Reviewer's report

Title: A Cross-sectional Study of Victorian Mobile Intensive Care Ambulance Paramedics Knowledge of the Valsalva Manoeuvre

Version: 1 Date: 21 September 2009

Reviewer: David McD Taylor

Reviewer's report:

Major compulsory revisions:
1. The authors have used the data from a previously published study to compare their own data with. This has generated 'new data' and p values which they proceed to discuss. I do not think this is acceptable. The authors should only present their own data and not compare it statistically with those of others. Their Results should only be their own data. The Discussion, however, can include a descriptive (not analytical) comparison of their data with those of others.

2. The Abstract needed more details of the Methodology used including where the study was set, what was the study period and, especially, what were the three criteria of the Valsalva Manoeuvre (VM) examined.

3. The Abstract Results should have other published data removed. Also, the first sentence is ambiguous - do they mean an incomplete understanding of the one paramedic who answered correctly or an incomplete understanding of paramedics generally? I assume it was the latter but rewording is required.

4. Abstract Conclusion - the authors can only make conclusions about their own data - not when combined with data of others.

Minor Essential Revisions
1. Introduction - The three VM criteria should be described at the end of paragraph 2

2. Methods - the phases of the VM need to be defined as most readers will have no idea what they are.

3. Methods - the entire section of the 'Definition and Evidence....' should be in the Introduction

4. Methods - The Study Design section is very cumbersome English and should be revised

5. Methods - When was the study done? This should be up front, not lower down

6. Methods - State that it was done in Melbourne. Was it all done in Melbourne? How many participants were not from Melbourne? Does this represent selection bias and by how much?

7. Results - as mentioned, all data from other papers should be removed.

8. Results - Remove all numbers that have already been reported in the tables
9. Discussion - remove all numbers that have been reported in the Results

10. Discussion, para 4, line 4 - what do you mean by 'demonstrating a larger percentile score'?

11. Discussion, para 5, line 6 - '.....both groups ascribed little importance to duration ....' This is not correct since they may have no idea that duration is important

12. Discussion, para 4, line 4 - '.... there is little scientific evidence....' This is not correct. Th instructors may know and use all the evidence but it may be very poorly taught and therefore not retained

13. All the data in Tables 1-3 is repeated in Tables 4-6. Suggest delete Tables 1-3

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.

Please note that three papers of mine have been cited. Hence, it would be in my interests to see this paper published. However, my recommendation is impartial and hardly glowing.