The relationship between medical students' empathy and resilience

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Background

Empathic ability has been recently drawing attention as a core competence for medical professionals. Along with empathic ability, resilience that can overcome stress or anxiety and positively adapt to clinical sites where a number of mentally tense situations occur is demanded.

The present study attempted to identify the factors that help form the right doctor-patient relationships by identifying the level of empathic ability, resilience of medical students, and determining their relationships.

Methods

1. Study setting

A survey was administered to 477 medical students of a university in South Korea in 2017, and a total of 405 students responded to all questionnaire items (84.9%).

2. Evaluation

The questionnaire items were composed of the general characteristics of students; Jefferson Scale of empathy, S-version, Korean edition (JSE-S-K); and Conner-Davidson Resilience Scale (CD-RISC).

The Jefferson Scale of Empathy(JSE 20 items) was specifically developed for measuring empathy in the context of medical education. Each question consists of 1(strongly disagree) to 7(strongly agree) points, and the total score is 140 points.

The Conner-Davidson Resilience Scale (CD-RISC 25 items) was intended to measure ego resilience. Each item consists of 5 steps, and the total score is 100 points.

3. Statistical analysis

The data were analyzed by t-test, one-way ANOVA, and Pearson correlation using SPSS version 22.0.

Results

The results revealed that the average scores of empathic ability and resilience were 108 and 69 points out of 100 and 140 points, respectively(TABLE 1).

		Number (total 405)	Empathy (average/total)	Resilience (average/total)
Pre-medicine	First-year	49	108/140	69/100
	Second-year	61		
Medicine	First-year	88		
	Second-year	61		
	Third-year	74		
	Fourth-year	72		

TABLE 1. The participants and average on empathy and resilience

Forty-one respondents (10.1%) did not have a sibling, while 282 (69.6%) had one sibling and 82 (20.3%) had two or more siblings. The influence of the number of siblings on empathic ability and resilience was nonsignificant. No significant difference was found in empathic ability and resilience by gender (male vs. female = 62% vs. 38%).

When respondents were grouped based on whether they had experienced clinical practice (146 third- and fourth-year medical students or 36% of respondents) or not (259 first- and second-year pre-medical and medical students or 64% of respondents), the difference in empathic ability between the groups was found to be significant (p=0.032) while the difference in resilience was nonsignificant (P=0.186)(TABLE 2). The correlation analysis showed a weak positive correlation (r=0.357, P<0.001) between empathic ability and resilience.

(P<.05)

	Non-experienced Clinical Practice	Experienced Clinical Practice	P value
Empathy	107±13.83	110±14.27	.032
Resilience	65±13.65	67±11.32	.186

TABLE 2. The clinical practice experience on empathy and resilience

Conclusion

To the extent of our knowledge, the present study is the first to investigate the relationship between empathic ability and resilience of medical students. The results confirmed that those who have clinical practice experience have better empathic ability and that it is positively correlated with resilience. It suggests that the duration of practice (a total of 32 weeks in the third year and 54 weeks in the fourth year) in which students see patients directly and indirectly and curricula such as medical communication positively affected their empathic ability. Further research on resilience and empathic ability is needed to help medical professionals overcome the mental adversity experienced in clinical work.

Discussion

In the present study, there was a significant difference between a group of experienced groups and a group of non-experienced groups.

Our findings suggest that medical college should consider offering a variety of effective options such as medical volunteer-based curriculums for students without clinical experience. Moreover, It needs to teach new values, such as the importance of self-awareness, life balance, and help-seeking for mental health problems. They could have mature and obvious motivation for learning, in-depth academic experience. However, our study has limitations that the sample is small and has been done in one university. Therefore, it needs study to improve empathy and resilience through various academic situations.