Educational' Assessment of Medical Ethics Education Course at the College of Medicine/ University of Mosul

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Abstract:

Introduction: Medical Ethics (MEs) education in the College of Medicine/ University of Mosul was very traditional in the form of theoretical lectures with no clinical integration or practical ethics training for the students.
Aim: The aim of the present study is to assess students' knowledge about the current MEs teaching at College of Medicine/ University of Mosul.
Subjects and Methods: The study was conducted in College of Medicine/ University of Mosul during the academic year 2013-2014. Across-sectional study design was adopted with a standardized self-administered questionnaire form distributed to 6th class undergraduate medical students.
Results: The overall satisfaction for MEs course assessment questionnaire in the present study was (35.5%). According to the results about one fifth (22%) and less than one third (28.8%) of the students only supposed that MEs course they received had helped them to develop their problem solving skill and sharpened their analytic skills consequently. On the other hand, (72.9%) thought that there are no difficulties of getting through the course by just working hard around the examination, and (49.2%) assumed that feedback on students work was usually provided in the form of marks and grades. Their preference to teaching and assessment methods in the present study revealed in general no significant agreement on a single best method.
Conclusions: Medical Students exposed their unsatisfaction regarding MEs course that they have been received. Actions regarding reviewing and reforming of the current MEs teaching became crucial which satisfy students' needs and the contemporary requirements of medical students' graduation.
Keyword: Medical, Ethics, Students, Course.

Introduction:

Medical ethics (MEs) are concerned both with the standards of conduct and competence expected of members of the medical profession, and with the study of ethical problems raised by the practice of medicine [14]. Consequently, it is well recognized that providing ethics teaching in medical schools is central to developing and maintains good medical practice [1, 2]. The physicians need appropriate knowledge, skills as well as attitudes for proper ethical medical practice.As well as, they must learned and cultivate skills that enable them to recognize ethical dilemmas analyze them and reach sound decisions [3]. Regarding the present situation in our medical schools MEs teaching was established in response to World Medical Association (WMA) and World Federation for Medical Education (WFME) recommendations. However, the ethics education was in the form of a single separate course of theoretical lectures with no clinical integration or practical training for the students. Unfortunately, there is no review or improvement of the course done since

the subject has been introduced in our medical curriculum.

In order to make a change in the students' understanding, attitude and practice; there is a raising need for reviewing the MEs education [4]. For any new approach there should be learning objectives which should be made clear between students and tutors concerning personal needs of the students and inevitably to the requirements for medical students' graduation [5]. Students' growing exposure and experience can usefully generate the issues to be explored [6]. Thus, students' feedback is an essential component of learning because students are the principle receivers of instruction, and their points of view have proven extremely useful [7]. Such feedback help to recognize or to identify the need and perception of students about MEs education and their assessment of the current MEs curriculum regarding its acceptability , relevance of the material to the teaching aim, learning settings, instruction and students assessment methods. This information can aid in the development of the MEs' curriculum that responsive to the perceived needs of our student in Iraqi Medical Colleges.

The aim of the present study is to assess the students' knowledge regarding the current MEs teaching

Materials and Methods:

Sixth class medical students in the College of Medicine/ University of Mosul were chosen just 2months before their graduation to investigate their opinions regarding the current MEs curriculum by a standardized self-administered questionnaire [8, 9]. The questionnaire form was disseminated to all students (total number=136). After explanation of the purpose of the survey

and taking oral consent 118 completed forms were obtained. The questionnaire form included five sections, which were intended to explore students' assessment of MEs teaching, their favorable teaching methods, favorable assessment methods, favorable teaching language, and favorable teaching setting.

Results:

Table (1) describes distribution of 6th class students' population in relation to their sex and age. The total number of participants' students was 118 out from 136 forming response rate of (86.8%). The mean age of participants was 23.8 year with SD of 0.56 and the male represented more than one third (39.8%) of study sample.

Table (2) reveals that less than half of 6th class students' agreed for almost all statements related to MEs course assessments with (35.5%) overall agreement. Course assessments questionnaire revealed that only (22%) and (28.8%) of students agreed that this course had helped them to develop their problem solving skill and sharpened their analytic skills. While just one third of students have an equivocal agreement for most of the statements; (12 out of 22 statements) forming an overall proportion of (35.2%). On the other hand, (72.9%) disagreed with the statement about the difficulty of getting through the course by just working hard around the examination indicating the opposite, and (49.2%) disagreed that feedback on students work was not usually provided in the form of marks and grades.

Table (3) shows that 6th class students rated role play as the most significant desirable teaching methods by (63.6%) agreement (p =0.003). Lectures were chosen by one-third (31.4%) of students

forming the least significant desirable method (p =0.000). Case studies discussion and problem solving exercises were chosen by more than half of the students (56.8%, and 50.8%) correspondingly.

In Table (4) MCQs were significantly chosen by (62.7%) as the most preferable assessment methods (p =0.006). While half of the students (50.8%) selected OSCE. In contrast, only (23.7%) and (28%) preferred projects or assignments and direct written questions forming the least preferable assessments methods (p =0.000).

Table (5) displays that more than half of the students (58.5%) preferred Arabic language for MEs teaching, and just about one-third (32.2%) selected a combination of Arabic and English languages (P=.000) and just one quarters (24.6%) favored English language (P=.000).

Table (6) depicts students' agreement about study settings used. Small groups rooms was the preferable teaching settings selected by just more than half (52.5%) of students. While lectures room and hospitals' ward were gained significant agreement by (39.8%) and (36.4%) of students in that order (p=0.023, 0.003).

Table (1): Characteristics of study population (6th class students).

Age (n=118)	Mean	Median	SD
	23.80	24.00	0.56
Sex (n=118)	No.	%	
Male	47	39.8	
Female	71	60.2	

Table (2): Students' opinions of the current MEs curriculum (n=118).

	Statements	Students' responses		
		Scores(4+5) Agree %	Score(3) Equivocal %	Scores(1+2) Disagree %
1	The aim and objectives of this course are made very clear.	(35.6)	(48.3)	(16.1)
2	This course has helped me to develop my problem-solving skills.	(22.0)	(40.7)	(37.3)
3	The teaching staff of this course motivates students to do their best work.	(42.4)	(33.9)	(23.7)
4	This course has sharpened my analytic skills.	(28.8)	(40.7)	(30.5)
5	To do well in this course you don't need a good memory only.	(50.0)	(26.3)	(23.7)
6	As a result of my course, I feel confident about tackling unfamiliar problems.	(36.4)	(36.4)	(27.1)
7	This course has helped develop my ability to work as a team member.	(25.4)	(47.5)	(27.1)
8	It seems to me that the syllabus tries to cover too many topics.	(43.2)	(35.6)	(21.2)
9	Staff seems more interested in testing what you've understood than what you've memorized.	(37.3)	(30.5)	(32.2)
10	Lectures given were extremely good at explaining things.	(43.2)	(33.9)	(22.9)
11	The staff make a real effort to understand difficulties students may be having with their work	(46.6)	(33.1)	(20.3)
12	Feedback on student work is not usually provided only in the form of marks and grades.	(22.0)	(28.8)	(49.2)
13	We often discuss with our lecturers or tutors how we are going to learn in this course.	(43.2)	(36.4)	(20.3)
14	It would not be possible to get through this course just by working hard around exam times.	(11.9)	(15.3)	(72.9)
15	There're a numerous choices in this course in the ways you are assessed.	(20.3)	(42.4)	(37.3)
16	The staff here make it clear right from the start what they expect from students.	(50.8)	(33.1)	(16.1)
17	The sheer volume of work to be got through in this course means you can comprehend it all thoroughly.	(34.7)	(35.6)	(29.7)
18	Overall, I am satisfied with the quality of this course.	(50.0)	(27.1)	(22.9)
19	Lectures give impression that there is often a new can be added or learned from students.	(31.4)	(35.6)	(33.1)
20	Enough time was given to individual or group discussion with the teacher.	(34.7)	(36.4)	(28.8)
21	Teachers' questions are not about facts only.	(22.0)	(44.1)	(33.9)
22	The MEs' teachers have a real interest about student's opinions.	(49.2)	(33.1)	(17.8)
	Overall average response	(35.5)	(35.2)	(29.3)

*Using proportions of participants' responses.

Table (3): Students' preference of teaching methods used (n=118).

Teaching methods	Students' responses				
	Agree		Disagree		P*-value
	No.	%	No.	%	
1-Lectures	37	31.4	81	68.6	0.000
2-Seminars	51	43.2	67	56.8	0.141
3-Case studies discussion	67	56.8	51	43.2	0.141
4-Role play	75	63.6	43	36.4	0.003
5-Clinical setting	54	45.8	64	54.2	0.357
6-Problem solving exercises	60	50.8	58	49.2	0.854

*Using Z-test for one proportion.

Table (4): Students' agreement concerning assessment methods used (n=118).

Assessments' methods	Students' responses				
	Agree		Disagree		P*-value
	No.	%	No.	%	
1-Projects or assignments	28	23.7	90	76.3	0.000
2- MCQs	74	62.7	44	37.3	0.006
3-OSCE	60	50.8	58	49.2	0.854
4-Case study with short written answers	46	39.0	72	61.0	0.017
5-Clinical supervision	41	34.7	77	65.3	0.001
6-Direct written questions	33	28.0	85	72.0	0.000

*Using Z-test for one proportion.

Table (5): Students' agreement on the teaching language used (n=118).

Study language	Students' responses				
	Agree		Disagree		P*-value
	No.	%	No.	%	
1- Arabic	69	58.5	49	41.5	0.066
2- English	29	24.6	89	75.4	0.000
3-Both Arabic and English	38	32.2	80	67.8	0.000

*Using Z-test for one proportion.

Table (6): Students' agreement concerning study settings used (n=118).

Study settings	Students' responses				
	Agree		Disagree		P*-value
	No.	%	No.	%	
1-Lectuers' room	47	39.8	71	60.2	0.027
2-Small groups' rooms	62	52.5	56	47.5	0.581
3-Hospitals' ward	43	36.4	75	63.6	0.003

*Using Z-test for one proportion.

Discussion:

Students' feedback in relation to their ethics teaching is important to ensure delivery of a curriculum that of interest and relevance to them [10, 11]. Sixth class medical students in the College of Medicine/ University of Mosul were chosen just 2months before their graduation because they had received the current MEs course formally, and their perspective had been established. The response rates of (86.8%). This

considered a good response rate in comparison with a previous study conducted on 2013 in the same setting (48.9%) [8], other studies with response rates varied "between" (28% to 67%) [12-14]. The achievement of this rate is facilitated by approaching each group of students (6th class) separately at the end of their clinical sessions.

The overall agreement for course assessment questionnaire in the present study was (35.5%). According to the results of the present study about one fifth (22%) and less than one third (28.8%) of the students supposed that MEs course they received had helped them to develop their problem solving skill and sharpened their analytic skills consequently. While about one third (35.2%) was confused giving an equivocal agreement for most of the statements. On the other hand, (72.9%) thought that there are no difficulties of getting through the course by just working hard around the examination, and (49.2%) assumed that feedback on students work was usually provided in the form of marks and grades. Evidently, students' responses reveal their no satisfaction regarding MEs course they have received. In comparison, in a review of biomedical ethics course offered at the College of Medicine, King Saud bin Abdul-Aziz University for Health Sciences [15]; in which MEs is taught in a four weeks course in the first year with multiple problem-based sessions integrated longitudinally within different blocks of the curriculum. Students considered the contents of the course were relevant to their culture and to themselves; but they couldn't decide whether the assessment methods used in the course were appropriate or not. In addition, students assumed that though all three ethical

problems which handled in their ethics course were relevant to the culture, but were not very stimulating. While, in a recent study conducted to evaluate the revised medical ethics curriculum at the School of Medicine, Tehran University of Medical Sciences [16]; the student feedback indicated that the new curriculum was successful in increasing the students' awareness of ethical issues and enabled them to understand and accept their professional obligations. In evaluating the process of the course, (74.0%), (74.3%), and (78.5%) of students agreed or strongly agreed that the program had practical contents, the amount of information was enough and the program was well introduced at the beginning of the semester, respectively. According to students' opinions in that study, the program was mostly successful in terms of sensitizing them to ethical issues [more than (87.6%) agreed], followed by giving them a better understanding and acceptance of their professional obligations, and humane and moral aspects of medical ethics (71.7%). However, it was mentioned that it fell short of significantly improving their ability to analyze medical ethical issues (51.3%) [16].

Improper teaching methods can lead to resistance in the learning process [17]. In relation to teaching and assessment methods in the present study, 6th class students rated role play as the most desirable teaching methods followed by case studies discussion and problem solving exercises; while, lectures forming the least desirable method. These finding were consistent with other several studies [10, 13, 14, 18, 19]. Ideally, role play helps the learners to observe and adopt the attitudes and behaviors of their role models. Then they compare

the techniques they observe and perform with discussion of a list of practical suggestions. On other hand, case study is one of the main educational methods that help students to develop self-learning skills and enable them to learn by their own for the rest of their lives. Furthermore, case discussion serve many of the aims of MEs teaching; it teaches sensitivity to the moral aspect of medicine, illustrates the application of humanistic or legal concepts to medical practice and shows doctors acting as a responsible moral agents [20-24].

However, in a recent study in Thai 2016 [17]; it was found that many medical students considered lecture sessions are still needed as a learning method. In that study students suggested that lectures could be used to provide concept and basic knowledge about ethics where case discussion and role-play clarified understanding and revealed ways to apply ethical principles in daily practice. Regarding assessment methods; MCQs were chosen as the most preferable assessment methods followed by OSCE, projects or assignments in the present study. Whereas, direct written questions forming the least preferable assessments methods. Similar results were obtained in Saied study [8] during 2013 in the same setting with no much difference from other studies related to the same domains [13, 14, 18, 19]. In general students' preference to teaching and assessment methods in the present study revealed no significant agreement on a single best method which is expected since achieving instructional goals in a contemporary instruction that based on several domains including knowledge, attitude and skills; required combination of several methods.

In the present study although, Arabic language was preferred by more than half (58.5%) of the students but considerable proportion (32.2%) agreed to combine both Arabic and English languages. Ideally, the combination of both Arabic and English languages may provide a chance for medical students for further reading as most of the references are in the English language.

Small groups discussion rooms were chosen by the half of students (52.5%) which is convenient and it can be achieved within the available resources concurrently with fulfillment of different educational methods including role play and case discussion.

In conclusion, Medical Students exposed their no satisfaction regarding MEs course that they have been received. Their preference to teaching and assessment methods in the present study revealed in general no significant agreement on a single best method. For that reason the researchers recommended to review and evaluate the present MEs curriculum in an attempt for reforming this curriculum to be contemporary and satisfy the needs of medical students.

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