







# Diabetes Distress Among Patients Undergoing Surgery for Diabetic Retinopathy and Associated Factors: A Cross-Sectional Survey [Response to Letter]

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## Dear editor

We sincerely appreciate your interest in our study, “Diabetes Distress Among Patients Undergoing Surgery for Diabetic Retinopathy and Associated Factors: A Cross-Sectional Survey” and thank you for giving us the opportunity to respond. We are also very grateful for the acknowledgement and suggestions of this study in the letter to editor.

We would like to make the following responses to the limitations of this study as suggested by the letter:

Firstly, in this study, sample size was calculated using G\*power 3.1 software. There were 6 predictors: demographic information, disease-related information, diabetes distress, self-management, family support and social support, and the predictors were selected using the same method as Kim et al.<sup>1</sup> However, we still very much appreciate your valuable suggestion. As you suggest, many studies also identify the number of predictors through the dimensions of the scale.<sup>2</sup> In this study, if the sample size is calculated according to 18 predictor variables, the study still meets the sample size requirement. In future studies, we will take this into consideration and calculate the sample size according to the maximum sample size.

Secondly, as you mentioned that this study is a cross-sectional study, causality should be interpreted with caution. We strongly agree with your views. Therefore, this point was stated in the limitations section of this paper: a cross-sectional, two-centre study with results that need to be interpreted with caution. Future multi-centre and longitudinal studies are needed to draw more robust conclusions.

Finally, regarding the limited variables included in the multivariate logistic regression, we recognize the potential benefits and risks associated with incorporating variables with P-values less than 0.1 or 0.2 from univariate analysis.<sup>3</sup> However, we excluded the gender, education level and diabetes duration and complications in our study. On the one hand, all factors except diabetes duration had a P-values higher than 0.2 in the univariate analysis, on the other hand, the cell containing zero, both of which could impact interpretation.<sup>4</sup> Meanwhile, among the limitations of this study, it was shown that the regression model predicted 30.6% of diabetes distress (DD), which means that this study did not fully cover other factors influencing DD in diabetic retinopathy (DR) surgery patient. Therefore, other factors that may influence DD in DR surgery patient, such as psychological and physiological factors, need to be included in future studies. Of course, the coping style and personality type you mentioned will also be included in future studies.

Thank you very much for the many valuable suggestions you have given us for future research directions. Some of the work we are doing, such as exploring the subjective experience of DD in DR surgery patients through qualitative

studies and constructing structural equation model or mediated effect model to explore specific intervention mechanisms. In our future research we will consider conducting the large-scale, multi-centre study of DD in DR surgery patients to draw more convincing conclusions and identifying different trajectories of DD in DR surgery patients through longitudinal studies and growth mixed models. More constructive measures are proposed to improve the quality of life and health prognosis of DR surgery patients in the future.

In summary, we very grateful to the editor for the valuable opportunity. We also appreciate both the acknowledgement of the study's strengths and the constructive feedback for improvement provided in the letter to the editor. If you have any questions, please feel free to talk to us.

## Disclosure

The authors declare that they have no conflicts of interest in this communication.

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