Self-Compassion in Medical Students: A Pilot Study of Its Association With Professionalism Pressure

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Abstract

Background: To be a “good doctor” and have “good medical practices” are apparent goals for both medical students and medical faculties. However, the associated implicit and explicit standards could be a source of distress in the form of pressure to achieve professionalism. Self-compassion has been identified as a transtherapeutic factor that plays a crucial role in developing and maintaining mental health. It seems to be an essential meta-skill to learn, especially for medical students who often perceive imperfection as failure. In this pilot study, we investigated the qualities that medical students attribute to the “good doctor” concept, how they perceive themselves compared to this concept, and whether any possible discrepancy between these two perspectives could be associated with self-compassion.

Methods: Altogether, 301 medical students participated in the study (mean age 22.3 ± 2.1; 71.8% female). The discrepancy between concepts was measured by a semantic differential consisting of a list of 36 adjectives and antonyms that students repeatedly mentioned in courses in their responses to the question “What should a doctor be like?” Self-compassion was measured by the Self-Compassion Scale.

Results: The obtained results offer an insight into students’ conceptualization of a “good doctor” and the hierarchy of given characteristics. Statistical analysis revealed significant associations between the discrepancy between the “ideal” doctor concept vs. actual self-perception and Self-Compassion Scale scores. The more students are compassionate to themselves, the lower the discrepancy.

Conclusions: The current pilot study supports the hypothesis that student self-compassion plays some role in the degree of discrepancy between the ideal “good doctor” image and student self-concept. This result could support the importance of educational interventions developing self-compassion for medical students. The proposed discrepancy measurement could also be a tool for measuring the effect of well-being programs aimed at self-compassion in medical students.

Background

Every medical student wants to be a “good doctor” and have “good medical practices” in their future. This notion is based on the integration of professional standards recommended by medical associations [e.g., 1], public bodies protecting patient safety and improving medical education [e.g., 2], hidden curricula (3), and competency-based medical education (4), and of patient needs and preferences (5). The clear operationalization of professionalism across several domains, such as knowledge, skills, and attitudes (including personal qualities and attributes), represents a key medical education challenge (6). “Professionalism is the basis of medicine’s contract with society” (7).

The Royal College of Physicians and Surgeons of Canada conducted extensive research (8) that included the views of medical education representatives, health professionals, affiliated stakeholders, and the general public. They defined seven key roles of the ideal doctor: Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar, and Professional. They suggest that all these roles overlap in one general factor and create a Medical Expert. A combined North American and European declaration on medical professionalism lists three principles and ten commitments in the areas of patient welfare, patient autonomy, and social justice (7). Van de Camp and colleagues (9) describe the three general themes of professionalism: (1) interpersonal professionalism (e.g., communication skills, leadership, trust, educating patients); (2) public professionalism (e.g., professional awareness, technical competence, being knowledgeable); and (3) intrapersonal professionalism (e.g., self-awareness, maturity, morality). In their mixed-methods exploration of the notion of the “good doctor” among junior and prospective medical students, Maudsley and her team (10) found that students valued compassion, patient-centered care, and communication skills over clinical competence and knowledge.

These domains should fulfill the primary outcomes of the explicit and hidden curriculum in medical training. They also create the more or less clear goal that students want to approach as future professionals. However, these standards could also be a source of distress, especially in medical schools where the standard of being “faultless and flawless leaves students with the feeling that they are constantly falling short” (11). This corresponds with the results of a study of medical student

perfectionism, socially prescribed perfectionism, and impostor phenomenon (12), showing that the “perception that others expect a great deal of you and will criticize any signs of failure” was an important predictor of medical student distress. In this context, Hill and Curran (13) showed in their meta-analysis that perfectionistic concerns displayed medium and medium-to-large positive relationships with overall burnout and symptoms of burnout.

In this context, from the perspective of Faculty of Medicine teachers at the Department of Medical Psychology and Psychosomatics, we are challenged to help our students deal with the pressure to achieve professionalism and to help them live with the discrepancies between their ideals and their natural characteristics. This does not mean that students should not strive to be better; however, they need to be equipped with psychological tools for learning to live with innate human imperfection.

Self-compassion is a key construct within the field of self-care that has been defined as relating to oneself with compassion by actively encouraging the expression of warmth, concern, and caring toward the self (14,15). The concept entails six components, put in three pairs: self-kindness vs. self-judgment, common humanity vs. isolation, and mindfulness vs. over-identification (15). The first pair of opposites include a kind and understanding attitude to oneself when facing failure or one’s own inadequacy instead of harsh self-criticism. The second pair is about bearing in mind that making mistakes and being imperfect is an irreplaceable part of human life, and feelings of isolation are an inappropriate approach to one’s experience; in other words, it is necessary to accept that things do go wrong for most people at some point. The third pair focuses on a balanced view of one’s own thoughts and feelings. Self-compassion means to neither avoid nor over-identify with an immediate state of mind and emotions. Self-compassion, with all its benefits, can be trained. In a meta-analysis with an overall sample size of N=16,416, a positive relationship was found between self-compassion and well-being, supporting the importance of self-compassion (16). Weingartner and colleagues (17), in their Compassion Cultivation Training for medical students, proved that this kind of program is able to influence students’ self-compassion. Self-compassion has been associated with self-rated health in university students (18). Self-compassion has been identified as a transtherapeutic and transdiagnostic phenomenon that plays a role in developing and maintaining mental health and quality of life (19,20). From this point of view, self-compassion is a critical meta-skill for medical students’ mental health and should be taught at medical schools.

In this context, we were interested in what qualities students attribute to the “good doctor” concept, how they perceive themselves compared to their “good doctor” concept, and whether any possible discrepancy between these two perspectives could be associated with self-compassion. We hypothesize that the discrepancy between what students think a good doctor should be like and how they perceive themselves is significantly negatively associated with their levels of self-compassion.

Methods

Sample and recruitment

In total, 301 medical students participated in the study (mean age 22.3 ± 2.1, 71.8% female). The survey ran from January to the end of February 2020. All subjects were students of Masaryk University, recruited through advertisements on the website and the Facebook page of the Department of Psychology and Psychosomatics of the Faculty of Medicine. The inclusion criteria were that participants were medical students. No exclusion criteria were applied. The survey was presented as a link to Google Forms. The survey was anonymous, and no personal data was collected. All students who participated in this study provided written informed consent for their anonymous participation. On the recommendation of the ethics committee of the Faculty of Medicine of Masaryk University and in accordance with the law, no ethical committee approval is necessary for this online, anonymous, and completely voluntary survey. All used methods were performed in accordance with the relevant guidelines and regulations.

Polarities – Semantic differential

We compiled a list of 36 adjectives that students repeatedly mentioned in their responses to the question “What should a good doctor be like?” during medical psychology seminars (Figure 1, right column). This exercise aim was to help students to: 1) raise their awareness of which aspects they prefer in a “good doctor” concept; 2) discover the opposites of these characteristics (Figure 1, left column); and 3) facilitate the process of integrating the conflicting forces between the often idealized notion of the “good doctor” and who they also are, such as ordinary imperfect human beings. The important step is usually to help the students contact and identify a repudiated part of the “good doctor” polarity. We used this list of polarities in our pilot research to quantify the degree of discrepancy between the “good doctor” concept and students’ actual self-perception on this continuum. Each polarity was assessed on a nine-point scale (see Figure 1). Only students who have not undergone this exercise earlier were included in this pilot study.

Self-compassion

The Self-Compassion Scale [20], the Czech version [21], measures individual compassion for oneself. The SCS-SF is a short form of the 26-item Self-Compassion Scale (SCS) and has a high correlation with the full SCS ($r \geq 0.97$; (14). The SCS-SF has six subscales with two items in each subscale: Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness, and Over-identified. The items are rated from 1 = “never” to 5 = “always.” The internal consistency of the subscales ranges between Cα = 0.65 – 0.86; total 0.89 (22). A total self-compassion score is calculated by averaging the mean subscale scores after reverse coding the negative items. A study of diverse and international samples shows that the subscales are best explained by a general overall factor of self-compassion (23).

Data analysis

Data analysis was conducted with Statistica 13.5 (24). Figure 1 was created with Seaborn 0.10.1 (25) and Matplotlib 3.3.0 (26). The tested data were normally distributed (Shapiro-Wilk W=.92642, p<.001). The relationship between the mean differences for each ideal vs. actual self-perceived characteristic and the self-compassion subscales was determined using the Pearson correlation. A simple linear regression was calculated to predict the role of self-compassion in the difference between ideal and self-perceived characteristics.

Results

The descriptive statistics presented in Fig. 1 show the differences between the “good doctor” concept and actual self-perception (mean difference of 1.4 ± 0.47; min 0.3 max 3.5).

Correlation analyses revealed low to medium significant correlations in the difference between the “good doctor” concept vs. actual self-perception and the Self-Compassion Scale subscale scores (Table 1).

Table 1
The correlations between the “good doctor” concept vs. self-perceived difference and self-compassion subscales

	Self-Kindness	Self-Judgment[b]	Common Humanity	Isolation[b]	Mindfulness	Over-identified[b]	Self-compassion total[a]	Age
“good doctor” vs. self-perception difference	-0.32***	0.27***	-0.12*	0.36***	-0.13*	0.33***	-0.35***	-0.15**
Self-compassion total	0.77***	0.72***	0.58***	0.79***	0.68***	0.78***	-	0.05

*p < 0.05; **p < 0.01; ***p < 0.0001; a = the higher total score indicates higher self-compassion; b = self-judgment, isolation, and over-identification subscales were calculated by reverse coding: higher values mean lower self-judgment, isolation, and over-

identification.

A significant regression equation was found ($F(1,299) = 41.483$, $p < 0.000$), with an $R2$ of .122. The students' predicted ideal vs. self-perception difference is equal to 2.175–0.261 (Self-Compassion – total). Thus, the difference between the ideal notion of how a good doctor should be and self-perception increases 0.261 for every point decrease in the Self-Compassion Scale score.

The statistical analysis did not reveal any significant difference between men (1.49 ± 0.50) and women (1.41 ± 0.46) in their "good doctor" concept vs. actual self-perception difference ($t = 1.26$; $p > 0.21$).

Discussion

The current pilot study supports the hypothesis that student self-compassion plays some role in the degree of discrepancy between their ideal image of a "good doctor" and their actual self-perception. These results indirectly support the assumption that self-compassion could relieve the distress associated with professionalism pressure. While studies in this field often focus on a more general relationship between self-compassion, compassion fatigue, and burnout syndrome among healthcare professionals (27) or between self-compassion and well-being in medical students (28), our pilot study describes a new specific association between self-compassion and the "good doctor" concept. Following other studies (18,29–32), our partial results also support the importance of educational interventions for medical students that develop self-compassion, such as mindfulness-based programs (33) (34) (35).

Our pilot data also offer an interesting insight into students' conceptualizations of a "good doctor" and the hierarchy of given characteristics. As expected, the ideal characteristics were rated higher than the self-assigned characteristics. The exceptions to this expectation differed in three polarities: Insensitive – Sensitive, Distant – Emotional, and Distrustful – Trusting. These results correspond with our observations in discussions with students. They often state that to protect themselves from emotional exhaustion or burnout in clinical practice, a good doctor should be a little insensitive and distant. They also usually discuss their experience from hospital internships and observations that patients are not generally telling the truth (wittingly or unwittingly). To be a good doctor, they believe, you need to verify patient information, and then you need to be a little distrustful.

To make the survey as anonymous as possible, we did not ask students which year of study they were in. The low negative significant correlation between the "good doctor" concept vs. actual self-perception discrepancy and student age reveals a trend indicating that the professional pressure could somewhat decrease during studies.

Limits, future directions, and practical implications

We do not know the imaginary borderline between the motivational value of discrepancy for personal and professional growth and where it is already a source of personal distress. Self-compassion seems to be an essential mediator; however, our current pilot study has raised a question and only partially answered it. Future research should include the mentioned discrepancy, the possible level of stress associated with this discrepancy, and self-compassion. The discrepancy and the importance attributed to it could be a tool for measuring the effect of well-being programs aimed at self-compassion in medical students.

Conclusion

This study describes a new specific association between self-compassion and the "good doctor" concept. Its results indirectly support the assumption that self-compassion could relieve the distress associated with professionalism pressure. The proposed discrepancy measurement could be a tool for measuring the effect of well-being programs aimed at self-compassion in medical students.

Declarations

Ethics approval and consent to participate

All students who participated in this study provided written informed consent for their anonymous participation. On the recommendation of the ethics committee of the Faculty of Medicine of Masaryk University and in accordance with the law, no ethical committee approval is necessary for this online, anonymous, and completely voluntary survey.

Consent for publication

Not applicable.

Availability of data and materials

The dataset generated and analyzed during the current study is available to the authors but is not publicly available due to ethical guidelines. The datasets used and/or analyzed during the current study available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contribution

MS, ŠD, and BK designed and conducted the study, analyzed the data, and wrote the initial manuscript draft. AS and RŠ significantly contributed to the revision of the final manuscript. All authors reviewed and approved the final manuscript.

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Figures

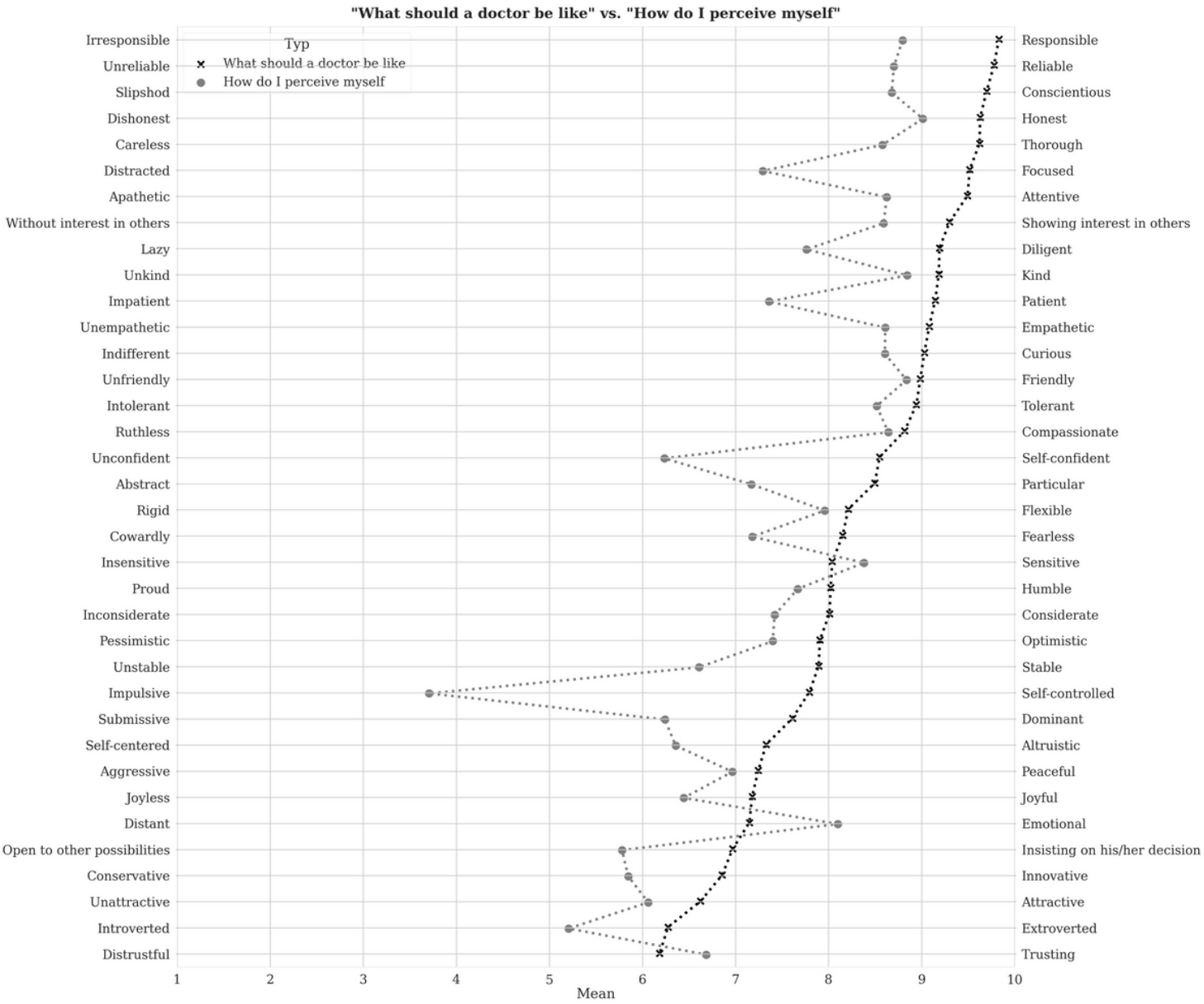

Figure 1

The differences between the “good doctor” concept vs. actual self-perception