Knowledge, Attitude and Practice on the Islamic Perspective Slots (IPS) in Biomedical Science Curriculum among Biomedical Science Students of International Islamic University Malaysia

Mohd Affendi Mohd Shafri[1,2], Ainaaul Mardhiyah Jamil[1], Intan Azura Shahdan[1], Norazlina Abdul Rahman[1]
[1]Biomedical Science Department, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia Kuantan.
[2]International Institute of Halal Research & Training (INHART), Kulliyyah of Engineering, International Islamic University Malaysia Gombak.

ABSTRACT

The Islamic perspective slot (IPS) is a strategy to enhance the agenda of Islamisation of Knowledge in the curriculum of the Department of Biomedical Science (DBMS) at the Kulliyyah of Allied Health Sciences (KAHS), International Islamic University Malaysia (IIUM). Here, the outcome of a 4-year implementation of the IPS is assessed by determining the knowledge, attitude and practices on the IPS in the Biomedical Science curriculum among IIUM Biomedical Science students. A cross-sectional study was performed using convenience sampling on 205 students administered with a self-guided questionnaire. The total score for each knowledge, attitude and practice were computed to find the association using SPSS. The total mean and standard deviation of knowledge, attitude and practice score were found to be 20.18±3.60, 89.47±12.99 and 38.22±6.94 respectively. There was weak positive correlation between knowledge and attitude (r=+0.286; p<0.001), and knowledge and practice (r=+0.246; p<0.001), and fair positive correlation between attitude and practice (r=+0.564; p<0.001). Significant association was also established between year of study and knowledge (p<0.001), attitude (p<0.001) and practice (p<0.001). Additionally, there were significant differences between gender with knowledge (p = 0.009) and attitude (p=0.016). However, there was no significant difference between gender in terms of practice (p=0.059). Educational background did not appear to influence knowledge (p=0.198), attitude (p=0.147) and practice (p = 0.876). The study revealed that overall students' score on knowledge is moderate, whereas score on attitude is good and score on practice is low. The results revealed that the current practice involving the IPS is yet to achieve satisfactory outcome, improvements must be made and the study to be repeated again after improvements are made.

KEYWORDS: Islamic Perspective, Biomedical Science, Islamisation of Knowledge

1.0 INTRODUCTION TO ISLAMISATION OF KNOWLEDGE (IOK)

Islamisation of Knowledge (IOK) pertains to the need to islamise contemporary knowledge which is currently heavily impregnated with Western worldview.[1,2,3] Western worldview here is defined as one which has "formulated its vision of truth and reality not upon revealed knowledge and religion belief, but rather upon cultural tradition reinforced by strictly philosophical premises based upon speculations pertaining mainly to secular life centred upon man as physical entity and rational animal."[1] Fundamental difference in the perspectives of the Western world and the world of Islam thus mean that a secular framework influencing the arrangement of knowledge, system and practice has to be challenged, reconfirmed, assessed, altered and imbued with Islamic qualities.

The processes of IOK take place on two basic levels: hypothetical and practical[4].The former incorporates clarifying the importance, thought processes, purposes, fundamental stages and approaches to achieve IOK, while the latter incorporates the realisation of IOK in the differing methods to be carried out by experts of specific disciplines. Both concept and methodology are fundamental requirements to the success of IOK.[4]

The process of IOK is also the liberation of man first from magical, mythological, animistic, national-cultural tradition opposed to Islam, and then from secular control over his reason and his speech[5]. In other words, Islamisation process can be viewed as non-subservience to a man's physical requests, which slant towards the common and foul play, to his actual self or soul, for man as a physical being is

Corresponding author:
Mohd Affendi Mohd Shafri,
Biomedical Science Department,
Kulliyyah of Allied Health Sciences,
International Islamic University Malaysia,
Jalan Sultan Ahmad Shah, 25200 Kuantan, Pahang.
Email: affendishafri@iium.edu.my

prone towards absent mindedness of his actual nature, getting to be unmindful of his actual reason.[6]

In relation to natural, physical and applied sciences IOK addresses the need to islamise these disciplines in the scope of interpretation of fact and formulation of theories[1]. Similarly, Haneef mentions that the criticism on modern sciences is with regard to their concepts, postulations, and symbols; experimental and reality scopes, influence on values and ethics, theory of origins, epistemology, relationship between another discipline of sciences and social agenda.[7] Al-Faruqi argued that a new base for Islam and its principles must be built:

> "As disciplines, the humanities, the social sciences, and the natural sciences must be reconceived and rebuilt, given a new Islamic base, and assigned new purposes consistent with Islam. Every discipline must be recast so as to embody the principles of Islam in its methodology, in its strategy, in what it regards as its data, its problems, its objectives, its aspirations.[8]"

Al-Attas however cautioned that Islamisation of contemporary knowledge is impossible to be achieved simply by integrating Western knowledge into Islamic sciences and foundations in light of the fact that such strategy, will deliver clashing results which are neither helpful nor worthwhile.[1] He insists:

> "Neither grafting nor transplant can produce the desired result when the body is already possessed by foreign elements and consumed in disease. The foreign and disease will have first to be drawn out and neutralised before the body of knowledge can be remodelled in the crucible of Islam."[1]

Hence, al-Attas justifies that, to Islamise modern knowledge, a two-step process is involved[1]. Firstly, all classifications of knowledge are to be isolated from key elements that build Western culture and civilisation. This is known as the process of "deWesternisation" or "desecularisation".[7] Following that, knowledge classifications must then be infused with Islamic elements and key concepts. Al-Attas believes that the Islamised learning complies with *fitrah* and is helpful in achieving 'genuine knowledge'.[1]

2.0 IIUM AND THE ISLAMISATION AGENDA

IIUM is a model university for IOK. Several methods were used including the incorporation of Islamic perspective teaching in the curriculum.[9]

The planning of a curriculum with Islamic perspectives slot (IPS) is a manifestation of the collective effort by the members of the Department of Biomedical Science (henceforth DBMS) to conform to the university's mission of IOK. The Bachelor of Biomedical Science was offered since 2002/2003 at the Kulliyyah of Sciences. It was transferred during Semester 1 Session 2011/2012 to the Kulliyyah of Allied Health Sciences (KAHS). The programme spans over 4 years (8 semesters). During this period, students are trained not only to learn the basics of Biomedical Science, but also offered avenues to gain Islamic knowledge and values. These Islamic inputs are in the form of:

(i) minor subjects, namely Philosophy of Science (RKUD), Islamic worldview (UNGS), Islam Knowledge and Civilization (UNGS), and Ethics Fiqh for Everyday Life (UNGS), offered in collaboration with the Kulliyyah of Islamic Revealed Knowledge and Human Sciences (IRKHS), and
(ii) the inclusion of an Islamic Perspective Slot (IPS) in each Biomedical Science subject.
(Figure 1)

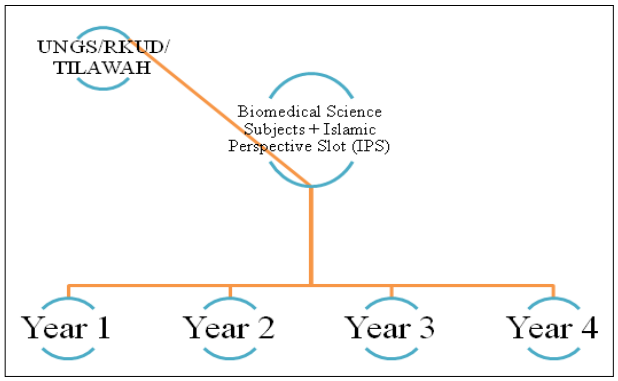

Figure 1. Conceptual framework of IPS implementation in the Biomedical Science curriculum.

The former is imposed by the University on all students irrespective of their course. The latter, the IPS, on the other hand, is specific and peculiar only to the Biomedical Science programme. In addition, the IPS slot requires that the Biomedical Science lecturer of each subject himself undertake the teaching and conduct of the class. This is a modification of previous models of Islamisation of sciences in which the Islamisation component in the subject is normally delivered by a non-science lecturer.

At IIUM, studies that look at the effect of IOK in specific fields have been carried out from time to time. For example, a study in 2011 looked at the impact of IOK on the curriculum of the Bachelor of Economics at the Kulliyyah of Economics & Management Sciences (KENMS), one of the pioneer undergraduate programs at IIUM. The outcomes demonstrate that the integrated educational curriculum has enabled the creation of graduates with the right values and qualities, without negatively affecting their professional aptitudes and marketability.[10]A different study was also conducted in the same year among IIUM alumni.[11] With 159 respondents comprising of 53 Malaysians and 106 international students it was found that IOK

provides a good influence in giving a proper comprehension of the vital Islamic Worldview exemplified by 52% agreed and 28% strongly agreed respondents (in a five point Likert scale of agreement). In addition, 52% agreed and 28% firmly agreed that IIUM has been essential in giving them an incorporated training of both the Shari'ah and '*Aqli* sciences; whereas 85% felt that by studying in IIUM, their understanding of the harmonisation of knowledge to faith and life has been better.

Another study performed during a 1-day workshop in IIUM incorporating Islamic input module also showed a very high level of acceptance among participants for the Islamic module, in spite of several limitations and challenges. The study believes that medical curriculum and practices with Islamic input is a form of reorientation and reformation of the current medical curriculum.[12]

A specific study on Biomedical Science students at IIUM however has not been performed. The curriculum of the course also has changed in 2012 from the SBM curriculum to the AHB curriculum. In the SBM curriculum, no slot for Islamic Perspective was included. The first batch of AHB students completed their study in 2016, which means that it is apt to assess the impact and experience of the IPS to provide a reference for future assessment as they have undergone all four years of studies and had experienced the full cycle of the IPS.

3.0 METHOD

3.1 STUDY DESIGN

A cross-sectional study design was used to evaluate the knowledge, attitude and practice (KAP) on Islamic Perspective teaching in Biomedical Science curriculum among Biomedical Science students from year one to year four.

3.2 STUDY AREA

The study was conducted at the Department of Biomedical Science, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia.

3.3 Study population

The population in this study was undergraduate students from Year One to Year Four who were enrolled during 2015/2016 academic term. The current number of students at the DBMS is listed in Table 1.

Table 1 No. of students at the Department of Biomedical Science 2015/2016

Level of Studies	Total no. of students active at DBMS during 2015/2016
Year One	59
Year Two	62
Year Three	71
Year Four	55
Total No. of Students	247

3.4 Sampling Method

Subjects for this research were selected via convenience sampling of minimum 50% per total number of students per year. The participants, irrespective of gender, were recruited based on their accessibility to the researchers. The sampling method was chosen because it would allow the representation of the Biomedical Science students. Postgraduate students were excluded.

3.5 Sample size

The number of sample size for this study is presented in Table 2.

Table 2 Number of Subjects for the Study

Year of study	No. of sample of respondents		
	Prospective	Expected *	Obtained
One	59	48	49
Two	62	50	50
Three	71	57	60
Four	55	44	46
Total	247	199	205

*using the calculation provided at http://www.survey system.com/sscalc.htm

3.6 Research Tool and Data Collection

The collection of data was conducted in April 2016. The instrument used to collect data was a self-administered questionnaire.The questionnaire was designed and prepared with a set of questions on knowledge, attitude and practice (KAP). There are four parts to the questionnaire:

PART A: Socio-demographic information
PART B: Knowledge (K) of Biomedical Science students in relation to the IPS in the Biomedical Science Curriculum.
PART C: Attitude (A) of Biomedical Science students towards the IPS in the Biomedical Science Curriculum.
PART D: Practice (P) of Biomedical Science students regarding the IPS in the Biomedical Science Curriculum.

The first part involves the socio-demographic information of the participants such as gender, year of study, and their educational background. This information was acquired to look at some external factors that may influence IOK and the IPS in the Biomedical Science curriculum.

The second part was the close-ended questions on knowledge of Biomedical Science students regarding IOK or the IPS in the Biomedical Science

curriculum. There were fourteen questions in this part with the choices of answer of 'Yes', 'No', and 'Not sure'.

The third part was about the attitude of Biomedical Science students regarding the IPS in the Biomedical Science Curriculum which used Likert-scale questions. Twenty-two questions were prepared for the students to agree or disagree to. The students could response either 'Strongly Agree', 'Agree', "I Am Not Sure', 'Disagree' or 'Strongly Disagree' for each question.

The last part of questionnaire was on the practice of Biomedical Science students regarding the IPS in the Biomedical Science Curriculum. There were eleven questions and the choices of answers are 'Never', 'Rarely', 'Sometimes', 'Often' and 'Always'.

A pilot study was conducted at the Department of Optometry and Visual Sciences, Kulliyyah of Allied Health Sciences, involving 25 final year students. Two phases of questionnaire validity were performed prior to actual data collection. The first one is the content validity of the research questionnaire, and this was done by our expert medical statistician, Dr Norazlina Abdul Rahman, who reviewed the instrument. The second one was the face validity by students which was carried out to ascertain the level of difficulty to understand the questionnaire.

3.7 Data Analysis

Scoring System

The scoring system used to analyse the questionnaire is given in Table 3.

Table 3 Scoring system for KAP choice of answer

Knowledge	
Correct Statement:	
Yes	2
No	0
Not sure	1
False statement	
Yes	0
No	2
Not sure	1
Attitude	
Correct Positive Answer:	
Strongly Agree	5
Agree	4
I am Not Sure	3
Disagree	2
Strongly Disagree	1
Correct Negative Answer	
Strongly Agree	1
Agree	2
I am Not Sure	3
Disagree	4
Strongly Disagree	5
Practice	
Correct Positive Answer:	
Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
Correct Negative Answer	
Never	5
Rarely	4
Sometimes	3
Often	2
Always	1

4.0 RESULT

4.1 Socio-Demographic Characteristics

The total number of respondents who completed the survey was 205 students; the majority of which were female (n=152; 74.1%) while 53 students were male (25.9%) (Figure 2). In term of the distribution of respondent's gender according to year of study, 31 female (63.3%) and 18 male (36.7%) students were in Year One (n=49), 39 female (78%) and 11 male (22%) students were in Year Two (n=50), 44 female (73.3%) and 16 male (26.7%) students in Year Three (n=60), and 38 students (82.6%) were female and 8 students (17.4%) were male in Year Four (n=46) (Figure 3).

Respondents came from either a religious school or non-religious school background (Figure 4). In each category there are two divisions: private and government types. Nineteen Year One students (38.8%) were from religious schools and thirty students (61.2%) were from non-religious schools. For Year Two, 23 students (46.0%) came from religious schools and 27 students (54.0%) came from non-religious schools. For Year Three, 23 students (38.3.0%) had religious school background and 37 students (61.7%) non-religious schools background. For Year Four students, 17 students (37.0%) came

from religious schools background and the rest of 29 students (63.0%) came from non-religious schools background.

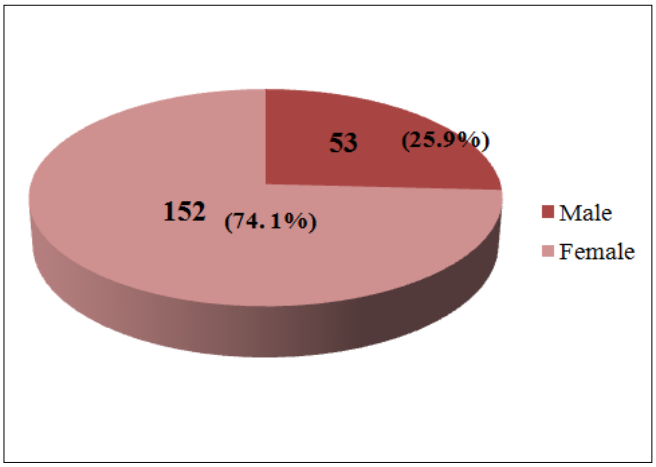

Figure 2. Distribution of participant's gender (N = 205)

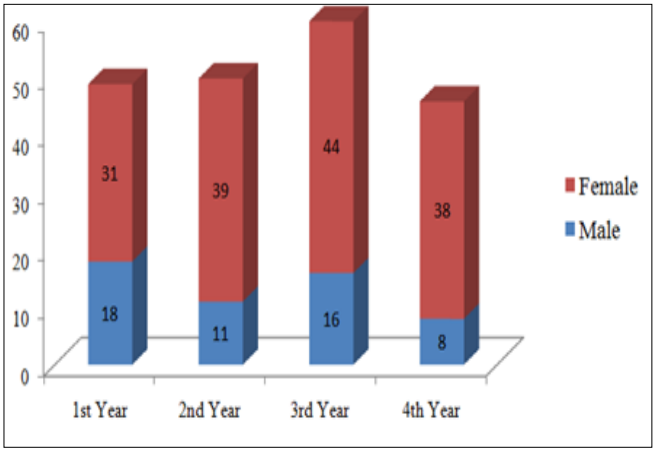

Figure 3.Distribution of participants' gender according to year of study (N = 205)

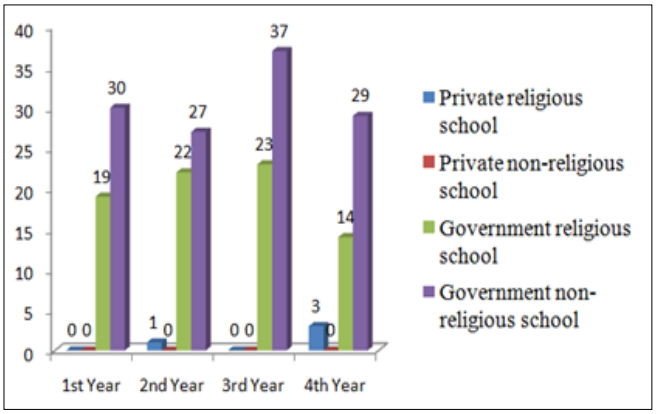

Figure 4. Distribution of participants based on their previous educational background (N = 205)

4.2 KAP LEVEL OF STUDENTS REGARDING THE ISLAMIC PERSPECTIVE SLOTS IN THE BIOMEDICAL SCIENCE CURRICULUM

4.2.1 Levels Knowledge, Attitude and Practice of Students regarding the Islamic Perspective Slots in the Biomedical Science curriculum

The total mean and standard deviation of knowledge score was 20.18 (SD=3.60) with a median of 21. The respondents obtained the minimum and maximum knowledge score of 5 and 28 respectively. For the attitude, the total mean and standard deviation of attitude score was 89.47 (SD=12.99) with a median of 90. The respondents obtained the minimum and maximum attitude score of 37 and 110 respectively. Table 2 illustrates the percentage of students responding on the attitude regarding Islamic perspective teaching in the Biomedical Science curriculum.

For the practice, the total mean and standard deviation of practice score was 38.22 (SD=6.94) with a median of 37. The respondents obtained the minimum and maximum practice score of 18 and 57 respectively.

In Figure 5, a box plot is used to show the overall patterns of response for knowledge, attitude and practice score for median and the interquartile range. The box plot for knowledge category is comparatively short and low compared to attitude and practice categories. The box plot for total attitude score is much more higher compared to knowledge and practice.

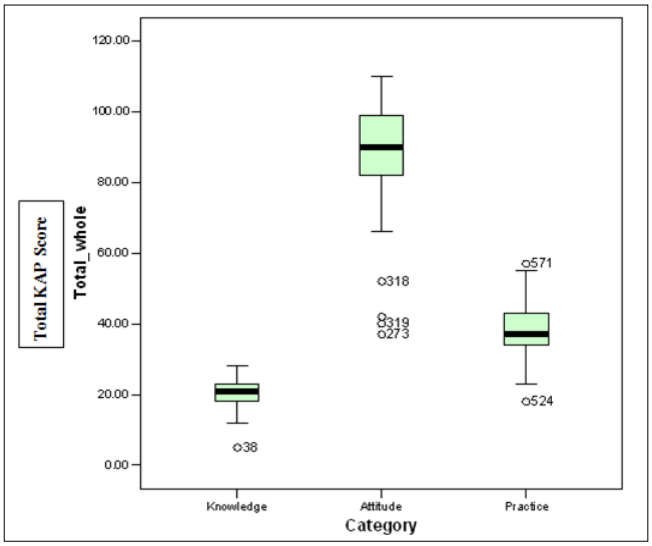

Figure 5. KAP Scores showing low knowledge, high attitude and moderate practice scores.

4.2.2 Association between Knowledge, Attitude and Practice regarding the Islamic Perspective Slots in the Biomedical Science curriculum

The correlation is estimated through bivariate analysis model to evaluate the relationship between knowledge, attitude and practice score. As illustrated in Table 4, knowledge of students showed weak positive correlation with attitude (r=+0.286; p<0.001) and practice (r=+0.246; p<0.001) regarding Islamic perspective teaching in

the Biomedical Science curriculum. This indicates that as the knowledge with regard to Islamic perspective teaching in the curriculum increases, the attitude and practice increases as well.

Table 4 Correlations between knowledge, attitude, and practice of students regarding the Islamic Perspective Slots in the Biomedical Science Curriculum

Variables	*r*-value*	*p*-value	Interpretation
Knowledge and Attitude	+0.286	<0.001	Weakpositive correlation
Knowledge and Practice	+0.246	<0.001	Weakpositive correlation
Attitude and Practice	+0.564	<0.001	Fair positive correlation

Note. *Pearson correlation.

The result for attitude of students also showed significant fair positive correlation with practice (r=+0.564; p<0.001) with regard to Islamic perspective teaching in the Biomedical Science curriculum. This means that as the attitude of the students' increases, there is a tendency for the practice to increase as well. All the results are represented by scatter plot graphs to show the association (Figure 6, Figure 7 and Figure 8, respectively).

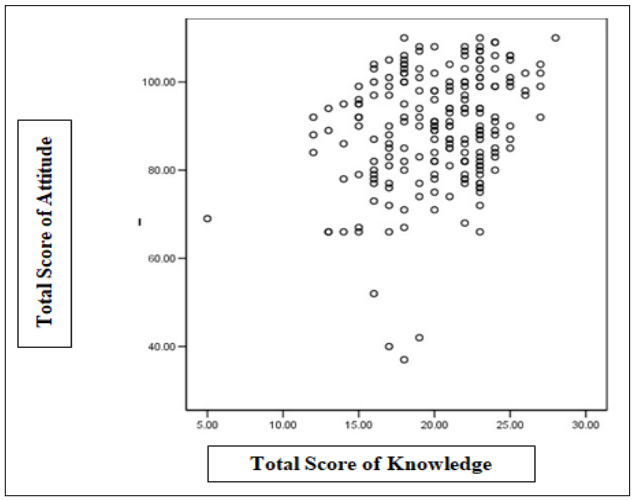

Figure 6. Correlation between knowledge and attitude of students regarding Islamic Perspective Slots in the Biomedical Science Curriculum

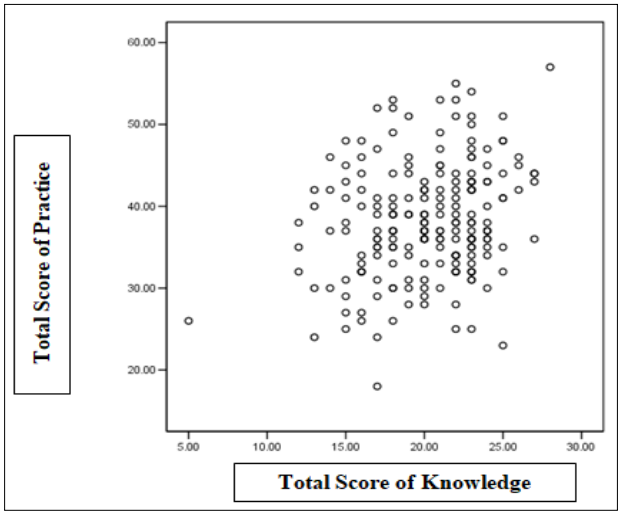

Figure 7. Correlation between knowledge and practice of students regarding the Islamic Perspective Slots in the Biomedical Science Curriculum

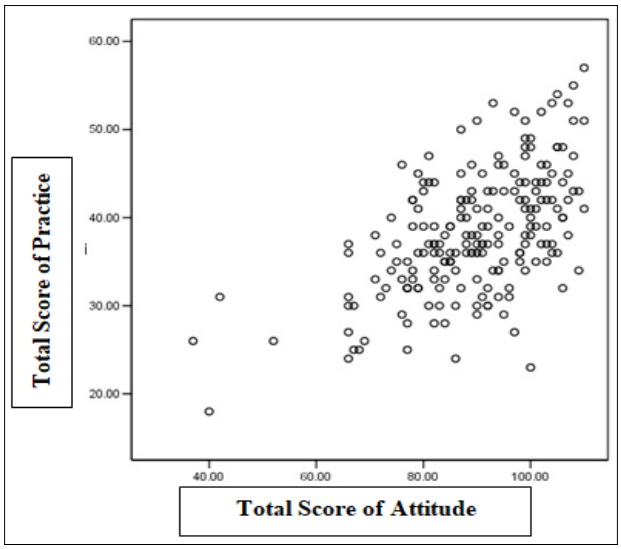

Figure 8. Correlation between attitude and practice of students regarding the Islamic Perspective Slots in the Biomedical Science Curriculum

4.2.3 Correlation between Socio-demographic Factors and Knowledge, Attitude and Practice Score regarding the Islamic Perspective Slots in the Biomedical Science curriculum.

The total score of Knowledge, Attitude and Practice is used for comparison between different demographic factors such as year of study, gender and educational background. There is significant association between knowledge, attitude and practice and year of study. For gender, there is significant difference between gender and knowledge as well as attitude but no significant difference between gender and practice. As for educational background, there is no significant difference between educational background and knowledge, attitude and practice.

4.2.3.1 Association between Year of Study and Knowledge, Attitude and Practice Score regarding the Islamic Perspective Slots in the Biomedical Science curriculum.

A One-way ANOVA test was used to estimate the correlation between year of study and knowledge, attitude and practice score regarding Islamic perspective teaching in the Biomedical Science curriculum. The summary of the association is shown in Table 5.

Table 5
Association between Year of Study and Knowledge, Attitude, and Practice of Students Regarding the Islamic Perspective Slots in the Biomedical Science Curriculum.

Variables	n	Mean (sd)	F stat. (df)	*p*-value*
Knowledge				
Year 1	49	19.14 (3.830)	3.540 (3, 201)	**0.016**
Year 2	50	19.58 (3.143)		
Year 3	60	20.82 (3.505)		
Year 4	46	21.09 (3.657)		
Attitude				
Year 1	49	94.06 (9.797)	10.618 (3, 201)	**<0.001**
Year 2	50	82.84 (11.795)		
Year 3	60	87.33 (15.189)		
Year 4	46	94.59 (10.197)		
Practice				
Year 1	49	37.84 (6.427)	6.351 (3, 201)	**<0.001**
Year 2	50	35.90 (6.367)		
Year 3	60	37.80 (7.336)		
Year 4	46	41.72 (6.355)		

Note. * = One-way ANOVA, n = number, sd = standarddeviation, F stat = statistics for the analysis of ANOVA, df =degree of freedom.

The association between knowledge with year of study showed statistically significant result (p=0.016). Having received a statistically significant difference, a post hoc test was performed, showing that year 1 and 4 differed significantly (p<0.05).The mean knowledge of year 4 (21.09, SD=3.657) is significantly higher than the mean knowledge or year 1 (19.14, SD=3.820).

4.2.3.2 Comparing Knowledge, Attitude and Practice Score regarding the Islamic Perspective Slots in the Biomedical Science curriculum between Genders.

Table 6 shows that there is a significant difference between male and female for the total knowledge score (p=0.009), and total attitude score (p=0.016). However there is no difference between gender when it comes to total practice score (p=0.059).

4.2.3.3 Comparing Knowledge, Attitude and Practice Score regarding the Islamic Perspective Slots in the Biomedical Science curriculum based on Educational Background.

Based on the result illustrated in Table 7, there is no evidence of a significant difference between religious school and non-religious school for the total knowledge score (p=0.198), total attitude score (p=0.147) and total practice score (p=0.876).

Table 6.
Comparing knowledge, attitude, and practice of students regarding the Islamic Perspective Slots in the Biomedical Science Curriculum in terms of genders.

Variables	N	Mean (sd)	Mean Difference (95%CI)	*t*-statistics value (*df*)	*p*-value*
Knowledge					
Male	53	19.08 (3.867)	0.009	-2.619	0.009
Female	152	20.56 (3.437)	(-2.601,-0.367)	(203)	
Attitude					
Male	53	84.87 (17.130)	-6.211	-3.058	0.016
Female	152	91.08 (10.811)	(-11.223,-1.199)	(203)	
Practice					
Male	53	36.68 (7.598)	-2.084	-1.869	0.059
Female	152	38.76 (6.631)	(-4.256,0.084)	(203)	

Note: * = Independent *t*-test, n = number, sd = standard deviation, CI = confidence interval, df = degree of freedom.

Table 7
Comparing knowledge, attitude, and practice of students regarding the Islamic Perspective Slots in the Biomedical Science Curriculum between educational backgrounds.

Variables	N	Mean (sd)	Mean Difference (95% CI)	*t*-statistics value (*df*)	*p*-value*
Knowledge					
Religious schools[s]	82	20.57 (3.311)	0.663	1.292	0.198
Non-religious schools[b]	123	19.91 (3.774)	(-0.348,1.674)	(203)	
Attitude					
Religious schools[a]	82	91.09 (11.975)	2.687	1.455	0.147
Non-religious schools[b]	123	88.40 (13.566)	(-0.955,6.329)	(203)	
Practice					
Religious schools[a]	82	38.32 (6.749)	0.154	0.156	0.876
Non-religious schools[b]	123	38.16 (7.083)	(-1.780,2.109)	(203)	

Note. * = Independent *t*-test, n = number, sd = standarddeviation, CI = confidence interval, df = degree of freedom.
[a]Include private and government religious school
[b]Include private and government non-religious school

5.0 DISCUSSION

5.1 Socio-demographic Characteristics
The questionnaire managed to get responses from about 83% of students from year 1, 2, 3, and 4, thus the result could be considered as strong and representative. In this study, the number of female respondents forms the majority in accordance with the higher number of female students in the course.

Most of the students received prior education from the non-religious, government school, followed by religious, government school. The rest of the respondents came from religious, private school while no respondents came from non-religious, private school.

5.2 Knowledge of Respondents regarding the Islamic Perspective Slots in the Biomedical Science Curriculum.

When asked about their ability of explaining IOK to the public, only a minority of students from each year could answer in the affirmative. However, as the year of study progresses, the frequency of negative answer decreases, although this is also accompanied by an increase in those unsure to explain IOK to the public.

When posed with questions on the general understanding of what constitute IOK, a clear difference could be observed in the answers given by the lower classes to the upper classes. Most of respondents from first year of class appeared unfamiliar with the definition and purposes of IOK, in particular about the process of dewesternisation of knowledge and the aim to produce scientists not influenced by non-Islamic ideologies. Although they have just started their university study very recently, they have been in the IIUM Centre of Foundation Studies in Petaling Jaya for two years and should have heard and been briefed on IOK there. Majority of the students in the lower years were also not aware that the Islamic Perspective Slot (IPS) is one of the IOK implementation in IIUM. This is represented by 26 students (53.1%) in Year One, 28 students (56.0%) in Year Two, and 36 students (60.0%) in Year Three. This is in contrast to Year Four in which 29 (63.0%) understood the purpose of the slot. This means that lecturers who were in touch with the students in the first few years of their studies need to reassess and emphasise on the purpose of the slots. In addition, the authority at the department or the Kulliyyah level must also ensure that these lecturers hold the slot and brief the students properly.

When asked questions pertaining with general knowledge on Islamic philosophy and its differences with modern sciences, more than half of respondents could answer correctly. This is encouraging; however this may reflect the input received from the IOK subjects (UNGS & RKUD) rather than the Islamic Perspective slots. Nonetheless, one particular question on Darwinism was not answered satisfactorily, despite the topic being a hot topic which had been discussed during one of the IPS.

Overall, however, the score on Knowledge regarding IOK is not very good and steps must be taken to increase their familiarity with the IOK and improve the content. They also need to be made to understand the strategies taken by the Kulliyyah to implement IOK so that their activities and thought processes are in tune with the Kulliyyah's aspiration.

5.3 Attitude of Respondents regarding the Islamic Perspective Slots in the Biomedical Science Curriculum

Contradictory to the score onKnowledge, the respondents in this study were receptive and had excellent attitude towards Islamic perspective teaching in the curriculum.

Some of the respondents felt that IPS is another repeat of RKUD/UNGS subjects. This could be due to some of the materials learned in IPS are almost similar to what is being learned in UNGS/RKUD class. This may be changed if instructors of IPS could steer their slot to answer one of the issues or ideologies in a more engaging manner and as a deeper, focused group discussion, avoiding the introductory style of UNGS/RKUD. Despite this, the majority felt that IPS is not a waste of time and should not be discontinued. Despite limitations encountered during the conduct of IPS, the respondents felt that IPS is an important aspect in their curriculum.

5.4 Practice of Respondents regarding the Islamic Perspective Slots in the Biomedical Science Curriculum

While most students attended their Islamic perspective slot without fail, most made no further initiative to further the discussion held in the class with their lecturers or other scholars of Islam. Very few also would have the initiative to ask their lecturers whenever they do not understand the contents of the Islamic Perspective Slots.

Less than half of the total respondents also read materials on related subjects on IPS prior to attending IPS. Some of them also had the perspective that by including Islamic perspective in their works, this would increases their marks for reports, presentation or even exam.

The total score on practice related to IPS in Biomedical Science curriculum among IIUM Biomedical Science students, however, is not at a satisfactory level.

5.5 Association between Knowledge, Attitude and Practice regarding the Islamic Perspective Slots in

the Biomedical Science Curriculum

It was found that there is a significant correlation between knowledge and attitude and between knowledge and practice of the students. As level of knowledge increase, this is reflected in an increase in positive attitude and positive practice towards IPS in the Biomedical Science curriculum. For example, student who knew that IOK is a niche agenda of IIUM will have purposeful motivation to attend the Islamic perspective slot in order to learn about the Islamisation of knowledge. Otherwise, they will attend just to fulfil the attendance requirement.

A strong correlation on the score of attitude and practice in the study population showed that when their attitude towards learning IOK is better, their practices related to the IPS will also be positive. For example, majority of the students answered that they attended Islamic perspective slot because they thought that the slot was important.

5.6 Association between Socio-demographic Factors with Knowledge, Attitude and Practice regarding to the Islamic Perspective Slots in the Biomedical Science Curriculum

Year of study of respondents can significantly influence their knowledge, attitude and practice regarding IPS. The score on knowledge, attitude and practice is higher in the upper class than in the lower classes.

There is a significant difference between gender for knowledge (p=0.009), and attitude (p=0.016). Female students tend to have higher scores as compared to male students. The educational background factor is not significantly associated with knowledge (p=0.198), attitude (p=0.147) and practice (p=0.876), hence previous educational background before entering IIUM has not shown any influence on the success of IPS and IOK. This however, may mean that IIUM could look into ways to incorporate IOK elements in secondary schools either by cooperation with related government agencies or private institutions.

6.0 CONCLUSION

After IPS was introduced into the new Biomedical Science curriculum at IIUM in 2012, the time has come to assess the impact of IPS to the students. Some of the important findings include that the knowledge, attitude and practices of students on IOK, in general, and IPS, in particular, are influenced by factors such as year of study and not by previous educational background. Increasing knowledge appears to result in the increase in positive attitude and practice among the students. Hence, it is crucial to formulate a mechanism by which knowledge of the issues surrounding IOK is introduced even before university years, at IIUM's Centre of Foundation Studies, and formulate IPS in such a way that it does not become redundant with UNGS or RKUD subjects. More importantly, IPS should be continued while improvement is being made to the content as well as the method of delivery. The current study has looked only at the student population, and has not included the academic staffs whose involvement and experience are also crucial in the current management and future improvement of the IPS.

7.0 REFERENCES

1. Al-Attas SMN The Dewesternization of Knowledge. Islam and Secularism. Muslim Youth Movement of Malaysia (ABIM), Kuala Lumpur. 1978; 133-150.
2. Al-Faruqi IR Islamization of Knowledge: Problems, Principles and Prospective; Islam: Source and Purpose of Knowledge, Proceeding and Selected Papers of 2nd Conference on IOK. International Institute of Islamic Thought , Herndon. 1982; pp.18-24.
3. Abu Sulayman AH Islamization of Knowledge. International Islamic Publishing House and IIIT, Riyadh:. 1989; 1.
4. Khalil, I Islamization of Knowledge: A Methodology. International Institute of Islamic Thought, Herndon. 1991.
5. Al-Attas SMN Islam and Secularism. 2nd ed. ISTAC, Kuala Lumpur. 1993.
6. Jahidin NZ Introducing Science on Tawhidic-Based Science: Perintis's Take on The Islamisation of Present-Day Knowledge. Perintis Journal. 2011; 1.
7. Haneef MA A Critical Survey of Islamization of Knowledge. IIUM Press, Kuala Lumpur. 2009.
8. Ba-Yunus I Al-Faruqi and Beyond: Future directions in Islamization of knowledge, American Journal of Islamic Social Sciences. 1988; 5(1): 13-28.
9. Dangor S Islamization of Disciplines: Towards an indigenous educational system. Educational Philosophy and Theory. 2005; 37(4), 519-531.
10. Amin RM, Yusof SA, & Haneef MA The Effectiveness of an Integrated Curriculum: The Case of the International Islamic University Malaysia. In: IIUM: The Premier Global Islamic University. IIUM Press, Kuala Lumpur. 2013; 153-168.
11. Hashim R Internationalisation of Contemporary Islamic Higher Education and Ummatic Development: A Case Study of the International Islamic University Malaysia (IIUM). Paper presented at the International Seminar on Reforms in Islamic Higher Education in Meeting Contemporary Challenges, Nagoya University. 2011.
12. Sharifudin MA, Ayeop MAS, & Ahmad AC (n.d). Implementation of The Islamic Input in Orthopaedics (IIIO) Undergraduate Medical Curricula and Practice: IIUM's Experience (2002 -2014). In: Revelation and Science in the 21st Century. IIUM Press, Kuala Lumpur. 2015; 141-148.