

CLINICAL STUDIES / ETUDES CLINIQUES

AWARENESS, KNOWLEDGE AND ATTITUDE TOWARDS EPILEPSY IN MALAYSIA: A PERSPECTIVE OF UNDERGRADUATES IN A PRIVATE UNIVERSITY

CONNAISSANCES, ATTITUDES ET PRATIQUES ENVERS L'ÉPILEPSIE CHEZ DES ÉTUDIANTS DE PREMIER CYCLE DANS UNE UNIVERSITÉ PRIVÉE EN MALAISIE

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ABSTRACT

Background

Stigma of epilepsy continues to negatively impact on the quality of life of people with epilepsy. It is important for undergraduates to be aware and possess accurate knowledge towards epilepsy. This study aimed to assess the awareness, knowledge and attitude towards epilepsy among the undergraduates in a private university.

Methods

A cross-sectional study was conducted using a self-administered questionnaire in Taylor's University, Malaysia. A validated questionnaire was administered, consisting of 17 items on awareness, knowledge and attitude towards epilepsy.

Results

A total of 371 undergraduates participated with a response rate of 94%. The respondents comprised of majority females (62.0%), Chinese ethnicity (74.7%) and Malaysian (88.4%). They possessed a low level of awareness (64.7%), with 71.7% of them having heard or read about epilepsy but only 16.2% had attended epilepsy-related seminars or lectures. Approximately two-thirds (64.2%) demonstrated a high level of knowledge as the majority denied that epilepsy was contagious and caused by evil spirits. Most respondents demonstrated a positive attitude (74.7%) by accepting the involvement of people with epilepsy in sports, marriage and socialization. Awareness and knowledge towards epilepsy were significantly associated with both the undergraduates' faculty and year of study ($p < 0.05$). Attitude towards epilepsy was significantly associated with only the faculty ($p < 0.05$).

Conclusion

Although the level of knowledge and attitude were generally quite satisfactory, the awareness was still low among undergraduates. This study highlighted the need for formal education and awareness campaigns in the university to improve their awareness, knowledge and attitude toward epilepsy.

RESUME**Introduction**

La stigmatisation de l'épilepsie continue d'avoir un impact négatif sur la qualité de vie des personnes épileptiques. Il est important que les étudiants de premier cycle soient conscients et possèdent des connaissances précises sur l'épilepsie. Cette étude visait à évaluer la sensibilisation, les connaissances et l'attitude envers l'épilepsie parmi les étudiants de premier cycle d'une université privée.

Méthodes

Une étude transversale a été menée à l'aide d'un questionnaire auto-administré à l'Université de Taylor, en Malaisie. Un questionnaire validé a été administré, composé de 17 items sur la sensibilisation, les connaissances et l'attitude envers l'épilepsie.

Résultats

Un total de 371 étudiants de premier cycle ont participé à l'étude avec un taux de réponse de 94%. Les répondants étaient majoritairement des femmes (62,0%), d'origine chinoise (74,7%) et malaisienne (88,4%). Ils possédaient un faible niveau de sensibilisation (64,7%), 71,7% d'entre eux ayant entendu ou lu sur l'épilepsie mais seulement 16,2% avaient assisté à des séminaires ou à des conférences sur l'épilepsie. Environ les deux tiers (64,2%) ont démontré un niveau élevé de connaissances, la majorité niant que l'épilepsie était contagieuse et causée par de mauvais esprits. La plupart des répondants ont fait preuve d'une attitude positive (74,7%) en acceptant l'implication des personnes épileptiques dans le sport, le mariage et la socialisation. La sensibilisation et la connaissance de l'épilepsie étaient associées de manière significative à la fois à la faculté des étudiants de premier cycle et à l'année d'études ($p < 0,05$). L'attitude à l'égard de l'épilepsie était significativement associée à la faculté uniquement ($p < 0,05$).

Conclusion

Bien que le niveau de connaissances et l'attitude soient généralement assez satisfaisants, la sensibilisation est encore faible parmi les étudiants de premier cycle. Cette étude a souligné la nécessité d'une éducation formelle et de campagnes de sensibilisation à l'université pour améliorer leur prise de conscience, leurs connaissances et leur attitude face à l'épilepsie.

INTRODUCTION

Globally, epilepsy is one of the most common chronic neurological disorders affecting around 50 million individuals of all ages (23). The prevalence of epilepsy is higher in developing countries than in developed countries, with the median life time epilepsy prevalence of 15.4 per 1,000 and 5.8 per 1,000, respectively (17). In Asia, the median life time prevalence is estimated at 6 per 1000, which is lower than in developing countries in other continents of the world (13). In Malaysia, it is estimated that 1% of the population are diagnosed cases (24).

Despite this prevalence, misinformation and misperceptions regarding epilepsy are found in many countries. There is a significant lack of knowledge on epilepsy despite a general high level of awareness (12). The lack of knowledge on epilepsy can lead to negative attitude towards people with epilepsy, and ultimately contribute to the stigma of epilepsy (7). Despite epilepsy education and awareness programs within the past several decades, the stigma continues to negatively impact on the quality of life of people with epilepsy (7). Understanding on awareness, knowledge and attitude towards epilepsy is a key factor to tackle this phenomenon. Research on awareness, knowledge and attitude is beneficial to identify the misinformation and misperceptions in a particular population to design a more targeted and effective strategy in combating the discrimination and stigmatization.

Undergraduates are not only the future work force of the country, but also a suitable source to help educate the public regarding the disorder. Studies reveal that better awareness, knowledge and attitude are found more often among the better educated community (5,20,22). In addition, most studies focus on young adults

because of a high tendency for this age group to experience epilepsy (12). As undergraduates are classified as a high literacy group, it is important for them to be aware and equipped with accurate knowledge and positive attitude towards epilepsy.

In recent years, many studies have investigated on the awareness, knowledge and attitude towards epilepsy among undergraduates in various countries, including Brazil (4), Canada (25), Turkey (8), Middle East Countries (1,2,6), Pakistan (3,5), India (19,22) and Malaysia (18,20). Generally, these studies have demonstrated a fair level of awareness and knowledge among the undergraduates (4,5,8,19,22). However, some studies have reported on the negative attitude towards epilepsy (1,6,8). Rahman (20) revealed that the public university students in Malaysia demonstrated a favourable degree of awareness and knowledge but a perception of stigma on epilepsy. However, no local survey has been conducted in a private university, resulting in a gap in research about contemporary awareness, knowledge and attitude of the undergraduates in the private sector. Hence, there is a need to extend studies on epilepsy to private university students. This study then aimed to assess the awareness, knowledge and attitude towards epilepsy among the undergraduate in a private university to provide an insight into the factors affecting the local situation.

MATERIALS AND METHODS

Study Design

A cross-sectional survey was conducted through a self-administered questionnaire. The respondents were recruited following the approval from the Human Ethics Committee (HEC 2017/008) of Taylor's University.

Study Population

Questionnaire

The self-administered questionnaire employed had been validated by Neni et al. (16) As the questionnaire in the study by Neni and colleagues (16) was based on Rahman's study (20), permission from the latter had been obtained for this study. The first part of the questionnaire concerned demographic data of the respondents. The second part consisted of three domains regarding epilepsy. The first was to examine awareness with 5 items (Q1 – Q5) and the second was to investigate knowledge with 8 items (Q6 – Q13). The third domain contained 4 items (Q13 – Q17) to measure attitude towards epilepsy.

Measurement of Variables

The scoring methods were based on similar methods used by Neni and colleagues (16). The awareness part consisted of 5 items with a score range of 0-10. Each response was scored: Yes = 2 and No = 0. The scores were interpreted and grouped into classes: 0 = No awareness, 1-5 = Low awareness and 6-10 = High awareness. The knowledge domain consisted of 8 items with a score range of 0 – 16. Responses for Questions 6, 8, 11 and 13 were scored: Yes = 2, Not sure = 1 and No = 0. Questions 7, 9, 10 and 12 were scored: Yes = 0, Not sure = 1 and No = 2. The scores were interpreted and grouped into classes: 0 = No knowledge, 1-8 = Low knowledge and 9-16 = High knowledge. As for attitude, there were 4 items with a score range of 0-8. Each response was scored: Yes = 2, Not sure = 1 and No = 0. The scores were interpreted and grouped into classes: 0 = No attitude, 1-4 = Negative attitude and 5-8 = Positive attitude.

Statistical analysis

Categorical variables were presented as percentages and analysed using the Statistical Package for Social Sciences (SPSS) version 24.0 (IBM Corporation, Armonk, New York, U.S.). Chi-squared (χ^2) test or Fisher's exact test (when the frequency of respondents was less than 5 for any category) was performed to determine the association between categorical variables (gender, faculty and year of study). All p values reported were two-tailed with a value of < 0.05 being statistically significant.

RESULTS

A total of 377 undergraduates across the various faculties in Taylor's University participated in this study. The response rate was 94%, with 6 respondents excluded due to the incomplete questionnaire. The

demographic data of the respondents are listed in Table 1. Generally, the respondents comprised of majority females (62.0%), Chinese ethnic group (74.7%) and those of Malaysian nationality (88.4%), with the age ranging from 17 to 29 years old (mean age of 20.8 ± 1.6 years).

The responses for the questions pertaining to awareness, knowledge and attitude towards epilepsy are shown in Table 2. According to the scoring method, they demonstrated a high level of knowledge and positive attitude towards epilepsy, yet their awareness was low. The relationship between these three domains are shown in Table 3. A low level of knowledge was significantly associated with no or low level of awareness of epilepsy ($\chi^2=51.2$, $p < 0.001$) and negative attitude ($\chi^2=31.5$, $p < 0.001$). The negative attitude was also significantly associated with no or low level of awareness ($\chi^2=37.0$, $p < 0.001$).

Awareness towards epilepsy

Generally, the undergraduates in this university possessed a low level of awareness (mean score = 2.5 ± 2.0), with the scores ranging from 0 to 8. Slightly more than two third of them had heard or read about epilepsy (71.7%). However, only 16.2% of them had attended epilepsy-related seminars or lectures, although 22.1% of them had witnessed epileptic attacks, and very few (7.3%) could do first-aid seizure management (Table 2).

The distribution of the respondents based on the level of awareness is shown in Table 4. The level of awareness was significantly associated with their faculty and also year of study. The awareness was significantly higher among the undergraduates from the Faculty of Health and Medical Sciences than other non-healthcare related faculties ($\chi^2=44.8$, $p < 0.001$). In terms of the year of study, the awareness was significantly lower among the first, second and third year undergraduates than those in their fourth year and beyond ($\chi^2=33.1$, $p < 0.001$). However, the level of awareness was not significantly associated with gender.

Knowledge towards epilepsy

The respondents demonstrated a high level of knowledge (mean score = 9.7 ± 2.5), with the scores ranging from 3 to 16. The majority of them (71%) knew that epilepsy was not contagious. Some (19%) thought that epilepsy could not be genetically inherited although 41% of them considered this disease to be hereditary. Almost half (48.5%) disagreed that epilepsy was a mental illness and the majority (80.9%) denied that evil spirits or demonic possession could cause epilepsy. However, the majority (71.7%) did not acquire any knowledge regarding first-aid epilepsy management (Table 2).

The distribution of the respondents based on the level of knowledge is shown in Table 5. The level of knowledge was significantly associated with their faculty and also year of study, but not significantly affected by gender. Those who were from the Faculty of Health and Medical Science were significantly more knowledgeable than those from other non-healthcare related faculties ($\chi^2=39.7$, $p = 0.001$). The level of knowledge was significantly higher among those in the fourth year and beyond, compared to the first, second and third year undergraduates ($\chi^2=16.7$, $p = 0.001$).

Attitude towards epilepsy

The overall attitude of the respondents was considered as positive or healthy (mean score = 5.7 ± 1.5), with the scores ranging from 0 to 8. Surprisingly, more than half (55.3%) agreed that people with epilepsy should be involved in sport activities. However, 46.4% of them disagreed that those with epilepsy should drive. Many (71.7%) approved of marriage and most (87.9%) agreed to their socialisation in the community (Table 2).

The distribution of the respondents based on the level of attitudes is shown in Table 6. There was no significant association between attitude and gender, or between attitude and year of study. However, the undergraduates from both the Faculty of Health and Medical Sciences and Faculty of Social Sciences and Leisure Management demonstrated a more positive attitude towards epilepsy compared to those from other faculties (Fisher's Exact Test = 20.7, $p = 0.001$).

DISCUSSION

Previous Malaysian studies pertaining to awareness, knowledge and attitude towards epilepsy were conducted with different target populations. Three public surveys had been conducted among urban or rural populations (10,16,21). An online survey was also conducted focusing only on the attitude towards epilepsy among secondary and tertiary students by using psychometric testing (11). At the university level, Rahman (20) performed the study among undergraduates in a public university, Universiti Sains Malaysia. To our knowledge, our study is the first to investigate the awareness, knowledge and attitude regarding epilepsy among undergraduates in a private university locally.

The present findings revealed that the awareness towards epilepsy among the undergraduates in this private university was relatively low. Slightly more than two-thirds of them had heard or read about epilepsy, comparatively similar to studies conducted in one of the Malaysian public universities (78%) (18), Jordan (78%) (6) and Turkey (73%) (8). However, the awareness is relatively lower than in other studies concerning undergraduates in Malaysia (87%) (20), Canada (91%) (25), Yemen (96%) (1) and India (93%) (19). Surprisingly, the awareness is also less than that reported by local community studies involving rural populations, with 91 – 99% having heard or read about epilepsy (10,16,21). It is argued that greater awareness can be observed in developing countries due to the high prevalence of epilepsy in these countries (15). As undergraduates are better literate, their awareness is anticipated to be higher and even better than that of the community. In our study, the lack of familiarity regarding epilepsy can be explained as not many of the undergraduates had attended epilepsy-related seminars and lectures, or had witnessed seizure attacks, compared to other studies (38 – 61%) (6,8,18-20). Formal education on epilepsy is less available in the courses at the local university level and this situation has not improved much since 2005 (20).

Despite the low awareness found, this study reveals a high level of knowledge regarding epilepsy among the undergraduates, compared to fair knowledge shown in other local studies (18,20). Only one-fourth of the undergraduates believed that epilepsy was a form of mental illness, comparable to other studies involving undergraduates in Jordan (27%) (6), Yemen (23%) (1), and Turkey (20%) (8), but higher than those studies reported in Kuwait (10.5%) (2) and Canada (9%) (25). Even though the response found in this study shows an improvement from previous studies among local undergraduates (40 – 47%) (18,20), the most worrisome issue is that this response was still relatively higher compared to other studies conducted in the local community setting (8 – 18%) (10,16). Surprisingly, very few undergraduates assumed that evil spirits or demonic possession could cause epilepsy, comparable to other local studies (5 – 8%) (16,20) and more encouraging than the studies in other developing countries (22 – 31%) (1,6). It is pointed out that this belief can affect the treatment-seeking behaviour of the population as people with epilepsy tend to seek traditional or alternative treatment rather than modern medicines (20).

In this study, responses to the belief that epilepsy was contagious were generally quite satisfactory. Only a minority had this belief, similar to other studies in developing countries (2 – 5%) (1,6,16,20). Nevertheless, it is disappointing that less than 10% of the undergraduates knew how to perform first-aid seizure management, less than the findings in another study (20%) (20) and a community population (19%) (16) in Malaysia. This lack of knowledge may be due to a lack of exposure through seminars and lectures. This finding indicates the need for more efforts to disseminate the information on first-aid seizure management for this target group.

With respect to attitude towards epilepsy, the undergraduates in this study displayed a positive attitude. More than half agreed that people with epilepsy need not avoid sport activities, marriage and socialization, except for driving. Only a few (12%) strongly objected to the participation of people with epilepsy in sport activities. This favourable finding is comparable to that in other studies (13-17%) in developing countries (1,6) and much lower than the finding (40%) reported by Neni and colleagues (16) in a Malaysian community population. In terms of marriage, few undergraduates objected to marriage for people with epilepsy. This finding is more promising than those (12-22%) in other studies (1,6,16,18). Similarly for socialization, the responses were relatively favourable than that (13%) in a Malaysian community population (16).

However, almost half of the undergraduates in this study discouraged people with epilepsy to drive, consistent with the finding from a Malaysian community population (46%) (16). Undoubtedly, driving is vital for employment, socialization and self-esteem (9). Driving restrictions for people with epilepsy are imposed to ensure the public's safety; however, the risks for them to drive appear limited and smaller than those with alcohol consumption during the seizure-free state (9). In Malaysia, people with epilepsy can obtain driving

licences when the seizure-free state is maintained for minimum 2 years, taking or without medication and subjected to a review 5 years later (14). Overall, a positive attitude can enable undergraduates to be effective opinion shapers to help build a conducive social environment for people with epilepsy to improve the latter's quality of life.

As for the level of awareness, knowledge or attitude towards epilepsy between males and females, this study reveals no difference. This finding is supported by studies from Neni and colleagues among a community population (16). This response can be explicated by the practice of equal opportunities between the genders that has been adopted in Malaysia (16). Lim and colleagues (10) also found that the awareness towards epilepsy among Malaysian Chinese was not associated with gender, but it was significantly associated with some of the negative attitudes found between males and females. In addition, the gender factor is also reported to be associated with knowledge, perceptions and attitudes of undergraduates in Middle East Countries (1,2,6).

In this study, the levels of awareness, knowledge and attitude towards epilepsy were dependent on the undergraduates' background, i.e. their faculty and year of study. The undergraduates from the Faculty of Health and Medical Sciences possessed significantly higher level in these three domains (awareness, knowledge and attitude) than those from other non-healthcare related faculties. Due to their healthcare-related background, the undergraduates likely had attended lectures on epilepsy in their formal education. This finding is consistent with the findings in previous studies in which medical and pharmacy students demonstrated a relatively better awareness, knowledge and attitude towards epilepsy (3,19,22). With regard to year of study, the levels of knowledge and awareness were significantly higher among fourth and higher year undergraduates, as compared to the first, second and third year undergraduates, but there was no significant difference between the level of attitude and year of study. This finding is supported by a study conducted for year 1 and year 5 medical students in India. There was a major gap in their knowledge but the social stigma regarding epilepsy was persistent regardless of their years of study (22).

The findings in this study further highlight the need for a formulation of formal education and scheduled awareness campaigns in the university setting to improve the undergraduates' awareness, knowledge and attitude towards epilepsy from time to time. This study is limited by the local setting in a private university which consists predominantly of Malaysians. The non-Malaysian undergraduates constitute only 11.6% in this study. The findings may still be generalised to other universities or communities with similar demographic characteristics.

CONCLUSION

In conclusion, the undergraduates in this university demonstrated a low level of awareness towards epilepsy, but a high level of knowledge and a positive attitude. The responses to knowledge and attitude domains were generally quite satisfactory. The levels of awareness and knowledge towards epilepsy were significantly associated with the undergraduates' background, notably the faculty and year of study. However, the level of attitude was significantly related to only the faculty. Overall, gender had no significant bearing. This study highlights the need for formal education and awareness programs on epilepsy in the universities, particularly for first-aid seizure management.

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Table 1 Demographic profile of study respondents (n = 377)

Demographic	n (%)
Gender	
Male	141 (38.0)
Female	230 (62.0)
Nationality	
Malaysia	328 (88.4)
Indonesia	16 (04.3)
Others	27 (07.3)
Race	
Chinese	240 (64.7)
Malay	61 (16.4)
Indian	36 (09.7)
Others	34 (09.2)
Year of study	
First year	92 (24.8)
Second	129 (34.8)
Third	99 (26.7)
Fourth and above	51 (13.8)
Faculty	
Health and Medical Sciences	111 (29.9)
Business and Law	98 (26.4)
Innovation and Technology	84 (22.6)
Social Sciences and Leisure Management	78 (21.0)

*s.d.: standard deviation

Table 2 Overall Responses of undergraduates on awareness, knowledge and attitude towards epilepsy (n = 371)

Questions	n (%)		
	Yes	No	Not Sure
Awareness			
Have you heard or read about epilepsy?	266 (71.7)	105 (28.3)	
Have you ever attended a seminar or lecture on epilepsy?	60 (16.2)	311 (83.8)	
Have you ever seen anyone having an epileptic attack?	82 (22.1)	289 (77.9)	
Have you ever done first-aid seizure management?	27 (07.3)	344 (92.7)	
Does anyone in your family have epilepsy?	29 (07.8)	342 (92.2)	
Knowledge			
Do you know the cause of epilepsy?	105 (28.3)	109 (29.4)	157 (42.3)
Do you think epilepsy is contagious?	24 (06.5)	264 (71.2)	83 (22.4)
Do you think epilepsy is hereditary?	153 (41.2)	70 (18.9)	148 (39.9)
Do you think epilepsy is a form of mental illness?	93 (25.1)	180 (48.5)	98 (26.4)
Do you think epilepsy is caused by evil spirits or demon possession?	12 (03.2)	300 (80.9)	59 (15.9)
Do you think epilepsy can cause death?	245 (66.0)	30 (08.1)	96 (25.9)
Do you think epilepsy can be cured?	134 (36.1)	83 (22.4)	154 (41.5)
Do you know how to perform first-aid for epilepsy?	35 (09.4)	266 (71.7)	70 (18.9)
Attitudes			
Do you think people with epilepsy should participate in sports?	205 (55.3)	44 (11.9)	122 (32.9)
Do you think people with epilepsy should drive?	84 (22.6)	172 (46.4)	115 (31.0)
Do you think people with epilepsy should be a couple and get married?	266 (71.7)	22 (05.9)	83 (22.4)
Do you think people with epilepsy should socialise in the community?	326 (87.9)	4 (01.1)	41 (11.1)

Table 3 Relationship between level of awareness, knowledge and attitudes towards epilepsy (n = 371)

Domain	Level of awareness (n, %)			P value*
	No	Low	High	
Level of knowledge				
Low	59 (44.4)	65 (48.9)	9 (06.8)	<0.001
High	28 (11.8)	175 (73.5)	35 (14.7)	
Level of attitudes				
Negative	42 (45.2)	45 (48.4)	6 (06.5)	<0.001
Positive	44 (15.9)	195 (70.4)	38 (13.7)	

Domain	Level of attitudes		P value
	Negative	Positive	
Level of knowledge			
Low	55 (41.4)	77 (57.9)	< 0.001
High	38 (16.0)	200 (84.0)	

*chi-square test; p < 0.05.

Table 4 The level of awareness towards epilepsy of undergraduates (n = 371)

Variables	Level of Awareness (n, %)			P value*
	No (Score 0)	Low (Score 1 – 5)	High (Score 6 – 10)	
Total	87 (23.5)	240 (64.7)	44 (11.9)	
Gender				
Male	37 (26.2)	87 (61.7)	17 (12.1)	0.58
Female	50 (21.7)	153 (66.5)	27 (11.8)	
Faculty				
Health and Medical Sciences	11 (09.9)	74 (66.7)	26 (23.4)	<0.001
Business and Law	34 (34.7)	59 (60.2)	5 (05.1)	
Innovation and Technology	31 (36.9)	48 (57.1)	5 (06.0)	
Social Sciences and Leisure Management	11 (14.1)	59 (75.6)	8 (10.3)	
Year of study				
First year	24 (26.1)	62 (67.4)	6 (06.5)	<0.001
Second year	35 (27.1)	77 (59.7)	17 (13.2)	
Third year	26 (26.3)	68 (68.7)	5 (05.0)	
Fourth year and above	2 (03.9)	33 (64.7)	16 (31.4)	

*chi-square test; p < 0.05.

Table 5 The level of knowledge towards epilepsy of undergraduates (n = 371)

Variables	Level of Knowledge (n, %)		P value*
	Low (Score 1 – 8)	High (Score 9 – 16)	
Total	133 (35.8)	238 (64.2)	
Gender			
Male	59 (44.8)	82 (58.2)	0.06
Female	74 (32.2)	156 (67.8)	
Faculty			
Health and Medical Sciences	21 (18.9)	90 (81.1)	0.001
Business and Law	56 (57.1)	42 (42.9)	
Innovation and Technology	37 (44.0)	47 (56.0)	
Social Sciences and Leisure	19 (24.4)	59 (75.6)	
Management			
Year of study			
First year	39 (42.4)	53 (57.6)	0.001
Second year	54 (41.9)	75 (58.1)	
Third year	34 (34.3)	65 (65.7)	
Fourth year and above	6 (11.8)	45 (88.2)	

*chi-square test; p < 0.05.

Table 6 The level of attitudes towards epilepsy of undergraduates (n = 371)

Variables	Level of Attitude (n, %)			P value*
	No (Score 0)	Negative (Score 1 – 4)	Positive (Score 5 – 8)	
Total	1 (0.3)	93 (25.1)	277 (74.7)	
Gender				
Male	0 (0.0)	39 (27.7)	102 (72.3)	0.622
Female	1 (0.4)	54 (23.5)	175 (76.1)	
Faculty				
Health and Medical Sciences	0 (0.0)	20 (18.0)	91 (82.0)	0.001
Business and Law	1 (1.0)	37 (37.8)	60 (61.2)	
Innovation and Technology	0 (0.0)	23 (27.3)	61 (72.6)	
Social Sciences and Leisure	0 (0.0)	13 (16.7)	65 (83.3)	
Management				
Year of study				
First year	0	25 (27.2)	67 (72.8)	0.275
Second year	1 (0.8)	36 (27.9)	92 (71.3)	
Third year	0	25 (25.3)	74 (74.7)	
Fourth year and above	0	7 (13.7)	44 (86.3)	

*Fisher's Exact Test; p < 0.05.

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