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LETTER

Risk Factors and Prediction Nomogram of Cognitive Frailty with Diabetes in the Elderly [Letter]

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Dear editor

The article with the title "Risk Factors and Prediction Nomogram of Cognitive Frailty with Diabetes in the Elderly" caught our attention because it produces a nomogram prediction model that can be used to predict cognitive frailty in elderly diabetic patients. This nomogram involves six factors (age, albumin levels, calf circumference, intellectual activity, depressive state, and duration of diabetes), which were obtained from the results of analysis. In the initial stage of analysis there were 12 significant risk factors for cognitive frailty, but in the final stage there were only 6 significant factors, namely age, albumin levels, calf circumference, intellectual activity, depressive state, and duration of diabetes. Meanwhile, factors that are not significant include walking assistance, self-care ability, BMI, hemoglobin, creatinine, and grip strength.[1] Is it true that these last six factors have no effect on cognitive frailty? Could these factors have an indirect effect?

Researchers used a logistic regression test to analyze the significance of cognitive frailty risk factors, so that indirect effects could not be detected, because this test assumes that all factors have a direct effect. If we suspect that one of the factors, for example self-care ability, has an indirect effect, then we have to go through an intermediate variable, for example depressive state. So first self-care ability affects depressive states and then depressive states affect cognitive frailty.[2]

Therefore, we recommend that further analysis be carried out to prove the existence of indirect effects from the 12 factors. In this case, the method that can be used is path-analysis. Because researchers use nominal scale data, one program that can be used is Smart-PLS.[3–5] We hope that the results of this advanced analysis will provide more accurate information for improving predictive models in the future.

Disclosure

The authors report no conflicts of interest in this communication.

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