The influence of resilience on mental health: The role of general well-being: Methodological issues to avoid prediction fallacy in a cross-sectional study

We have read with great interest the manuscript entitled “The influence of resilience on mental health: The role of general well-being” by Tingting Gao MD et al. that was published in International Journal of Nursing Practice in 2017. The aim of the study was to explore the relationship between resilience and mental health and general well-being among nurses. It was concluded that general well-being is an effective and significant predictor of resilience and mental health, whereas it both can moderate and mediate the relationship (Gao et al., 2017). However, although this was a valuable investigation and its findings were very interesting, some methodological issues should be considered.

First point, Gao et al. (2017) evaluated the predictive performance of general well-being on resilience and mental health in a cross-sectional study, whereas longitudinal studies are the most important for making assumptions for clinical prediction models (Steyerberg, 2008). The temporality assumption (the dependent variable has to occur after the independent variable) must be ensured in the prediction model. Thus, prediction models resulting from cross-sectional designs can be misleading (Ayubi & Sani, 2016; Steyerberg, 2008).

Second point, considering the predictive performance of general well-being on resilience and mental health to be significant is an optimistic interpretation. The internal and external validation of the prediction model must be done through bootstrapping and split validation, respectively (Noto et al., 2016).

Therefore, according to the above explanation, it is necessary considering to this point in interpretation of results of this study for readers.

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