

# Effect of Health Literacy Intervention on Glycemic Control and Renal Function Among Thai Older Adults at Risk of Type 2 Diabetes Mellitus [Letter]

Dongrui Liang<sup>1,\*</sup>, Shengnan Ma<sup>1,\*</sup>, Xiaodong Li<sup>2</sup>

<sup>1</sup>2nd Department of Ophthalmology, Baoding No. 1 Central Hospital of Hebei Medical University, Baoding, Hebei, People's Republic of China;

<sup>2</sup>Department of Nephrology, Baoding No. 1 Central Hospital of Hebei Medical University, Baoding, Hebei, People's Republic of China

\*These authors contributed equally to this work

Correspondence: Xiaodong Li, Department of Nephrology, Baoding No. 1 Central Hospital of Hebei Medical University, Baoding Great Wall North Street No 320, Baoding, Hebei, 071000, People's Republic of China, Tel +8618617789590, Email lxd\_765@sina.com

## Dear editor

We read a research article “Effect of Health Literacy Intervention on Glycemic Control and Renal Function Among Thai Older Adults at Risk of Type 2 Diabetes Mellitus” written by Katekaw Seangpraw and his colleagues with great interest.<sup>1</sup> The study provided insights into the efficacy of a health literacy intervention in enhancing glycemic control and renal function among Thai older adults who are at risk of developing type 2 diabetes mellitus (T2DM). We find this exploration to be highly encouraging. However, it is crucial to include and exclude some certain significant factors that influence the research results. Thus, these vital factors should be considered in this study.

Firstly, the exclusion criteria for this study should encompass chronic kidney disease (CKD), especially considering that a comparison of albuminuria levels between the two groups. These factors could significantly influence the renal functions of these patients, leading to a lack of comparability in the levels of serum creatinine between the two groups in this study. A cohort study involving 1008 patients with T2DM revealed that the variability of albuminuria could serve as an independent predictor for the decline of renal function over the long term in patients with T2DM.<sup>2</sup>

Secondly, the authors did not consider anti-hypertensive medications as impact factors for this research, especially for renin-angiotensin system (RAS) blockade and sodium-glucose cotransporter 2 (SGLT2). Numerous clinical trials have provided compelling evidence that the renin-angiotensin system (RAS) blockade, is highly effective in managing and slowing down the progression of CKD. It is widely recognized that the initiation of RAS blockade is often accompanied by a temporary decrease in the eGFR. However, this short-term reduction can potentially lead to the long-term preservation of kidney function.<sup>3</sup> SGLT2 inhibitors have been observed to decrease eGFR in patients with T1DM or T2DM. But this was followed by a gradual recovery and stabilization of renal function.<sup>4</sup> In summary, all the aforementioned medications have a certain impact on the renal functions of these patients in this study. However, it is crucial to note that these significant influencing factors were not included in this research.

Lastly, this study has a limited sample size and a short duration of follow-up, which may not adequately show the dynamic changes in renal functions among these patients.

In conclusion, we acknowledge that the study conducted by Katekaw Seangpraw can serve as a valuable point of a health literacy intervention on glycemic control and renal function among Thai older adults at risk of T2DM.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Seangpraw K, Ong-Artborirak P, Boonyathee S, et al. Effect of health literacy intervention on glycemic control and renal function among Thai older adults at risk of type 2 diabetes mellitus. *Clin Interv Aging*. 2023;18:1465–1476. doi:10.2147/CIA.S413456
2. Lin CH, Lai YC, Chang TJ, et al. Visit-to-visit variability in albuminuria predicts renal function deterioration in patients with type 2 diabetes. *J Diabetes Investig*. 2022;13(6):1021–1029. doi:10.1111/jdi.13761
3. Weir MR, Lakkis JI, Jaar B, et al. Use of renin-angiotensin system blockade in advanced CKD: an NKF-KDOQI controversies report. *Am J Kidney Dis*. 2018;72(6):873–884. doi:10.1053/j.ajkd.2018.06.010
4. Fioretto P, Zambon A, Rossato M, et al. SGLT2 inhibitors and the diabetic kidney. *Diabetes Care*. 2016;39(Suppl 2):S165–71. doi:10.2337/dcS15-3006

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Clinical Interventions in Aging 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Clinical Interventions in Aging editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

### Clinical Interventions in Aging

Dovepress

### Publish your work in this journal

Clinical Interventions in Aging is an international, peer-reviewed journal focusing on evidence-based reports on the value or lack thereof of treatments intended to prevent or delay the onset of maladaptive correlates of aging in human beings. This journal is indexed on PubMed Central, MedLine, CAS, Scopus and the Elsevier Bibliographic databases. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/clinical-interventions-in-aging-journal>

<https://doi.org/10.2147/CIA.S443350>