Original Research Article

Determining the knowledge level on safe sex and the attitude towards sexual consent among medical students in Malaysia: A cross-sectional study

Abstract

Introduction: Medical students are the future health educators of the public; hence it becomes essential for us to be empowered with accurate and sufficient knowledge on safe sex and sexual consent as the sparsity of the knowledge among the population leads to detrimental implications.

Aim: This study aimed to investigate knowledge regarding safe sex, factors associated with the knowledge on safe sex, as well as to identify the attitude on sexual consent among medical students.

Study design: A cross-sectional analytical study

Methodology: This study was conducted from April 2022 to May 2022 among undergraduate medical students (MBBS) in a private medical university in Malaysia. The respondents were recruited by purposive sampling and self-administered validated questionnaire was used for data collection. The data was analyzed using Epi Info software (version 7.2.5.0). The descriptive statistics was calculated as frequency, percentage, and mean. The Chi-square test was used in inferential statistics.

Results: There were 140 students who agreed to participate in this study. After the data analysis, 61.7% of the students have good knowledge on safe sex, and 72.34% of the students have good attitude towards sexual consent. There were no statistically significant association between age, gender, ethnicity, semester of study, country of origin and the knowledge of safe sex, attitude towards sexual consent, and sources of information of safe sex. Furthermore, the most sourced out for safe sex related information are from schools/ universities followed by health talks/ seminars/ webinars, online sources, friends, and lastly parents and siblings.

Conclusion: Our study has demonstrated societal significance between gender and age against the knowledge level on safe sex and attitude level towards sexual consent. This reinforces that sex education which includes safe sex and sexual consent should be inculcated into the general education syllabus for the betterment of the society as a whole in terms of sexual well-being.

Keywords: Safe Sex, Sex Education, Medical Students, Knowledge on safe sex, Attitude towards sexual consent.

1. INTRODUCTION

Safe sex is a term first used in 1968 to mean “sexual activity and especially sexual intercourse in which various measures (such as the use of latex condoms or the practice of monogamy) are taken to avoid diseases (such as AIDS) transmitted by sexual contact” [1]. Adolescents and young adults are prone to be involved in unsafe sexual practices. Knowledge of safe sex and STIs is very important for adolescents who need to be imbued with a comprehensive awareness of how to avoid unsafe sex, STIs, and teenage pregnancies [2]. Previous studies showed an increased risk of sexually transmitted diseases and unintended pregnancies were due to lack of knowledge about reproduction and safe sex practices [3]. Much of this knowledge should be grasped by every individual but unfortunately, many schools across Asia don't have a comprehensive curriculum regarding this matter. In Malaysia, there is a curriculum developed but it involves mostly abstinence teaching instead of safe sex practice. They have a curriculum called Reproductive Health and Social Education or Pendidikan Kesihatan Reproduktif dan Sosial (PEERS). However, PEERS have no obligation by the ministry of education to be taught by the teacher and many of them don’t fully teach the whole syllabus but only based on their beliefs and understanding [4]. This has led to many unwanted social problems as simple observations have proven that the teenage mind tends to venture into the stuff told to them to be prohibited. The global health agenda stresses on why it’s important for the adolescents to have adequate knowledge about sexual health, in order to have a healthy life [5].

The lack of knowledge in school curriculum will impact student’s upbringing and their views on, safe sex. Many individuals would go through different sources that may be violent or perverted and inappropriate sources of information. Inaccurate information sources might not be appropriate for medical students especially, since they will be giving information out to patients since there isn’t a safe sex course besides theoretical lectures on sexually transmitted diseases and their prevention but mostly treatment and identifiers, they won’t be able to truly educate their patients on this topic. Based on a study done, respondents who obtained information from social media happened to practice safer sex [6]. Now this is great news but unfortunately not many will actively seek out this information as they may be oblivious as to what to search with the lack of information provided by their main source of information for surviving in society, school. School being the main source of information and one of the trusted sources of information. As a study mentioned, sex communication with parents provides a very small protective role towards the use of safer sex [7]. Furthermore, a study

Comment [A1]: year

was conducted among Italian adolescents showed that there is a need for proper sex education in schools and very few claimed good sex education was provided in school [8]. This further shows how important education is to ensure safer sex among adolescents and adults. If a developed country agrees on the need for such education, this further proves the importance for a developing country to adapt this requirement into our curriculum. Moreover, medical students, the future healthcare professionals, are expected to have proper knowledge about transmission and prevention of sexually transmitted diseases but a study have shown that they lack the knowledge about AIDS [9]. As the years move forward, we should all strive to try and achieve the sustainable development goals (SDG) released by the United Nation. There are three sustainable development goals related to the safe sex: SDG 3 (good health and well-being), SDG 4 (Quality education), and lastly, SDG 5 (Gender equality). These three SDGs happened to be a part of safe sex education to reduce the stigma and taboo of it all to ensure a future with better healthcare and educated individuals [10,11].

According to a study done in Vientiane Prefecture, Lao PDR in 2020 on the knowledge of safe sex among 337 high school students (14 – 20 years of age), approximately half of them (50.3%) reported having poor knowledge on safe sex [12]. This just further shows how many of us in Asia happen to have lesser knowledge regarding safe sex which leads to a majority of the social issues associated with it, like sexually transmitted diseases, unwanted teenage pregnancies and more. This shows the requirement of sexual education being needed direly in the school curriculum for future prevention. Fortunately, in the same study done in Lao PDR, 51.9% of the respondents knew about sexually transmitted diseases, which further proves the need for comprehensive education regarding the topic proper [12]. Besides, a study by California State University on relationship source of safe sex knowledge & testing for STI revealed that those who had obtained fundamental knowledge on safe-sex practices from a medical professional are more open to the idea of getting tested for STIs whereas those who had received the mentioned knowledge from online resources were comparatively less inclined towards testing for STIs [13].

Comment [A2]: 51.9% is not a significant percentage to state as fortunate

Unsafe sex has led to the rise in sexually transmitted diseases and unwanted pregnancies over the years. With many unaware and unwilling for the use of some form of contraception has led to this undesired outcome. In the United Kingdom, a study had shown that sex education reduced the risky sexual behaviours and in turn decreased sexually transmitted diseases [14]. It is important to understand the social context and knowledge regarding safe sex to prevent undesirable consequences. Not to our surprise, scarce literature explored regarding safe sex in

Comment [A3]: If sex is performed with consent then who is considered responsible

Malaysia. Therefore, there is a need to assess the knowledge level in regard to safe sex among Malaysians, especially medical students. In addition to that, we intend to have sexual consent knowledge and attitudes to be tested, which happen to need light shone upon. It is crucial to investigate on safe sex and consent as many will go unaware of the disaster they would cause and the fact that it could all be prevented with a simple syllabus inculcated into them. Abstinence alone doesn't do much.

This research aimed to investigate the knowledge regarding safe sex and attitude towards sexual consent among medical students. The specific objectives were (1) to investigate the knowledge on safe sex, (2) to determine the factors associated with the knowledge on safe sex, and (3) to identify the attitude towards sexual consent.

Comment [A4]: Then why were other nationalities selected

Comment [A5]: Have any of the students experienced sex or giving consent for sex before the study started.

If not how do they contribute to a topic that they themselves have not experienced.

Comment [A6]: How do you define and differentiate consent when none of the students have ever participated in that activity

2. MATERIAL AND METHODS

2.1 Study design and Study setting

A cross-sectional study was conducted on the knowledge of safe sex and sexual consent among undergraduate medical students in a private medical university in Malaysia. An online English language questionnaire (google form) was sent out to the students from April 2022 to May 2022. The students from MBBS programs of semester 1 to Semester 4 & semester 7 to semester 10 were recruited for this study.

Comment [A7]: Kindly attach a copy of the questionnaire

2.2 Sample size and Sampling method

The sample size for this study was calculated by using the Epi Info sample size calculator. The estimated total population was 800 medical students in the study university. The minimum sample size required was 126 with an expected frequency of 50.4% based on a previous study done in Lao PDR by Khonsavanh Inthavong [12], the acceptable margin of error was 8%, confidence level of 95%, and non-response rate of 10%. The final sample size requirement was140 for this study. The respondents were recruited with the non-probability sampling method, purposive sampling. The inclusion criteria of this study were medical students in semesters 1,2,3,4,7,8,9 and 10 of the MBBS degree programme in the study university. They had to be voluntarily willing to participate and must have completed the entire questionnaire.

Comment [A8]: Other study details Not required in sample size and sampling method section

Comment [A9]: Reason why students from semester 5,6 were excluded ?

2.3 Study instrument and Data collection

The questionnaire consisted of four components. The first being demographics, then source of information regarding safe sex, then knowledge on safe sex, and lastly attitude towards sexual consent. Demographics contained information of their age, gender, ethnicity, semester of study, and country of origin. For questions under source of information [9], it contained yes or no answers, and multiple-choice questions. For questions under knowledge on safe sex [12], it was evaluated with yes, no, and don't know/ unsure. Lastly, questions for attitude towards sexual consent [15], it was evaluated with a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). Reliability analysis was conducted by calculating Cronbach's alpha for the attitude items (0.969, excellent reliability); and coefficient for Kuder-Richardson 20 (KR-20) for the knowledge items (0.512, reasonable reliability). The data was collected through an online English questionnaire (google form); The respondents received the link to the questionnaire in order to complete the survey upon giving written consent. The link was sent to them via college whatsapp group chat and also their student email ID. The data collected from the respondents are private and confidential. The said data was stored in a password protected file to ensure that it is secure & retrievable.

Comment [A10]: How much time was given for the participants to complete the task.

How many participants walked out and how many left the questionnaire incomplete kindly provide details

2.4 Data processing and Data analysis

The data was analysed using Epi Info version 7.2.5.0. software. The results are presented through frequency counts and mean. Inferences and association between the independent variables and knowledge on safe sex and attitude towards sexual consent was assessed to see their significance. Chi-square test and Fisher exact test were utilised to perform data analysis. The significant level (p value) is set up at 0.05 with 95% confidence interval.

Comment [A11]: Which department study was conducted .

Was the study conducted by students or staff

Comment [A12]: Which department conducted the statistical analysis

2.5 Ethical consideration

Informed consent was obtained from the respondents. The confidentiality was maintained throughout the research and after the research. The respondents had full autonomy and willingness to participate in this research. Ethical approval was granted from the Research Ethics Committee, Faculty of Medicine, Manipal University College Malaysia (MUCM), Malaysia.

Comment [A13]: Were the forms blinded ? or coded, if not how was the confidentiality maintained

3. RESULTS

A total of 141 students responded to the survey. Table 1 presents the demographic characteristics of the respondents. With reference to the sociodemographic variables, the majority of the respondents were aged less than 22 years (66.67%). 69.5% of the respondents were females and 30.5% were males. Based on ethnicities, 46.1% were Indians, followed by 34.75%, Chinese, 9.93%, Others, ending with 9.22%, Malays. This study included some international students (14.18%) of which 7.8%, Sri Lankan and 6.38%, Indian. Majority of our respondents were from the clinical years (51.77%) and the rest pre-clinical years (48.23%) (Table 1).

Comment [A14]: This is obvious as the population was selectively included.

How does this result impact the learning of the topic in concern.

Comment [A15]: This may be because the number of students in each batch may have a higher female to male ratio. Kindly provide details on what is the male to female ratio of all the students studying in the university

Comment [A16]: Why were other nationals included in the study kindly elaborate

Comment [A17]: How is it that 46.1% Indians participated in previous line based on ethinicity now are 6.38% in this statement

Comment [A18]: Significance of this statement

Table 1. Sociodemographic characteristics of respondents (n=141)

Variable	Frequency (%)
Age	
≤ 22 years	66.67%
>22 years	33.33%
Gender	
Male	30.5%
Female	69.5%
Ethnicity	
Malay	9.22%
Chinese	34.75
Indian	46.10
Others	9.93
Nationality	
Malaysian	85.82%
Sri Lankan	7.8%
Indian	6.38%
Study year	
Pre-clinical year	48.23%
Clinical year	51.77%

As a whole, 61.7% of the respondents had good knowledge level on safe sex while 38.3% of them did not. Besides that, 72.34% of them had good attitude towards sexual consent while 27.66% did not (Figure 1).

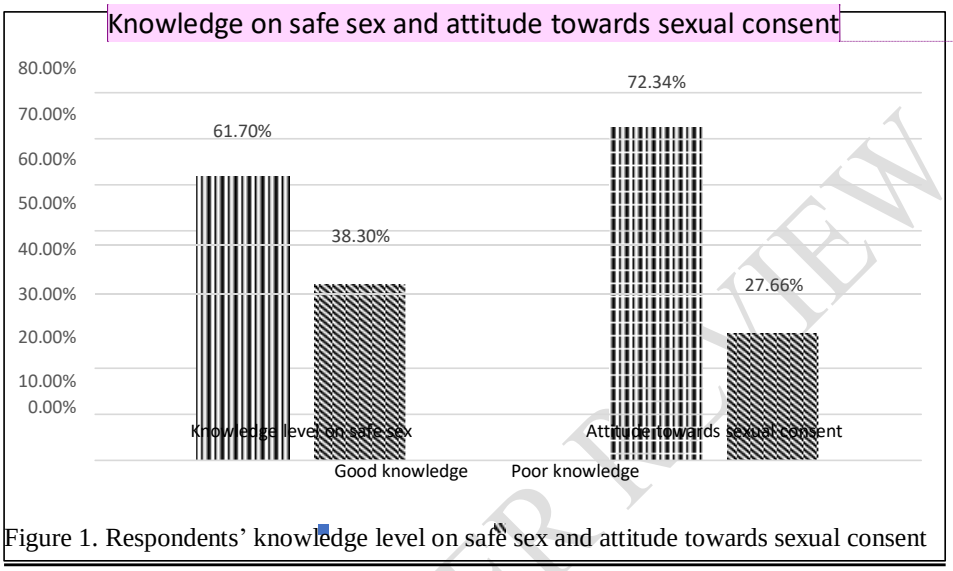

Figure 1. Respondents' knowledge level on safe sex and attitude towards sexual consent (n=141)

A majority of the sample responded that their source of information on safe sex was through school/university (108 students) & health talks/seminar/webinars (91students). A proportion of the sample acquired information on safe sex through online resources searched by themselves (79 students) and from their friends (68 students). The results also reflected that in the sample, information on safe sex is rarely discussed by parents (35 students) and siblings (26 students) (Figure 2).

Comment [A19]: On what test of significance is this concluded and is it statistically significant or not ?

Comment [A20]: Labeling missing , table with incomplete details

Comment [A21]: Kindly elaborate in percentage form

Comment [A22]: This data is incomplete as no parents/ siblings were included in the study .

the information provided arbitrarily is by the children and not confirmed by parents/ sibling whether they discussed the topic at home

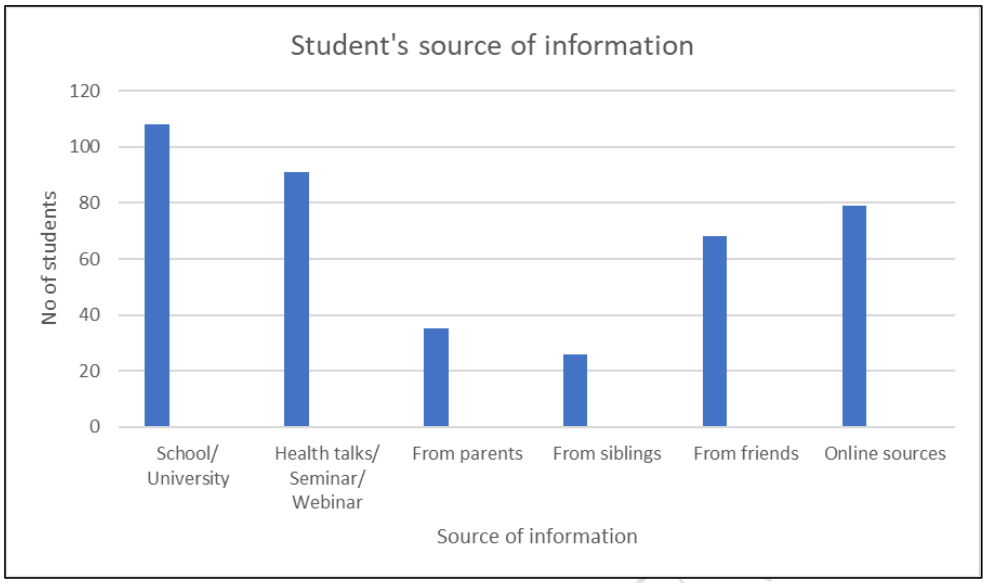

Figure 2. Source of information on safe sex among the respondents (n=141)

Comment [A23]: no labeling and figures missing

Table 2 presents the association between the demographic characteristics of the respondents and their knowledge on safe sex. Based on our results, there is a negative association between age and the knowledge on safe sex as the Odds Ratio (OR) is 0.76 (<1). Those aged less than 22 years are less likely to have good knowledge on safe sex compared to those who are older than 22 years. However, there is no statistical significance between age and the knowledge on safe sex in regards to the 95% Confidence Interval (CI) ranges from 0.37 to 1.58 in which the null value of '1' is included, hence making it not statistically significant.

Comment [A24]: contrary to earlier finding as it is mentioned that maximum students received knowledge in school when the were younger. Hence ideally students less than 22 years would have more knowledge as compared to students above 22 years.

There is positive association between gender and the knowledge on safe sex as the OR is 1.08. Females are 1.08 times more likely to have good knowledge on safe sex in comparison to Males. However, there is no statistical significance between gender and knowledge on safe sex. This can be inferred from the 95% CI ranging from 0.52 - 2.25.

Comment [A25]: For this stateme3nt to be accepted the study should have included equal number of male and female students and then evaluated their knowledge.

There is negative association between ethnicity and the knowledge on safe sex. With Malay as the reference, the OR's are 0.52 for Chinese, 0.37 for Indians, and lastly, 0.75 for Others. All ethnicities were less likely to have good knowledge on safe sex than Malays. There is no significance statistically between ethnicity and the knowledge of safe sex as the 95% CI

Comment [A26]: Your Ethinicty graph shows maximum knowledge by Indians followed by Chinese and lastly Malays

proves that as well, all with the inclusion of the null value of '1'. Chinese - 0.13-2.13, Indians - 0.09-1.48, Others - 0.13-4.25.

There is positive association between nationality and the knowledge on safe sex. With Indians as the reference, the OR's are 9 for Sri Lankans, and 3.26 for Malaysians. Sri Lankans are 9 times more likely to have good knowledge on safe sex than Indians. Malaysians are 3.26 times more likely to have good knowledge on safe sex than Indians. There is statistical significance in regards to nationality and good knowledge as the 95% CI is between 1.14-71.04, in which the null value of '1' is not included. However, for Malaysians there isn't any statistical significance as the 95% CI is between 0.78-13.68, which is inclusive of the null value '1'.

Finally, there is positive association between the study year and the knowledge on safe sex as the OR is 1.27. Those in clinical years are 1.27 times more likely to have good knowledge than those in pre-clinical years. There is no statistically significant association between the study year and good knowledge as the 95% CI including the null value, 0.64 - 2.50 (Table 2).

Comment [A27]: Contradictory to your previous explanation 14% Malay 7% Sri lanka 6% Indians

Comment [A28]: This is too bold of a statement.

When all students involved in the study are pursuing their studies in the same place and institution we cannot bring their nationality into the account

Also

Comment [A29]: Totally irrelevant and misleading data as the subjects in the sample are all studying at the same university

Comment [A30]: Incomplete data as selection did not include 5th and 6th semester students, when students were not even included in the study how can we state that they had less knowldege

Table 2. Association between demographic characteristics and knowledge on safe sex among the respondents (n= 141)

Variable	Good Knowledge n (%)	Poor knowledge n (%)	Odds Ratio (OR)	95% Confidence Interval (CI)	P value
Age					
>22 years	31 (65.96)	16 (34.04)	reference		
≤ 22 years	56 (59.57)	38 (40.43)	0.76	0.37 - 1.58	0.462
Gender					
Male	26 (60.47)	17 (39.53)	reference		
Female	61 (62.24)	37 (37.76)	1.08	0.52 - 2.25	0.841
Ethnicity					
Malay	10 (76.92)	3 (23.08)	reference		
Chinese	31 (63.27)	18 (36.73)	0.52	0.13 - 2.13	0.513*
Indian	36 (55.38)	29 (44.62)	0.37	0.09 - 1.48	0.150
Others	10 (71.43)	4 (28.57)	0.75	0.13 - 4.25	1.00*
Nationality					
Indian	3 (33.33)	6 (66.67)	reference		
Malaysian	75 (61.98)	46 (38.02)	3.26	0.78 - 13.68	0.155*
Sri Lankan	9 (81.82)	2 (18.18)	9.00	1.14 - 71.04	0.064*
Study year					
Pre-clinical year	40 (58.82)	28 (41.18)	reference		
Clinical year	47 (64.38)	26 (35.62)	1.27	0.64 - 2.50	0.497

*Fisher Exact test

Table 3 presents the association between the demographic characteristics and attitude towards sexual consent among the respondents. There is positive association between age and attitude on sexual consent as the Odds Ratio (OR) is 1.39 (>1). Those aged less than 22 years are 1.39 times more likely to have good attitude towards sexual consent compared to those who are more than 22 years. There is no statistical significance between age and the attitude towards sexual consent as the 95% Confidence Interval (CI) ranges from 0.62 - 3.11 in which null value of "1" is included explaining the statistically non-significant association.

Comment [A31]: Odds ratio in this study is not befitting as no exposure is given to the study subjects during the period of study

Comment [A32]: Contrary to your previous line

There is positive association between gender and the attitude on sexual consent as the OR is 1.65. Females are 1.65 times more likely to have good attitude towards sexual consent than Males. There is no statistically significant association between gender and the attitude on sexual consent. This can be inferred from the 95% CI, 0.76 - 3.60 in which null value of "1" is included.

There is negative association between ethnicity and attitude on sexual consent. With Malay as the reference, the OR's are 0.38 for Chinese, and 0.44 for Indians. Both Chinese and Indians are less likely to have good attitude towards sexual consent than Malays. However there is a positive association between Other ethnicities and Malay as the OR is 1.09. Other ethnicities are 1.09 times more likely to have good attitude towards sexual consent than Malays. There is no statistical significance of attitude towards sexual consent between races as the 95% CI as well as it includes the null value of '1' in its ranges. Chinese - 0.07-1.90, Indians - 0.09-2.18, and Others - 0.13-9.12.

There is positive association between nationality and the attitude towards sexual consent. With Indians as the reference, the OR's are 5 for Sri Lankans and 1.23 for Malaysians. Sri Lankans are 5 times more likely to have good attitude towards sexual consent than Indians. Malaysians are 1.23 times more likely to have good attitude towards sexual consent than Indians. There is no statistically significant association between the nationalities and attitude towards sexual consent as the 95% CI includes the null value of '1', Malaysian - 0.29-5.19, and Sri Lankan - 0.42-59.66

There is positive association between study year and the attitude towards sexual consent as the OR is 1.58. Those in clinical years are 1.58 times more likely to have good attitude towards sexual consent than pre-clinical years. There is no statistically significant association between study year and the attitude towards sexual consent as the 95% CI ranges from 0.75 - 3.31 in which the null value of "1" is included (Table 3).

Comment [A33]: False abbreviation as 69% study participants were female hence more correct answers came from that particular gender.

If you had included equal number of males and females and then checked for correct answers then driving a conclusion was fair.

Comment [A34]: Biased conclusion

Comment [A35]: Why reference have been changed. If one group is considered as reference the same needs to be continued throughout the study.

Seems like only to find some association references have been changed for every heading

Comment [A36]: Not recommended to include name of nationals with a mere small number of group of students representing a nation, rather students studying at university had good or poor knowledge can be stated and with reasons and solutions

Comment [A37]: Not relevant as 5th and 6th semester students were not included in the sudy

Table 3. Association between demographic characteristics and attitude towards sexual consent among the respondents (n= 141)

Variable	Good Attitude n (%)	Poor Attitude n (%)	Odds Ratio	95% Confidence Interval (CI)	P value
Age					
>22 years	36 (76.60)	11 (23.40)	reference		
≤ 22 years	66 (70.21)	28 (29.79)	1.39	0.62 - 3.11	0.424
Gender					
Male	28 (65.12)	15 (34.88)	reference		
Female	74 (75.51)	24 (24.49)	1.65	0.76 - 3.60	0.204
Ethnicity					
Malay	11 (84.62)	2 (15.38)	reference		
Chinese	33 (67.35)	16 (32.65)	0.38	0.07 - 1.90	0.312*
Indian	46 (70.77)	19 (29.23)	0.44	0.09 - 2.18	0.495*
Others	12 (85.71)	2 (14.29)	1.09	0.13 - 9.12	1.000*
Nationality					
Indian	6 (66.67)	3 (33.33)	reference		
Malaysian	86 (71.07)	35 (28.93)	1.23	0.29 - 5.19	0.720*
Sri Lankan	10 (90.91)	1 (9.09)	5.00	0.42 - 59.66	0.285*
Study year					
Pre-clinical year	46 (67.65)	22 (32.35)	reference		
Clinical year	56 (76.71)	17 (23.29)	1.58	0.75 - 3.31	0.229

*Fisher Exact test

Comment [A38]: Explanation why reference have been changed in each section

Comment [A39]: Change in reference

Comment [A40]: If nationality is included you may have to state how many years students have stayed in their parent country and how many years they have stayed in Malaysia for study purpose

4. DISCUSSION

This cross-sectional study was done to investigate the knowledge of safe sex and the attitudes towards sexual consent among medical students in a private medical college in Malaysia. Based on our study, we found that around 61.7% of the respondents had good knowledge, of which includes both males and females more than 22 years old, females, Malay ethnicities, Sri Lankan nationals, and Clinical years students, from the independent variables. Our study was set to determine the association between the independent variables: age, gender, ethnicity, nationality, and semester of study, and the dependent variables: knowledge level and attitude level. To our dismay, we did not manage to get any statistically significant relation between both our independent and dependent variables. However, with further analysis, we have concluded that some factors are indeed socially significant.

As per our results, females have the highest knowledge and attitude levels due to the centuries worth of patriarchal destruction of self-worth and understanding. This can be proven by the fact that women get blamed for everything that happens onto themselves including any unwanted sexual action. Furthermore, it has been statistically proven that every woman has been harassed in some form of way at least once in their life [16]. Many, if not all women have to be well informed on the practice of safe sex to protect themselves from societal ostracism and the burden of an unwanted pregnancy. Women are often blamed for inviting sexual harassment and rape in spite of being victims, while the man seems to get away with little. Due to this, women may have imbibed knowledge towards safe sex as a protective mechanism over the years. Moreover, older and clinical year students that participated had better knowledge because they had more experience in said topic.

Based on the research done in Lao PDR (2020) that inspired this research, both their results and ours showed a majority of respondents having good knowledge [12]. Even with the difference in population type, theirs being high school students while ours being medical students, it just shows that as the years go by, many of the new generations are grasping more knowledge towards safe sex. Fortunately for us, we managed to find a rather similar study done in 2013 by University Kebangsaan Malaysia (UKM) regarding knowledge and attitude on sex among medical students. Their results showed that 54.9% of respondents had a satisfactory knowledge level [17]. However, for our research, 61.7% of respondents had good knowledge. Judging by the 9-year difference between the two researches, medical students have garnered a better understanding on safe sex. Although it represents a small increase, it is an important marker of a trend which may increase as years go by.

A study done in Nigeria among medical students established that many of their respondents got their sources of information regarding safe sex from school followed by friends, and lastly, family members [9]. In contrast, our study also found that majority gained insights regarding safe sex through schools and universities, but it was followed by health talks, online resources, and lastly friends and family members. Sources of information may not be

Comment [A41]: Biased misleading wrongly formulated and one sided statement

Comment [A42]: All students belong to the same age group hence invalid

Comment [A43]: Male and females were in ratio of 31:69 % in the study how do you expect to give equal opportunity to both gender

Comment [A44]: Ethnicity would not have a major role if students are studying in the same university and gaining knowledge from the same place

Comment [A45]: Mere 141 number of subjects do not represent a nation its education or practices followed . too bold of a statement to categorize results on the basis of nationality. Also was there a mechanism to validate nationality information submitted by subjects ?

Comment [A46]: 5th and 6th semester students not include in study hence cannot be generalized to semester

Comment [A47]: Reason wrong selection criteria , unqual number of participants and no validation of information during the study

Comment [A48]: Kindly explain with reason and data

Comment [A49]: Again a big statement biased and demeaning to a particular gender

Also in the study number of females were 69% as compared to males then it is obvious to get more correct answers from one gender

Comment [A50]: Giving such a statement is unethical and hurtful to a particular gender

Comment [A51]: How is this statement useful to the title

Comment [A52]: Equally men need to be informed as a part of ethics morals and good conduct

Comment [A53]: Reference

Comment [A54]: reference

Comment [A55]: experience in the form of personal or syllabus kindly elaborate

Comment [A56]: reasons elaborate

Comment [A57]: 54.9% knowledge is no fortunate finding . it means 45.1% had less knowledge and that is a huge figure stating that almost half the population in the country do not have sufficient knowledge

Comment [A58]: It is but obvious that more educated group will have better syllabus and understanding of the topic.

Comment [A59]: Incomplete statement as parents were not a part of the study to validate what the subjects are saying is true or not

easily available, and the curriculum may not incorporate knowledge on sexual education, especially in societies where the topic of safe sex is a huge taboo. For generations, sex has been disregarded as embarrassing or weird to be discussed. This can be seen from a study done way back in 2008 among college students in the United States. Parents happened to be the least sought out source of information on this matter while media and self-resourcing turned out to be the highest [18]. This study has shown that little progress has happened over the years. This further proves the need for parents to be more open and well-versed in safe sex so the children of tomorrow don't get lost in the sea of information.

Sex being a topic, not freely discussed, we wanted to explore attitudes towards sexual consent. Sexual consent is a basic human right and must be expressed by everyone regardless and it has the potential to be protective legally as well. We all deserve to have a say in what we want for our body. Moving on, a study done in 2015 among college-going women showed that there were higher positive attitudes towards sexual consent [19]. So did our research. We found that around 73% of our respondents had good attitudes towards sexual consent. With that being said, the majority of them happened to be females, which reinforces the point of how women have to constantly be on their feet in order to be as safe as they could in regard to themselves.

5. CONCLUSION

In a nutshell, we have to understand that for this topic which happens to be a huge taboo in our country, we have to take into account cultural and societal views. Our study has shown significance in society between gender and age against the knowledge level on safe sex and attitude level towards sexual consent. It is not brand-new news to hear about females being ostracised for simply existing at this point of time. With these results, we can conclude that sex education which includes safe sex and sexual consent should be inculcated into the general education syllabus so that the future generations are more educated on this matter. Only then will it reduce the unfairness among gender by a huge chunk.

Comment [A60]: Topic of safe sex is not a taboo, unethical, teenage sex, pre marital sex, oral and anal sex and sex with multiple partners is a taboo in many societies

Comment [A61]: reference

Comment [A62]: the reason may well be that the student never asked any information to their parents

Comment [A63]: this statement is not apt now since no parents were a part of this study . hence there is no information how much information parents are sharing with children

Comment [A64]: sexual consent

Comment [A65]: when a previous study included only women how does it say that they had better understanding

Comment [A66]: when 69% of your participants were women how did 73% have better understanding ?

Comment [A67]: this was because the number of female students itself in the university and study are more than men.

Comment [A68]: Kindly reiterate with meaningful statement

Comment [A69]: When already as per your finding 73% have sufficient knowledge gained from syllabus then what is the point again including in education system ?

The main issu is that the children do not speak up with parents for guidance and efforts need to be established by government agencies on media promotion skits movies and series that educate the children on the said topic.

Comment [A70]: Kindly give an insight on how many seminars / lectures were conducted by the institution in the past 5 years on the said topic ?

Consent
Informed consent was obtained by all participants.

Ethical Approval
Ethical approval was granted by the Research Ethics Committee (Faculty of Medicine), Manipal University College Malaysia.

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