

Center for Global Health

Perceptions of Chinese Medical Students on Instruction in the Social Aspects of Medicine: Wuhan University Medical School's Implementation of University of Chicago PSOM's P2S2 Curricular Thread

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Background

- The marketization of the healthcare system in China has taken a grave toll on the doctor-patient relationship¹⁻⁵ with patient and physician dissatisfaction leading to **patient distrust of physicians**, **outbreaks of patient disputes**, **bribery**, **vandalism of physician and hospital property**, **and physical injury to physicians**.⁶⁻⁸
- Some attribute the deterioration of trust in the doctor-patient relationship to the lack of humanities education for medical students.⁹ The Chinese government showed concordance with this view in 2012 declaring that the proportion of medical humanities and social science courses be increased in medical universities.¹⁰
- This movement in China is couched in a global movement of medical education curricular reform that began with 1999 establishment of the GMER by the Institute for International Medical Education (IIME).¹¹

Global& Chinese& Wuhan& Initial& Chinese& Wuman& Government& Essential& Education& Enters&nto& Project& Issues& Evaluation& Distinguished& De4ined& Task&Force& with& Study& Physician& Education& Established& Pritzker& Education& Programme& Programme&

- In 2008, the University of Chicago PSOM and Wuhan University Medical School entered into a collaborative partnership to design a reform medical education curriculum for Wuhan.
- The pilot curriculum was launched in 2009 and the longitudinal study WUMER Project Evaluation was developed to evaluate the implementation of basic science and clinical science courses in the reform curriculum.
- The Pritzker curriculum dedicates a significant portion of the first year to a curricular thread entitled Physician-Patient-Society-Systems (P2S2) and includes the courses: Health Care Disparities: Equity and Advocacy, Clinical Skills, Doctor-Patient Relationship, and Social Context of Medicine and the American Healthcare System.
- These courses introduce students to core concepts in **professionalism**, communication, doctor-patient relationship and medical ethics. 12

Objectives

- To assess the state of implementation of Pritzker's P2S2 courses into the Wuhan University Medical School Curriculum.
- To explore Wuhan University medical students' perceptions of the importance of learning about the P2S2 topics in the preclinical classroom in China, and whether or not the students perceive having learned about these topics in their current curricula.

Hypothesis

As the reform curriculum was modeled after the Pritzker Initiative, it was expected that:

- Students of the reform curriculum would have had greater exposure to the P2S2 topics than those of the traditional curriculum and therefore would be more likely to report having learned about these topics.
- Chinese versions of the P2S2 courses would have to differ at least some in content in order to be contextually relevant.

Methods

- Class syllabi and schedules were consulted
- •Coding instruments filled out by course directors were used to collect data on existing courses:
 - Topics covered, reading materials used, hours dedicated to the course, teaching methods, assessment of students etc.

Survev

Curricular Content

- •A 13-item Likert scale survey was administered to 64 fourth-year medical students in the reform and traditional curricula.
- •The questions used a 1-5 scale: 1=strongly disagree, 5=strongly agree.
- •The final question asked students to write in topics they wished had been covered in their coursework.

The format of the Likert scale questions was as follows:

"I feel it is important to learn about Topic A in the classroom"

'I have learned about Topic A in the classroom."

Doctor-Patient Communication

Violent Patients and their Families

Tension in the Doctor-Patient Relationship

The Doctor-Patient Relationship in China

Trust and Distrust in the Doctor-Patient Relationship

Insurance and Payment

Data Analysis

- •Coding instrument data was analyzed using qualitative data analysis.
- Survey data was analyzed using descriptive statistics: calculation of mean scores, standard deviation, and percentage of students who agreed with each given statement.
 - This percentage was calculated by separating an "agree" group of those who answered 4 or 5 from those who answered 1, 2 or 3
- •SPSS software version 22 was used to compare the survey data collected from reform and traditional students.
- •Chi Square Goodness-of-Fit analysis was used to determine whether there was a significant difference in the number of students who agreed and disagreed with each statement.

Traditional (n=40)

- •Pearson Chi Square analyses were run to compare the data from the traditional and reform students.
- •Test statistics were considered significant at the .05 level.

Limitations

- As our study was conducted at only one medical school in China, the generalizability of the results is limited.
- The two groups of students that were compared, those of the reform and traditional curriculum, were not randomly assigned.
- The study included a small sample size.

Discussion

- The results of our investigation show that while WU has fully integrated the basic science components of the Pritzker curriculum, the social aspects as represented by the P2S2 curricular thread, with the exception of medical ethics, have yet to be integrated.
- The results further show that both reform and traditional curriculum medical students at WU perceive P2S2 topics to be important to learn about in the preclinical years, but that neither group perceives having learned about them in their curriculum
- learned about them in their curriculum.
 Therefore, from the perspective of the students, there is a need for curricular modifications that address the social aspects of medicine.
- While it was expected that the reform students were more likely to report having learned about these topics, the lack of any statistically significant difference in the two groups' answers suggests that the reform curriculum has not yet addressed these issues in any more significant way than the traditional curriculum.
- However, one question showed a statistically significant difference between reform and traditional groups' answers: Question 10 (5.934, p= 0.15), which asked students if they had learned about the insurance system and payment structures. This difference might be attributable to the reform ethics course's inclusion of the topic "Medical Insurance and Health Care Reform."

Results

Analysis of Data	a Collected from St	udent Surveys (N=64)	
	Total (n=64)	Reform (n=24)	

Question	Mean (SD)	Percentage who agree	Chi Square Goodness-of-fit (p)	Mean (SD)	Percentage who agree	Mean (SD)	Percentage who agree	Pearson Chi Square (p) (1, N=64)	•
1. I think it is important to learn about the Doctor Patient Relationship in the classroom.	4.47 (0.835)	85.93%	33.063 (<0.0001)	4.46 (0.977)	87.50%	4.48 (0.751)	85.00%	.078 (.781)	
2. Learning about the DPR in the classroom can help prepare me for my clinical experiences	4.27 (0.895)	85.93%	33.063 (<0.0001)	4.25 (1.113)	91.67%	4.28 (0.751)	82.50%	1.043 (.307)	
3. I think it is important to talk about conflicts in the DPR, including bribery and violence against physicians, in the classroom.	4.23 (0.868)	79.68%	22.563 (<0.0001)	4.21 (0.977)	83.33%	4.25 (0.809)	77.50%	.315 (.574)	L
4. I have been taught in the classroom how to deal with patients who are violent.	2.56 (1.081)	15.60%	30.250 (<0.0001)	2.79 (1.25)	25.00%	2.43 (0.958)	10.00%	2.560 (.110)	
5. I have been taught in the classroom how to deal with patients who offer bribes.	2.59 (1.122)	14.06%	33.063 (<0.0001)	2.58 (1.472)	25.00%	2.6 (0.871)	7.50%	3.801 (.051)	•
6. I think it is important to learn about the structure of the healthcare system in the classroom.	4 (0.943)	70.31%	10.563 (0.001)	3.83 (1.049)	66.67%	4.1 (0.871)	72.50%	.245 (.621)	
7. I have learned about the structure of the healthcare system in the classroom.	2.88 (1.016)	23.43%	18.063 (<0.0001)	3.13 (1.035)	29.16%	2.73 (0.987)	20.00%	.702 (.402)	
8. I feel confident in my knowledge of the healthcare system and my role in it.	2.86 (0.906)	21.87%	20.250 (<0.0001)	3.04 (1.042)	33.33%	2.75 (0.809)	15.00%	2.950 (.086)	
9. I think that it is important to learn about the insurance system and payment structures in the classroom.	4.11 (0.911)	76.56%	18.063 (<0.0001)	3.88 (0.85)	66.67%	4.25 (0.927)	82.50%	2.096 (.148)	
10. I have learned about the insurance system and payment structures in the classroom.	2.23 (1.05)	9.38%	42.250 (<0.0001)	2.58 (1.213)	20.83%	2.03 (0.891)	2.50%	5.934 (.015)	
11. I think it is important to learn about the factors that influence disparities in health care access (i.e. transportation, insurance, socioeconomic status, culture) in the classroom.	4.28 (0.899)	81.25%	25.000 (<0.0001)	4.13 (0.947)	83.33%	4.38 (0.868)	80.00%	.109 (.741)	•
12. I have learned about the factors that influence disparities in health care access in the classroom.	3.03 (1.098)	31.25%	9.000 (0.003)	3.13 (1.035)	41.67%	2.98 (1.143)	25.00%	1.939 (.164)	
13. I felt like my classroom discussions of the DPR and related issues prepared me well for my clinical experiences.	3.42 (1.03)	45.31%	.563 (.453)	3.63 (1.056)	58.33%	3.3 (1.018)	37.50%	2.627 (.105)	,

Topics Wuhan Medical Students would Like Addressed in Their Curriculum

Informed Consent

Bribery

Families

Communicating with Patients' Families

Communicating with Difficult Patients

Regional Healthcare Disparities

Communication of Surgical Risks with Patients and their

Future Directions

- The lack of significant difference between the reform and traditional students answers to the survey, and the overwhelming trend that students perceived these topics to be important to learn about but did not perceive having learned about them, identifies potential areas of growth and development for the medical education curriculum at WU.
- In addition to devoting curricular time to P2S2 topics, students expressed great interest in learning about topics that are relevant to their sociocultural context, such as dealing with violent patients, patients who offer bribes, and communicating with patient's families.
- An integrated P2S2 curriculum at WU would need to strike a balance between inclusion of topics as taught in the Pritzker curriculum and topics which address culturally and socially relevant needs.

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