

# Analysis of the perceptions of medical students applying contextual relevance to literature

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## Abstract

**Background:** We analysed book reports written by medical students on 1) Bulgakov's *A Young Doctor's Notebook* and 2) Zweig's *The Right to Heresy: Castello against Calvin*.

**Methods:** About 50 medical students were asked to read the above books. In the book reports, the following questions were included: 1) Do patients have confidence in medical doctors? What is needed to gain a patient's trust? Can a doctor's good will and efforts make patients trust their doctor? Would it be helpful for a doctor to write a narrative of his or her own experiences to obtain patients' trust? 2) Should the medical doctor engage in wide variety of activities or focus on the medical profession? Would you risk your life for your convictions? Why is tolerance by medical doctors currently needed?

**Results:** Of the students, 50% thought that patients do not have confidence in their medical doctors, while 34% answered that patients trust doctors; 46% answered that competence is needed for a doctor to be trusted by patients, 84% stated that good will and efforts will make patients trust their doctor, and 60% replied that it would be useful for a doctor to write a narrative of own experiences to obtain patients' trust. Eighty-four percent thought that it is desirable for medical doctors to participate in a wide variety of activities, and 60% answered that they would risk their life for their convictions.

**Discussion:** Our findings regarding students' perceptions indicate that these readings are good teaching materials for medical humanities.

**Keywords:** *Books; Medicine in Literature; Writing; Students, Medical; Physicians; Humans*

## Practice Highlights

- Half of the students thought patients do not have confidence in their medical doctors, while one-third answered that patients trust doctors.
- About half of the students (46%) answered that competence is needed for a doctor to be trusted by patients.
- The majority of students (84%) answered that a doctor's good will and efforts make patients trust their doctor.
- Most students (84%) thought that the participation of medical doctors in a wide variety of activities is desirable and reported that they would risk their lives for their convictions.

## I. INTRODUCTION

In Korea, several attempts have been made to use literature in medical education. Through telling, hearing, reading, and writing illness narratives, Hwang insisted that medical doctors and medical students can learn empathy and clinical wisdom (Hwang, 2013). Lee said that 'medicine in the literature' can give deep understanding and insight into patients. She insisted that

doctors can also develop self-awareness through literature (Lee & Rhee, 2003).

Several special study modules in literature and medicine have been conducted previously (Calman, Downie, Duthie, & Sweeney, 1988; Lancaster, Hart, & Gardner, 2002; Jacobson et al., 2004). In a 4-week course for medical students in Newcastle, UK, the themes included

empathy, death and dying, disability, madness and creativity, addiction, domestic violence, ethical dilemmas, doctor/patient communication, doctors' emotions, and end-of-life decisions (Lancaster, Hart, & Gardner, 2002).

In this study, we analysed the perceptions of medical students applying contextual relevance to literature, after having read Bulgakov's *A Young Doctor's Notebook* and Zweig's *The Right to Heresy: Castellio against Calvin*. Synopsis of these 2 books could be found in *Part IV. Discussion* section.

## II. METHODS

### A. Bulgakov's *A Young Doctor's Notebook*

**Participants:** The participants included 50 medical students in their sophomore class (second year of a 4-year course). The mean overall age was  $28.8 \pm 3.2$  years. A month before the classroom lecture, they were asked to read Bulgakov's *A Young Doctor's Notebook* (written in the 1920s, first English translation in 1975) and to have a discussion in groups of 7. The Korean translation (by Lee BH, 2011) was provided to students (Lee, 2015).

**Semi-structured theme lists:** In their book reports on Bulgakov's *A Young Doctor's Notebook*, the students were asked to address the following questions:

1. Do patients in Korea have confidence in their medical doctors?
2. What is needed to gain a patient's trust?
3. Can a doctor's good will and efforts make patients trust their doctor?
4. Would it be helpful for a doctor to write a narrative of his or her own experiences to obtain patients' trust?

### B. Zweig's *The Right to Heresy: Castellio against Calvin*

**Participants:** The participants in this study included 50 medical students in their third year of a 4-year program. The mean overall age was  $27.4 \pm 2.3$  years.

**Book:** A Korean translation of Zweig's *The Right to Heresy: Castellio against Calvin*, 1936 (Original title: *Castellio gegen Calvin oder Ein Gewissen gegen die Gewalt*) was provided to each student one month before the forum (Zweig, 1936).

**Questionnaires:** In their analysis of Zweig's *The Right to Heresy*, the students were asked to address the following questions:

1. Should medical doctors engage in a wide variety of activities or focus solely on the medical profession?
2. Would you risk your life for your convictions?
3. Why is tolerance necessary for medical doctors?

These books brought up questions that we considered in our previous studies (K. Hwang, Lee, S. Y. Kim, S. W. Hwang, & A. Y. Kim, 2014; Hwang, Hong, & Heo, 2014; K. Hwang, H. Kim, A. Y. Kim, S. W. Hwang, & S. H. Hwang, 2016; S. W. Hwang, H. Kim, A. Y. Kim, & K. Hwang, 2016).

Students were divided into 7 focus groups and 7-8 students were allocated to each group. Each group participated in a focus group discussion, and during their discussion, they chose between the options of yes, no, and undecided, and articulated the reasons for their choice.

These discussions were summarized in PowerPoint slides, and a member of each group presented in an open forum discussion in front of all the students and 2 moderating professors.

After the forum, they were asked to write a book report. The answers to the questions were provided as free text. However, based on the focus group discussion and open forum, their replies could be analysed in terms of yes, no, and undecided answers.

Factors potentially affecting their decisions were also analysed (age, sex, marital status, number of family members, volunteer work hours, and severity of experienced illness).

SPSS version 19.0 (IBM Corp., Armonk, NY, USA) was used for the statistical analysis. To compare the answers of each group, the chi-square test was used. For the odds ratio and 95% confidence intervals, logistic regression analysis was used. When the p-value was less than 0.05, the data were interpreted as statistically significant.

## III. RESULTS

The results of the questionnaires were as follows:

### A. Bulgakov's *A Young Doctor's Notebook*

#### 1) Do patients in Korea have confidence in their medical doctors?

Of the 50 respondents, 25 students (50%) answered that patients do not have confidence in their medical doctors, while 17 (34%) replied that patients trust doctors. The remaining 8 (16%) answered that patients are ambivalent. Two students (4%) noted that trust is evolving into distrust recently due to recent events in the news (a bill passed that allows victims of medical malpractice to begin legal proceedings without the consent of hospitals and doctors, and an event occurred in which syringes were reused for injections, infecting hundreds of patients with hepatitis C) (Korea Herald, 2016a, 2016b).

Students over 28 years of age were more likely to answer that patients have confidence in their medical doctors than those under 28 years (OR=5.143; 95% CI, 1.384-19.108, p=0.014 [logistic analysis]).

No significant differences were found according to gender, number of family members, volunteer work hours, or severity of experienced illness (p>0.05).

### 2) What is needed to gain a patient's trust?

The virtues that doctors must have in order to be trusted by their patients were competence (54%), followed by professionalism (14%), a sense of ethics (10%), and a suitable demeanour (6%).

Among the 50 respondents, 27 students (54%) answered that competence is needed for doctors to be trusted by their patients. About half of them (14 students) answered that the following are also needed, along with competence: communication and conversation skills (8), a suitable demeanour and sense of ethics (7), professionalism (2), effort (2), empathy (1), self-confidence (1), and sense of responsibility (1) (Table 1).

There were no significant differences according to age, gender, number of family members, volunteer work hours, or severity of experienced illness for this question (p>0.05).

Answer	n		
	Answers	Students	
Competence	Competence only	14	14
	+ Communication and conversation skill	8	
	+ Attitude and sense of ethics	7	
	+ Professionalism	2	
	+ Effort	2	13
	+ Empathy	1	
	+ Self-confidence	1	
	+ Sense of responsibility	1	
	Subtotal	36	27
Professionalism	Professionalism only	3	3
	+ Sense of ethics	4	
	+ Empathy	2	4
	+ Self-confidence	1	
	Subtotal	10	7
Sense of ethics	Sense of ethics only	3	3
	+ Revision of education	1	2
	+ Love	1	
	Subtotal	5	5
Demeanour	Demeanor only	2	2
	+ Conversation skill	1	1
	Subtotal	3	3
Other	Policy improvement	3	3
	Communication	1	1
	Courage	1	1
	Effort	1	1
	Self-confidence	1	1
	Sense of responsibility	1	1
Total		62	50

Table 1. What is needed to gain a patient's trust?

### 3) Can a doctor's good will and efforts make patients trust their doctor?

Of the 50 respondents, 42 students (84%) answered affirmatively to this question. Seven (14%) replied that good will and effort are not sufficient to gain trust. The remaining respondent (2%) was unsure.

There were no significant differences in age, gender, number of family members, volunteer work hours, or severity of experienced illness regarding this question (p>0.05).

### 4) Would it be helpful for a doctor to write a narrative of his or her own experiences to obtain patients' trust?

Of the 50 respondents, 30 students (60%) answered 'yes' to this question, while 13 (26%) replied negatively. The remaining 5 (10%) answered that this possibility has both pros and cons.

There were no significant differences in age, gender, number of family members, volunteer work hours, or severity of experienced illness regarding this question (p>0.05).

## B. Zweig's *The Right to Heresy: Castellio against Calvin*

### 1) *Should medical doctors engage in a wide variety of activities or focus solely on the medical profession?*

Among the 50 students, 48 included the answer in their book report and 2 did not. Among them, 42 (84%) thought the participation of medical doctors in a wide variety of activities is desirable. A few students (3, 6%) responded that medical doctors should focus on the medical profession alone. Three students (6%) had ambivalent thoughts.

The major reasons for the preference for participation of medical doctors in a wide variety of activities are as follows: to broaden the medical doctor's horizons (15, 36%), and to contribute to society with responsibility and leadership (10, 24%).

Other reasons were, in order, not to be intolerant or narrow-minded (6, 14%), the demand of the era (5, 12%), for integration of academic disciplines (4, 10%), and in preference of diversity (2, 4%).

There was no significant difference in age group, gender, number of family members, or voluntary work hours associated with the motivation of the medical doctor.

### 2) *Would you risk your life for your convictions?*

Among the 50 students, 30 (60%) responded that they would risk their lives for their convictions, while 16 (32%) would not. Four students (8%) answered that they could not make up their mind.

The major reasons for taking risk for one's convictions are as follows: "One's convictions are worth risking one's life" (14, 47%) and "One's convictions are an important value which changes the world, as seen in the case of Servetus" (8, 27%). Other opinions were "Though I cannot risk my life for my convictions, I respect people who do" (3, 10%), "We exist because of the people who risked their lives for their convictions" (3, 10%), and "I would adapt myself to circumstances with various convictions" (2, 6%).

The reasons for not taking risk for one's convictions are as follows: "One's convictions are important but not worth enough to risk one's life" (4, 25%), "I have important work to do in this life" (4, 25%), "Deviant convictions are rather harmful to society" (4, 25%), "I do not have the courage to risk my life" (3, 19%), and "Life itself is more important than convictions" (1, 6%).

There was no significant difference in these responses by age group, gender, number of family members, or volunteer work hours.

### 3) *Why is tolerance required of medical doctors?*

Among the 50 respondents, 11 students (22%) reported that tolerance is required for communication with individuals and another 11 (22%) for better treatment results.

Ten students responded that tolerance is needed to understand patients' pain (20%). Seven students (14%) thought that tolerance is required because medical science is in progress and another 7 (14%) to adapt to diversifying society. Two students (4%) reported needing tolerance for their character training, and another 2 (4%) reported that doctors need tolerance for leadership (Table 2).

Reason	N	(%)
For communication with individuals	11	22
For better treatment results	11	22
To understand patients' pain	10	20
Medical science is in progress	7	14
To adapt to diversifying society	7	14
For their character training	2	4
For leadership	2	4
Total	50	100

Table 2. Why is it necessary for a medical doctor to be tolerant

## IV. DISCUSSION

### A. *Bulgakov's A Young Doctor's Notebook*

The plot of *A Young Doctor's Notebook* can be summarized as follows. This book is the collection of a medical doctor's narrated experiences. A freshly graduated doctor, the protagonist of *A Young Doctor's Notebook* arrives in a remote village with no electricity, a long day by coach from the nearest town. He has a well-equipped medical centre, a good library, and competent assistants, but he carries immense responsibility as the only doctor. Many of the stories involve the protagonist facing a medical challenge of some kind. With no practical experience, he faces up to this and (usually) succeeds without exposing his fears or uncertainties. Recurring themes include the severity of the cold and the blizzards, the isolation, and the backwardness of peasant attitudes to health and medical care. Sometimes patients have confidence in their young medical doctor, but in some situations distrust him (Lee, 2015).

Trust in physicians reflects the patient's optimistic acceptance of vulnerability and the expectation that the physician will do what is best for his or her welfare (Gopichandran & Chetlapalli, 2015). Trust in physicians influences the health and well-being of older adults, as well as paediatric patients (Simon, Zhang, & Dong, 2014; Singh, 2016). However, there have been few studies investigating how physicians can instil confidence in patients (Maruani et al., 2013; Fiscella et al., 2004).

Through an analysis of this book, we hoped to explore medical students' thoughts about whether patients have confidence in their medical doctors, what is needed to gain a patient's trust, and whether a doctor's good will and efforts make patients trusting their doctor.

### B. Zweig's *The Right to Heresy: Castellio against Calvin*

Three important characters appear in Zweig's *The Right to Heresy*: John Calvin, Michael Servetus, and Sebastian Castellio. The first character is John Calvin. He was born in France and was a second-generation religious reformer after Martin Luther. He fought against the corruption of the Catholic Church at the time. He wrote the *Institutes of the Christian Religion (Institutio Religionis Christiane)* in 1535 in Geneva, Switzerland, which presented a doctrine that puritans (Protestants) should observe. During his theocracy in Geneva, Calvin expelled and even killed many people who crossed his will. He cut the figure of a dreadful dictator.

The second is Sebastian Castellio. He was a humanist scholar who studied and translated the Bible. He used decent words against the dictatorial reign of Calvin. He knew that he was merely a "mosquito in front of the elephant." However, he held his convictions as an intellectual against injustice.

The third is Miguel Servetus. He was a medical doctor who first described the function of pulmonary circulation. He was also a theologian who wrote a book to some concepts associated with the Trinity, and wished to meet Calvin and discuss their opinions. Servetus published *Reconstruction of the Christian* under the name of Michel de Villeneuve to avoid risk. Because Servetus wrote some different opinions against Calvin's *Institutes of the Christian Religion*, Calvin was angry about the writings of Servetus and demonized him. Using trickery, Calvin found evidence that Servetus was the author of that book. Servetus was eventually accused of heresy by both the Catholic and Protestant, and was eventually burned by the council of Geneva, which was under control of Calvin. Until the last moment, with his body chained in the engulfing flames, Servetus did not withdraw his beliefs in his doctrine and kept his convictions.

When Castellio watched this injustice, he decided to face Calvin. In his book called *About Heretics*, he argued that Calvin definitely did wrong to the theologian from Spain. Castellio defended the freedom of thinking and wrote that the recklessness of burning Servetus was an "obvious murder." In other words, "To kill the people who keep their beliefs is a religious murder." Castellio believed that only toleration could save humanity from such violence. The writings of Castellio, however, could

not be distributed to the readers under Calvin's reign. After their deaths, the writings came to light. Stefan Zweig studied and summarized the story of these three historical characters and wrote a famous book: *The Right to Heresy: Castellio against Calvin*. This book emphasized the importance 'toleration'.

We attempted to see if medical students would express willingness to risk their lives for their convictions and explain why tolerance is required of the medical doctor by analysing the book reports of on Zweig's *The Right to Heresy*.

The students pointed out Calvin's intolerance to Servetus and regarded Calvin as a dictator. They thought it was ironic that Calvin, who fought against Catholics for their intolerance, treated Servetus without tolerance and eventually killed him. They agreed with Zweig, who suffered under Hitler, and tried to draw connections between the similar figures of the tyrants through Calvin's story.

The students were concerned about the 'many little Calvins' around them who do not even listen to others' opinions, leading to a 'society of impossible communication.'

Most students (84%) responded that the participation of medical doctors in a wide variety of activities is desirable, and a few students (6%) responded that they preferred to focus on the medical profession only. They gave the examples of several role models of medical doctors who contributed a great deal to society, such as Che Guevara, Lu Hsun (鲁迅), and Fr. John Lee Tae-seok, a Korean priest. Another interesting example was Paula Pareto, the first woman to win an individual gold medal for Argentina, in judo at the Rio Olympics, who also studied medicine at the University of Buenos Aires.

Most students (60%) responded that they would risk their life for their convictions, while (32%) would not. This result was expected because the medical profession cannot be performed without having convictions devoted to patients.

We were able to observe that the students took great pains to answer the question of why tolerance is required of the medical doctor. The most common answers were for communication (22%), for better treatment results (22%), and to understand patients' pain (20%). Here, we could see that the students wanted to be good doctors by developing their proper humanity.

As reported in a paper from Cardiff, a literature and medicine special study module was designed and evaluated for third year undergraduate medical students,

by tutors from an academic department of general practice. Developing subjects was challenging for students and tutors (Jacobson et al., 2004). In the present study, 7-8 students were allocated to focus groups and asked to choose between yes, no, and undecided answers, as well as to indicate why they chose their answer. Additionally, they were asked to write a book report. We view our method as a combination of a focus group with a semi-structured theme approach, as reported by some previous authors (Heaney, Tolhurst, & Baines, 2004; Denham & Shaddock, 2004).

It is thought that, to some extent, Korean culture and the system of medical practice in Korea influenced students' perceptions of the book and their reactions, so this study may present some interesting inter-cultural perspectives.

Since the present study did not have a pre-test and post-test design, we could not see the impact of this teaching mode on students' beliefs or attitudes in a qualitative manner, which is a limitation of this study. Other minor limitations are the small sample size and the fact that students were asked to reflect on different themes regarding the 2 books.

## V. CONCLUSION

*A Young Doctor's Notebook* allowed the readers to reflect on the virtues necessary to get a patient's trust. Through reading *The Right to Heresy*, the students became aware of the importance of tolerance and determined that they would respect other people's opinions. These books may be suitable teaching materials for the medical humanities.

### Notes on Contributors

Kun Hwang is a Fellowship Professor of Department of Plastic Surgery at Inha University School of Medicine, Incheon, South Korea. He conceived the idea, planned the research, and wrote the manuscript.

Ae Yang Kim is an Adjunct Professor of Inha University School of Medicine, Incheon, South Korea, and director of Eun Hye OB & GY Clinic, Seoul, South Korea. She analysed students' reports.

Hun Kim is on the PhD course in Department of Plastic Surgery at Inha University School of Medicine, Incheon, South Korea. He contributed statistical analysis and the table.

### Ethical Approval

This study received approval from the institutional review board (IRB) of Inha University (approval number 170220-8A).

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## Declaration of Interest

The authors have no conflict of interest to declare.

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