

Vertigo Following COVID-19: A Scoping Review



1 Introduction



- Vertigo is the illusion of self or environmental motion which can be central or peripheral in origin¹.
- There's a history of unstandardisation in vertigo terminology which can potentially lead to variation in the diagnosis and treatment of patients as well as inconsistencies in research².
- A range of symptoms, including vertigo, are believed to increase following COVID-19, however most studies are of poor quality³.
- Is research on vertigo following COVID-19 sufficient to conduct a high-quality systematic review?

2 Methods



- Aims to investigate in context of vertigo following COVID-19:
 1. Terminology used for vertigo.
 2. Assessment and diagnosis of causes of vertigo.
 3. Literature quality.
- Conduct stakeholder engagement (Audiologist, Neurologist, Stroke consultant and Audiovestibular consultant).
- 5 databases searched using two inclusion criteria due to unclear use of the term "vertigo":
 1. Dizziness group
 2. Vertigo group

Clarivate
Web of Science

Embase®

Scopus®

MEDLINE

Cochrane

3 Results



4984
Articles identified

2335
Title and abstract
screened

214
Full text screened

54
Dizziness group

8
Vertigo group

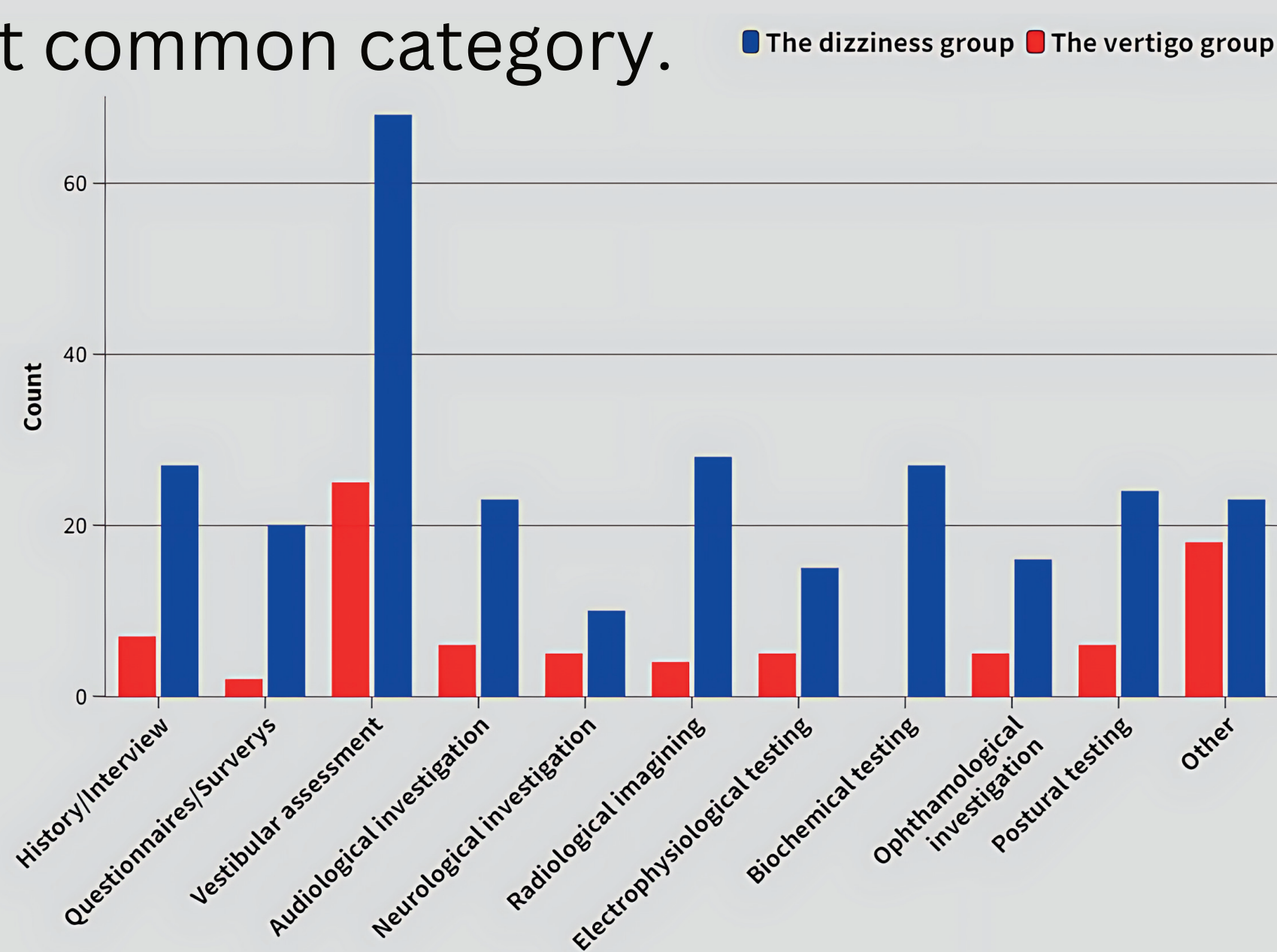
3.1 Terminology

- Meaning of the term "vertigo" used in articles was unclear.
- 23 different terms to describe "vertigo" or "dizziness" were identified.
- No difference in the terms used between researcher disciplines.



3.2 Vertigo assessment and diagnosis

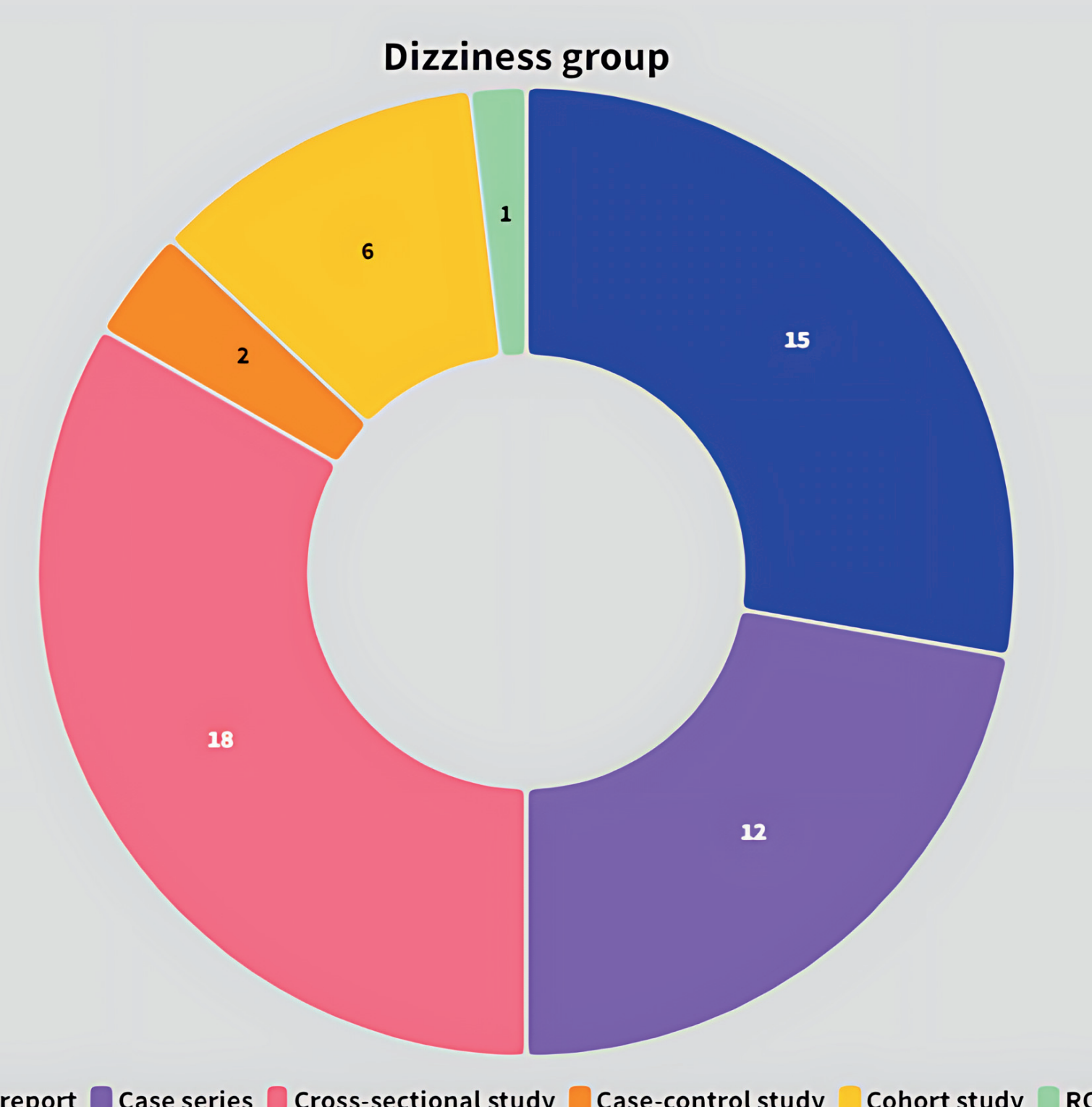
- 79 diagnostic tests were identified with vestibular assessments being the most common category.



- Between 1 and 26 tests were conducted in each article.
- No diagnosis was given to participants in 56% of articles in the dizziness group and 25% of the vertigo group.
- Peripheral vestibular conditions were the most commonly diagnosed in both groups.

3.3 Literature quality

- Lower-quality evidence like case reports and case series made up a significant proportion of articles in both groups.



- There was often a lack of reporting of key areas like COVID-19 tests, the time since participants had been diagnosed with COVID-19 and the ages of participants.

4 Conclusion



4.1 Findings

- Lack of clarity in the use and definition of terms "vertigo" and "dizziness" which was reflected in inconsistency seen in stakeholder engagement.
- Poor quality of literature on this topic calls into question any of the systematic reviews currently published.

4.2 Future research

- Investigating barriers to the adoption of the International Classification of Vestibular Disorders (ICVD-I) and its defined terminology.
- Repeat primary research on relationship between vertigo and COVID-19 following the standardisation of terms.

References

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2. Blakley, B. W. & Goebel, J. 2001. The meaning of the word "vertigo". *Otolaryngology Head Neck Surgery*, 125, 147-50.
3. Jung, R. G., Di Santo, P., Clifford, C., Prospero-Porta, G., Skanes, S., Hung, A., Parlow, S., Visintini, S., Ramirez, F. D., Simard, T. & Hibbert, B. 2021. Methodological quality of COVID-19 clinical research. *Nature Communications*, 12, 943.