

ORIGINAL ARTICLE

Validation of Newly Developed Questionnaire Islamic Work Ethics Questionnaire – A pilot study

FAIZAN MUNIR KHAN¹, AMIR RAFIQ², HAMZA HASSAN MIRZA³, ZUHAIR MEHDI⁴, SALEHA SAEED⁵

¹Demonstrator, Dental Education Department, Dental College, HITEC Institute of Medical Sciences, Heavy Industries, Taxila Cantt, Taxila.

²Assistant Professor, Prosthodontics, Dental College, HITEC Institute of Medical Sciences, Heavy Industries, Taxila Cantt, Taxila.

³Senior Registrar, Oral & Maxillofacial Surgery Department, Dental College, HITEC Institute of Medical Sciences, Heavy Industries, Taxila Cantt, Taxila.

⁴Registrar, Oral & Maxillofacial Surgery Department, Dental College, HITEC Institute of Medical Sciences, Heavy Industries, Taxila Cantt, Taxila.

⁵Demonstrator, Oral Pathology Department, Dental College, HITEC Institute of Medical Sciences, Heavy Industries, Taxila Cantt, Taxila.

Corresponding author: Dr. Faizan Munir Khan, Email: fmksr2007@gmail.com, Cell No: 0334-0031031, <https://orcid.org/0000-0002-2909-4122>.

ABSTRACT

Background: The field of measuring Islamic work ethics is a nascent one, and not much work has been cited on the topic. The most cited work is of Mr. Ali from Indiana University, but protestant work ethics and Arabic culture heavily influence that work, so the need was felt for a purpose-built questionnaire for health professionals free from foreign influences.

Methods: A mixed-methods exploratory study was performed to develop a novel instrument, following A.M.E.E. guide no. 87, its validity & reliability was established via the measurement of statistical tests such as Cronbach α , Item-Total Correlation & Pearson's Correlation.

Results: Cronbach α was calculated to be 0.9, which is an excellent result. Furthermore, a strong correlation of Islamic ethical constructs Unisation/Tawheed with Itqan/Ihsan; Amanah/Adl and correlation of Itqan/Ihsan with Amanah/Adl; Consultation/Shura; and Unisation/Tawheed was observed.

Conclusion: A newly developed data collection instrument was validated following the results of the pilot study. The instrument developed is reliable and fit for purpose.

Keywords: Islamic work ethics; measurement tool; medical education; ethics; health professionals.

INTRODUCTION

The rising incidence of ethical misconduct in the medical profession has provoked a global response in stressing the need for ethics education and inculcation of ethical behaviours(1,2). A study in India reported that the observance of professional ethics is even lower among dental professionals than their medical counterparts(3). It is the need of the hour to remediate the rising unethical behaviours and practices, especially in the face of increasing social accountability.

In developing countries like Pakistan, there has been a growing rift & miscommunication between doctors and patients, leading to increased dissatisfaction. Some of it can be attributed to the lack of resources and facilities in our healthcare setup, but the doctors are not blameless in this matter. The mindset of health professionals has increasingly become materialistic, and the moral and ethical standards have been on a gradual decline over time. A study investigated the level of awareness of medical ethics among the health professional staff of a tertiary care hospital in Lahore. The study reported a general lack of awareness regarding medical ethics in all respondents ranging from house officers to consultants(4). In addition, the physicians had poor knowledge about patient autonomy and patient rights; a result echoed in another study which proposed that patients' wishes may not be respected by health professional staff at all times(5).

METHODS

Study Design: The questionnaire development study was of a mixed-method, exploratory design that is typically utilised for questionnaire development. The research

project followed the guidelines and 9 step process in A.M.E.E. guide No. 87(6)

The validation of that questionnaire was performed via a cross-sectional survey study, using the 5-point Likert scale questionnaire.

Study Sites & Duration: A multicentre study was conducted at Riphah International University and H.I.T.E.C. - Institute of Medical Sciences, Taxila. The study duration was six months, from April to September 2021.

Sampling: The purposive sampling technique was chosen to include knowledgeable experts regarding Islamic ethics, medical education, and questionnaire construction.

Data Collection Procedure: The sample size was thirty-four academicians, selected with guidance from literature(7,8) and valuable feedback from Riphah's faculty members.

Data was collected on the newly developed questionnaire online on Google Forms and printed questionnaires to maximise the response rate. Emails requesting participation in the pilot study were sent to Riphah faculty, while printed questionnaires were used to collect data from HITEC-IMS. In addition, a period of one week was allocated for responses on the online Google Forms questionnaire.

RESULTS

The newly developed instrument was field-tested at both research sites, namely Riphah International University and HITEC-IMS, Taxila. The sample size was thirty-four respondents, with guidance from literature(7,8) and valuable feedback from Riphah's faculty members.

Reliability of the Instrument: The reliability of the

instrument was established via the measurement of Cronbach α in S.P.S.S. version 26. As a result, the reliability score of the overall questionnaire and that of

individual constructs was above the acceptable score of 0.70(9) as given in Table 1.

Table 1: Reliability of Developed Instrument

Sr. No.	Constructs	No. of Items	Cronbach α	Overall Cronbach α
1	Unisation/Tawheed	12	0.85	0.95
2	Itqan/Ihsan	20	0.87	
3	Amanah/Adl	10	0.86	
4	Consultation/Shura	10	0.83	
4	Dignity	15	0.91	

Statistical Analysis: Measures of dispersion, including mean and standard deviation, were calculated along with correlation tests of Item-Total correlation and Pearson's correlation between Islamic ethical constructs, which are described in Table 2 below.

Table 2: Result of Statistical Analyses

Sr. No.	Questionnaire Items	Mean	Standard Deviation	Item-Total Correlation
1. Islamic Ethical Construct – Unisation/Tawheed				
A. Unity of Life				
1.	I derive all rules and principles of my personal and professional life from Quran and Sunnah.	1.53	0.61	0.61
2.	I maintain a work-life balance reasonably well, as required by Shariah.	1.94	0.77	0.62
3.	My personal life and obligations do not suffer because of my work for the sake of Allah.	2.09	1.08	0.41
4.	My work does not suffer because of my family life and obligations for the sake of Allah.	1.71	0.67	0.48
B. Tawheed Rububiyyah (Oneness of Allah's Lordship)				
5.	I perform to the best of my ability to please Allah Almighty.	1.71	0.67	0.69
6.	The purpose of my work is to benefit my students for the sake of Allah.	1.68	0.76	0.74
7.	I see students as my sacred responsibility and not as clients.	1.47	0.78	0.38
8.	I believe that success in my work endeavours comes from Allah Almighty.	1.24	0.49	0.30
9.	I believe that my sustenance (rizq) comes from Allah Almighty and not any worldly source.	1.12	0.32	0.41
C. Tawheed-ul-Uluhiyyah (Oneness of Worship)				
10.	I inculcate the belief in students that the parameter of success is to please Allah.	1.74	0.93	0.49
11.	I inculcate the belief in students that their work as health professionals will be in service of Allah.	1.53	0.74	0.61
12.	The ultimate aim of all my teaching responsibilities (teaching, assessment, curriculum development, among others) and everything else in my life is to please Allah.	1.71	0.76	0.77
2. Islamic Ethical Construct – Itqan/Ihsan (Effort)				
A. Itqan as Muallim (Teacher)				
13.	I believe that Allah Almighty will hold me accountable for how much effort I put into my teaching.	1.32	0.47	0.39
14.	I provide learning content in a manner that engages higher-order critical thinking processes.	1.79	0.80	0.50
15.	I allocate adequate time for lecture preparation.	1.56	0.61	0.44
16.	I revise my lecture content with new and updated information.	1.62	0.73	0.32
17.	I accommodate different learning styles (Visual, Aural, Read/Write, Kinaesthetic) using multimedia aids.	1.50	0.56	0.32
18.	I use active learning practices (brainstorming, group work, one minute paper, among others) in my teaching.	1.82	0.62	0.40
19.	I facilitate the transfer of knowledge through the appropriate construction of PowerPoint lectures.	1.47	0.56	0.53
20.	I provide clinical examples to establish the relevance of theoretical content.	1.47	0.56	0.41
B. Itqan as Mu'rabbī (Trainer)				
21.	I believe I play a role in the behavioural change in my students.	1.62	0.69	0.57
22.	I try to foster empathy amongst my students to please Allah.	1.88	0.72	0.58
23.	I try to foster honesty amongst my students to please Allah.	1.65	0.64	0.62
24.	I try to foster compassion amongst my students to please Allah.	1.74	0.71	0.42
25.	I try to foster God-consciousness in students by stressing that Allah Almighty made the human body in perfect form & function.	1.91	0.75	0.52
26.	I try to give equal attention to all students during teaching.	1.53	0.56	0.46
27.	I inculcate the knowledge about problems in the health sector of Pakistan and encourage students to think about their solutions.	1.82	0.75	0.44
C. Itqan as Mudarrīb (Practice)				
28.	I provide opportunities to students to perform revision and elaboration of knowledge.	1.41	0.55	0.53
29.	I encourage the students to reflect and elaborate their understanding of learning content by performing reflective writing regarding their learning.	1.82	0.83	0.48
D. Itqan as Muaddib (Discipline)				
30.	I identify students with poor academic results.	1.82	0.57	0.28
31.	I take feedback from academically poor students to identify the cause of poor performance.	2.24	0.74	0.72
32.	I provide mentoring to academically poor students.	1.97	0.67	0.40
3. Islamic Ethical Construct – Amanah/Adl				
A. Amanah/Adl as Assessor				
33.	I am aware that Allah Almighty will hold me answerable for my assessment practices.	1.29	0.52	0.47
34.	I keep my knowledge up to date to be able to utilise the latest developments in assessment practices.	1.65	0.64	0.66
35.	I do not engage in favouritism amongst students regarding assessment.	1.32	0.58	0.61
36.	I do not accept gifts from students in return for favours.	1.38	0.69	0.35

Sr. No.	Questionnaire Items	Mean	Standard Deviation	Item-Total Correlation
37.	I perform grading of assessment according to pre-defined criteria.	1.47	0.61	0.54
B. Amanah/Adl as Curriculum Planner				
38.	I keep myself updated with the latest developments in the field of curriculum development.	1.56	0.66	0.65
39.	I include the latest learning content while developing the curriculum.	1.59	0.70	0.61
40.	I include the latest best-evidenced based teaching practices while developing the curriculum.	1.74	0.71	0.64
41.	I provide an authentic curriculum to students by providing clinical cases representative of the Pakistani population.	1.82	0.71	0.51
42.	I engage in curriculum reform because it will benefit students instead of any other cause.	1.65	0.77	0.66
4. Islamic Ethical Construct – Consultation/Shura				
A. Consultation with Colleagues				
43.	I consult with other faculty members to deliver the learning content in an integrated manner.	1.71	0.67	0.33
44.	I consult with other faculty members to assess the learning content in an integrated manner.	1.79	0.77	0.64
45.	I take feedback from other faculty members about the quality of my teaching and assessment practices.	2.18	0.86	0.60
46.	The feedback taken by me is of ongoing, continuous nature.	2.15	0.82	0.72
B. Consultation with Students				
47.	I take feedback from students about concerns regarding my teaching and assessment practices.	1.85	0.55	0.52
48.	The feedback taken by me is of ongoing, continuous nature.	2.03	0.71	0.61
C. Facilitation/Ta'awun				
49.	I facilitate students in their development as God-consciousness health professionals.	1.74	0.71	0.52
50.	I foster equity in health care by encouraging students to not discriminate on any parameter.	1.62	0.69	0.48
51.	I perform career counselling of students to guide them towards areas most needed by society.	1.88	0.72	0.46
52.	I am aware that I also benefit when I facilitate other people in their works that please Allah.	1.53	0.61	0.28
5. Islamic Ethical Construct - Dignity				
A. Dignity with Colleagues				
53.	I maintain respectful behaviour towards my colleagues.	1.29	0.46	0.66
54.	I do not have any inappropriate relations with my colleagues.	1.26	0.44	0.70
55.	I try to solve my conflicts with other faculty members in a positive, productive manner.	1.29	0.57	0.83
56.	I try to mediate conflicts towards their resolution between faculty members.	1.53	0.70	0.49
57.	I do not abuse my authority to harm any other faculty members in any manner.	1.29	0.62	0.77
58.	I do not abuse my authority to engage in favouritism.	1.26	0.61	0.47
B. Dignity with Students				
59.	I maintain kind behaviour towards students.	1.35	0.54	0.50
60.	I do not insult or embarrass the students.	1.59	0.70	0.54
61.	I do not engage in deception while dealing with students or their parents.	1.56	0.66	0.51
62.	I do not have inappropriate relations with the students.	1.41	0.65	0.61
63.	I do not invade the privacy of the students.	1.38	0.60	0.65
C. Dignity with Subordinates				
64.	I maintain kind behaviour towards my subordinates.	1.29	0.46	0.61
65.	I do not overburden my subordinates with work beyond their capacity.	1.50	0.70	0.75
66.	My subordinates have a safe and conducive working environment.	1.44	0.61	0.58
67.	I try to foster the professional development of my subordinates.	1.50	0.61	0.56

Pearson correlation was also calculated to observe correlations between different Islamic ethical constructs included in the questionnaire, and the results are presented in Table 3 below.

Table 3: Pearson's Correlation Among Islamic Ethical Constructs

Pearson's Correlation						
		Unisation/Tawheed	Itqan/Ihsan	Amanah/Adl	Consultation/Shura	Dignity
Unisation/Tawheed	Pearson Correlation	1	.60**	.56**	.46**	.43*
	Sig. (2-tailed)		.00	.00	.00	.01
	N	34	34	34	34	34
Itqan/Ihsan	Pearson Correlation	.60**	1	.55**	.55**	.46**
	Sig. (2-tailed)	.00		.00	.00	.00
	N	34	34	34	34	34
Amanah/Adl	Pearson Correlation	.56**	.55**	1	.65**	.66**
	Sig. (2-tailed)	.00	.00		.00	.00
	N	34	34	34	34	34
Consultation/Shura	Pearson Correlation	.46**	.55**	.65**	1	.36*
	Sig. (2-tailed)	.00	.00	.00		.03
	N	34	34	34	34	34
Dignity	Pearson Correlation	.43*	.46**	.66**	.36*	1
	Sig. (2-tailed)	.01	.00	.00	.03	
	N	34	34	34	34	34
**. Correlation is significant at the 0.01 level (2-tailed).						
* Correlation is significant at the 0.05 level (2-tailed).						

DISCUSSION

Item-Total correlation is a test of reliability and internal consistency. The values range from 0.2 to 0.7, which is within acceptable limits and indicates a good relationship of items with constructs and subconstructs(10).

There is a strong correlation between Islamic ethical constructs of Unisation/Tawheed and Itqan/Ihsan; Amanah/Adl because Pearson's correlation value is 0.5 or more(11). The strong correlation signifies that respondents who believe in Tawheed tend to be more hardworking and facilitatory than others and are just and fair in their dealings.

Similarly, there is a strong correlation between Islamic ethical constructs of Itqan/Ihsan and Amanah/Adl; Consultation/Shura and Unisation/Tawheed because their Pearson's correlation value is also 0.5 or more(11). The strong correlation signifies that hardworking people tend to be just and fair in their dealings with others, are good collaborators and believe in the oneness of Allah Almighty.

Content Validity of Developed Instrument: Content validity can be defined as "the degree to which elements of an assessment instrument are relevant to, and representative of, the targeted construct for a particular assessment purpose" (12)

The Delphi study is an iterative approach for achieving content validity for a new questionnaire. First, evidence for the instrument's content validity was gathered in the form of feedback from a panel of five medical education experts as part of a modified Delphi study under the guidance of literature (12,13). The validated questionnaire was then sent to a panel of fifty-two experts during the first round of modified Delphi study to achieve consensus on the inclusion of questionnaire items in the questionnaire.

Results were obtained from the modified Delphi study on a 5-point Likert scale. The frequencies of responses were calculated along with measures of dispersion such as median and ranges.

Practical Applications of Developed Instrument: Although the study and application of ethics in daily life are critical to lead a 'good' and virtuous life, it is more critical in the healthcare profession, as healthcare professionals deal with the sick and dying. Teaching our student health professionals how to deal with patients and their relatives in a proper, ethically sound manner is imperative for every healthcare professional, including dental surgeons. As we do not have a purpose-built questionnaire that can measure the ethical environment in which we perform our daily practice, the need was felt for such an instrument to aid in the ethical education of our students.

The data obtained from the instrument's administration will help recognise the ethical and unethical behaviours being performed. Subsequently, an ethics course may be designed to reinforce ethical behaviours and perform remedial actions for unethical behaviours identified in a given population.

There is an imperative need of the hour to teach Islamic ethics purposefully; we cannot hope that our students will passively adopt ethical practices from their teachers in an unstructured apprenticeship model. This need is now being recognised worldwide, and efforts are

being made to promote ethical practices and remedy unethical behaviours by purpose-built ethical courses.

An example of such an Islamic bioethics course is "The Fiqh Of Medicine" online course conducted by Al Balagh academy in the UK. The course discusses the relationship of medical fiqh with Islamic bioethics and includes the topics within Islamic theology, Usul Al-fiqh, epistemology and fiqh of modern-day medicine and exemplified by practical application of these topics on contemporary medical cases (14)

Hamad Bin Khalifah University, Qatar, offers another such course. The course consists of Masters of Art (M.A) qualification in Islamic ethics, and the course work includes applied Islamic bioethics in medicine (15).

The benefits of promoting awareness and practice of Islamic ethical practices will benefit the organisations in multiple ways. Essentially, with a close relationship to God, one could expect to spur his attitudes and behaviour to be consistent with the rules and stipulations of the religion. Islamic work ethics advocates the importance of performing one's work to the best of ability for the pleasure of God. In an organisational setting, Islamic work ethics advocates the importance of fostering cooperation and collaboration when faced with conflict, improving job quality (16). As a result, Islamic work ethics increase organisational commitments and reduces the turnover rate of employees (17).

CONCLUSION

The final questionnaire developed comprises sixty-six questionnaire items measuring five Islamic ethical constructs on a 5-point Likert scale, and it is meant to measure the observance of Islamic ethical values in health professional academicians. The instrument has good content validity, and it has high reliability to serve its function.

Declarations

Ethics approval(s) and consent to participate

Ethical approvals were received from Institutional Review Committees of the Islamic International Medical College with "Ref. Appl. # Riphah /I.R.C./ 21/30" and from Dental College HITEC-IMS, Taxila "Ref. Dental/HITEC/IRC/1/4".

Verbal informed consent was obtained from all participants before all data collection procedures. Above mentioned institutional review committees waived the need for written consent.

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