

### Taibah University

## Journal of Taibah University Medical Sciences



www.sciencedirect.com

Letter to the Editor

# Response to the Letter to the editor criticizing our recently published work



Mai E. Abbass, Ph.D. a,\* and Alaa M. El-Moatasem, Ph.D. b

a Department of Physical Therapy for Paediatrics, Faculty of Physical Therapy, Cairo University, Giza, Egypt

Received 25 September 2023

Dear Editor,

In response to the editor's letter criticizing our recently published work, we would like to clarify the following points. Our study investigated intrathoracic oscillations' effects on pulmonary function in children with spastic quadriplegic cerebral palsy. In the literature, the majority of the published research that studied the effect of specific treatment on respiratory function with similar objectives as our published work did not use predictive equations. <sup>2-4</sup>

We would like to point out that the stated references in the letter to the editor follow a different research objective than ours. The study by Sadiq et al., aimed to discover the relationship between weight, height, and age with spirometry variables and to generate a regression equation using weight as an independent variable alongside age and height among children and adolescents from Karachi. The study by Chang et al.,6 aimed to establish reference equations for spirometry in healthy Taiwanese children and to assess the applicability of the Global Lung Function Initiative (GLI) 2012 equations to Taiwanese children. The study by Jones et al.,7 aimed to generate spirometry reference values in Brazilian children aged 3-12 years old and compare those values to the values used in the equations currently in use in Brazil. The study by Kim et al., aimed to determine the reference values that would apply to Korean children and adolescents. Based on the stated references, the formulation of predictive respiratory equations is to compare the respiratory function with a

#### Source of funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

#### Conflict of interest

The authors have no conflict of interest to declare.

#### Ethical approval

Not applicable.

#### **Author's contributions**

The project was developed and designed by AME and MEA, who also performed the research, gathered, categorised, and processed the data. Research resources were offered by AME. MEA wrote the article's first and last drafts. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

E-mail: mai.tamer.elmasry@cu.edu.eg (M.E. Abbass)
Peer review under responsibility of Taibah University.



Production and hosting by Elsevier

b Department of Cardiovascular/Respiratory Disorder and Geriatrics, Faculty of Physical Therapy, Cairo University, Giza, Egypt

normal reference. This is completely different from our study's objective, which compares statistically each child's results before and after treatment. Furthermore, Parker<sup>9</sup> mentioned clearly that "Spirometry is useful to detect and monitor airway disease in patients with symptoms, risk factors, or suspicion of airway disease. Spirometric equipment is readily available and requires little maintenance and some calibration." Therefore, there is no necessity to use predictive respiratory equations in studies using spirometry in the assessment of respiratory functions after treatment.

<sup>\*</sup> Corresponding address: Department of Physical Therapy for Paediatrics, Faculty of Physical Therapy, Cairo University, Giza, Egypt.

#### References

- El-Moatasem AM, Abbass ME. Effect of intrathoracic oscillations on pulmonary functions in children with cerebral palsy.
   J Taibah Univ Med Sci 2023; 18(6): 1254–1260. <a href="https://doi.org/10.1016/j.jtumed.2023.05.003">https://doi.org/10.1016/j.jtumed.2023.05.003</a>.
- Kanna B, Balabaskar K. A study on efficacy of respiratory exercises coupled with neurodevelopmental treatment on pulmonary function of children with spastic quadriplegic cerebral palsy. Biomed Pharmacol J 2019; 12(3). Published online, <a href="https://api.semanticscholar.org/CorpusID:208382035">https://api.semanticscholar.org/CorpusID:208382035</a>.
- Lee HY, Cha YJ, Kim K. The effect of feedback respiratory training on pulmonary function of children with cerebral palsy: a randomized controlled preliminary report. Clin Rehabil 2014; 28(10): 965–971. https://doi.org/10.1177/0269215513494876.
- Shin S-O, Kim N-S. Upper extremity resistance exercise with elastic bands for respiratory function in children with cerebral palsy. J Phys Ther Sci 2017; 29(12): 2077—2080. <a href="https://doi.org/10.1589/jpts.29.2077">https://doi.org/10.1589/jpts.29.2077</a>.
- Sadiq S, Rizvi NA, Soleja FK, Abbasi M. Factors affecting spirometry reference range in growing children. Pakistan J Med Sci 2019; 35(6): 1587–1591. https://doi.org/10.12669/pjms.35.6.1212.

- Chang S-M, Tsai H-J, Tzeng J-Y, et al. Reference equations for spirometry in healthy Asian children aged 5 to 18 years in Taiwan. World Allergy Organ J 2019; 12(11):100074. <a href="https://doi.org/10.1016/j.waojou.2019.100074">https://doi.org/10.1016/j.waojou.2019.100074</a>.
- Jones MH, Vidal PCV, Lanza FC, et al. Reference values for spirometry in Brazilian children. J Bras Pneumol Publicacao da Soc Bras Pneumol Tisilogia 2020; 46(3):e20190138. <a href="https://doi.org/10.36416/1806-3756/e20190138">https://doi.org/10.36416/1806-3756/e20190138</a>.
- Kim DH, Kim JH, Lim DH. Normal predicted reference values for spirometry in Korean children and adolescents. Child (Basel, Switzerland) 2020; 7(9). <a href="https://doi.org/10.3390/children7090105">https://doi.org/10.3390/children7090105</a>.
- Parker MJ. Interpreting spirometry: the basics. Otolaryngol Clin North Am 2014; 47(1): 39-53. <a href="https://doi.org/10.1016/j.otc.2013.10.002">https://doi.org/10.1016/j.otc.2013.10.002</a>.

How to cite this article: Abbass ME, El-Moatasem AM. Response to the Letter to the editor criticizing our recently published work. J Taibah Univ Med Sc 2024;19(1):151–152.