


# Age-Dependent Association Between Body Mass Index and All-Cause Mortality Among Patients with Hypertension: A Longitudinal Population-Based Cohort Study in China [Letter]

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## Dear editor

We are writing in response to the article titled “Age-Dependent Relationship Between Body Mass Index and All-Cause Mortality Among Patients with Hypertension: A Longitudinal Population-Based Cohort Study in China” by Huang et al, published in Clinical Epidemiology. The study conducted by Huang et al investigated the age-dependent association between body mass index (BMI) and all-cause mortality among patients with hypertension in China. The findings revealed a U-shaped relationship between BMI and all-cause mortality, with a trough at 26–27 kg/m<sup>2</sup>. The study also highlighted the differential impact of BMI on mortality risk across different age groups, suggesting that moderate weight gain may benefit longevity in middle-aged and elderly hypertensive patients. The use of a longitudinal population-based cohort and the use of sophisticated statistical models with continuous BMI and age are key strengths of this study. These findings have important implications for individualized weight management interventions for hypertensive patients, especially in relation to age at diagnosis.<sup>1</sup>

Despite the outstanding contributions, we have comments on the weaknesses of this study including the limitation of using self-reported data to calculate body mass index (BMI), which may introduce measurement error. In addition, the potential influence of other chronic diseases on the relationship between BMI and mortality risk was not fully explained. In addition, this study only considered BMI information at baseline, without considering changes in BMI during the follow-up period, which may affect the observed results. In addition, the data was extracted from Shanghai, which is the largest urban center in China, so it may be less generalized to the Chinese population as a whole. Therefore, future research is needed to explore the relationship between various populations to confirm these findings.

To improve the reliability and generalizability of the results, future studies may consider using direct measurement data to calculate BMI, rather than relying on self-reported data. In addition, it is important to expand the scope of information regarding other chronic diseases at the time of participant recruitment, so that the potential influence of other health conditions on the relationship between BMI and mortality risk can be considered. In addition, considering changes in BMI during the follow-up period will provide a better understanding of the relationship between BMI and mortality. Studies involving a wider and diverse population in different regions of China would also be helpful in ensuring the generalizability of the findings. Finally, future studies could consider other factors that may influence the relationship between BMI and mortality, such as comorbidities, lifestyle and genetic factors, to provide a more comprehensive understanding of the relationship.<sup>2,3</sup>

## Disclosure

The author(s) report no conflicts of interest in this communication.

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