

Impact of Coronavirus Disease 2019 (COVID-19) pandemic on internal medicine residency training program: A single-center survey research



Donlawat Saengpanit MD.

Nephrology Center, Department of Medicine, Police General Hospital, Bangkok, Thailand

Background

- The COVID-19 pandemic has impacted the internal medicine residency training program.
- The objectives are to study the pandemic's effect on residents' mental health and internal medicine residency training program

Summary of work

- This study was single-center survey research with online questionnaires distributed among the internal medicine residents at Police General Hospital during the third wave of the pandemic.
- Data were collected between June 1st and June 14th of 2021.
- The survey requested demographic and perception of the COVID-19 situation data and information related to the anxiety using the 6-item State-Trait Anxiety Inventory (STAI-6).

Results

- Responses were received from 100% of the 21 residents.
- The 90.5 % of respondents reported moderate to severe anxiety with a mean STAI-6 score of 58.2 and a standard deviation of 11.6.
- There was no association between STAI-6 score and demographic data, including age, sex, seniority, and COVID-19 related workload.
- The residents' and their families' health was the primary anxiety source.
- During the outbreak surge, 70.6 percent of respondents were substantially concerned about their learning.
- The most significant influences on residents' learning were increased workload, the elective program cancellation, and lack of time to conduct assessment activities

Table 1. Univariable analysis of factors associated with resident anxiety state during COVID-19

Characteristics	N	Mean	SD	P-value
Sex				
Male	14	57.4	12.6	0.90
Female	7	58.1	12.0	
Age (years)				
< 30	10	55.3	9.05	0.41
≥ 30	11	59.7	14.4	
Education level				
PGY-1	7	55.7	10.7	0.89
PGY-2	7	58.6	9.97	
PGY-3	7	58.6	16.3	
COVID-19 related workload (day per month)				
0-7	8	54.6	8.72	0.38
> 8	13	59.5	13.7	
History of isolation due to close contact to COVID-19				
Yes	3	58.9	15.4	0.88
No	16	57.7	12.0	
Total	21 (100%)	58.2	11.6	
Moderate to severe anxiety state (STAI-6 ≥ 45)	19 (90.5%)			
Low anxiety state (STAI-6 < 45)	2 (9.5%)			

*Abbreviation: PGY = Postgraduate Year

Figure 1. Sources of residents' anxiety during COVID-19 pandemic

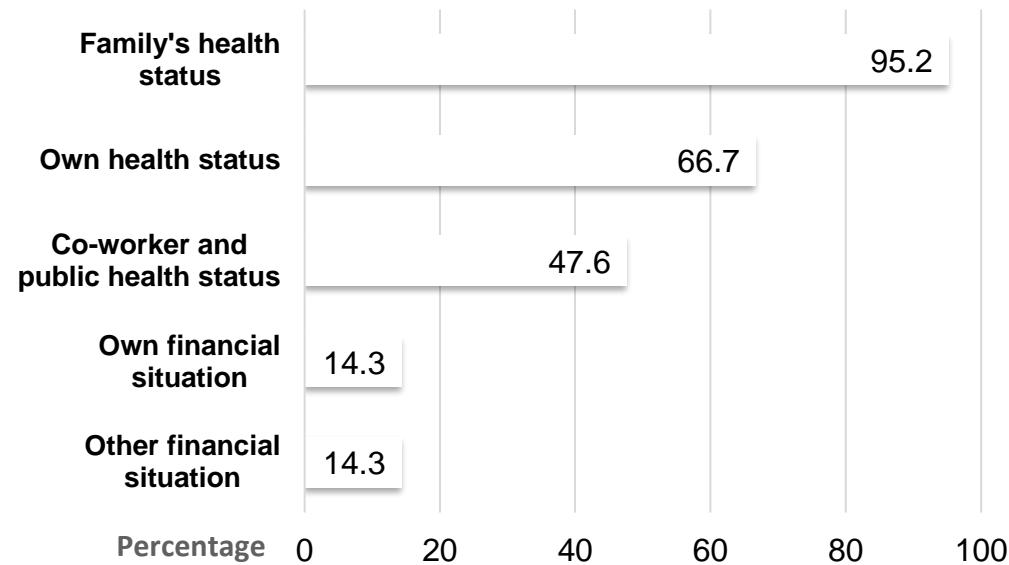
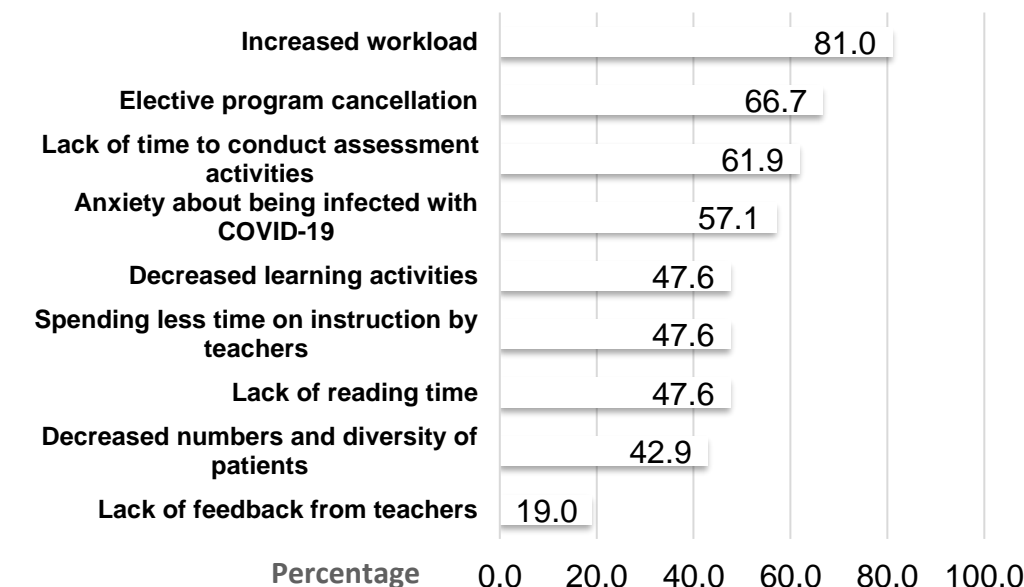


Figure 2. Effects of COVID-19 pandemic on residents' learning



Discussion and Conclusion

- The impact of the COVID-19 pandemic on residents' mental health and internal medicine training program is quite concerning, so providing residents with mental support is needed

Take home messages

- The COVID-19 pandemic's disruption to the residency training program cannot be underestimated.
- As a result, it is necessary to adapt residency training programs to account for such consequences.

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