
Teaching medical ethics

An international survey of medical ethics curricula in Asia

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Abstract

Setting—Medical ethics education has become common, and the integrated ethics curriculum has been recommended in Western countries. It should be questioned whether there is one, universal method of teaching ethics applicable worldwide to medical schools, especially those in non-Western developing countries.

Objective—To characterise the medical ethics curricula at Asian medical schools.

Design—Mailed survey of 206 medical schools in China, Hong Kong, Taiwan, Korea, Mongolia, Philippines, Thailand, Malaysia, Singapore, Indonesia, Sri Lanka, Australia and New Zealand.

Participants—A total of 100 medical schools responded, a response rate of 49%, ranging from 23% - 100% by country.

Main outcome measures—The degree of integration of the ethics programme into the formal medical curriculum was measured by lecture time; whether compulsory or elective; whether separate courses or unit of other courses; number of courses; schedule; total length, and diversity of teachers' specialities.

Results—A total of 89 medical schools (89%) reported offering some courses in which ethical topics were taught. Separate medical ethics courses were mostly offered in all countries, and the structure of vertical integration was divided into four patterns. Most deans reported that physicians' obligations and patients' rights were the most important topics for their students. However, the evaluation was diverse for more concrete topics.

Conclusion—Offering formal medical ethics education is a widespread feature of medical curricula throughout the study area. However, the kinds of programmes, especially with regard to integration into clinical teaching, were greatly diverse.

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Introduction

In the last two decades, formal ethics education has become one of the common features of medical curricula in many Western countries.¹⁻⁹ The formation of a formal programme led to a general empirical understanding of how medical ethics should be taught. In the United Kingdom the Institute of Medical Ethics recommended that medical ethics teaching should recur at regular intervals throughout medical teaching, and that time should be set aside within existing teaching for ethical reflection relevant to each stage of a student's experience.² Miles and colleagues in the USA argued similarly that ethics education should be conceptually coherent, vertically and horizontally integrated through preclinical and clinical training, multidisciplinary, academically rigorous, and should demonstrate humane and value-conscious medical practice.³ Thus, the integration of ethics into the formal curriculum has become the standard recommended programme design of medical ethics education.

However, examples of well-integrated ethics programmes, quite often found in the literature, are mostly limited to Western industrialised countries. Few have questioned whether this *standard* programme design is universal, applicable worldwide to all medical schools, especially to those in non-Western developing countries. The fundamental changes in medical ethics are usually attributed to social factors common to Western developed countries, namely the novel moral view of respect for patient's autonomy; the development of high-tech medical technology, and the shift of major causes of death from acute curable diseases to chronic incurable ones, which have forced physicians to think of therapeutic options concerning patients' quality of life.¹⁰⁻¹⁴ In many developing countries, acute diseases are still killing many people, and therapeutic options concerning comfortable quality of life are not realistic for many people. Furthermore, individualistic

patient choice in clinical settings is not usual in non-Western countries, even today. Some Japanese scholars have criticised Western bioethics as placing too much weight on the principle of respect for autonomy that poorly fits the East-Asian ethos, which appreciates human interaction and communitarian empathy.^{15 16}

If Western individualistic ethics has promoted formal medical ethics education, and if it is really unacceptable for the South and the East, it could be assumed that formal medical ethics education is neither common, nor even needed in most Asian countries. On the other hand, taking into account that most issues in medical ethics, such as organ transplantation and termination of life support, are now faced in Asian countries, and that the worldwide trade of medical technology has created a greater disparity in the distribution of health care resources, even within countries, it could be argued that Asian medical schools should prepare their students for ethical dilemmas, and indeed, for ethical dilemmas that could be much more complicated than in the West.

This study was designed to survey the medical ethics programmes of medical schools in the East, South-east, South Asia, and Oceania. The purpose of the study is to analyze how much ethics education is formally given, and how much is integrated into the medical curriculum.

Methods

SUBJECTS

We included all medical schools of the area which appeared in the World Health Organisation's *World Directory of Medical Schools*.¹⁷ Medical schools which specified they taught only traditional medicine were excluded. A four-page questionnaire was developed and sent to the dean or the president of the medical school. The initial mailing was made in November 1994, and four months later, a follow-up mailing was sent to non-respondents. The last response was received in October 1995. The mailing included an introductory letter. The letter and the questionnaire were in English. In a separate study, Japanese data were collected using a Japanese translation of the questionnaire used in this survey, and were submitted elsewhere.¹⁸ Part of the Japanese data was used to make statistical comparisons in this report. In Taiwan, where no data were cited in the directory, Dr Tai-Yuan Chiou of Taiwan University kindly informed us of the mailing addresses of all of the ten medical schools at that time.

QUESTIONNAIRE AND ANALYTIC TECHNIQUES

The questionnaire consisted of two parts. One addressed the programme of medical ethics or similar courses. Deans were asked to fill in the name of the course, school years in which the course was offered, the length of the course, whether it was compulsory or elective, and teachers' specialties. The second part asked the personal opinion of the dean on: ethics education; the degree of satisfaction with ethics education at his/her school; the importance of ethics education compared with other subjects; what kind of programme he/she would like to see and what kind of backgrounds he/she would prefer teachers to have, and what lecture topics he/she regarded as desirable for students. Respondents were required to note their nationality, sex, age, religion, specialty, the number of students in a school year, the number of full-time teachers, total school years (duration of medical degree course), and during which school years bed-side teaching was scheduled.

A "separate medical ethics course" was defined as a course whose title contained both (1) words representing medicine/medical care, ie "medicine", "health", "physician", "patient", "clinic", and (2) words representing ethics/moral philosophy, ie "ethics", "moral", "rule", "value". Other courses were categorised as "medicine related courses"; these were courses whose title contained only medicine-related words, or as "other courses"; these were courses whose titles included no medicine-related words.

We separated the medical degree course into three segments: before, during, and after bed-side teaching (BST) school years. The "BST school years" were defined as including school years at the beginning and end of BST, and all school years in between. Therefore, if BST was offered in the second and the fourth years, the third year was also regarded as "during BST".

Teachers' specialties were categorised into four categories; (1) physician/health professional; (2) philosopher/ethicist; (3) theologian/priest/monk, and (4) lawyer/ jurist/social scientist. Interdisciplinary backgrounds were identified by combination of the four categories. For instance, "medical ethics" was coded as "(1) and (2)". We didn't distinguish between the following two cases: (A) where one teacher had two or more backgrounds, and (B) where two or more teachers took part, but each of them had one—but a different—background.

With regard to Singapore and Mongolia, both of which had only one medical school, the country data are not shown in this report.

Table 1 Characteristics of medical ethics programmes

	China	Taiwan	Hong Kong	Korea	Indonesia	Malaysia	Philippines	Thailand	Sri Lanka	Australia	New Zealand	Total*	Japan†
Response rate	93	10	2	26	20	3	27	9	5	7	2	206	80
No (%) of school responded	21 (22.6)	8 (80.0)	1 (50.0)	12 (46.2)	15 (75.0)	3 (100)	18 (66.7)	8 (88.9)	4 (80.0)	6 (85.7)	2 (100)	100 (48.5)	64 (80.0)
Courses in which ethical topics are lectured (%)	21 (100)	8 (100)	1 (100)	8 (66.7)	11 (73.3)	2 (66.7)	18 (100)	7 (87.5)	4 (100)	6 (100)	2 (100)	89 (89.0)	56 (87.5)
Offered	0 (0)	0 (0)	0 (0)	3 (25.0)	2 (13.3)	1 (33.3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (7.0)	4 (6.3)
Not offered / will be offered	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	0 (0)	0 (0)	1 (1.0)	3 (4.7)
Not offered / will not be offered	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total length of all courses (%)													
1-4 hr	0 (0)	0 (0)	0 (0)	1 (8.3)	0 (0)	2 (66.7)	1 (5.6)	0 (0)	1 (25.0)	0 (0)	0 (0)	6 (6.0)	9 (14.1)
5-9 hr	0 (0)	0 (0)	0 (0)	1 (8.3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (25.0)	1 (16.7)	0 (0)	3 (3.0)	9 (14.1)
10-19 hr	6 (28.6)	3 (37.5)	1 (100)	4 (33.3)	5 (33.3)	0 (0)	5 (27.8)	1 (12.5)	0 (0)	0 (0)	0 (0)	25 (25.0)	7 (10.9)
20-39 hr	11 (52.4)	5 (62.5)	0 (0)	2 (16.7)	3 (20)	0 (0)	5 (27.8)	1 (12.5)	1 (25.0)	1 (16.7)	1 (50.0)	30 (30.0)	12 (18.8)
>40 hr	3 (14.3)	0 (0)	0 (0)	0 (0)	2 (13.3)	0 (0)	6 (33.3)	2 (25.0)	0 (0)	2 (33.3)	0 (0)	15 (15.0)	15 (23.4)
Compulsory or elective (%)													
Compulsory	16 (76.2)	8 (100)	1 (100)	8 (66.7)	11 (73.3)	2 (66.7)	18 (100)	5 (62.5)	4 (100)	4 (66.7)	1 (50.0)	79 (79.0)	42 (65.6)
Compulsory + elective	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	1 (16.7)	0 (0)	3 (3.0)	9 (14.1)
Elective	3 (14.3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	0 (0)	0 (0)	4 (4.0)	5 (7.8)
Separate medical ethics courses (%)													
Medical ethics	18 (85.7)	8 (100)	0 (0)	6 (50.0)	10 (66.7)	1 (33.3)	12 (66.7)	3 (37.5)	3 (75.0)	2 (33.3)	1 (50.0)	65 (65.0)	8 (12.5)
Medical ethics + medical	2 (9.5)	0 (0)	0 (0)	1 (8.3)	0 (0)	0 (0)	4 (22.2)	2 (25.0)	0 (0)	1 (16.7)	0 (0)	10 (10.0)	6 (9.4)
Medical ethics + other	1 (4.8)	0 (0)	1 (100)	0 (0)	1 (6.7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1.8)	0 (0)
Medical ethics + medical + other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	1 (16.7)	1 (50.0)	3 (1.8)	0 (0)
Unit of other courses (%)													
Medical	0 (0)	0 (0)	0 (0)	1 (8.3)	0 (0)	1 (33.3)	2 (11.1)	0 (0)	1 (25.0)	1 (16.7)	0 (0)	6 (6.0)	26 (40.6)
Other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	0 (0)	0 (0)	1 (1.0)	5 (7.8)
Medical + other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0.0)	10 (15.6)
No. of courses (%)													
1	18 (85.7)	6 (75.0)	0 (0)	7 (58.3)	6 (40.0)	2 (66.7)	5 (27.8)	1 (12.5)	2 (50.0)	0 (0)	0 (0)	48 (48.0)	23 (35.9)
2	1 (4.8)	2 (25.0)	1 (100)	1 (8.3)	3 (20.0)	0 (0)	2 (11.1)	2 (25.0)	0 (0)	0 (0)	0 (0)	12 (12.0)	19 (29.7)
3	2 (9.5)	0 (0)	0 (0)	0 (0)	2 (13.3)	0 (0)	8 (44.4)	1 (12.5)	1 (25.0)	4 (66.7)	0 (0)	18 (18.0)	4 (6.3)
4	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (11.1)	0 (0)	1 (25.0)	0 (0)	2 (100)	5 (5.0)	7 (10.9)
5 or more	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5.6)	1 (12.5)	0 (0)	1 (16.7)	0 (0)	3 (3.0)	2 (3.1)
Schedule (%)													
Before BST	9 (42.9)	3 (37.5)	0 (0)	5 (41.7)	8 (53.3)	0 (0)	1 (5.6)	1 (12.5)	0 (0)	0 (0)	0 (0)	28 (28.0)	32 (50.0)
After BST	1 (4.8)	0 (0)	0 (0)	1 (6.7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.0)	1 (1.6)
Before + after BST	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5.6)	1 (12.5)	0 (0)	0 (0)	0 (0)	3 (3.0)	4 (6.3)
During BST	7 (33.3)	3 (37.5)	0 (0)	3 (25.0)	1 (6.7)	2 (66.7)	7 (38.9)	2 (25.0)	2 (50.0)	1 (16.7)	0 (0)	26 (26.0)	5 (7.8)
Before + during BST	0 (0)	2 (25.0)	1 (100)	0 (0)	1 (6.7)	0 (0)	6 (33.3)	4 (50.0)	2 (50.0)	4 (66.7)	1 (50.0)	21 (21.0)	10 (15.6)
After + during BST	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.6)	0 (0)
Before + after + during BST	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5.6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.6)	0 (0)
Teacher's backgrounds (%) #													
Physician / health professional	14 (66.7)	5 (62.5)	1 (100)	5 (41.7)	10 (66.7)	2 (66.7)	11 (61.1)	2 (25.0)	3 (75.0)	4 (66.7)	0 (0)	58 (58.0)	37 (57.8)
Philosopher / ethicist	12 (57.1)	2 (25.0)	0 (0)	1 (8.3)	0 (0)	0 (0)	7 (38.9)	1 (12.5)	0 (0)	3 (50.0)	1 (50.0)	27 (27.0)	20 (31.3)
Theologian / priest / monk	0 (0)	2 (25.0)	0 (0)	0 (0)	2 (13.3)	0 (0)	6 (33.3)	0 (0)	1 (25.0)	0 (0)	0 (0)	11 (11.0)	2 (3.1)
Lawyer / jurist / social scientist	2 (9.5)	2 (25.0)	0 (0)	0 (0)	1 (6.7)	0 (0)	4 (22.2)	0 (0)	1 (25.0)	0 (0)	0 (0)	10 (10.0)	8 (12.5)
Dean's satisfaction (%)													
Satisfied	7 (33.3)	1 (12.5)	0 (0)	3 (25.0)	1 (6.7)	0 (0)	7 (38.9)	0 (0)	1 (25.0)	1 (16.7)	1 (50.0)	22 (22.0)	5 (7.8)
Moderately satisfied	11 (52.4)	6 (75.0)	1 (100)	4 (33.3)	9 (60.0)	1 (33.3)	8 (44.4)	7 (87.5)	1 (25.0)	5 (83.3)	1 (50.0)	54 (54.0)	24 (37.8)
Less satisfied	2 (9.5)	0 (0)	0 (0)	2 (16.7)	2 (13.3)	1 (33.3)	3 (16.7)	0 (0)	1 (25.0)	0 (0)	0 (0)	12 (12.0)	28 (43.8)
Not satisfied	0 (0)	0 (0)	0 (0)	3 (25.0)	3 (20.0)	1 (33.3)	0 (0)	1 (12.5)	1 (25.0)	0 (0)	0 (0)	10 (10.0)	4 (6.3)

*Data from Singapore and Mongolia are included. #Categories are not mutually exclusive. †Reported in ref 18.

Table 2 Important ethical topics

Topics	Rank	China	Taiwan	Hong Kong	Korea	Indonesia	Malaysia	Philippines	Thailand	Sri Lanka	Australia	New Zealand	Total*	Japan†
Physicians' obligations / etiquette	M	15 (71.4)	5 (62.5)	1 (100)	6 (50.0)	11 (73.3)	2 (66.7)	14 (77.8)	4 (50.0)	1 (25.0)	4 (66.7)	0 (0.0)	64 (64.0)	43 (67.2)
Patients' rights / autonomy	M	3 (14.3)	1 (12.5)	0 (0.0)	4 (33.3)	3 (20.0)	0 (0.0)	4 (22.2)	3 (37.5)	2 (50.0)	0 (0.0)	1 (50.0)	22 (22.0)	12 (18.8)
Informed consent	M	6 (28.6)	5 (62.5)	0 (0.0)	1 (8.3)	9 (60.0)	1 (33.3)	9 (50.0)	3 (37.5)	3 (75.0)	3 (50.0)	0 (0.0)	40 (40.0)	26 (40.6)
Patients' privacy / confidentiality	M	10 (47.6)	3 (37.5)	1 (100)	3 (25.0)	7 (46.7)	0 (0.0)	6 (33.3)	3 (37.5)	1 (25.0)	3 (50.0)	1 (50.0)	36 (36.0)	24 (37.5)
Abortion	M	3 (14.3)	2 (25.0)	0 (0.0)	0 (0.0)	7 (58.3)	2 (66.7)	14 (77.8)	3 (37.5)	3 (75.0)	1 (16.7)	0 (0.0)	24 (24.0)	33 (51.6)
Contraception	M	8 (38.1)	2 (25.0)	0 (0.0)	1 (8.3)	6 (40.0)	2 (66.7)	14 (77.8)	3 (37.5)	1 (25.0)	5 (83.3)	1 (50.0)	49 (49.0)	22 (34.4)
Artificial insemination / in vitro fertilization	M	1 (4.8)	4 (50.0)	0 (0.0)	7 (58.3)	12 (80.0)	3 (100)	1 (5.6)	3 (37.5)	0 (0.0)	2 (33.3)	0 (0.0)	15 (15.0)	11 (17.2)
Population control	M	9 (42.9)	0 (0.0)	0 (0.0)	0 (0.0)	10 (66.7)	0 (0.0)	16 (88.9)	5 (62.5)	4 (100)	4 (66.7)	1 (50.0)	63 (63.0)	38 (59.4)
Sex selection	M	4 (19.0)	3 (37.5)	0 (0.0)	6 (50.0)	10 (66.7)	1 (33.3)	10 (55.6)	2 (25.0)	3 (75.0)	1 (16.7)	0 (0.0)	40 (40.0)	5 (7.8)
Care for seriously handicapped newborns	M	1 (4.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (3.0)	0 (0.0)
Care for children / rights of children	M	7 (33.3)	2 (25.0)	0 (0.0)	1 (8.3)	5 (33.3)	0 (0.0)	10 (55.6)	1 (12.5)	1 (25.0)	1 (16.7)	0 (0.0)	29 (29.0)	2 (3.1)
Drug abuse / alcoholism	M	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	0 (0.0)	0 (0.0)	2 (2.0)	2 (3.1)
AIDS	M	4 (19.0)	4 (50.0)	0 (0.0)	5 (41.7)	3 (20.0)	0 (0.0)	6 (33.3)	2 (25.0)	0 (0.0)	1 (16.7)	0 (0.0)	26 (26.0)	11 (17.2)
Mental disorders	M	5 (23.8)	0 (0.0)	0 (0.0)	0 (0.0)	2 (13.3)	0 (0.0)	3 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	10 (10.0)	0 (0.0)
Physical disabilities	M	12 (57.1)	1 (12.5)	0 (0.0)	2 (16.7)	0 (0.0)	0 (0.0)	9 (50.0)	1 (12.5)	1 (25.0)	1 (16.7)	0 (0.0)	31 (31.0)	4 (6.3)
Placebo / side effects	M	7 (33.3)	1 (12.5)	0 (0.0)	5 (41.7)	3 (20.0)	1 (33.3)	5 (27.8)	0 (0.0)	1 (25.0)	1 (16.7)	0 (0.0)	24 (24.0)	8 (12.5)
Research with living human subjects	M	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Animal research / animal rights	M	8 (38.1)	3 (37.5)	0 (0.0)	0 (0.0)	6 (40.0)	2 (66.7)	11 (61.1)	2 (25.0)	1 (25.0)	1 (16.7)	0 (0.0)	34 (34.0)	10 (15.6)
Genetic engineering / gene therapy	M	1 (4.8)	1 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (4.0)	1 (1.6)
Quality of life	M	3 (14.3)	2 (25.0)	0 (0.0)	3 (25.0)	6 (40.0)	2 (66.7)	12 (66.7)	6 (75.0)	3 (75.0)	2 (33.3)	0 (0.0)	39 (39.0)	17 (26.6)
Sexual behaviour / sexuality / homosexuality	M	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Equal care for men and women	M	2 (9.5)	0 (0.0)	0 (0.0)	1 (8.3)	2 (13.3)	0 (0.0)	1 (5.6)	1 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)	6 (6.0)	1 (1.6)
Care for the aged	M	7 (33.3)	3 (37.5)	1 (100)	0 (0.0)	6 (40.0)	0 (0.0)	6 (33.3)	3 (37.5)	1 (25.0)	0 (0.0)	1 (50.0)	29 (29.0)	21 (32.8)
Telling truth to patients about diagnosis and prognosis	M	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Suicide / homicide	M	12 (57.1)	5 (62.5)	0 (0.0)	3 (25.0)	5 (33.3)	1 (33.3)	14 (77.8)	4 (50.0)	1 (25.0)	2 (33.3)	2 (100)	50 (50.0)	25 (39.1)

Table 2 Important ethical topics—continued

Topics	Rank	China	Taiwan	Hong Kong	Korea	Indonesia	Malaysia	Philippines	Thailand	Sri Lanka	Australia	New Zealand	Total*	Japan†
Organ transplantation	M	0 (0.0)	1 (12.5)	0 (0.0)	3 (25.0)	0 (0.0)	0 (0.0)	1 (5.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (5.0)	6 (9.4)
Criteria for death / brain death / persistent vegetative state	V	7 (33.3)	3 (37.5)	0 (0.0)	4 (33.3)	8 (53.3)	0 (0.0)	5 (27.8)	4 (50.0)	1 (25.0)	0 (0.0)	0 (0.0)	33 (33.0)	26 (40.6)
Terminal care / hospice	V	11 (52.4)	5 (62.5)	1 (100)	6 (50.0)	10 (66.7)	2 (66.7)	16 (88.9)	6 (75.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.0)	8 (12.5)
Euthanasia / physician-assisted suicide	M	7 (33.3)	3 (37.5)	0 (0.0)	6 (50.0)	8 (53.3)	0 (0.0)	1 (5.6)	0 (0.0)	0 (0.0)	2 (33.3)	0 (0.0)	1 (50.0)	42 (65.6)
Living will / advanced directive / proxy decision making	M	3 (14.3)	4 (50.0)	0 (0.0)	3 (25.0)	0 (0.0)	0 (0.0)	2 (11.1)	1 (12.5)	2 (50.0)	0 (0.0)	0 (0.0)	40 (40.0)	34 (53.1)
Equal access to medical care / resource allocation / health insurance	M	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (44.4)	2 (25.0)	1 (25.0)	3 (50.0)	1 (50.0)	11 (41.0)	29 (45.3)
Legal issues	V	3 (14.3)	6 (75.0)	1 (100)	1 (8.3)	3 (20.0)	0 (0.0)	1 (5.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.0)	2 (3.1)
	M	5 (23.8)	4 (50.0)	1 (100)	4 (33.3)	3 (20.0)	0 (0.0)	6 (33.3)	5 (62.5)	1 (25.0)	4 (66.7)	0 (0.0)	31 (31.0)	22 (34.4)
	V	0 (0.0)	1 (12.5)	0 (0.0)	2 (16.7)	1 (6.7)	0 (0.0)	1 (5.6)	0 (0.0)	0 (0.0)	2 (33.3)	0 (0.0)	7 (7.0)	4 (6.3)
	M	0 (0.0)	1 (12.5)	0 (0.0)	2 (16.7)	1 (6.7)	0 (0.0)	14 (77.8)	4 (50.0)	2 (50.0)	2 (33.3)	1 (50.0)	16 (46.0)	22 (34.4)
	V	5 (23.8)	4 (50.0)	1 (100)	4 (33.3)	7 (46.7)	1 (33.3)	9 (50.0)	5 (62.5)	2 (50.0)	3 (50.0)	1 (50.0)	44 (44.0)	22 (34.4)

M: No (%) of respondents who ranked "most important". This ranking was limited to three topics.

V: No (%) of respondents who ranked "very important".

*Data from Singapore and Mongolia are included.

†Reported in ref 18.

Results

MEDICAL ETHICS PROGRAMMES

We did not analyze countries from which fewer than ten per cent of questionnaires were retrieved. The response rate of the remaining 13 countries (China, Hong Kong, The Republic of Korea, Taiwan, Indonesia, Malaysia, the Philippines, Singapore, Thailand, Sri Lanka, Australia, New Zealand, Mongolia), was 48.5% (100/206), ranging from 23% - 100% by country.

Table 1 summarises the characteristics of courses which had lectures on ethical topics. Eighty-nine per cent (89/100) of medical schools had some courses. Seven schools did not have a course, but said they would have in the near future. One Thai school answered that they did not have a course, and did not expect to have any course in the near future. A diversity of allocated lecture time was found in most countries. However, in China, Taiwan and the Philippines, 60% or more medical schools allocated more than 20 hours to ethics courses, while in Hong Kong, Korea, Indonesia, Malaysia, Thailand and Sri Lanka, this ratio was below 40%. In every country, most of the courses were compulsory. Seventy-nine per cent of medical schools required students to take all courses, and three per cent offered elective courses in addition to required ones. Four per cent of medical schools which responded said they had elective courses only.

The number of medical schools offering separate medical ethics courses was 81% (81/100) of all respondents. The majority of the separate courses were referred to as "medical ethics", "bioethics", or "clinical ethics".

The longitudinal schedule, reflected in the number and the schedule of the course, was as diverse as any other aspect of the curriculum. In China, Taiwan and Malaysia, more than 60% of medical schools reported one course, while in Hong Kong, the Philippines, Thailand, Sri Lanka, Australia and New Zealand, two or more courses were more common than one course. In particular, in the Philippines, Australia and New Zealand, 60% or more replied that they offered three or more courses. The schedule of ethics teachings was found to differ widely by country. In China, Korea, and Indonesia, the number of medical schools offering ethics courses during BST school years was less than half. In contrast, in Taiwan, Hong Kong, Malaysia, the Philippines, Sri Lanka, and Australia, ethics courses were scheduled during BST school years in 60% of schools, or more. Medical schools offering ethics both before and during BST school years were found in most countries. In the Philippines, Thailand, Sri Lanka, Australia, and New Zealand, 30%

or more of schools had this kind of multi-stepped schedule.

The analysis of diversity in teacher specialty was limited to cases in which specialties could be identified concretely enough to be categorised into four groups. Fifty-eight per cent of medical schools reported that persons with medical backgrounds were teaching ethics. The proportion of medical schools featuring philosopher/ethicist, theologian priest/monk, and lawyer/jurist/social scientist, were 27%, 11%, and 10%, respectively. Theologian/priest/monk, and/or lawyer/jurist were reported to be teaching medical ethics in a limited number of countries.

ATTITUDE OF RESPONDENTS TO ETHICS EDUCATION

We mailed the questionnaire to deans and requested them to express their personal opinions. However, it should be noted that we could not correctly identify the person(s) who directly answered the questionnaire. Therefore, we do not describe the attitude of respondents as that of "deans".

The number of respondents who were "satisfied" or "moderately satisfied" reached 80% in China, Taiwan, the Philippines, Thailand and Australia, while in Korea and Malaysia, this ratio was 50 to 60% or lower (table 1). Eighty-three per cent of all respondents considered ethics education to be "very important" compared with other subjects (not shown in the tables). However, fewer respondents thought more time should be allocated to ethics courses.

Table 2 shows which topics the respondents thought ought to be covered in lectures during medical ethics courses at their schools. "Physicians' obligations/etiquette" was evaluated as the most important topic by 64% of all respondents. "Patient's right/autonomy," "informed consent," and "patient's privacy/confidentiality", were all highly evaluated, but the ratio of respondents who chose these as "most important" decreased to 40%, 24%, and 15% respectively. On the other hand, the evaluation was diverse and may reflect some difference between countries for specific items. "Artificial abortion" was considered as "most important" or "very important" by 78% of Filipino respondents and 73% of Indonesian respondents. However, in China, Thailand, and Australia the figure did not reach 30%. "Population control" was highly evaluated in China. "The care of children, the rights of children" received high evaluation in Thailand, Malaysia, the Philippines and Sri Lanka.

Discussion

Our survey has shed some light on both similarities and differences in medical ethics education in Asian countries. It is obvious that medical ethics education has become a universal component of undergraduate formal medical training in most countries. Except for Japan, where many schools were not teaching medical ethics in separate courses, and China, where the data of non-respondents might significantly alter the results, medical ethics was commonly taught in required separate courses. We could not obtain detailed data which would illustrate how the ethics programme had been developed in each school reported herein. Nevertheless, the development appears to have occurred in the last two decades,¹⁹⁻²¹ as in many Western medical schools. It should be noted that the spread of formal medical ethics education is not limited to industrialised countries, where high-tech medicine forces physicians to face new ethical dilemmas which are familiar in the literature of bioethics. Also, in developing countries, where physicians are required to cover a large population, with high-tech medicine usually beyond their reach, medical schools are becoming aware of ethical dilemmas unique to their own medical and sociocultural context, and that students should be prepared for these dilemmas.

On the other hand, there were many different sorts of medical ethics teaching programmes. One of the most conspicuous differences was found between Japan and other countries. In all countries except Japan, courses dealing with ethical topics were separate ones, mostly with explicit titles such as "medical ethics" or "bioethics". However, the majority of Japanese medical schools were teaching medical ethics as a unit of "introduction to medicine" or similar courses. This was not likely to be due to the matter of wording or translation. The original Japanese for "introduction to medicine," *igaku gairon*, has been defined and translated in various ways (ie "the philosophy of medicine"²² or "medical humanities"²³) since its establishment in 1942. By any definition, it aims to cover a broad spectrum of humanities and social sciences which will form a foundation for the study of medicine. Thus, the goal of "introduction to medicine" is similar to that of the medical humanities. However, quite a few Japanese medical schools seemed to allocate only a short time to ethical topics in their courses,²⁴ and most Japanese deans did not feel their ethics teaching was well organised.²⁵ In the Japanese survey,¹⁸ the number of Japanese medical schools offering separate medical ethics courses was 14 (22% of 64 schools responded), but this

figure was a leap from 7 (9% of 80 respondents) in 1990.²⁴ Furthermore, Japanese respondents were the least satisfied with their ethics education. Putting all accounts together, offering medical ethics in separate courses is becoming a common feature of Asian medical schools, including Japanese ones.

From the standpoint of vertical integration, medical ethics should be taught step by step throughout preclinical and clinical education. The results suggest that the structure of vertical integration in this area was divided into four stages. Medical ethics is given as either: (1) a single course before BST school years (dominant in China and Korea); (2) a single course during BST school years (dominant in Taiwan and Malaysia); (3) multiple courses during BST school years and other years (dominant in the Philippines and Australia), or (4) a unit of courses not specified for medical ethics before BST school years (dominant in Japan). Judging from the longitudinal structure of the programme, the third pattern appears to be the most explicit mode of the vertically integrated programme, in which medical ethics literally recurs through preclinical and clinical training, as recommended by Western observers.²⁵ Medical ethics curricula categorised in other groups seemed to be suffering from the absence of either preclinical or clinical ethics education. It can be argued that preclinical and clinical ethics education have different goals from each other, and that both are indispensable. This standpoint appears to be becoming accepted in many Asian countries, because the vertically integrated programme was found in most countries surveyed herein. At the same time, the wide range of differences in the patterns within countries suggested that the longitudinal cohesiveness of ethics education is still of less concern to medical educators in this area. The importance of longitudinal cohesiveness has only been recognised very recently, and it might be a hard task for medical schools where the curriculum is overcrowded, to introduce another set of courses throughout multiple school years.

Our results indicated that, on the one hand, interdisciplinary teaching was popular in many schools, but on the other hand, that teachers with religious backgrounds only took a modest part in the teaching of medical ethics. Modern academic medical ethics, or bioethics, has been developed as a secular discipline, dominantly influenced by the Anglo-American social context, even though there has been a significant contribution by theologians to its development. Our data suggest that medical ethics teaching at Asian medical schools has a secular character. However, the dominance of

secular teachers raised questions about education on sensitive ethical issues such as abortion and euthanasia where there can be conflicts between medical conduct and religious beliefs. Most Asian countries maintain diverse, and sometimes conflicting, traditional religious beliefs or social habits. Furthermore, the conflict between modern medicine and traditional values is very often hard to mediate. The diversity observed in the respondents' evaluation of ethical topics suggests the contents of medical ethics education can differ, perhaps reflecting the sociocultural and historical context in which the medical school stands. Therefore, in the educational setting, teachers need carefully to address this conflict, especially when no one from the religious camp is participating in the programme. In this regard, interdisciplinary teaching was highly appreciated by deans; respondents expected more diversity than the current teachers had. The recruiting of more lecturers can be done without a drastic reformation of the curriculum, without needing to hire full-time teachers, and without having to establish an independent department or programme. However, the successful institutionalisation of medical ethics education would be hard to achieve without a core responsible organisation. The form of the core organisation could vary according to the availability of multidisciplinary teachers, and the support of the dean and the college. Therefore, the most serious weaknesses of Asian medical ethics education may be that only a few countries have centres for training teachers,²⁶ and that the standardisation or qualification of medical ethics teachers is still poorly developed.

Exchanging experiences

On the basis of our survey we can say that the teaching of medical ethics is obviously widespread in the South and the East. Therefore, it may not be true to describe modern medical ethics as a discipline unique to the industrialised West. Rather, medical ethics education, like other disciplines, should be taken to be an essential part of medical education that is mandated to meet society's need for a supply of competent practitioners. On the other hand, the diversity in vertical integration of the programmes suggested a difference of contents or goals of medical ethics teachings. The recommendation for an integrated programme, as put forward by Western observers, seems grounded in the practical character of medical ethics, and the belief that it should be incorporated as a unit of clinical education. In countries like Japan, which has traditionally taken medical ethics education as a unit of medical humanities, and given it a character resembling liberal education, it is not yet

certain how medical ethics will be given a practical character, and integrated into clinical education. Although setting goals, designing programmes, and recruiting appropriate teachers are left for each country and each medical school to decide, these tasks would be harder to achieve without the accumulation of empirical study in the field. Therefore, exchanging experiences may be the most feasible method for Asian medical schools to establish well-organised programmes of medical ethics education.

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