count	19.8	5.9	64.4	90.0
		% within GENDER	15.6%	6.7%	77.8%	100.0%
	Male	Count	30	7	73	110
		Expected Count	24.2	7.2	78.7	110.0
		% within GENDER	27.3%	6.4%	66.4%	100.0%
Total	Count	44	13	143	200	
	Expected Count	44.0	13.0	143.0	200.0	
	% within GENDER	22.0%	6.5%	71.5%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.998 ^a	2	.135
Likelihood Ratio	4.090	2	.129
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.85.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.141	.135
Cramer's V	.141	.135
N of Valid Cases	200	

1.5**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GENDER * Are you willing enough to give up on junk food?	200	100.0%	0	0.0%	200	100.0%

GENDER * Are you willing enough to give up on junk food? Crosstabulation

			Are you willing enough to give up on junk food?			
			Maybe	No	Yes	Total
GENDER	Female	Count	38	15	37	90
		Expected Count	32.9	14.0	43.2	90.0
		% within GENDER	42.2%	16.7%	41.1%	100.0%
	Male	Count	35	16	59	110
		Expected Count	40.2	17.1	52.8	110.0
		% within GENDER	31.8%	14.5%	53.6%	100.0%
Total	Count	73	31	96	200	
	Expected Count	73.0	31.0	96.0	200.0	
	% within GENDER	36.5%	15.5%	48.0%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.230 ^a	2	.199
Likelihood Ratio	3.239	2	.198
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.95.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.127	.199
Cramer's V	.127	.199
N of Valid Cases	200	

1.6**Case Processing Summary**

	Cases				Total	
	Valid N	Percent	Missing N	Percent	N	Percent
GENDER * If indulged, are you ready to quit smoking?	200	100.0%	0	0.0%	200	100.0%

GENDER * If indulged, are you ready to quit smoking? Crosstabulation

		If indulged, are you ready to quit smoking?				
		I dont smoke	Maybe	No	Yes	Total
GENDER Female	Count	79	2	0	9	90
	Expected Count	65.7	5.0	6.3	13.1	90.0
	% within GENDER	87.8%	2.2%	0.0%	10.0%	100.0%
Male	Count	67	9	14	20	110
	Expected Count	80.3	6.1	7.7	16.0	110.0
	% within GENDER	60.9%	8.2%	12.7%	18.2%	100.0%
Total	Count	146	11	14	29	200
	Expected Count	146.0	11.0	14.0	29.0	200.0
	% within GENDER	73.0%	5.5%	7.0%	14.5%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.832 ^a	3	.000
Likelihood Ratio	27.489	3	.000
N of Valid Cases	200		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.95.

Symmetric Measures

	Value	Approximate Significance
Nominal by Nominal Phi	.330	.000
Cramer's V	.330	.000
N of Valid Cases	200	

1.7

Case Processing Summary

	Cases			
	Valid N	Percent	Missing N	Total N
GENDER * Will you try to remain in a positive frame of mind from now on?	200	100.0%	0	200

GENDER * Will you try to remain in a positive frame of mind from now on? Crosstabulation

		Will you try to remain in a positive frame of mind from now on?				
		Maybe	No	Yes	Total	
GENDER	Female	Count	11	1	78	90
		Expected Count	10.4	2.3	77.4	90.0
		% within GENDER	12.2%	1.1%	86.7%	100.0%
	Male	Count	12	4	94	110
		Expected Count	12.7	2.8	94.6	110.0
		% within GENDER	10.9%	3.6%	85.5%	100.0%
Total	Count	23	5	172	200	
	Expected Count	23.0	5.0	172.0	200.0	
	% within GENDER	11.5%	2.5%	86.0%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.345 ^a	2	.510
Likelihood Ratio	1.458	2	.482
N of Valid Cases	200		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.25.

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.082	.510
	Cramer's V	.082	.510
N of Valid Cases		200	

Figures:

Figure 1:

Exercise is necessary for a healthy lifestyle?
200 responses

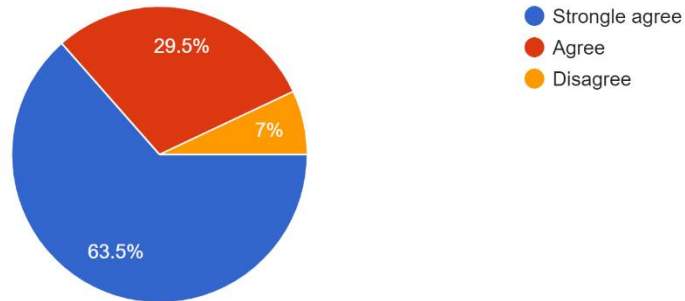


Figure 2:

Mental health is not as important as physical health. Your thoughts!
200 responses

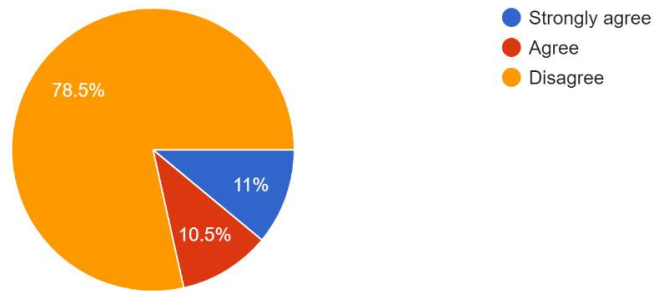


Figure 3:

Are you willing enough to give up on junk food?
200 responses

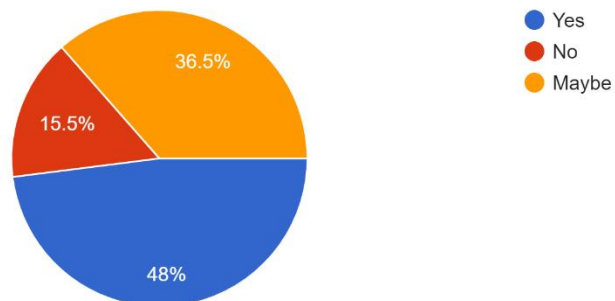
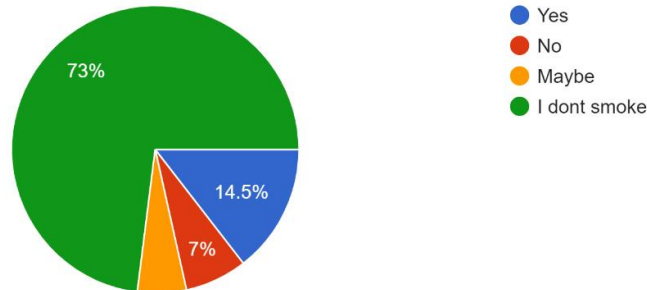


Figure 4:

If indulged, are you ready to quit smoking?
200 responses



DISCUSSIONS:

Non Communicable diseases can be prevented by adopting a healthy life style.

Majority of the students are of the view that exercise is necessary for a healthy lifestyle. Most of population is of the view that strenuous exercises and gym are not necessary. Majority of the medical students are non smokers. Majority of students consider mental health is as important as physical health. A similar research shows that more knowledge regarding health doesn't result in more practicing of these changes [10].

Regarding behavior change, most of the medical student are willing to change their behavior such as to drink 6 glasses of water daily, to exercise 1 hour daily, to quit smoking if indulged, and to give-up junk food.

Major limitation of this study was that it included students of only one medical college. Only a few aspects of health were considered. Life style was mainly focused on hostilities since most of the medical students of Sahiwal medical college live in hostels.

Suggestions:

- A. Proper health awareness programs should be organized.
- B. Mental health problems should be a priority.
- C. Lack of motivation results in harmful practices, students should be motivated in context to adopting a healthy life style.
- D. Fruits and vegetables should be used regularly to maintain a good health.

REFERENCES:

1. Scott, C. (2001). Health Promotion Planning: An Educational and Ecological Approach (3rd ed):

L.W. Green, M.W. Kreuter (Eds.) Mountain View, CA: Mayfield Publishing Company, 1999; 621 pp. Canadian Journal of Public Health, 92, 384-384. doi:10.1007/BF03404986

2. Cotugna, N., Vickery, C. E., & McBee, S. (2005). Sports Nutrition for Young Athletes. The Journal of School Nursing, 21(6), 323-328. doi:10.1177/10598405050210060401
3. O'Dea, J. A., & Abraham, S. (2001). Knowledge, beliefs, attitudes, and behaviors related to weight control, eating disorders, and body image in Australian trainee home economics and physical education teachers. J Nutr Educ, 33(6), 332-340. doi:10.1016/s1499-4046(06)60355-2
4. Sakamaki, R., Toyama, K., Amamoto, R., Liu, C.-J., & Shinfuku, N. (2005). Nutritional knowledge, food habits and health attitude of Chinese university students –a cross sectional study–. Nutrition Journal, 4(1), 4. doi:10.1186/1475-2891-4-4
5. Wardle, J., Parmenter, K., & Waller, J. (2000). Nutrition knowledge and food intake. Appetite, 34(3), 269-275. doi:10.1006/appe.1999.0311
6. Janz, N. K., & Becker, M. H. (1984). The Health Belief Model: a decade later. Health Educ Q, 11(1), 1-47. doi:10.1177/109019818401100101
7. Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: the evidence. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne, 174(6), 801-809. doi:10.1503/cmaj.051351
8. Sesso, H. D., Paffenbarger, R. S., Jr., & Lee, I. M. (2000). Physical activity and coronary heart disease in men: The Harvard Alumni Health Study. Circulation, 102(9), 975-980. doi:10.1161/01.cir.102.9.975

9. Nasir, U., Farooq Butt, A., & Choudry, S. (2019). A Study to Evaluate the Lifestyle of Medical Students in Lahore, Pakistan. *Cureus*, 11(3), e4328. doi:10.7759/cureus.4328
10. Sajwani, R. A., Shoukat, S., Raza, R., Shiekh, M. M., Rashid, Q., Siddique, M. S., . . . Kadir, M. (2009). Knowledge and practice of healthy lifestyle and dietary habits in medical and non-medical students of Karachi, Pakistan. *J Pak Med Assoc*, 59(9), 650-655.