• 医学教育 • doi:10.3969/j.issn.1671-8348.2014.25.052

# Analysis and countermeasures of the conflicting between clinical practice and taking test of postgraduate of medical undergraduates\*

Zhang Lixia<sup>1</sup>, Gu Yun<sup>2</sup>, Cai Heng<sup>3</sup>, Liang Shaohua<sup>3</sup>, Shao Yiye<sup>4</sup>, Ni Yanbo<sup>3</sup> (1. Medicine and Pharmacy Research Center, Binzhou Medical University, Yantai, Shandong 264003, China; 2. Penglai City People's Hospital, Yantai, Shandong 265600, China; 3. Basic School of Medicine, Binzhou Medical University, Yantai, Shandong 264003, China; 4. Shanghai Medical College of Fudan University, Shanghai 200032, China)

中图分类号:G465

文献标识码:B

文章编号:1671-8348(2014)25-3393-04

Nowadays, with the expanding enrollment of medical schools in our country, the competitive pressures of employment increase. It is very difficult for the graduates of these schools to find ideal jobs, but medical students with master or doctor degrees are relatively optimistic to the employment situation. As a result, more and more fresh medical graduates pursue the post-graduate education, thus forms a "rush of taking test of postgraduate" phenomenon<sup>[1]</sup>. Clinical students spent much time and efforts preparing for taking test of postgradu-

ate, which may result in lower quality internships and bad impacts on medical care and the management of teaching hospitals. In order to solve the conflicts between the clinical practice and taking test of postgraduate, we investigated the students who were about to enter the clinical practice, those about to finish clinical practice and the clinical tutors to solve the problem.

- 1 Subjects and methods
- 1.1 Subjects 500 clinical undergraduate interns of Grade 2008 and 2009(Table 1) and 110 clinical tutors(Table 2).

Table 1 The basic information of students that were going to enter the clinical internship of Grade 2009 and those who were about to finish the clinical internship of Grade 2008[n(%)]

Items	Total(n=500)	students of Grade 2009(n=250)	students of Grade 2008( $n=250$ )	$\chi^2$	P
Sex				2.128	0.230
Male	280(56.0)	132(52.8)	148(59.2)		
Female	220(44.0)	118(47.2)	102(40.8)		
Age				10.230	0.006
$22\sim <23$	131(26.2)	87(34.8)	44(17.6)		
$23\sim <24$	211(42.2)	128(51.2)	83(33.2)		
$24\sim <25$	158(31.6)	35(14.0)	123(49.2)		

Table 2 The basic information of clinical tutors

T <sub>e</sub> .	Clinical Tutors		
Items	Number(n)	Ratio(%)	
Sex			
Male	65	59.1	
Female	45	40.9	
Age			
35~<40	68	61.8	
40~<45	30	27.3	
≥45	12	10.9	
Title			
Chief Physician	10	9.1	
Associate Chief Physician	30	27.3	
Physician	55	50.0	
Residency	15	13.6	

#### 1.2 Methods

- 1.2.1 Survey methods A questionnaire survey was distributed to 250 students that were going to enter the clinical practice, 250 students that were about to finish the clinical practice and 110 clinical tutors. All the papers were reclaimed.
- 1.2.2 Survey items (1) For the students being about to enter the clinical practice, the survey was conducted from the following aspects; the desired place of the clinical practice, the standard for them to choose the site(high level of clinical teaching or level of taking test of postgraduate) taking test of postgraduate or not, being satisfactory with the school's internship arrangements or not, etc. (2) For the students being about to finish the clinical practice, the survey was conducted in the following aspects: the purposes of taking test of postgraduate, the

<sup>\*</sup> Grant sponsor: The training and education of staff and workers of enterprises in Shandong province key project(2014-223); The graduate education innovation project of Shandong province(SDYY12004); Binzhou Medical University adult education teaching and research projects(BY-CJY201203, JYKT201215, 13-rwjykt-003). Author brief introduction: Zhang Lixia(1981—), master degree candidate, lecturer, research direction on medical education management. 

Corresponding author, Tel: (0535)6913159; E-mail:nyb0907@163.com.

conflicts between the clinical practice and taking test of postgraduate, pressures of the clinical practice and taking test of postgraduate, plans for the clinical practice being adjusted or not, requests for full-time review or not and how long being OK, methods dealing with the conflicts between the clinical practice and taking test of postgraduate that students and teachers took, etc. (3) For the clinical tutors, the survey was conducted in the following aspects: students' performance, mood changes, measures the teaching hospital took to help the students and so on.

- 2 Results
- 2.1 Results of student questionnaire
- **2.1.1** Questionnaire of being about to enter clinical internship students in Grade 2009 see Table 3.
- **2.1.2** Questionnaire of being about to finish clinical internship students in Grade 2008 see Table 4.
- 2.1.3 The ratio of 157 students in Grade 2009 believing the conflicts existed between the clinical practice and taking test of postgraduate was 62. 8. That of 221 students in Grade 2008 was 88. 4. The students of these two grades considered that there were conflicts between the clinical practice and taking test of postgraduate, and there was difference (chi-square test through SPSS13.0, $\chi^2 = 44.41$ ,P < 0.01). The reason causing the differences was that students belonged to different grades,

in another words, many of them were in the clinical practice, while others were going to take it. Most students (Table 3 and 4) considered that there were significant differences between the clinical practice and taking test of postgraduate, which was mainly focused on the allocation of time. The students that being about to finish the clinical practice had further understanding in this aspect than those about to enter the clinical internship. In addition, our questionnaire showed that medical students tended to taking test of postgraduate, hoping entering hospitals for the clinical practice with high postgraduate level and being given guidance and full time for review.

2.2 Results of clinical tutors questionnaire Table 5 shows that the students that were preparing for the entrance examination for postgraduate had lax discipline, low enthusiasm, they could not put their heart into the practice and there were more difficulties in managing them. Most clinical tutors thought the conflicts between clinical practice and taking test of postgraduate could be alleviated. They advised the school and hospitals make more feasible plans for the clinical practice, such as sending teachers to practice places for postgraduate training and provide psychological counsel to improve students' confidence and help students with their difficulties and thus balance clinical practice and taking test of postgraduate.

Table 3 Questionnaire of being about to enter clinical internship students in Grade 2009

	Students in Grade 2009		
Questions	Number(n)	Ratio(%)	
Eager to practice in municipal hospitals and third-grade class-A hospitals	218	87.2	
Going to taking test of postgraduate	238	95.2	
Choosing the internship place with high postgraduate level	181	72.4	
Believing the conflicts existed between clinical practice and taking test of postgraduate	157	62.8	
Selecting this internship place obedient to school arrangements	238	95.2	

Table 4 Questionnaire of being about to finish clinical internship students in Grade 2008

Questions		Students in Grade 2008		
		Ratio(%)		
Believing taking test of postgraduate is as important as clinical practice	250	100		
Believing taking test of postgraduate will get an ideal job	228	91.2		
Believing the conflicts existed between clinical practice and taking test of postgraduate	221	88.4		
Believing the pressure existed in clinical practice and taking test of postgraduate because of the limited time	245	98.0		
Very necessary to giving guidance in study during internship	250	100		
Very necessary to have full time for review	238	95.2		
Improving the plans for clinical practice	225	90.0		

Table 5 Results of clinical tutors questionnaire

	Clinical tutors		
Questions	Number(n)	Ratio(%)	
More students were going to taking test of postgraduate than before	85	77.3	
Students taking test of postgraduate with more enthusiasm than others	94	85.5	
Hoping schools make new plans for clinical practice	82	74.5	
Hoping schools giving guidance in study during internship tutorship in these internship places	61	55.5	
Believing the conflicts existed between clinical practice and taking test of postgraduate	43	39.1	

- 3 Discussion
- 3.1 The forming of the rush of taking test of postgraduate

The rush of taking test of postgraduate for master and doctor degrees has been going on for several years, which has become a trend<sup>[2]</sup>. The reasons for this phenomenon may be as the followings: with the development of society, more and more talents are needed, especially for the high educated people<sup>[3]</sup>. However, these units are unwilling to accept them compared to those with master or doctor degrees. In order to find ideal jobs, many students have to pursue for further education.

- **3.2** The conflicts between the clinical practice and taking test of postgraduate. For the students who want to take test of postgraduate, they must face the conflicts between the clinical practice and preparing for the entrance exam, the main reason is the limited time. They know that clinical practice is an organic combination of the medical theory and the clinical practice, which is important for them to improve the professional skills and is necessary for clinical work<sup>[4-5]</sup>.
- 3.3 Paying much attention to the postgraduate test and ignoring the clinical practice—In this dilemma, medical students could not handle the relationship between the contradictions mentioned above effectively. As a result, they could not complete the tasks of clinical practice, obey the guidance of clinical tutors, do not attach importance on the clinical knowledge and skills learning. For their part, the clinical practice was regarded as a burden when preparing for the exam<sup>[6]</sup>.
- **3.4** The influence of taking test of postgraduate blindly during the clinical practice
- 3. 4. 1 Teaching disorder In recent years, many students were tended to attend the coaching classes which caused the practice process being not so systematic and incoherent, resulting in students' make-up examinations, which not only increased the teaching load but also affected the teaching order and the quality of practice.
- 3. 4.2 Students paying little attention to the clinical practice. The enthusiasm of teaching hospitals and teachers were seriously damaged. As a result, students had negative attitudes towards the tasks in the clinical practice, satisfied with the state "follow others blindly", not looking for opportunities to practice and learn actively, they do not attach importance to training. It is particularly unfavorable for the optimization of practice and the improvement of teaching quality.
- 4 Strategies to resolve the conflicts
- 4.1 Strengthening the ethics and quality of education to guide students to correctly handle the relationship between the clinical practice and taking test of postgraduate Modern medical talents must have lofty moral quality, strong ethics, and a high sense of responsibility and dedication in particular. Comply with the current employment situation, medical schools should allow students to understand the needs for medical talents situation and help them to establish a correct career concept<sup>[7]</sup>. Besides, the school can help students to estimate their own abilities correctly and make decisions. Students with high scores are suitable for postgraduate test and should be given full review time and guidance<sup>[8]</sup>.
- **4.2** Good education before practice mobilization and enhancing training initiative Before students begin clinical practice, they should be given the ideological education to help them to recognize the importance of clinical practice and taking test of

postgraduate clearly. The aim of clinical practice is to make the learned theoretical knowledge flexibly being applied to practice as quickly as possible to consolidate the basic theoretical knowledge, which can be beneficial for postgraduate test and improving the professional skills<sup>[9-10]</sup>.

- **4.3** Rational allocation of teachers, enhancing training and improving teaching quality Formulating the policies which make the teachers comprehend their responsibilities and qualification, encourage the outstanding ones and make them work more actively. Meanwhile, teachers should pay attention to their words and deeds, basic operations and basic skills training, and try to promote the quality of teaching practice.
- Strengthening the practice management to ensure the quality of clinical practice and establishing the practice teaching quality monitoring system Medical colleges can set up an independent unit for teaching practice management and clinical medical school, which would strengthen the management of clinical practice. The school should establish a clinical practice teaching quality monitoring system with one assessment, two tests, three checks and four attendances [11], as follow: One assessment means giving a comprehensive assessment to the overall situation of teaching hospital. Two tests are to examine students by means of department examination and comprehensive clinical examination. Three checks include checking the teaching quality at the beginning, midterm and final of one term. Four attendances contain leadership lectures, lectures steering group, director lectures and peer lectures. The multistation tests had better reduce the proportion of theoretical knowledge and increase the skills assessment proportion containing history taking, case analysis, basic skills subjects, auxiliary test results for determination and so on, which can comprehensively assess the students' basic knowledge, proficiency of the clinical skills and logic thinking of clinic [12].
- **4.5** Compact practice time On the premise of students' clinical practice reasonably arranging, students are encouraged to take test of postgraduate. Schools or hospitals should give students 1-2 months for review as it is critical for them.

## 5 Conclusion

Resolving the conflicts between the clinical practices and taking test of postgraduate of medical undergraduates reasonably is beneficial for improving the quality of clinical teaching and the medical graduates<sup>[13-14]</sup>. The contradiction of these two parts needs dialectical analysis and awareness. We are sure that according to the actual circumstances and with appropriate guidance, Methods of solving these problems will be given. Also, deepening reform of medical education and postgraduate examination system is needed<sup>[15-16]</sup>.

# References:

- [1] Bi HY. The analysis of China's higher education and the rush of taking test of postgraduate[J]. J Yunnan Natly Univers, 2007, 24(4):60-62.
- [2] Zhao BY. Analysis of the rush of taking test of postgraduate and information consulting service work[J]. Tu Shu Guan Gong Zuo Yu Yan Jiu, 2006, (1):68-69.

- [3] Scott MW, Marye L, Geoffrey H. Postgraduate education: does it improve the knowledge base of practititioners with time[J]. J Urol, 1998, 160(2):502-504.
- [4] Richardson JD, Martin LF, Snow NJ, et al. Impact of a surgical postgraduate course on undergraduate surgical performance[J]. South Med J,1984,77(3):367-369.
- [5] Gray JD, Ruedy J. Undergraduate and postgraduate medical education in Canada [J]. CMAJ, 1998, 158(8): 1047-1050.
- [6] Zhu KX, Guo JQ. The ponder and countermeasure to the contradiction between the clinical practice and postgraduate entrance examination in medical students[J]. Medline Philos, 2006, 27(9):67-68.
- [7] Chang HM, Xu BF. How to deal with the relationship of medical students' clinical practice, employment and taking test of postgraduate [J]. J Xinxiang Med Coll, 2012, 29 (11):884-886.
- [8] Aly M, Willems G, Carels C, et al. Instructional multimedia programs for self-directed learning in undergraduate and postgraduate training in orthodontics[J]. Eur J Dent Educ, 2003, 7(1):20-26.
- [9] Bain J, Scott R, Snadden D. Integrating undergraduate and postgraduate education in general practice: experience in Tayside[J]. BMJ, 1995, 310(6994):1577-1579.
- [10] Franzen C. The undergraduate degree project-preparing
- 医学教育 doi:10.3969/j.issn.1671-8348.2014.25.053

- dental students for professional work and postgraduate studies[J]. Eur J Dent Educ, 2004, 36(6): 285-288.
- [11] Miyakis S, Karamanof G, Liontos M, et al. Factors contributing to inappropriate ordering of tests in an academic medical department and the effect of an educational feedback strategy [J]. Postgrad Med J, 2006, 82(974);823-829.
- [12] Sloan DA, Donnelly MB, Schwartz RW, et al. The objective structured clinical examination, the new Gold standard for evaluating postgraduate clinical performance[J]. Ann Surg, 1995, 222(6):735-742.
- [13] Clare K. An analysis of entry-level postgraduate students' readiness for student-centred, masters Level learning[J]. Learn Health Soc Care, 2006, 5(3):133-141.
- [14] Patterson F, Carr V, Irish B, et al. Innovations in the design and validation of situational judgement tests for postgraduate selection[J]. Med Educ, 2010, 8(12):150-152.
- [15] Koczwara A, Patterson F, Zibarras L, et al. Evaluating cognitive ability, knowledge tests and situational judgement tests for postgraduate selection [J]. Med Educ, 2012,46(4):399-408.
- [16] Ponnamperuma, Gominda G. Selection for postgraduate training[J]. Clin Teach, 2010, 7(4):276-280.

(收稿日期:2014-03-08 修回日期:2014-05-22)

# 通识教育对加强医学生职业素养的实证研究\*

陈 煜,唐金华,刘 涛<sup>△</sup>,马 玲,欧阳静 (新疆医科大学教务处,新疆乌鲁木齐 830011)

中图分类号:G465

文献标识码:B

文章编号:1671-8348(2014)25-3396-02

通识教育是近二十年来我国高等教育领域备受关注的话题。在传统专才教育模式的影响下,医学院校培养的人才逐渐表现出知识面窄,能力结构不合理,社会适应性差,创新素质欠缺等一系列不适应社会进一步发展的不足[1]。对于一个医学生来说,除了精湛的技艺以外,一个稳重、宽和、冷静的医生形象会给患者以值得信赖的感觉,而这对缓解医患矛盾、加强医患沟通、提高医疗服务质量非常重要[2],这也是医生职业素养的重要内容。San Francisco 在其著《职业素养》中定义:职业素养更平个人在职业过程中表现出来的综合品质[3]。随着人群对医疗卫生服务需求的增加,其对医务人员职业素养的期望和要求也越来越高,如何通过通识教育拓展和提高医学生职业素养已成为当前医学教育领域研究的新方向。

### 1 资料与方法

1.1 一般资料 调查对象为医学及相关专业一年级到四年级的在校学生,在21个医学相关专业中每个专业随机抽取一个班级进行调查,干预期内由学校制订实施了一套新的通识课程培养方案,方案涉及了历史、文化、科学、伦理、法学、医学等6个领域40余门课程的重新整合和按模块打包,并在此基础上

经过全校范围内学生需求调查和专家论证购买了 16 门网络通识课程在全校范围内全面开放,要求在校生必须修够一定学分。

- 1.2 方法 采用整群随机抽样的方法自行设计调查问卷进行调查,问卷参考 San Francisco 对职业素养的定义,结合"全球医学教育最低标准"中对医学生职业素养的要求,从医患沟通、文化礼仪、法律意识、道德情操等几方面设定医学生职业素养问卷。问卷在实施通识课程课程培养方案前后各进行一轮,时间周期为1学期。其中第1次下发问卷630份,回收575份,回收率91.26%;第2次下发问卷630份,回收584份,回收率92.70%。两次调查对象在性别、年龄、族别、专业上差异无统计学意义(P>0.05),具有可比性。
- 1.3 统计学处理 采用 SPSS17.0 软件进行数据分析与处理,采用秩合检验进行干预前后的对比分析,检验水准  $\alpha$ = 0.05,以 P<0.05 为差异有统计学意义。

#### 2 结 果

2.1 医学生对通识教育提高其职业医患沟通能力的评价 调查结果显示,开设相关通识课程之后,学生对医患沟通重要性

<sup>\*</sup> **基金项目**:国家社会科学基金项目(13HZ010);中华医学教育学会项目(2012-KC-10);自治区教育科学"十二五"规划项目(142068);自治区高校科研计划项目(XJEDV2014S031);新疆医科大学校级教改项目(YXJY2013-10)。 **作者简介**:陈煜(1983-),在读博士,讲师,主要从事医学教育的研究。 <sup>△</sup> 通讯作者,Tel:18997956799;E-mail:441318420@qq.com。