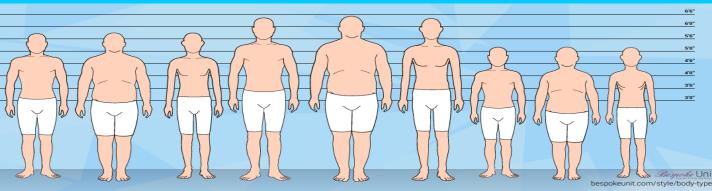


How Accurate are Anaesthetists at the Visual Estimation of Body Weight & Height in Healthy Adult Volunteers?



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1. Anaesthetists use body weight & height

routinely for a myriad of calculations.

Introduction

- 2. Healthcare Workers (HCW) have been found to be poor estimators of weight & height. ¹⁻⁷
- 3. There is, however, paucity of data relating to anaesthetists in this regard.
- 4. This study aimed at ascertaining anaesthetists' ability to accurately estimate the weight & height of healthy adult volunteers on visual inspection.

anesthesiologist

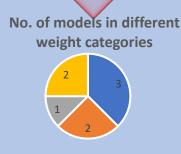
Objectives

- 1. To ascertain anaesthetists' ability to accurately estimate weight & height of healthy adult volunteers on visual inspection.
- 2. Secondary objectives included calculating BMI & an intubating dose of rocuronium for the models, as well as determine if there were any differences in estimating abilities based on participant demography.

Methods

1. Study participants included members from the department of anaesthesiology at a tertiary academic hospital in South Africa.

2. Healthy adult volunteers, in a range of weight & height categories were used as models.



■ <60kg ■ 60 - 80kg ■ 80 - 100kg ■ >100kg

Percentage

Participant Demography

n = 65

62

41

39

37

43

28

Numbeo

Percentage

Percentage

Percentage

Designation

Percentage

P

3. Data from 65 observations of 8 models were captured once a week, over a 4-week period in July 2022

Results

Average estimation to within 10% for all 8 models 150% 150% 100% 98% 45% Weight estimation Rocuronium dose est

Conclusion

Anaesthetists are poor estimators of weight, which correlates with research conducted on other HCWs.

Further research is required to determine the clinical significance of these error rates & to delineate an acceptable margin of error.

References

