Peer Review Report

Review Report on Differences in sleep patterns and mental health problems during different periods of COVID-19 outbreak among community-dwelling older men in Hong Kong

Original Article, Int J Public Health

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EVALUATION

Q 1 Please summarize the main findings of the study.

The study revealed a positive relationship between poor sleep quality and worsening of mental health among Hong Kong community-dwelling older men. As the study was carried out within the context of COVID-19, it highlighted that between 2nd and 3rd wave of the virus, participants demonstrated better sleep cycles, but worsened mental health.

Q 2 Please highlight the limitations and strengths.

The strength of the current study is in its originality and scarcity of the context in which it was conducted. The pandemic has changed the functioning of society. As this study provides first-hand information from the specific stages of COVID-19, it would give valuable insights into the existing literature on outbreaks and coronavirus. However, limitations include relatively small sample size, potential selection bias, and flaws of cross-sectional study designs, such as the inability to establish causation relationships.

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The statistical analysis of the study is relatively valid and well applied. One minor shortcoming is the sample size, as it could be more comprehensive if it explored further the distinct groups of layers. This could also affect the validity of certain scales, such as the Hospital Anxiety and Depression Scale, as used in the study. The Hospital Anxiety and Depression Scale were observed to have relatively low sensitivity in detecting clinical depression. With a small sample, instances of false-negative may occur. If possible, adjust future research on the same subject matter with optimum power.

Although the procedures of the study are highly replicable, the outcomes may not be the case. The highlight of this study is the utilization of COVID data from specific time points, therefore, the situation proves to be context-based. To replicate the study, it would require data to be gathered before and immediately after the spreading of another virus, where lockdown and preventive measures are enforced to the maximum extent.

The results of the study are valid and correctly interpreted. However, it could be insightful if the authors explored the co-occurring events of The Anti-Extradition Law Amendment Bill Movement. As that may constitute an independent phenomenon that affects the mental health of Hong Kong citizens, especially with the elderly population. Further research may be needed to investigate the independent and interactive effects of the political movement and the pandemic's impact on mental health.

PLEASE COMMENT

Yes		
Q 5	Are the keywords appropriate?	
Yes		
Q 6	Is the English language of sufficient quality?	
Yes		
Q 7	Is the quality of the figures and tables satisfactory?	
Yes.		
Q 8	Does the reference list cover the relevant literature adequately and in an unbiased manner?)	
Yes		
QUALITY /	ASSESSMENT	
Q 9	Originality	
Q 10	Rigor	
Q 11	Significance to the field	
Q 12	Interest to a general audience	
Q 13	Quality of the writing	
Q 14	Overall scientific quality of the study	
REVISION	LEVEL	
Q 15 Accept.	Please make a recommendation based on your comments:	