Height Measures

Evaluating alternatives to standing height in the ambulatory setting

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BACKGROUND: Height measurement is a key clinical component to measure body mass index and body surface area used for patient care, including calculating chemotherapy doses. Some patients cannot safely or reliably stand for height measurement because of a number of diseases and disabilities. The literature is unclear regarding alternatives to standing height for patients unable to stand.

OBJECTIVES: The purpose of this research study was to test equivalence of a number of measurements to find a reliable alternative to standing height for ambulatory oncology clinic patients who are unable to or cannot safely stand.

METHODS: A repeated-measures design was used to measure the height of 60 volunteer adult participants using a convenience sample of 30 men and 30 women. Standing height was compared to self-reported height, recumbent length, arm span, half-arm span, demispan, and knee height measurements.

FINDINGS: Results indicated that demispan was equivalent to standing height with a mean difference of –0.69. A practice change to use demispan in patients who cannot stand has been proposed and accepted at the authors’ organization. The use of demispan was a feasible alternative to standing height in cost of supply and technique.

KEYWORDS
arm span; body height; demispan; half-arm span; knee height; recumbent height

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