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Palliative care medical student education: a cross-sectional medical school survey in mainland China

Guanchen Ye ,¹ Jiahui Mao ,² Jingjing Hu,³ Jie Chen ,⁴ Therese Hesketh⁵

¹The Stomatologic Hospital, School of Medicine, Zhejiang University, Hangzhou, China

²Zhejiang University School of Medicine, Hangzhou, Zhejiang, China

³Zhejiang University School of Medicine, Hangzhou, Zhejiang, China

⁴Zhejiang University School of Medicine, Centre for Global Health, Hangzhou, China

⁵Institute for Global Health, UCL, London, UK

Correspondence to

Dr Jie Chen, Zhejiang University School of Medicine, Centre for Global Health, Hangzhou, China; med_chenjie@zju.edu.cn

This study was previously presented as an abstract at The Lancet-CAMS Health Summit, 2019.

Received 22 September 2019
Revised 2 November 2019
Accepted 18 November 2019
Published Online First
29 November 2019



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To cite: Ye G, Mao J, Hu J, et al. *BMJ Supportive & Palliative Care* 2022;**12**:e493–e496.

ABSTRACT

Objective According to the 2015 Quality of Death Index, China ranks 71st in terms of quality of palliative care out of 80 countries. Lack of palliative care education for health professionals is regarded as largely responsible. The study aims to evaluate the status of palliative care education for medical students in mainland China.

Methods A list of all medical schools was obtained from the Ministry of Education. A telephone survey of associate deans responsible for medical education at all 282 medical schools in mainland China was conducted in May 2019, following a standardised protocol. Telephone interviews focused on attitudes to palliative care teaching and the extent and manner in which palliative care is incorporated into the curriculum.

Results Associate deans from 173 (61.2%) of the 282 medical schools responded. A total of 120 schools (42.5%) completed the interview, while 53 (18.7%) evaded direct questions related to palliative care. Of the responding deans, 92 (76.7%) regarded palliative care education as very important. However, only 11 (9.2%) provided specific teaching on palliative care. A few schools (n=18) integrated palliative care education within required curricula, such as medical ethics and nursing science. The main reason reported for not providing palliative care education was that the medical curriculum dictated by the Ministry of Education does not require it.

Conclusion A very small minority of medical schools in mainland China have any formal teaching about palliative care. Clearly, national standards for didactic and clinical teaching in palliative care for medical students and other health professionals are needed.

BACKGROUND

The WHO defines palliative care as ‘an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening

illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual’.¹ WHO has also called for training institutions to make palliative care compulsory in courses leading to basic professional qualifications.²

With a population of over 1.3 billion, China accounts for nearly one-fifth of the world’s population and cancer is the second cause of death (after cardiovascular disease). In 2015, there were approximately 4.3 million patients with newly diagnosed cancer and more than 2.8 million cancer deaths.³ Despite the obvious need, access to good quality palliative care is still very limited.⁴

There are two main academic organisations involving palliative care in China: The Committee of Rehabilitation and Palliative Care and the Chinese Association for Life Care. These organisations are trying to promote the development of palliative care in China.⁵

By 2018, China had a total of 276 facilities, offering some form of palliative care services but this included just 146 hospitals (of a total 22 000) Most of these were in the major cities like Shanghai, Beijing, Tianjin and Guangzhou.^{6,7} In rural areas, such services are virtually non-existent. According to the 2015 Quality of Death Index (Economist Intelligence Unit, UK), based on extensive research and interviews with palliative care experts in each country, China ranks 71st in terms of the quality of palliative care out of 80 countries.⁸

The lack of education in palliative care for health professionals has been identified as an important factor that impedes the development of the discipline.⁹ China’s medical education still focuses on

curing physical illnesses.¹⁰ According to a questionnaire survey of four hundred interns from Third Military Medical University, a major medical university in southwest China, only 7.5% of interns felt adequately trained in basic pain management and 13% in the management of terminally ill patients; 77% of interns reported that their communication skills regarding management of terminal illness were also poor.¹¹

The aim of this study was to assess the status of palliative care education in Chinese medical schools. The focus was on the perceived importance and the extent and manner in which palliative care is incorporated into the curriculum.

METHODS

Questionnaire

The survey covered the following areas: (1) basic information about the school, (2) curriculum time and content related to palliative care, for example, courses or clerkships, (3) the extent and manner in which palliative care is incorporated into the curriculum, including an assessment of existing curriculum and the textbook used (if any), (4) attitudes to palliative care teaching, (5) barriers related to teaching and training in this area.

Study participants

We carried out a telephone survey of associate deans of medical education at all 282 medical schools in mainland China in May 2019, following a standardised protocol. Medical schools include those providing standard 5-year training programmes and also those which provide 3-year training focusing on primary healthcare. Of the universities offering standard 5-year training programmes, some take place at so-called key universities which are higher level and attract more resources from the government. We chose associate deans of medical education or curricular affairs as our respondents because they are most familiar with the plans, policies and guidelines related to the curriculum content in medical schools. A list of schools was obtained from the website of the Ministry of Education. Contact information for associate deans for medical education or curricular affairs was identified

on the schools' websites. In cases where schools had no related public information, we contacted the office of the medical school to find the appropriate contact. Deans who did not respond were contacted again after 1, 3, 7 and 14 days. All procedures were approved by the Zhejiang University Research Ethics Committee.

Data collection

The questionnaire was designed by the investigators and reviewed by a consulting faculty member. All investigators were trained by the Principal Investigator from the Centre for Global Health at Zhejiang University School of Medicine. At the beginning of the telephone interview, we explained the purpose and the confidentiality of our study. Verbal consent was obtained before asking questions concerning palliative care education. After each call, the interviewers immediately recorded the information using a standard proforma.

RESULTS

Table 1 describes the regional distribution and level of school of 282 medical schools of mainland China, responding to the survey on palliative care. Of the 282 medical schools, associate deans from 173 (61.2%) responded and 120 (42.6%) deans completed the interview. The deans at a total of 19 key universities, 68 non-key universities, 33 3-year medical colleges completed the interview. Fifty-three (18.7%) evaded questions related to palliative care education in their own institution, mostly by curtailing the interview. The non-responders (38.8%) were unreachable despite several attempts.

When asked about attitudes to palliative care teaching, 92 of the 120 (76.7%) associate deans said it was very important, 63 (52.5%) of the schools claimed their undergraduate education involved palliative care and 18 (15%) schools have integrated palliative education within required curricula, such as medical ethics and nursing science. Thirty-nine (32.5%) schools had one or two lectures covering the topic of palliative care. Only 11 schools (9%) had a separate course, of which 2 were compulsory and 9 were elective. Only six schools used a textbook which included palliative care.

Table 1 Regional distribution and level of medical schools of mainland China Responding to a survey on palliative care

Characteristic	N (%)	Completed the interview (n (%))	View palliative care education as important (n (%))	Palliative care education was involved (n (%))	Offered a specific course (n (%))
Region					
Eastern	114 (40.4%)	61 (53.5%)	47 (77.0%)	36 (59.0%)	7 (11.5%)
Central	99 (35.1%)	32 (32.3%)	22 (68.8%)	13 (40.6%)	1 (3.1%)
Western	69 (24.5%)	27 (39.1%)	23 (85.2%)	14 (51.9%)	3 (11.1%)
Level of schools					
Key University	33 (11.7%)	19 (57.6%)	17 (89.5%)	14 (73.7%)	1 (5.3%)
Non-key University	142 (50.4%)	68 (47.9%)	51 (75.0%)	39 (57.4%)	9 (13.2%)
3-year medical training colleges	107 (37.9%)	33 (30.8%)	24 (72.7%)	10 (30.3%)	1 (3.0%)

Of the 11 schools, lectures were the main teaching methods, carried out by 9 schools. The number of schools employing videos and seminar/small group discussions was 3 and 2, respectively; only one school performed role-play during the course.

Regarding the barriers related to palliative education, eight deans stated their students were fully occupied by other courses with many competing demands and did not have enough time for a separate course of palliative care. Eleven others reported that the main reason for not providing palliative care is that it is not a requirement of the medical curriculum, as dictated by the Ministry of Education.

There was a huge discrepancy between schools from different regions and levels. The central region lagged far behind the eastern region and western region in terms of the attitudes towards palliative care and the extent and manner in which palliative care is incorporated into the curriculum. Key universities were more likely to provide palliative care practice than non-key universities or 3-year training colleges (73.7%, 57.4%, 30.3%, respectively). Three-year training colleges, though targeting primary care, were least likely to provide palliative care education.

DISCUSSION

The majority of responders acknowledged that palliative care was very important, but there was an apparent contradiction between the high percentage who thought palliative care was important and the low rate of implementing palliative care education. Deans reported that the most significant barrier to increased teaching of palliative care in the undergraduate curriculum was that the medical curriculum dictated by the Ministry of Education does not require it. Integrating palliative care content into the undergraduate curriculum is a major endeavour, which depends on government guidelines. Most of the deans did not recognise palliative care as an independent discipline, so where it is available, it tends to be integrated into other courses rather than creating new courses devoted to palliative care.

Economic factors such as Gross National Income (GNI) per capita have been observed to be significantly associated with levels of palliative care development across a range of country settings.¹² China is no exception, and this explains the better level of palliative care education in the eastern region of China, which has a higher level of economic development compared with the central and western regions.

There is a shortage of palliative care education in mainland China, especially in 3-year training colleges. Thus, offering efficient training courses for undergraduate and postgraduate as well as continuing education is urgent. Education in medical schools can be conducted through the use of some of the excellent educational resources available from elsewhere, such as Education in Palliative and End-of-Life Care¹³

and PEACE (Prepare, Embrace, Attend, Communicate and Empower) project.¹⁴ These can be translated into Chinese and can be provided online in a modular format allowing for widespread availability. There is some reason to be optimistic. The Committee of Rehabilitation and Palliative Care, the largest national organisation of palliative care in China, is planning to apply for the establishment of cancer palliative care as a subspecialty. Once achieved, this will stimulate the growth of palliative care education in China.¹⁵

Our study has several limitations: the 61.2% response rate to the telephone interview is low with a clear risk of response bias. Reliance on self-report may have led to overestimates of numbers of schools providing specific palliative care education. We did not check the veracity of responses through the examination of each school's curriculum.

CONCLUSION

A very small minority of medical schools in mainland China offer courses that focus on palliative care. This contributes to the shortage of medical care personnel skilled in this area. Clearly, national standards for didactic and clinical teaching in palliative care for medical students and other health professionals are needed.

Contributors GY, JC and TH contributed to the design of the study and the data analysis. GY, JM, JH and TH contributed to the writing and revision of the paper. All authors have read and approved the final manuscript.

Funding This work was supported by Start-up Funds for Foreign Experts of Zhejiang University.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article.

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ORCID iDs

Guanchen Ye <http://orcid.org/0000-0002-0765-0271>

Jiahui Mao <http://orcid.org/0000-0002-5198-5554>

Jie Chen <http://orcid.org/0000-0002-4029-4192>

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