

Faculty of Medicine and Dentistry Palacký University Olomouc



PSYCHOSOMATIC WELLBEING OF MEDICAL STUDENTS DURING COVID-19 PANDEMIC

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Introduction

The recent COVID-19 pandemic bears a major challenge for medical students. Studying online, isolation, constant changes of the restrictions, disrupted traveling schedule and fear of disease may become serious stressors and influence psychological well-being of medical students.

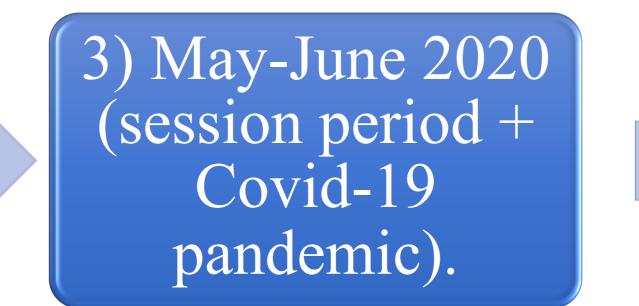
Objective

To explore psychosomatic wellbeing of medical students during the initial period of Covid-19 pandemic.

Methods:

64 university students were actively recruited for participation in the research of influence role of examination stressor on psychosomatic functions in October 2019. After the start of Covid-19 pandemic, 53 students agreed to participate in the present research. Participants filled in online questionnaires in 3 phases: 1) November 2019 (inter-session period); 2) January 2020 (examination session period); 3) May-June 2020 (session period + Covid-19 pandemic). Holmes and Rahe stress scale for non-adults was used for assessment of the chronic stress in phase 1, other questionnaires were used 3 times: Perceived Stress Scale (PSS) for assessment of acute stress, Kellner's Symptom Questionnaire for assessing symptomatology and emotional well-being, Brief COPE to assess cognitive and behavioral coping strategies. Medical Student Stressor Questionnaire (MSSQ) was used for assessment of specific stress and stressors in medical study.

1) November 2019 (intersession period) 2) January 2020 (examination session period)



Scheme 1: Flow diagram of the research questionnaire sending

Results

We found that the examination period before COVID-19 pandemic and after the start of pandemic (session 2 vs 3) were characterized by different changes in medical students' psychological state and well-being. During examination period (phase 2) medical students have felt more frightened $(0.39 \pm 0.06 \text{ vs } 0.23 \pm 0.05, \text{ p}<0.01)$, more panicky $(0.33 \pm 0.05 \text{ vs } 0.17 \pm 0.05, \text{ p}<0.01)$, more anxious $(6.25 \pm 0.05 \text{ vs } 5.21\pm0.5 \text{ p}<0.01)$ in comparison to phase 1. During the initial period of Covid-19 (phase 3) in comparison with phase 1, students felt unable to control the important things in their life (3.07+0.16 vs 2.48+0.16, p<0.001), similar changes were on other scales of PSS; the main coping mechanism used among the students during phase 3 was getting emotional support and advice from family (2.21+0.14 vs 2.69+0.14, p<0.01). Most of other parameters of psychosomatic wellbeing in phase 3 did not differ from phase 1. Graph 1: Correlation of standard scales with stress from Covid-19, |r|>0,40, p<0,02

Results

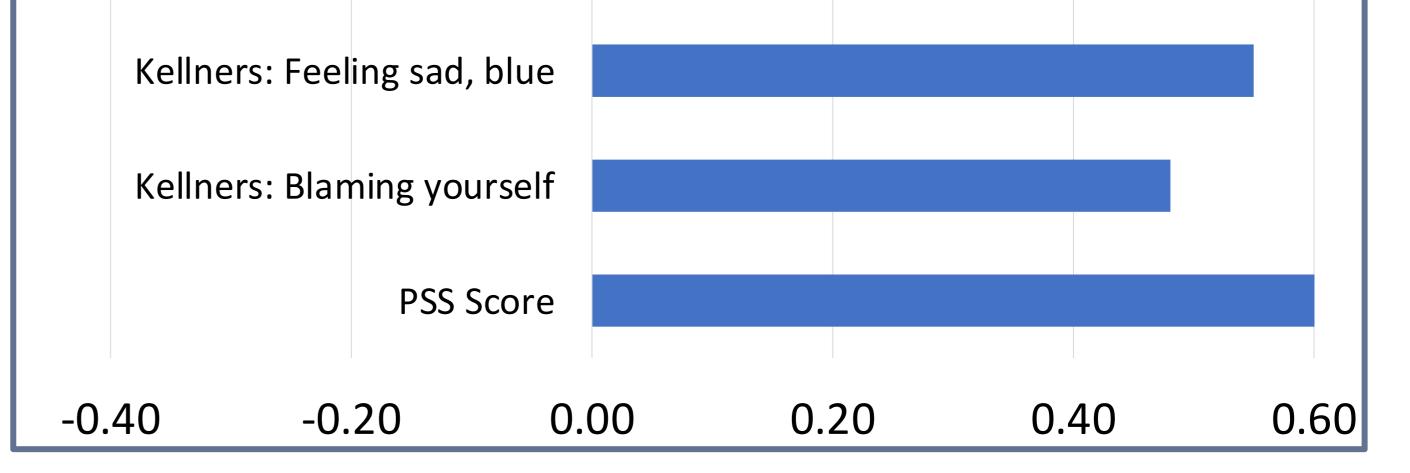
analysis

MSSQ Academic Related Stressor

Kellners: Depressed

Kellners: No aches anywhere

Kellners: Feeling guilty



Conclusion

At the initial period of Covid-19 medical students did not demonstrate deterioration of major psychosomatic parameters. Students used emotional support from the families more extensively during initial period of Covid-19 pandemic in comparison with intersession period, which might help them to maintain their psychosomatic wellbeing. Subjective perception of stress from Covid-19 positively correlated with feeling sad, blue, guilty, depressed, Perceived Stress Scale score and academic stress.

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