

## Knowledge And Attitude Towards High Blood Cholesterol Among Undergraduate Malaysian University Students

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### ABSTRACT

**Background:** High blood cholesterol in young adulthood is associated with an increased risk for cardiovascular diseases (CVD) in later stages of life if not managed well at a younger age. Based on the National Health and Morbidity Survey (NHMS) 2019, 4 out of 10 people in Malaysia have high cholesterol – 18.7% being between 18 and 29 years old. Understanding the risk of high blood cholesterol is necessary for proper management, and the attitude of undergraduate university students towards high blood cholesterol is vital. Therefore, this study aimed to identify the knowledge and attitudes towards high blood cholesterol among undergraduate university students.

**Methods and Materials:** A descriptive cross-sectional study was conducted at a private university in Malaysia in 2024. A total of 300 undergraduate students aged between 18 and 25 years were recruited for the study. The questionnaire was distributed among medical and non-medical undergraduate students aged between 18 and 25. Data was collected by an online questionnaire. This questionnaire identifies the level of knowledge possessed by using nominal scale questions (8 questions) and identifies the attitude of undergraduates using Likert scale questions (9 questions) with responses that range from 'strongly agree' to 'strongly disagree'. The data was analysed using IBM SPSS Statistic (SPSS) software Version 26.

**Results:** The 300 students were from health science-related faculties (n=166) and non-health science-related faculties (n=134). The distribution of respondents' knowledge was 57.3% for good knowledge, 17.3% for moderate knowledge, and 25.3% for poor knowledge. 52.0% of respondents had a positive attitude, while 48.0% of respondents had a negative attitude towards high blood cholesterol. There were significant differences found in scores between the two groups of undergraduates,  $t(129) = 3.627$ ,  $p < 0.001$ , two-tailed, with health science undergraduates (Mean = 6.17, SD = 3.01) having higher knowledge than the non-health science undergraduate (Mean = 4.18, SD = 3.58). The magnitude of differences in the means (Mean Difference = 1.99, 95% CI: 0.904 to 3.07). However, no significant difference was found in attitude scores between student groups ( $p = 0.338$ ).

**Conclusions:** There were significant differences in knowledge between health science and non-health science faculties towards high blood cholesterol.

**Keywords:** Knowledge, Attitudes, Cholesterol, Undergraduate students, Malaysia

## 1. INTRODUCTION

Cholesterol is a primary sterol found in animal tissues. It plays an important role in human health and natural functions like digesting foods, producing hormones, generating vitamin D, and building healthy cells; however, high cholesterol levels can raise the risk of getting severe diseases (1). It is transported in the blood by macromolecules called lipoproteins which include very low-density lipoprotein (VLDL), low-density lipoprotein (LDL), high-density lipoprotein (HDL), and chylomicrons. LDL particles transfer cholesterol to peripheral tissues, and if LDL-cholesterol levels are high, lipids can deposit in the artery lumen, causing plaque development and blood vessel thickening or narrowing (2).

For this reason, LDL is also known as “bad” cholesterol. On the other hand, HDL or “Good” cholesterol oversees the transportation of cholesterol from peripheral tissues to the liver for bile acid synthesis, steroid synthesis, and cholesterol ring elimination via bile (3). High cholesterol levels can lead to a dangerous build-up of cholesterol and other deposits on artery walls (atherosclerosis). These deposits (plaques) can reduce blood flow through arteries, causing problems such as chest pain, heart attack, and stroke (2,3).

A study on awareness of high blood cholesterol among Malaysian adults in 2015 found a prevalence of 50%. However, among those diagnosed, only 19.2% were aware of their condition (4). Referring to the age groups, those who are 60 and above have the highest awareness of high blood cholesterol at 38.5%. On the other hand, those aged between 18 and 39 have the lowest awareness, recording 7.6% (5). A technical report from the Institute for Public Health Malaysia in 2019 also stated that half of the respondents from the 70-74 age group were aware that they had hypercholesterolemia (6). This solidifies the fact that the younger demographic has minimal awareness of high blood cholesterol. This could be a potential hindrance to Malaysia in achieving the target of the United Nations Sustainable Goals, which aims to decrease 1/3 of the premature mortality from non-communicable diseases (NCD) by 2030, including cancer, diabetes as well as cardiovascular disease (CVD) (7).

As such, having a low awareness of high blood cholesterol could contribute to the increase in CVD rate (8). Obesity also causes dyslipidaemia marked by elevated fasting and postprandial triglycerides and small dense LDL (9). The lower levels of circulating HDL cause reduced transport of LDL back to the liver and increase their propensity to stick to the arterial wall (1,2).

Another factor contributing to high blood cholesterol in young adults is familial hypercholesterolemia. A chromosomal genetic mutation at chromosome 19 can result in the body losing its ability to remove LDL, leading to excess LDL in the blood. Hence, the body starts accumulating LDL at an early age, causing atherosclerosis or narrowing arteries (5). As this is a disorder that is passed on through an autosomal dominant method, only one parent with the mutated gene is enough to pass the disease to the offspring. Initially, the young patient will have no symptoms. Still, as time passes, they might start to develop fatty acid deposits over parts of their body. As they worsen, they start to develop chest pains indicative of coronary artery disease and stroke symptoms like drooping eyes and paralysis of one side of their face (5,10).

Atherosclerosis arising from high blood cholesterol will cause various forms of cardiovascular complications, namely heart attack and stroke. As of 2020, the leading cause of death in Malaysia, regardless of race, is a heart attack (11). A heart attack, which develops from ischemic heart disease, is caused by plaque build-up in the coronary arteries, which can eventually break off and form a blood clot on the surface of the plaque. The clot will get bigger and bigger until it blocks blood flow, leading to oxygen not being delivered to cardiac muscles and causing heart damage (12). On the other hand, a stroke is the blockage of blood flow to the brain, causing brain damage in a matter of minutes due to deprivation of oxygen and nutrients. Stroke is a severe condition that requires immediate medical attention as it leaves behind serious consequences like brain damage, which may result in long-term disability and death (11,12).

## 2. RATIONALE

Despite existing research on high blood cholesterol and its impact on cardiovascular diseases (CVD), there remains a significant gap in awareness among young adults, particularly university students in Malaysia. Moreover, while previous research has established the role of lifestyle choices such as diet and smoking in cholesterol levels (13,14,15,16), limited studies have explored how undergraduate students perceive and manage their cholesterol levels. Given the increasing prevalence of obesity in Malaysia (6), this study aimed to identify the knowledge and attitude towards high blood cholesterol among undergraduate Malaysian university students. The findings from this study may help in health promotion programs aiming to increase cholesterol awareness and encourage lifestyle modifications among young adults.

## 3. MATERIALS AND METHODS

A cross-sectional study was conducted from November 2024 to December 2024. A convenience sampling technique was used to collect data. The sample size of 300 students was calculated using OpenEpi software based on 50% frequency of good knowledge on cardiovascular knowledge according to a previous study with a 95% confidence level and a 10% non-response rate (4). More than half of the respondents (166) were from the health science faculty, and the rest (134) were from the non-health science-related faculty. The inclusion criteria for the participants were 18 years old and above both genders.

Students from health-related studies and non-health-related studies were included. They must be Malaysian undergraduate students. All the international students were excluded from the study.

#### 4. TOOLS AND DATA COLLECTION

The questionnaires were adapted from previously published studies (17,18,19). The content validity of the questionnaire was verified by an expert in the field within the university. The pilot testing was done. A Google Form was created as the survey tool, and the survey link was distributed to participants via email and social media platforms such as WhatsApp.

The data collection process involved distributing a Google Form link to undergraduate students via university email and social media platforms such as WhatsApp. Upon clicking the link, a brief explanation of the research was provided, and participants were informed that the participation was voluntary, and they were required to give informed consent before proceeding. Their qualifications were then assessed to determine eligibility. If a respondent met the criteria, the questionnaire was unlocked, allowing them to complete it. The collected data was then compiled, distributed, and analysed. However, if a respondent did not meet the eligibility requirements, they were excluded from the study. The questionnaire was divided into 3 sections.

The first section gathered demographic data of the respondents. The second part consisted of nominal scale questions focusing on knowledge regarding high blood cholesterol, including its risk factors, symptoms, and preventive measures. It consisted of nominal scale questions (“True” or “False”) to assess the respondents' understanding of cholesterol-related concepts. The third section comprised attitude-based questions towards high blood cholesterol, structured using a Likert-scale format with five choices ranging from “Strongly Agree” to “Strongly Disagree.” Including questions focusing on cholesterol-related behaviours, including dietary habits, regular health check-ups, and lifestyle modifications. The ethical approval was obtained from the ethical committee of Segi University.

#### Data analysis

The data collected through the questionnaire was analysed using the IBM SPSS Statistic (SPSS) software Version 26, Microsoft Office Excel, and Microsoft Word. All the data obtained were anonymized and kept as a code number. The data analysis was done by the descriptive statistics such as mean  $\pm$  SD, total number, and percentage. The Mann-Whitney U test was used to analyze differences in knowledge and attitude scores between student groups. The p-value below 0.05 was taken as statistically significant.

#### 5. RESULTS

This research study explored the knowledge and attitude toward high blood cholesterol among undergraduate university students. It includes both health science and non-health science students, assessing their understanding and perceptions of high blood cholesterol.

#### Demographic characteristics

A total of 300 respondents participated in this study, with 166 (55.3%) respondents from health science-related faculties and 134 (44.7%) respondents from non-health science-related faculties. The ages of the respondents are between 18 and 25 years. Participants were between 18 and 25 years old, with a mean age of 21.4 years (SD = 2.08). The majority were female with 168 respondents (56%) while 132 respondents were male (44%). All respondents were Malaysian, and all non-Malaysian students were excluded from the study.

Among the health science-related faculties, 30 (10%) respondents were from the Faculty of Dentistry, the Faculty of Medicine with 68 (22.7%) respondents, the Faculty of Optometry & Vision Sciences with 40 (13.3%) respondents, and the Faculty of Pharmacy with 28 (9.3%) respondents. In contrast, among non-health-related faculties, 2 participants (0.7%) were from the American Degree Program, 8 participants (2.7%) from Faculty of Business, 80 participants (26.7%) from Social Sciences and Hospitality Management, 26 participants (8.7%) from Faculty of Education, and Faculty of Engineering, Built Environment & Information Technology had 18 participants (6%). A summary of the demographic data is presented in Table 1.

Health Science Related Faculties	Male	Female	Total
Faculty of Medicine	28	40	68
Faculty of Dentistry	12	18	30
Faculty of Optometry & Vision Sciences	8	32	40
Faculty of Pharmacy	10	18	28
<b>Total</b>	<b>58</b>	<b>108</b>	<b>166</b>

Non-Health Science Related Faculties	Male	Female	Total
American Degree Program	0	2	2
Faculty of Business, Social Sciences and Hospitality Management	60	28	88
Faculty of Education	2	24	26
Faculty of Engineering, Built Environment & Information Technology	10	8	18
<b>Total</b>	<b>72</b>	<b>62</b>	<b>134</b>

**Table 1: Demographic Table**

### Knowledge on high blood cholesterol

A comparison of knowledge regarding high blood cholesterol among health science and non-health science students was explored. A large proportion of health science students 88% were aware of the good cholesterol (HDL), compared to 59.7% of non-health science students. Of the remaining non-health-related students 40.3%, were not sure or do not know about it.

Regarding exercise's role in reducing cholesterol, 83.1% of health science students and 71.6% of non-health science students acknowledged its benefits. Meanwhile, 16.9% of health science students and 28.4% of non-health science students did not recognize this. Additionally, 62.7% health science and 35.8% of non-health science students correctly identified the ideal total cholesterol level as <200 mg/dL, while 37.3% health science and 64.2% non-health science students did not know this.

When asked whether “high blood cholesterol is not a risk factor for heart attack,” the majority of both health science and non-health science students (94% and 90%, respectively) correctly identified this statement as false. Similarly, regarding the symptoms to high blood cholesterol levels, 124 (74.7%) health science and 84 (62.7%) non-health science students correctly stated that high blood cholesterol typically has no symptoms.

Moreover, the majority of respondents, 85.5% health science students and 70% non-health science students, realized that high blood cholesterol can result in heart disease. On the other hand, 30% of non-health science students were unsure of the relation. In terms of body weight and cholesterol levels, 78.3% of health science and 65.7% of non-health science students agreed that high blood cholesterol can occur in thin individuals.

Lastly, findings on hereditary factors and blood cholesterol levels were mixed, with 56.6% of health science students and 46.3% of non-health science students agreeing that high cholesterol can be inherited. The full findings and knowledge scores are shown in Table 2 and Table 3.

A Mann-Whitney U test was conducted to examine whether there was a statistically significant difference in the knowledge of high blood cholesterol between health science and non-health science students. It indicated that there was a significant difference in the knowledge of high blood cholesterol between health science (mean rank = 83.19) and non-health science faculties (mean rank = 65.98),  $U = 2142.5$ ,  $z = -2.445$ ,  $p = 0.014$ . This indicates a statistically significant difference in knowledge about high blood cholesterol, with health science students scoring higher than non-health science students. The detail of the test is shown in the Table 4.

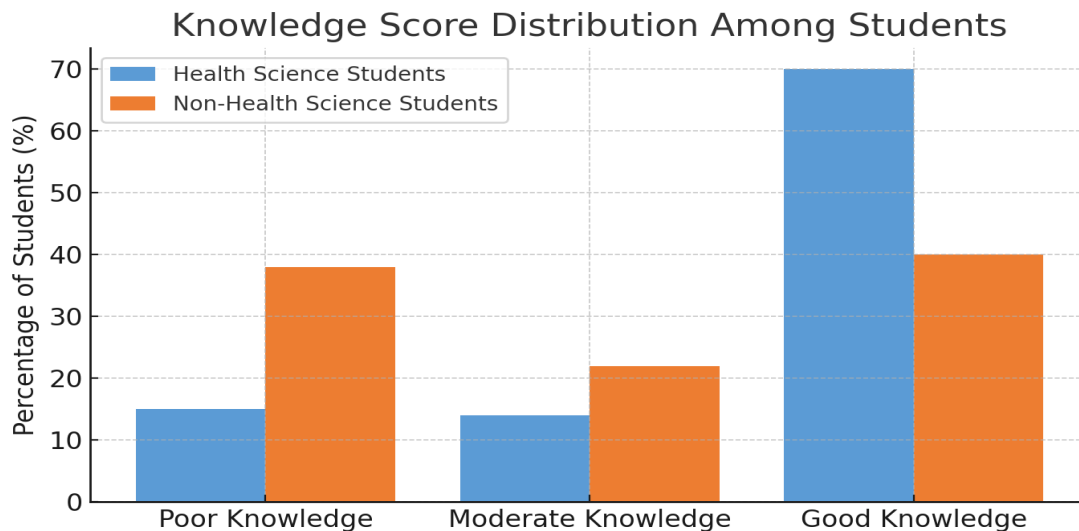
No.	Question	Faculty	Correct	Wrong	Total
1.	There is good cholesterol.	Health Science	146 (88%)	20 (12%)	166
		Non-health Science	80 (59.7%)	54 (40.3%)	134
2.	Exercise can reduce high blood cholesterol.	Health Science	138 (83.1%)	28 (16.9%)	166
		Non-health Science	96 (71.6%)	38 (28.4%)	134

3.	The ideal total cholesterol level is <200 mg/dL.	Health Science	104 (62.7%)	62 (37.3%)	166
		Non-health Science	48 (35.8%)	86 (64.2%)	134
4.	High blood cholesterol is not a risk factor for heart attack.	Health Science	156 (94%)	10 (6%)	166
		Non-health Science	120 (90%)	14 (10%)	134
5.	High blood cholesterol has no symptoms.	Health Science	42 (25.3%)	124 (74.7%)	166
		Non-health Science	50 (37.3%)	84 (62.7%)	134
6.	High blood cholesterol can result in heart diseases.	Health Science	142 (85.5%)	24 (14.5%)	166
		Non-health Science	94 (70%)	40 (30%)	134
7.	High blood cholesterol may occur in thin people.	Health Science	130 (78.3%)	36 (21.7%)	166
		Non-health Science	88 (65.7%)	46 (34.3%)	134
8.	High blood cholesterol can be inherited.	Health Science	94 (56.6%)	72 (43.4%)	166
		Non-health Science	62 (46.3%)	72 (53.7%)	134

**Table 2: Knowledge Towards High Blood Cholesterol Between Health Science and Non-Health Science Students**

			Knowledge Score			Total
			Poor Knowledge	Moderate Knowledge	Good Knowledge	
Faculty	Health Science Faculty	Count	26	24	116	166
		% Within Faculty	15.7%	14.5%	69.9%	100.0%
	Non-Health Science Faculty	Count	50	28	56	134
		% Within Faculty	37.3%	20.9%	41.8%	100.0%
Total		Count	76	52	172	300
		% Within Faculty	25.3%	17.3%	57.3%	100.0%

**Table 3: Knowledge score Between Health Science and Non-Health Science Students**



**Fig 1: Knowledge score distribution among students**

	Faculty	N	Mean Rank	Sum of Ranks
Knowledge_Score1	Health Science Faculty	166	83.19	6904.50
	Non-Health Science Faculty	134	65.98	4420.50
	Total	300		

**Test Statistics<sup>a</sup>**

	Knowledge_Score
Mann-Whitney U	2142.500
Wilcoxon W	4420.500
Z	-2.445
Asymp. Sig. (2-tailed)	.014

a. Grouping Variable: Faculty

**Table 4: Comparison of Knowledge on High Blood Cholesterol**

#### Attitudes toward high blood cholesterol

Similar to the findings from the knowledge score, health science students generally showed more positive attitudes toward managing high blood cholesterol compared to non-health science students. Most of the students from different faculties acknowledged that maintaining a healthy BMI is important to prevent high blood cholesterol. A higher proportion of health science students (86.8%) agreed that maintaining a healthy BMI is important for preventing high blood cholesterol, compared to non-health science students (73.1%).

In terms of the management of high cholesterol levels, around 70% of health science students and non-health science students believed high blood cholesterol is manageable. Similarly, regarding periodic blood cholesterol testing, 80.7% of health science students and 70.1% of non-health science students agreed it is important.

Regarding diet, surprisingly, non-health science students (61.2%) were more likely to prefer low-cholesterol foods than



health science students (47%). However, Health science students (74.7%) placed more importance on reading nutrition labels compared to non-health science students (68.7%). 78.3% of health science students and 65.7% of non-health science students agreed that eating less oily food can reduce cholesterol risk.

Additionally, the majority of health science students and non-health science students disagreed that high blood cholesterol is not serious (92.7% and 74.7% respectively). Just 19.3% of students studying health sciences and 25.4% of students studying non-health sciences said they have talked to friends about how to keep their cholesterol levels in check. However, 79.5% of health science students and 59.8% of non-health science students agreed that maintaining their blood cholesterol level is important.

A Mann-Whitney U test was conducted to examine whether there was a statistically significant difference in the attitudes toward high blood cholesterol between health science and non-health science students. The results indicated that there was no significant difference in attitudes between health science (mean rank = 152.68) and non-health science students (mean rank = 144.32),  $U = 10,415.0$ ,  $z = -1.283$ ,  $p = 0.199$ . This indicates that the difference in attitudes toward high blood cholesterol between the two groups was not statistically significant. The details of the test are shown in Tables 5,6 and 7.

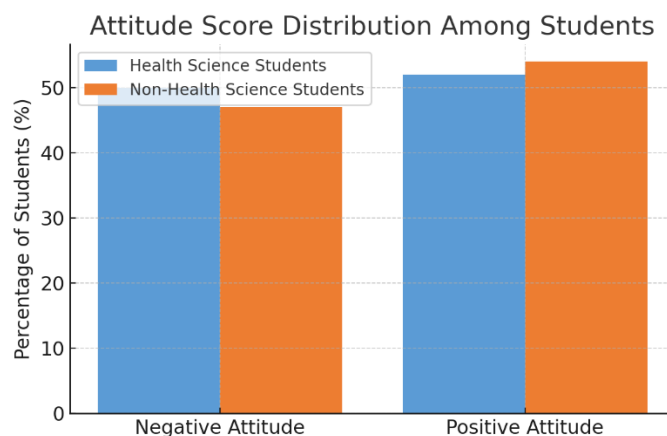
No.	Question	Faculty	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)	Total
1.	Maintaining a healthy BMI is important to prevent high blood cholesterol.	Health Science	2 (1.2%)	6 (3.6%)	14 (8.4%)	58 (34.9%)	86 (51.9%)	166
		Non-health Science	0 (0%)	6 (4.5%)	30 (22.4%)	34 (25.4%)	64 (47.7%)	134
2.	I think high blood cholesterol is manageable.	Health Science	2 (1.2%)	0 (0%)	42 (25.3%)	62 (37.4%)	60 (36.1%)	166
		Non-health Science	2 (1.5%)	4 (3%)	34 (25.4%)	40 (29.8%)	4 (40.3%)	134
3.	It is important that periodic blood cholesterol test should be conducted.	Health Science	2 (1.2%)	4 (2.4%)	26 (15.7%)	68 (40.9%)	66 (39.8%)	166
		Non-health Science	0 (0%)	2 (1.5%)	38 (28.4%)	40 (29.8%)	54 (40.3%)	134
4.	I prefer to consume food labelled with "low-cholesterol" or "no-cholesterol".	Health Science	2 (1.2%)	12 (7.2%)	74 (44.6%)	54 (32.5%)	24 (14.5%)	166
		Non-health Science	2 (1.5%)	10 (7.5%)	40 (29.8%)	42 (31.4%)	40 (29.8%)	134
5.	Reading nutrition facts for each product before consumption is important.	Health Science	2 (1.2%)	4 (2.4%)	36 (21.7%)	66 (39.8%)	58 (34.9%)	166
		Non-health Science	0 (0%)	12 (1.5%)	20 (29.8%)	40 (23.9%)	32 (44.8%)	67 134
6.	I think that high blood cholesterol is not a serious condition.	Health Science	68 (40.9%)	50 (30.1%)	36 (21.7%)	8 (4.9%)	4 (2.4%)	166
		Non-health	22	38	40	16	18	134

		Science	(16.4%)	(28.4%)	(29.9%)	(11.9%)	(13.4%)	
7.	I think that eating less oily food will reduce the chances of getting high blood cholesterol.	Health Science	2 (1.2%)	6 (3.6%)	28 (16.9%)	90 (54.2%)	40 (24.1%)	166
		Non-health Science	0 (0%)	6 (4.5%)	40 (29.8%)	50 (37.3%)	38 (28.4%)	134
8.	I always discuss with my friend on how to maintain a normal blood cholesterol level.	Health Science	12 (7.2%)	34 (20.5%)	88 (53%)	24 (14.5%)	8 (4.8%)	166
		Non-health Science	2 (1.5%)	18 (13.4%)	80 (59.7%)	18 (13.4%)	16 (12%)	134
9.	It is important to me that I maintain my blood cholesterol level.	Health Science	2 (1.2%)	0 (0%)	32 (19.3%)	52 (31.3%)	80 (48.2%)	166
		Non-health Science	0 (0%)	6 (4.5%)	48 (35.7%)	38 (28.4%)	42 (31.4%)	134

**Table 5: Attitude score Between Health Science and Non-Health Science Students**

			Attitude Score		Total
			Negative	Positive	
Faculty	Health Science Faculty	Count	82	84	166
		% Within Faculty	49.4%	50.6%	100.0%
	Non-Health Science Faculty	Count	62	72	134
		% Within Faculty	46.3%	53.7%	100.0%
Total		Count	144	156	300
		% Within Faculty	48.0%	52.0%	100.0%

**Table 6: Attitude score Between Health Science and Non-Health Science Students**



**Fig 2: Attitude score distribution among students**



	Faculty	N	Mean Rank	Sum of Ranks
Attitude_Score1	Health Science Faculty	166	152.68	25,045.00
	Non-Health Science Faculty	134	144.32	19,334.00
	Total	300		

**Test Statistics<sup>a</sup>**

	Attitude_Score
Mann-Whitney U	10,415.000
Wilcoxon W	19,334.000
Z	-1.283
Asymp. Sig. (2-tailed)	0.199

a. Grouping Variable: Faculty

**Table 7: Comparison of Attitude score on High Blood Cholesterol**

## 6. DISCUSSION

A study done at University Malaysia Sarawak (UNIMAS) on participants aged between 18-29 has found that 21.3% of their students have a mean higher blood cholesterol at 4.7 mmol/L as compared to the reported 4.5mmol/L in the third National Health and Morbidity Survey (NHMS III) where only 5-10% were reported (6). The figures are worrying as young adults should not have developed this modifiable risk factor but has become a common theme among the younger population due to a sedentary lifestyle, eating unhealthy food and stress (14). This highlights the relevance of our study, which focuses on undergraduate students aged 18-25, examining their knowledge and attitudes toward high blood cholesterol management.

Our study revealed a statistically significant difference in knowledge about high blood cholesterol between health science and non-health science students (Mann-Whitney U test,  $p = 0.014$ ). This outcome is expected since health-related students have more knowledge of the topic of cholesterol in compulsory science subjects taught in secondary school; as such, they have an idea of how high blood cholesterol can cause a myriad of cardiovascular diseases like stroke and myocardial infarction. Participants from health-related faculty were also aware that there is good cholesterol. They also agreed that even if a person appears to have normal body size, they can still have high blood cholesterol. All the students studying health-related disciplines had more exposure to these topics in their coursework, they were more knowledgeable than those studying non-health-related subjects.

On the other hand, regarding the attitude between the two groups of students, the results showed no significant difference in attitude scores ( $p = 0.338$ ). This suggests that while health science students had greater knowledge, their attitudes toward managing high blood cholesterol were not that much different from those of non-health science students. Both groups of students agreed that keeping a normal BMI and having their blood cholesterol checked is important for cholesterol management.

Interestingly, non-health science students (61.2%) were more likely to prefer low-cholesterol foods compared to health science students (47%). In contrast to that finding, health science students (74.7%) placed more importance on reading nutrition labels compared to non-health science students (68.7%). This suggests that while health science students are more likely to read nutrition labels due to their knowledge, they may not always apply this knowledge in their food choices as their attitude is lacking.

These findings align with prior research, which suggests that the younger generation may have an awareness of cholesterol-related risks but often lack proactive attitudes toward managing them (9). As urbanization progresses, a sedentary lifestyle is becoming normalised, as the car ownership growth and desk-based occupations are increasing (20). This highlights the need for health education programs to improve not just knowledge but also to change attitudes.

Additionally, known risk factors for high cholesterol levels are age, family history, obesity, and socioeconomic status all of these may influence students' knowledge and attitudes (13,17,18,19). Research suggests that older individuals tend to be

more proactive about monitoring their cholesterol levels, emphasizing the need to introduce health awareness programs at a younger age (21).

Moreover, as university students, they might be staying away from their parents, hence their food choices might not be healthy or balanced. Previous studies found that many students rely on convenient, high-fat foods, contributing to rising BMI levels and cholesterol-related issues (16). Even if the students stay at home, nowadays parents are getting busier trying to provide a better life for their children so they tend to order takeouts which may contain high fats, salt and sugar that might increase BMI (15). So, mindfulness over food intake is important in controlling blood cholesterol. Therefore, raising awareness about dietary habits, exercise, and regular screening is essential for university students.

## 7. CONCLUSION

Through our research, we managed to identify the knowledge and attitude towards high blood cholesterol among undergraduate Malaysian university students. This is important as it allows us to understand and uncover any misunderstanding or lack of information regarding high blood cholesterol among undergraduates. Through this understanding, we can develop and improve the knowledge and attitude of undergraduates towards high blood cholesterol. Overall, both health science and non-health science undergraduates have good knowledge and positive attitudes towards managing and maintaining blood cholesterol levels. There were significant differences in knowledge between health science and non-health science faculties towards high blood cholesterol. Even though their knowledge level is different, the attitude toward knowing that having high cholesterol is bad is not that much of a difference. This is a cross-sectional study with its limitations. Future studies are recommended for a better assessment.

## 8. RECOMMENDATIONS

The sample size should be enlarged by collecting data from different universities to obtain more significant and accurate results. The samples collected should be equally distributed between health science and non-health science faculties.

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### Conflicts of Interest

The authors declare that there are no conflicts of interest.

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