

Analysis of Prevalence of Thyroid Nodules and Related Factors in Physical Examination Population in a Hospital in Jinan [Letter]

Yu Hao

School of Graduate, Heilongjiang University of Chinese Medicine, Harbin, Heilongjiang, 150006, People's Republic of China

Correspondence: Yu Hao, School of Graduate, Heilongjiang University of Chinese Medicine, Harbin, Heilongjiang, 150006, People's Republic of China, Email tg2605330019@163.com

Dear editor

I have recently perused the article written by Meng et al entitled “Prevalence and Related Factors of Thyroid Nodules in Physical and Examination Population in a Level-A Hospital in Jinan”,¹ which was published in the Journal of Multidisciplinary Healthcare. This study reaches the conclusion that gender, age, and occupation are the primary factors influencing the formation of thyroid nodules (TNs). I extend my sincerest gratitude to the authors for their invaluable contribution and would like to offer a few suggestions for consideration.

First, the research conducted a comprehensive statistical analysis to determine the occurrence of thyroid nodules among medical professionals and general healthy population. Furthermore, it employed multivariate logistic regression analysis to delve into the potential risk factors that are linked to the development of TNs. This process not only enhances our understanding of the condition but also provides valuable insights into the prevention and management strategies for this commonly encountered disease in clinical practice.

However, this study did not go further into multivariate analysis to account for potential confounding variables, which I believe is an area for deeper exploration. Age, occupation, emotional well-being, and lifestyle habits are known to exert significant influence on thyroid health.² A test suggested that stress and psychological factors have been linked to alterations in the hypothalamic-pituitary-thyroid axis,³ potentially affecting thyroid function and nodule formation. If these variables are included in logistic regression model, the risk factors associated with TNs can be carefully identified by excluding confounding factors.

Second, while the study performed subgroup analyses based on age, gender, and occupation, there is room for more stratification. Features such as education level, psychological status, and dietary habits could offer additional insights.⁴ More detailed stratified analyses could enhance the utility of findings as well as provide actionable information for clinical practice, particularly in tailoring preventive measures and early interventions for high-risk groups.

In addition, due to the homogeneity of samples, the trial being limited to one center may lead to selection bias. Patient demographics can vary across geographic settings as well as socioeconomic conditions, reducing the reliability of final results. In the future, multi-center trials could be conducted to effectively avoid bias and improve the validity and generalisability of outcomes.

Surprisingly, this paper has a special focus on healthcare workers, emphasizing the need for heightened awareness and proactive health management among individuals in high-stress professions. The implications of occupational stress on thyroid health warrant further exploration, particularly in light of the growing body of evidence linking psychosocial factors to endocrine disorders.⁵ Initiatives to mitigate the impact of occupational stress, such as stress management programs and work-life balance policies, could be pivotal in reducing the incidence of TNs among at-risk groups.

I eagerly anticipate the continuation of this research trajectory, which has the potential to significantly inform clinical practices and public health strategies aimed at alleviating the healthcare burden related to TNs.

Disclosure

The author reports no conflicts of interest in this communication.

References

1. Meng C, Yang P, Wang Y, et al. Prevalence and related factors of thyroid nodules in physical examination population in a level-a hospital in Jinan. *J Multidiscip Healthc*. 2024;17:3753–3762. doi:10.2147/JMDH.S443884
2. Wan Z, Li Y, Dong X, et al. Influence of metabolic syndrome and lifestyle factors on thyroid nodules in Chinese adult men: a cross-sectional study. *Eur Thyroid J*. 2023;12(6). doi:10.1530/ETJ-23-0168
3. Fischer S, Strahler J, Markert C, et al. Effects of acute psychosocial stress on the hypothalamic-pituitary-thyroid (HPT) axis in healthy women. *Psychoneuroendocrinology*. 2019;110:104438. doi:10.1016/j.psyneuen.2019.104438
4. Li R, Li G, Wang Y, et al. Psychological distress and sleep disturbance throughout thyroid nodule screening, diagnosis, and treatment. *J Clin Endocrinol Metab*. 2021;106(10):e4221–e4230. doi:10.1210/clinem/dgab224
5. Hyun YG, Alhashemi A, Fazelzad R, et al. A systematic review of unmet information and psychosocial support needs of adults diagnosed with thyroid cancer. *Thyroid*. 2016;26(9):1239–1250. doi:10.1089/thy.2016.0039

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Journal of Multidisciplinary Healthcare 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Journal of Multidisciplinary Healthcare 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.

Journal of Multidisciplinary Healthcare

Dovepress

Publish your work in this journal

The Journal of Multidisciplinary Healthcare is an international, peer-reviewed open-access journal that aims to represent and publish research in healthcare areas delivered by practitioners of different disciplines. This includes studies and reviews conducted by multidisciplinary teams as well as research which evaluates the results or conduct of such teams or healthcare processes in general. The journal covers a very wide range of areas and welcomes submissions from practitioners at all levels, from all over the world. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-multidisciplinary-healthcare-journal>

<https://doi.org/10.2147/JMDH.S504060>