Healthcare Worker's Mental Health During the Epidemic Peak of COVID-19 [Letter]

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Dear editor

We have read the article "Healthcare Worker's Mental Health and Their Associated Predictors During the Epidemic Peak of COVID-19". Based on the results, the researchers concluded that healthcare worker's stress, anxiety and depression are influenced by social-support, working time, discrimination and workplace violence; and not influenced by age, gender, working at designated hospital, medical equipment, patient–physician relations and household transmission-related fears.[1]

Is it true that seven variables have no effect on stress, anxiety and depression? Could these variables have an indirect effect on stress, anxiety and depression? Which statistical analysis can be used to analyze this indirect-effect?

In this study, the authors used a logistic-regression test, a method used to analyze the effects of independent variables on the dependent variable simultaneously. Thus, it has been assumed that all independent variables have a direct-effect on stress, anxiety and depression.

It is unlikely that all variables have a direct-effect on stress, anxiety and depression. There are several variables which have an indirect-effect through intervening variables. For example, age is related to working at designated hospitals, working at designated hospitals has an effect on discrimination experience, then discrimination experience has an effect on stress, anxiety and depression. Referring to other cases,[2,3] we propose a framework involving independent, intervening and dependent variables (Figure 1), which the researchers can check and modify.
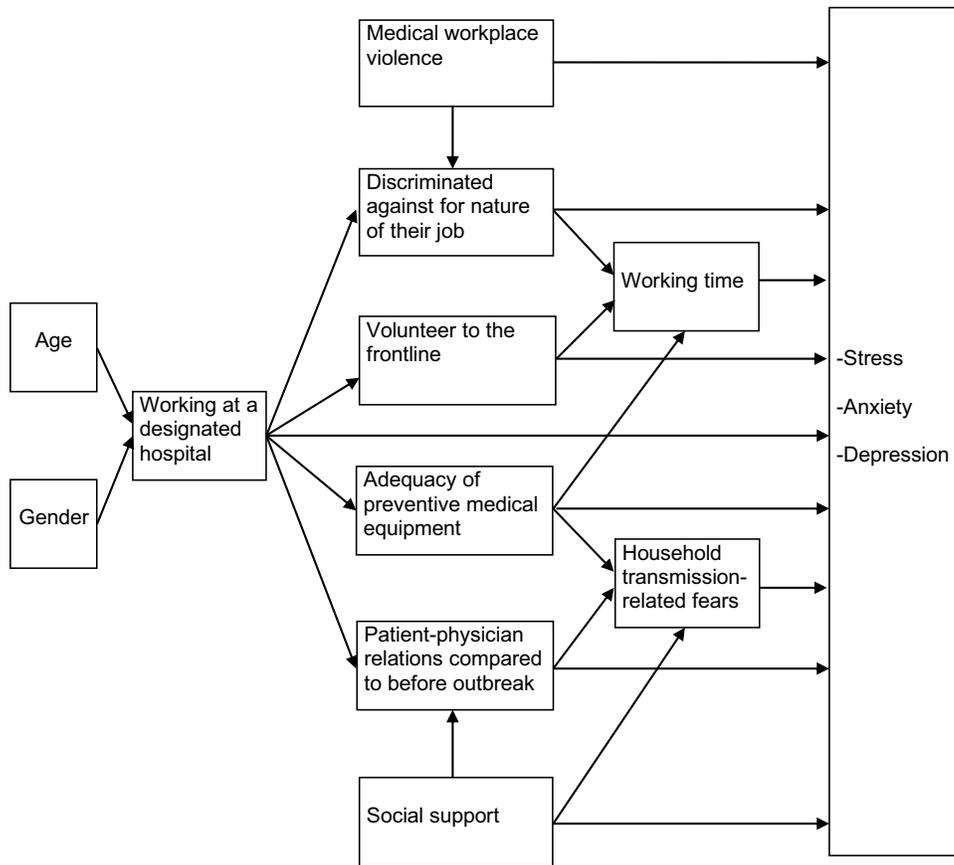
Based on Figure 1, the researchers can carry out further analysis to test the significance of each effect pathway, so that, the direct-effect, indirect-effect and total-effect will be obtained. In this case, the appropriate method is path-analysis.[2–4] In this study, the researchers used data with nominal scale, so one of the suitable statistical software is Smart-PLS.[4]

We recommend that researchers undertake a further analysis, in order to obtain more complete information on the effects of the eleven variables on stress, anxiety and depression.

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Disclosure

The authors report no conflicts of interest for this communication.

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Figure 1 Effects of independent and intervening variables on stress, anxiety and depression.

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