



Burnout and coping strategies among future healthcare professionals: a structural equation modelling approach

Sindrom sagorevanja i strategije za suočavanje sa stresom kod budućih zdravstvenih radnika: pristup zasnovan na modeliranju strukturnih jednačina

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Abstract

Background/Aim. To reduce the risk of burnout development in medical professionals, it is important to identify the contributing factors as early as in their schooling years. The aim of this study was to propose a model for determining the relationship between the coping strategies used by medical high school and medical faculty students and burnout. **Methods.** The cross-sectional study included 164 students of Medical High School (80.5% female and 19.5% male) and 344 students of the Faculty of Medicine University of Belgrade, Serbia (76.9% female and 23.1% male). The model exploring the relationship between coping strategies (measured by the Brief COPE scale) and burnout [measured by the Copenhagen Burnout Inventory-student version (CBI-S) scale] was tested using structural equation modelling (SEM) analysis. **Results.** When copied with stress, Medical High School students used Acceptance, Venting, Behavioural Disengagement, and Planning, which increased their burnout, but they did not use any strategies to help them reduce burnout. When copied with stress, Faculty of Medicine students used Planning, Acceptance, Humour, Venting, Behavioural Disengagement, Self-Blame, and Substance Use, which increased their burnout, and Positive Reframing, which helped them reduce burnout. **Conclusion.** The results of this research showed an evident lack of using adaptive coping strategies with both groups of respondents. Proper education could help them replace these dysfunctional coping strategies with constructive ones.

Key words:

adaptation, psychological; burnout, psychological; health personnel; models, psychological; schools; stress, psychological; students, medical; risk factors.

Apstrakt

Uvod/Cilj. U cilju smanjenja rizika od pojave sindroma sagorevanja (SS) kod zdravstvenih radnika, važno je identifikovati faktore koji doprinose njegovom razvoju još tokom njihovog školovanja. Cilj rada bio je da se predloži model za utvrđivanje povezanosti između različitih strategija za suočavanje sa stresom, koje koriste učenici srednje medicinske škole i studenti medicine, sa SS. **Metode.** Studijom je obuhvaćeno ukupno 164 učenika Srednje medicinske škole (80,5% ženskog i 19,5% muškog pola) i 344 studenta Medicinskog fakulteta Univerziteta u Beogradu, Srbija (76,9% ženskog i 23,1% muškog pola). Model za ispitivanje veze između strategija za suočavanje sa stresom (merene skalom „Brief COPE“) i SS merenog skalom *The Copenhagen Burnout Inventory-student version* (CBI-S) testiran je upotrebom modeliranja strukturnih jednačina. **Rezultati.** Pri suočavanju sa stresom, učenici Srednje medicinske škole koristili su Prihvatanje, Ventiliranje, Bihevioralno neangažovanje i Planiranje, koje su im povećavali SS, a nisu koristili nijednu strategiju za pomaganje u smanjenju SS. Kod suočavanja sa stresom, studenti Medicinskog fakulteta koristili su Planiranje, Prihvatanje, Humor, Ventiliranje, Bihevioralno neangažovanje, Samookrivljanje i Konzumiranje psihoaktivnih supstanci, što im je povećavalo SS, a Pozitivnu reinterpretaciju (redefinisiranje) koristili su kako bi smanjili SS. **Zaključak.** Rezultati istraživanja pokazali su jasan nedostatak upotrebe adaptivnih strategija suočavanja sa stresom kod obe grupe ispitanika. Pravilno obrazovanje bi pomoglo da se nefunkcionalni način reagovanja na stres zameni konstruktivnim.

Ključne reči:

adaptacija, psihološka; sagorevanje na radu, sindrom; zdravstveno osoblje; modeli, psihološki; škole; stres, psihološki; studenti medicine; faktori rizika.

Introduction

Medical professions involve high risks of burnout development¹⁻⁴. The figures show that 25% to 80% of all healthcare professionals experience mild to severe burnout⁵, while 30–50% of nurses demand clinical intervention regarding burnout⁶. The presence of burnout levels in physicians and nurses is indicated as early as in medical schools⁷, with increasing rates over time predicting lower vocational preparedness and actual clinical achievement⁸. More specifically, burnout prevalence among medical faculty students reaches up to 75.2% worldwide⁹, with 19% suffering from high or very high overall burnout¹⁰. As for nursing students, the research showed that around 25% experience overall burnout¹¹, with 6% experiencing high burnout¹² and almost 90% reporting low levels of professional efficacy¹¹.

Student burnout development is proven to be related to the ways individuals cope with stressful situations^{3, 13}. Moreover, poor coping can influence students' success, satisfaction, and career development before leading to burnout³, while effective and adequate coping can significantly reduce the risk of burnout development¹⁴. Exploring the relationship between coping strategies and burnout occurrence among medical high school students and medical faculty students has, so far, received insufficient attention¹⁵, both in Serbia and globally, and has been recommended for research¹⁶.

Therefore, the present study aims to develop a conceptual model that will unveil how specific coping strategies impact the levels of different types of burnout among medical high school and medical faculty students. The model we propose is based on the literature review of what could be identified as a distinctive field of study, proposing several analogous models so far. For instance, in 2020, by using the structural equation modelling (SEM) analysis, de la Fuente et al.¹⁷ verified a model that explores a mediating role of coping strategies with respect to achievement emotions and engagement-burnout variables. A methodological advance was thus made since such predictive relationships could not be identified using classic analyses. Similarly, in 2019, Vizoso et al.¹⁸ used the SEM analysis to propose a model which examines the effects of optimism and adaptive and maladaptive coping on exhaustion, cynicism, and efficacy (as burnout dimensions) as well as on the performance of undergraduate students. Following these examples, we designed a model that would test the impact of 14 distinct coping strategies¹⁹ on medical students' overall burnout as well as on their personal, colleagues-related, studies-related, and teachers-related burnout²⁰.

The aims of the presented model could be multifold. Firstly, the verification of the proposed conceptual model would be done on two different populations – medical high school students and medical faculty students. Secondly, the findings would contribute to the existing body of literature as the influence of the 14 examined coping strategies on specific medical students' burnout types has not been ex-

amined yet. Finally, as the effectiveness of coping strategies is shown to be occupation-specific^{4, 21}, the identification of the beneficial as well as maladaptive coping strategies related to medical students' burnout should provide a basis for the appropriate training that would enable them to deal with stress more effectively²² both at school and university and later once they become doctors and nurses²³.

Methods

This study was designed as cross-sectional and included the students of the High School of Medicine, Belgrade, and the students of the University of Belgrade, Faculty of Medicine (Serbia), who were willing to participate and gave their written informed consent. The survey was anonymous and was conducted by filling in provided online questionnaires in January and February 2020. The study protocol was approved by the Ethics Committee of the Faculty of Organizational Sciences, University of Belgrade (from June 10, 2021) and carried out in accordance with the principles of the Declaration of Helsinki.

Instruments

Sociodemographic characteristics were investigated by the 5-item sociodemographic self-reported questionnaire designed for this study. Five items were gender, age, academic year, tuition payment source (budget of the Republic of Serbia, self-funding, or other), and hometown schooling (yes or no). Student burnout syndrome was assessed using the student version of the Copenhagen Burnout Inventory (CBI-S)²⁰. CBI-S is composed of four scales - Personal burnout, Studies-related burnout, Colleagues-related burnout, and Teachers-related burnout. Each scale consists of 6, 7, 6, and 6 items, respectively. Items' responses were measured on a five-point Likert-type scale (1 = Never or 0% of times and 5 = Always or 100% of times). Coping strategies were measured with Brief COPE¹⁹. Brief COPE consists of 28 items measuring 14 distinguishable coping reactions (2 items per scale): Active Coping, Planning, Positive Reframing, Acceptance, Humour, Religion, Using Emotional Support, Using Instrumental Support, Self-Distraction, Denial, Venting, Substance Use, Behavioural Disengagement, and Self-blame¹⁹. Responses were assessed on a four-point scale ranging from 0 (I have not been doing this at all) to 3 (I have been doing this a lot).

To identify the relationship between coping strategies and specific and overall burnout, we used the SEM analysis. The initial step in the SEM analysis is to inspect the internal consistency of the proposed constructs using Cronbach's alpha²⁴. The relationships we aimed to measure are presented in Figure 1. After the survey had been conducted, the statistical analysis was done using SPSS 25 (IBM Corporation, Armonk, NY, USA), whereas the SEM analysis was performed using AMOS 22 (IBM Corporation, Armonk, NY, USA).

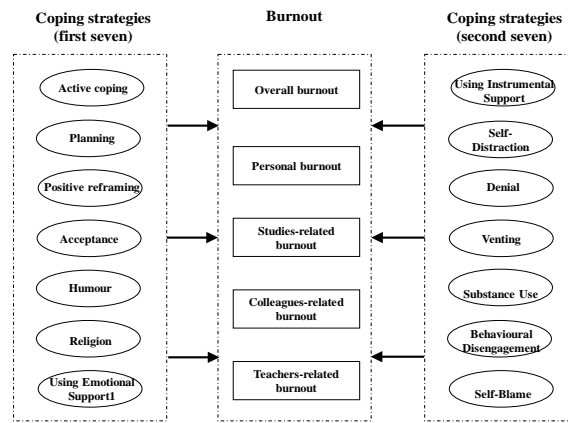


Fig. 1– Proposed conceptual model.

Results

Sample characteristics

The sociodemographic characteristics of the participants are presented in Table 1. In the sample of the High School of Medicine, 80.5% were female students. The age range was from 15 to 18. Most (53.0%) respondents were second-year students studying in their hometowns (79.3%). The sample of the Faculty of Medicine included 76.9% of female students, with an age range from 18 to 24. Most respondents were second-year students, almost 80% of the respondents had their

tuitions covered by the state budget of the Republic of Serbia, and more than half of them studied in their hometown (59.3%).

Comparison of burnout levels between Medical High School and Medical Faculty students

The comparison of the levels of burnout between Medical High School and Medical Faculty students was presented in Table 2. Medical High School students were significantly more prone to studies-related, teachers-related, and overall burnout.

Table 1

Sociodemographic characteristics of students

Parameter	Medical High School in Belgrade	Faculty of Medicine, University of Belgrade
Gender		
male	32 (19.5)	77 (23.1)
female	132 (80.5)	257 (76.9)
Year of study		
first	10 (6.1)	8 (2.4)
second	87 (53.0)	102 (30.5)
third	67 (40.9)	96 (28.7)
fourth	0 (0.0)	71 (21.3)
higher years of study	/	57 (17.1)
Study in their hometown		
yes	130 (79.3)	198 (59.3)
no	34 (20.7)	136 (40.7)
Tuition payment source		
self-funding	113(68.9)	70 (21.0)
RS budget	35 (21.3)	264 (79.0)
other	16 (9.8)	0 (0.0)

All values are expressed as numbers (percentages).
RS – Republic of Serbia.

Table 2

Comparison of burnout levels between Medical High School students and Medical Faculty students

Respondents	Personal burnout	Studies-related burnout	Colleagues-related burnout	Teachers-related burnout	Overall burnout
Medical High School students	3.331 ± 1.016	3.240 ± 0.903	2.295 ± 1.029	2.678 ± 1.150	2.886 ± 0.790
Medical Faculty students	3.150 ± 0.942	2.853 ± 0.894	2.201 ± 0.989	2.261 ± 1.018	2.616 ± 0.779
Mann-Whitney test statistics	-1.691	-4.299**	-0.862	-3.864**	-3.399**

All values are expressed as mean ± standard deviation.
***p* < 0.01.

Validation of the proposed conceptual models

Concerning Medical High School students, Cronbach's alpha ranged from 0.573 (Venting) to 0.942 (Substance Use). For Medical Faculty students, the internal consistency ranged from 0.421 (Venting) to 0.950 (Substance Use). Interestingly, the same constructs had the highest and lowest consistency for both groups of respondents. These results showed that the data is suitable for the SEM analysis.

Herein we assessed four SEM models: models of the impact of coping strategies on overall burnout and specific burnout dimensions for Medical High School students and Medical Faculty students.

The first model we assessed was the model of the impact of coping strategies on overall burnout for Medical High School students. The initial model had a low fit to the data ($\chi^2 = 1345.552$, $p < 0.000$, SRMR = 0.129). In the following steps, we modified the model by removing the paths which were not statistically significant. To assess the significance of the paths, we employed bootstrapping with 1,000 samples. We first removed the paths with the highest p -value. The final model had a better fit to the data ($\chi^2 = 150.090$, $p < 0.000$, SRMR = 0.089). In the final model, three coping strategies proved to have a statistically significant impact: Acceptance, Venting, and Behavioural Disengagement, with standardized coefficients of 0.169, 0.191, and 0.274. All coefficients were positive, indicating that the increase in employing these coping strategies increases burnout. The adjusted R-squared value was 0.188, indicating that 18.8% of the variability of overall burnout can be explained by the three predictors (Table 3).

The second observed model was the model of the impact of coping strategies on specific burnout dimensions for High School students. The initial model had a low fit to the data ($\chi^2 = 1302.753$, $p < 0.000$, SRMR = 0.078). In the following steps, we modified the model in the same manner as the previous model. The final model had a better fit to the data ($\chi^2 = 231.376$, $p < 0.000$, SRMR = 0.070). The obtained equations are given in Table 3.

Personal burnout proved to have three predictors, Planning, Venting, and Behavioural Disengagement. All coping strategies had a positive statistically significant impact on this particular burnout, meaning that these coping strategies slightly increased burnout. The adjusted R-squared value was 0.209, showing that these three coping strategies are responsible for 20.9% of the variability of personal burnout. When it comes to teachers-related burnout, the obtained model was of low quality as one significant predictor, coping strategy Behavioural Disengagement, explains only 5.6% of this specific burnout. Two coping strategies had a statistically significant impact on colleagues-related burnout: Acceptance and Behavioural Disengagement. The coefficients were stable and explained 13.1% of the variability. Finally, the only strategy that had an impact on studies-related burnout was Venting. Nevertheless, the sole predictor explained 12.2% of the variability.

Now we proceed to the SEM analysis on the Medical Faculty students. The third model we assessed was the model of the impact of coping strategies on overall burnout. The initial model had a low fit to the data ($\chi^2 = 1941.671$, $p < 0.000$, SRMR = 0.066). In the following steps, we modified the model. The final model had a better fit to the data ($\chi^2 = 887.480$, $p < 0.000$, SRMR = 0.083), and its assessment is given in Table 4.

In the case of the Faculty students, the overall burnout proved to have seven predictors: Planning, Positive Reframing, Acceptance, Humour, Venting, Behavioural Disengagement, and Self-Blame. All coefficients were positive, except for Positive Reframing. Therefore, the remaining six coping strategies lead to increased burnout, while the coping strategy of Positive Reframing decreased burnout. Some of the coefficients were quite low and close to zero, but they were not removed from the model as we aimed to create a high-quality model and find as many predictors as possible²⁵. The coefficients on the original sample and the mean coefficients did not differ, indicating that the coefficients were stable.

The fourth observed model was the model of the impact of coping strategies on specific burnout dimensions for Faculty students. The initial model had a low fit to the data

Table 3

¹Coping strategies' impact on different burnout levels of Medical High School students

Construct/predictors	Std. coeff.	Std. coeff. (mean)	SD	<i>t</i>	R ²
Overall burnout					
Acceptance	0.169	0.176	0.083	2.032*	0.188
Venting	0.191	0.197	0.075	2.559**	
Behavioural Disengagement	0.274	0.279	0.080	3.440**	
Personal burnout					
Planning	0.198	0.207	0.085	2.336*	0.209
Behavioural Disengagement	0.212	0.215	0.084	2.505*	
Venting	0.248	0.246	0.082	3.009**	
Teachers-related burnout					
Behavioural Disengagement	0.235	0.234	0.087	2.714**	0.056
Colleagues-related burnout					
Acceptance	0.172	0.178	0.079	2.170*	0.131
Behavioural Disengagement	0.310	0.311	0.083	3.726**	
Studies-related burnout					
Venting	0.324	0.328	0.066	4.899**	0.122

¹Assessment of the model on the impact of coping strategies on the level of different types of burnout among Medical High School students: construct, predictors, obtained standardized coefficients (std. coeff.), mean std. coeff., standard deviation (SD), *t* statistics, and the R-squared.

* $p < 0.05$; ** $p < 0.01$.

($\chi^2 = 2024.310$, $p < 0.000$, SRMR = 0.059). In the following steps, we modified the model in the same manner as the previous models. The final model had a better fit to the data ($\chi^2 = 874.919$, $p < 0.000$, SRMR = 0.059). The obtained equations are given in Table 5. All indicators were positive, stable, and statistically significant.

Personal burnout of the Faculty students was impacted by coping strategies Humour, Venting, Substance Use, and Self-Blame. All coefficients were positive, meaning that they increased this burnout. The four predictors explained 30.8% of the variability, thus creating a model of solid quality. Similarly, teachers-related burnout can be predicted with the use of coping strategies Humour, Venting, Behavioural Disengagement, and Self-Blame. Again, the obtained model was of solid quality as the adjusted R-squared value was 0.215. Burnout related to colleagues had just two predictors, Humour and Behavioural Disengagement, which explain more than 10% of the variability (13.8%). Burnout related to studies had the most predictors, five, which create a model of the highest quality that explains 31.7% of the variability.

Discussion

There is a visible disproportion in the number of male and female students in both samples. That could have been expected as more female students enrol in the High School of Medicine²⁶ and the University of Belgrade, Faculty of Medicine²⁷.

The first conspicuous insight provided by the proposed conceptual model is that both the Medical High School and Medical Faculty students do not use coping strategies that could help them reduce burnout occurrence risk (namely faculty students use only one of such strategies while high school students use none). The strategies they use to combat stress are dysfunctional and serve only to increase their risk of experiencing burnout. Both groups of students use Acceptance, Venting, and Behavioural Disengagement, which are herein shown to be positively related to their overall burnout.

As for Acceptance, the finding is in line with the results of Shin's et al.⁴ meta-analysis showing that Acceptance is

Table 4

²Coping strategies' impact on the overall burnout of Medical Faculty students

Construct/predictors	Std. coeff	Std. coeff (mean)	SD	<i>t</i>	R ²
Overall burnout					
Planning	0.124	0.119	0.055	2.272*	0.203
Positive Reframing	-0.134	-0.125	0.056	-2.374*	
Acceptance	0.096	0.097	0.047	2.032*	
Humour	0.213	0.209	0.045	4.753**	
Venting	0.161	0.165	0.048	3.358**	
Behavioural Disengagement	0.191	0.193	0.049	3.857**	
Self-blame	0.242	0.243	0.049	4.946**	

²Assessment of the model on the impact of coping strategies on the level of overall burnout among medical students: construct, predictors, obtained standardized coefficients (std. coeff.), mean std. coeff., standard deviation (SD), *t* statistics, and the R-squared.

* $p < 0.05$; ** $p < 0.01$.

Table 5

³Coping strategies' impact on different burnout levels of Medical Faculty students

Construct/predictors	Std. coeff.	Std. coeff. (mean)	SD	<i>t</i>	R ²
Personal burnout					
Humour	0.101	0.101	0.047	2.131*	0.308
Venting	0.170	0.172	0.047	3.638**	
Substance Use	0.132	0.132	0.048	2.764**	
Self-blame	0.387	0.387	0.051	7.661**	
Teachers-related burnout					
Humour	0.228	0.228	0.051	4.474**	0.215
Venting	0.158	0.161	0.058	2.733**	
Behavioural Disengagement	0.197	0.196	0.059	3.337**	
Self-blame	0.124	0.125	0.055	2.247*	
Colleagues-related burnout					
Humour	0.235	0.236	0.053	4.464**	0.138
Behavioural Disengagement	0.175	0.176	0.052	3.372**	
Studies-related burnout					
Planning	0.151	0.155	0.049	3.062**	0.317
Humour	0.134	0.134	0.048	2.767**	
Venting	0.139	0.142	0.051	2.697**	
Behavioural Disengagement	0.187	0.186	0.054	3.446**	
Self-blame	0.288	0.286	0.053	5.425**	

³Assessment of the model on the impact of coping strategies on the level of different types of burnout among medical students: construct, predictors, obtained standardized coefficients (std. coeff.), mean std. coeff., standard deviation (SD), *t* statistics, and the R-squared.

* $p < 0.05$; ** $p < 0.01$.

positively related to burnout. This finding might seem counter-intuitive as accepting the reality of a situation might imply an individual's attempt to consequently deal with the stressor¹⁹, which makes it a positive coping strategy. Indeed, a few studies prove its negative relation to burnout²⁸. However, as Lazarus²⁹ observed, Acceptance can be an adaptive strategy only in such circumstances when there is nothing an individual can do to change them; the relation was, for instance, later confirmed for medical professionals³⁰ facing dying patients. Since Acceptance leads to burnout in our examined groups, it leads us to the conclusion that the stressors could be changed, and Acceptance herein is rather a passive strategy that should be replaced and/or coupled with an active strategy. With regard to Venting and Behavioural Disengagement, both of them are confirmed to be positively related to students' overall burnout, which is in congruence with a number of other studies testing their relations to burnout and distress^{31,32}. The ineffectiveness of both strategies is referred to in Carver's¹⁹ study that provided this very instrument (Brief COPE). Chao³³ states that using the Venting of emotions dominantly suggests that emotions are focused on distress with no adaptive behavioural strategies. On the other hand, when people tend to use Behavioural Disengagement, they stop attempting to deal with stressors, while the stress remains³⁴. Therefore, both strategies are unfruitful and should be replaced with effective ones.

Apart from these three dysfunctional strategies, Medical Faculty students also use Planning, Humour, and Self-Blame, which increase their burnout, and only one strategy that is negatively related to their burnout – Positive Reframing.

Planning as a strategy occurs during secondary appraisal and is different from active coping, and mainly involves thinking about the potential active strategies and the solutions for dealing with the problem³⁴. Previous studies found that planning itself is perceived as stressful by some medical students and trainees, and not following the plan is seen as even more stressful³⁵. Herein, not only has planning been shown to be positively related to faculty students' overall and studies-related burnout but also to high school students' personal burnout. It may also indicate that 'a delay' in action-based coping has a deteriorating effect on the younger generations. Previous results of using Humour as a coping strategy are ambivalent, suggesting both its negative correlation with various burnout dimensions³⁶ and its ineffectiveness in burnout reduction³⁷. Other studies suggest that different types of humour can either decrease or increase job burnout³⁸ and that, for instance, self-enhancing humour is negatively correlated to burnout, while self-defeating humour is positively correlated³⁹. In addition, using humour to make fun of the situation can be a marker of cynicism which can be a sign of burnout. Humour was also linked with increased levels of emotional exhaustion⁴⁰. Since it is linked with all dimensions of faculty students' burnout herein, it should be substituted with a more effective strategy. Self-blame has been shown to be the most or one of the most maladaptive coping strategies in the medical profession³². Overuse of Self-blame can be indicative of the lack of self-confidence and the increased levels of insecurities in students

who can inaccurately perceive errors as self-made, which can, in return, paralyze them from moving further and learning how to behave in less-than-ideal situations with patients. Self-blame, along with Venting and Disengagement, has been found to be connected to elevated depersonalization as well as emotional exhaustion scores³¹. On the other hand, counseling interventions aiming to reduce self-blame have been proven to reduce emotional exhaustion as a burnout component⁴¹. This approach should be applied to Serbian medical students as well. Positive Reframing or, as Lazarus and Folkman⁴² named it, Positive Reappraisal, is, according to them, an emotional coping strategy that manages stress-induced emotions and does not focus on the stressor *per se*. In addition, as Carver et al.³⁴ state, dealing with the stressful reaction positively leads an individual 'to continue' or subsequently use an active coping strategy. Its negative correlation with burnout has been confirmed by previous studies⁴. Shin et al.⁴ add that it facilitates the expansion of positive emotions, which, in turn, increase one's ability for positive reframing in situations of intense and chronic stress. Herein, it has been shown as a positive and functional coping strategy and should be promoted as such and included in student stress management training.

The last strategy that appeared to be related to burnout herein is Substance Use. It is positively related to faculty students' personal burnout. van der Merwe et al.⁴³ confirm that students who use maladaptive coping strategies, like Substance Use, have decreased resilience to stress. Since high rates of substance abuse have frequently been reported among both medical students and health care professionals⁴⁴, this result confirms that the deteriorating effect of this dysfunctional mechanism should be communicated more seriously at the university level and students taught to use more functional strategies instead.

If the models of overall burnout are compared, the three predictors in the model of high school students (Acceptance, Venting, and Behavioural Disengagement) are among the seven predictors in the model of faculty students. This result indicates that faculty students use more coping strategies that can increase burnout than high school students and that they use one coping strategy that decreases it. When it comes to comparing the models for each specific burnout, there are some similarities. For personal and studies-related burnout, both of the groups use Venting. For teachers-related and colleagues-related burnout, both of the groups use Behavioural Disengagement. As seen, Behavioural Disengagement is herein used for people-related burnout and Venting for the dimensions of burnout which are more under the control of the self, but both strategies have already been associated with burnout and lower personal accomplishment of future physicians⁴⁰ and are, therefore, very dysfunctional.

Finally, our results show that Medical High School students are statistically significantly more prone to personal, studies-related, teachers-related, and overall burnout than Medical Faculty students, while both groups have the same level of colleagues-related burnout. That is an interesting insight emphasizing the increased need to work with medical

high school students on developing functional coping strategies and thus prevent future nurses' burnout.

Limitations of the study

This study has some limitations. It should be followed by a qualitative one to obtain more thorough insights into why certain strategies, such as humour or planning, are positively linked to burnout. Moreover, a larger sample of students, including those from other medical schools and universities in Serbia, should be included in the research to get more representative results for the entire future Serbian healthcare workforce.

Conclusion

The results of this study show an evident lack of using adaptive coping strategies, such as active coping or instrumental or emotional support, which would help students deal effectively with stress, thus decreasing the risk of developing burnout. On the contrary, the proven positive relationship between a large number of strategies the students use and burnout is alarming and should be a red flag to educators and the medical community. An adequate training should be created to help students substitute these dysfunctional ways of reacting to stress with more functional ones, which they would be able to use once they become a part of the professional workforce.

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Received on October 6, 2021

Revised on November 3, 2021

Accepted on November 5, 2021

Online First November 2021