

Building Medical Law Education for Medical Graduate in China

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Abstract: In the past 20 years, China experienced great improvement in health system, but medical disputes between patients and doctors have increasingly dramatically, reaching an unprecedented level. Strengthening medical graduate law education is an urgent work. In china, Problem-based learning (PBL) as an approach to the instruction of medical students has attracted much attention in recent years. PBL could not only attract students but also improve student's medical knowledge, clinical reasoning and decision making skills. However, although PBL has been used in a range of different contexts in medical education, they have never previously been used to facilitate the teaching of medical law. In the past three year years, our medical graduates were trained in designed PBL courses. In this paper, we summarize our experience in PBL courses in medical law learning. As a multiple effect, our program promotes medical graduates to have better understanding and mastering medical law in their future clinic practice.

Keywords: Medical, Graduate, PBL, Law, Education.

INTRODUCTION

Disputes between patients and hospital staff have been making headlines in China in recent years. Throughout the course of their medical education, medical graduates are frequently exposed to comments from their physician faculty mentors about the legal risks they are likely to encounter in their professional lives. The current system of medical education fails medical graduates by not providing any systematic approach to thinking about the legal issues they will face. Many curricula focus, instead, on ethics, which leaves students without clear guidance on the legal matters they will certainly encounter. The lack of legal exposure in medical education carries adverse consequences.

A GLOOMY FUTURE FOR MEDICAL STUDENTS IN CHINA

In the past 20 years, health and medicine system have greatly improved, but there have been numerous reports that doctors or other health professionals have been attacked by patients or members of patient's families. Many factors contribute to the disputes between doctors and patients, including the high medical costs, unreasonable examinations and prescription [1-4]. Those acts of disputes and violence have been attributed, more important, to the inadequacy of the legal system for handling medical disputes that was in effect prior to 2002.

There are three main legislative regulations on medical malpractice in China [5]. The first is the Rule on the Handling of Medical Accident from 1987 to 2002. The second is the Regulations on the Handling of Medical Accident since 2002. The 2002 regulation replaces the previous 1987 regulation and increases the adequacy and fairness of compensation as well as the procedure for resolving medical disputes [6]. The third regulation is the Chapter 6 Liability for Medical Malpractice of the Tort Law of the People's Republic of China, which was adopted on December 26, 2009 and became effective on July 1, 2010. Medical malpractice is treated as a special type of tort by the Tort Liability Law, which is regulated under the title of "Liability for Iatrogenic Injury". Where a patient sustains any harm during diagnosis and treatment, if the medical institution or any of its medical staff is at fault, the medical institution shall assume the compensatory liability. This is quite different from Western countries.

Besides eroding the confidence and trust between patients and doctors, medical disputes and errors spawned a great deal of economic loss [7]. The majority of medical disputes in China occur in bigger hospitals. We found that obstetrics and gynecology, orthopedics, and general surgery were always the top three medical-risk specialties in China [8-14]. Similar results were also found western countries that malpractice experiences were more frequent in surgeon. This phenomenon can be attributed to three factors. First, surgery always is an invasive, traumatic

procedure. Second, patients who are admitted to surgery departments often suffer from severe diseases and expect dramatic improvements following a surgery. Third, surgical procedures are more dramatic and may encounter more risk than in intern medicine.

This situation has caused serious consequences in China. In USA and the other western countries, there is fierce competition to get a place in medical school. Only very excellent students have a chance to enter medical school. In China, the situation is very different. This year, even the top medical schools in China are struggling to attract excellent students. What's happening? The three main reasons can explain it: low salary, long working hours and terrible working conditions - including the real possibility of disputes and violence.

A PRACTICAL APPROACH TO TEACHING MEDICAL LAW TO MEDICAL GRADUATE

The influence of law on the clinical practice in China has required doctors to become as skilled in understanding the medical law as they are in treating disease. Today a doctor must not only be able to communicate with patients and diagnose illness successfully, he or she must also be well-versed at navigating the complex legal and regulatory systems that now govern what type of medical care will actually be delivered to a patient. But, many of today's practicing physicians are ill-equipped to handle the legal, regulatory of modern medical practice. Sadly, Chinese medical education does a poor job of training physicians about the legal realities of medical practice. Many curricula focus on medical ethics, which leaves students without clear guidance on the legal matters they will certainly encounter in clinical setting.

A medical curriculum that addresses the medical law context of clinical practice should focus on raising awareness of a wide range of subjects and should train students to recognize areas where medical practice and law can come into conflict. We recommended that the medical law education should aim to give medical students concrete tools with which to enter medical practice, with the hope that these tools will help them avoid common legal pitfalls. We thought that it was crucial educating medical graduates about the legal backdrop of the regulatory, malpractice, and ethical questions they will surely face. So we did some work and exploration in past three years.

Since the introduction of problem-based learning (PBL) at McMaster University in Canada in the late 1960s, there has been an increasing interest in PBL in medical schools throughout the world. As the demands for new curricular outcomes and graduating competencies are made of medical schools, a PBL approach to learning embodies the flexibility and adaptability necessary to accommodate such challenges.

Over the past 20 years, PBL has been progressively introduced in China. The medical graduates of PBL curricula demonstrate equivalent or superior professional competencies compared with graduates of more traditional curricula [15].

Usually, young graduates have been taught a great deal about the mechanism of disease. They are too "scientific" and do not know how to take care of patients. Including law and humanities courses in medical education may potentially provide significant benefits not only to future physicians but also to society as a whole. Those benefits may include enhancing their medical skills to communicate with patients, family members, increasing their ability to observe and recognize diagnostic findings, as well as promoting their empathy and positive attitudes toward psychological aspects of patients. PBL is an important educational strategy for integrating the curriculum, motivating the students and helping them to identify their learning issues and set their own learning goals.

There is an increasing consensus that medical law is good for promoting a patient-centered approach to medical care, which is also highly emphasized in current clinical practice. Therefore, we believe that the integration of medical law education courses inside to PBL courses. As recommended by "Physicians for the Twenty-First Century," premedical education should be focused on broad and general education including scientific and nonscientific disciplines. Accordingly, medical law courses, as part of the general education for medical students, are mainly conducted in the first and second year for the medical graduates.

DEVELOPING AND EVALUATING MEDICAL EDUCATION PBL CURRICULUM

In the past several years, the number of medical law courses have been increasing in medical schools. However, several studies have pointed out weaknesses of present medical law education using lecture [16]. We conducted a qualitative study to examine medical graduates' attitudes toward medical law courses. We found that medical graduates were concerned about the inconsistency between learning objectives and courses content, and that medical graduates preferred more PBL courses than lectures for medical humanities. We found that medical graduates saw medical law courses as useful to their future career because those disciplines were part of Physicians' Licensing Examination. Therefore, medical graduates tended to have an active attitude toward medical law courses according to those studies.

The study process includes the motives for learning and the strategies for engaging in the process of learning to reach the intended outcomes. The combination of learning motives and strategies forms 3 approaches to learning: (1) a deep approach, for

example, understanding meaning and using information; (2) a surface approach, for example, memorizing fact and reproducing information; and (3) an achieving approach, for example, obtaining the highest grades [17]. For example, the previous study reported that several factors may encourage a deep approach and discourage surface approach to learning medical humanities: (1) appropriate workload for the learners; (2) clear goals and informative feedback; (3) enthusiastic, clear, empathic teaching focused on promoting conceptual change; (4) freedom of choice over learning content and method; (5) assessment that students perceive to reward understanding; and (6) assessment through written work rather than multiple-choice questions [17]. As such, our medical law PBL course, which complied with several of these key factors, was expected to encourage a deep approach to learning medical law and to a better learning outcome compared with those taught by conventional teaching.

We designed scene according to the hot social issues. For example, it described the case of a female doctor called Li Qian of the Beijing Third People's Hospital, who was travelling to Nanjing by train [18]. A woman on the train went into labour and Dr. Li helped to deliver her baby and saved its life. However, during the birth the baby aspirated some amniotic fluid and had breathing difficulties which required treatment at a hospital in Nanjing. The mother sued the doctor for the treatment costs and was awarded 15,000 Yuan compensation by the Court. Lawyers said doctors responding to emergencies outside their places of work were exempted from liability.

This is a false story. We organize graduates to discuss the matter from a legal perspective. In law, a doctor's actions in such an emergency did not constitute "practicing medicine" but "saving people". It has nothing to do with practicing medicine. It is just an act of a Good Samaritan. A doctor would be liable only if it was proven he deliberately caused harm and made serious mistakes in treatment. Put another way, doctors were not obliged to respond to medical emergencies on public transport, but if they did, they were not liable even if there were complications, so long as they did not act deliberately to do harm to patient. We sought to link medical law theory and medical practice and to strengthen the social responsibility of graduate. The graduates said the small group discussions were very opening, because working through the cases was not simply about deciding who is right and who is wrong. Instead, the cases require them to analyze and consider how could do better in the future.

Our study first examined the outcome of the medical law PBL course facilitated by the teaching assistants with a strong background as indicated by the medical graduates' satisfaction scores. In addition, we also found that medical students were more satisfied

with discussing clinical medical law issues rather than clinical medicine-related humanities issues. The current study assessed the impact of a graduate qualification in medical education on the graduates. The findings showed that the vast majority of participants perceived an improvement across. They reported improved self efficacy [19]. For example, their belief in their ability to complete educational tasks and reach goals. Another benefit of the PBL curriculum is that graduates are more communicative, show more initiative, and are more positive about medical law education.

PBL depends on self-directed learning, triggered by a medical law setting. The graduates meet in small groups led by a facilitator and discuss carefully designed medical law cases. The medical graduate would encounter many information necessary to solve the case and, in so doing, will have gained medical law knowledge that in a conventional curriculum would usually have been disseminated by lecture. There were great differences between graduates from traditional curricula. As the previous study showed that those from a PBL curriculum had excellent results to those from a traditional curriculum on both basic science and clinically based examinations but were happier with their educational experiences [20].

Nevertheless, there are some limitations in this study. This is a single center study, and the medical graduates enrolled in this medical school mostly are excellent. Therefore, the study results may be limited to be extrapolated to other medical students. They adjust more readily to clinical clerkships, are more likely to ask questions, and seem to have superior independent learning and problem-solving skills. These trends are reassuring, considering that many teachers had expressed initial reservations about graduates' ability to cope with the PBL curriculum in medical law education.

CONCLUSION

Medical law education are a crucially means toward achieving important goals in medical graduates' education, including a focus on practical skills; strengthening of legal knowledge. PBL should directly assist in the development of medical law education through an active, broad-based, assertive program of support for medical law education programs throughout their clinical practice.

AUTHOR'S CONTRIBUTION

Haiyong Wang and Jianfei Song wrote the paper. Jing Ma, Yong Li, Chunhong He, Zhenzong Du and Jiangbin Sun supervised the composition of the paper. All authors read and approved the final paper.

ACKNOWLEDGEMENTS

This work was supported by Guangxi Department of Education [Guangxi Education Science

12th Five-Year Plan Grant (No. 2013C051): Cultivation of Surgery Graduate Medical Professional Law Quality]. We thank Xiaoyan Zhu and for her contribution to this article.

REFERENCES

1. Liebman BL; Malpractice mobs: medical dispute resolution in China. *Columbia Law Rev*, 2013; 113(1):181–264.
2. The Lancet; Chinese doctors are under threat. *Lancet*, 2010; 376 (9742): 657.
3. Jingxi X; Doctor's death prompts calls for protection of medical staff. *China Daily*. 9, May, 2016. http://www.chinadaily.com.cn/china/2016-05/09/content_25146589.htm
4. Jiang Y, Ying X, Zhang Q, Tang SR, Kane S, Mukhopadhyay M, Qian X; Managing patient complaints in China: a qualitative study in Shanghai. *BMJ open*, 2014; 4(8):e005131.
5. Li H, Wu X, Sun T, Li L, Zhao X, Liu X, Gao L, Sun Q, Zhang Z, Fan L; Claims, liabilities, injures and compensation payments of medical malpractice litigation cases in China from 1998 to 2011. *BMC Health Serv Res.*, 2014; 14:390.
6. Harris DM, Wu CC; Medical Malpractice in the People's Republic of China: The 2002 Regulation on the Handling of Medical Accidents. *J Law Med Ethics*, 2005; 33(3):456–77.
7. Tucker JD, Cheng Y, Wong B, Gong N, Nie JB, Zhu W, McLaughlin MM, Xie R, Deng Y, Huang M, Wong WC, Lan P, Liu H, Miao W, Kleinman A; Patient-Physician Trust Project Team. Patient-physician mistrust and violence against physicians in Guangdong Province, China: a qualitative study. *BMJ Open*, 2015; (10):e008221.
8. Wang D, Yang Y; Retrospective Analysis on 315 Cases of Medical Dispute In a General Hospital. *Sun Yatsen University Forum*, 2007; 27(11):32–6.
9. Zhu Z, Jiang B; To Discuss The Necessity of Establishing a Medical Identification System of Medical Disputes- Report of 62 Cases of Medical Dispute Lawsuit Case Analysis. *Jiangsu Health Management*, 2007; 18(97):78–80.
10. Su Y, Hu Y, Yang J, Yan Z, Liu M; A Retrospective Analysis on 356 Cases of Forensic Identification for Medical Dispute. *West China Med J.*, 2009; 24(2):288–91.
11. Zheng L, Jin K, Yan X, Chen Y, Dong L, Jin H, Tang J; 111 Case of The Investigation and Analysis of Medical Disputes. *Chin J Hosp Admin.*, 2006; 22(4):250–2.
12. Li W; Analysis of 69 Cases of Medical Disputes and Protection. *J Qiqihar Med Coll.*, 2011; 32(1):94–5.
13. Kong F, Bai R, Cui Z, Wang X, Pan L, Fan Y, Liu C, Zhang Z; Identification Results of 254 Cases of Medical Disputes. *Chinese Hospital Management*, 2011; 31(2):17–8.
14. Teo D; 7th International Association of Biological Standardization (IABS) Symposium on Advances in Transfusion Safety. *Biologicals*, 2012; 40:169.
15. Neville AJ; Problem-based learning and medical education forty years on. A review of its effects on knowledge and clinical performance. *Med Princ Pract.*, 2009; 18(1):1-9.
16. Wang HY, Du ZZ, Chen G, Sun QZ, Xia XW, Zhu XY, Song JF; Cultivation of Medical Interns' Professional Law Quality. *Northwest Medical Education*, 2010; 18(4):825-827.
17. Tseng FY, Shieh JY, Kao TW, Wu CC, Chu TS, Chen YY; Developing and Evaluating Medical Humanities Problem-Based Learning Classes Facilitated by the Teaching Assistants Majored in the Liberal Arts: A Longitudinal Crossover Study. *Medicine*, 2016; 95(6):2765.
18. Pinghui Z; Does Chinese law restrict doctors from helping outside their clinics? Man's fake rumour triggers heated debate. 07 July, 2014, <http://www.scmp.com/news/china/article/1548827/man-punished-fake-news-doctor-was-convicted-illegally-delivering-baby>
19. Wang H, Ma J, Tang J, Sun J, Li Y, Song J, Du Z; A Gloomy Future for Medical Students in China: The Role of the Teacher in Medical Law Learning *Sch. J. Arts Humanit. Soc. Sci.*, 2016; 4(6A):676-9.
20. Chang G, Cook D, Maguire T, Skakun E, Yakimets WW, Warnock GL; Problem-based learning: its role in undergraduate surgical education. *Can J Surg.*, 1995; 38(1):13-21.