Assessment of the Wong-Baker FACES® Pain Rating Scale's Inter-Rater Reliability when applied to standardised adult patients by paramedics in Qatar: a pilot study

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Wong-Baker FACES® Pain Rating Scale

0	2	4	6	8	10
No Hurt	Hurts Little Bit	Hurts Little More	Hurts Even More	Hurts Whole Lot	Hurts Worst

Wong-Baker FACES Foundation (2016). http://www.WongBakerFACES.org.

BACKGROUND: The appropriate assessment of pain, in the prehospital setting of Qatar, has been identified as a Key Performance Indicator for its service delivery. Currently, patients' pain is assessed by ambulance paramedics, service wide, using the standard Wong-Baker FACES® Pain Rating Scale. Although the scale was originally designed as a **pain self-rating evaluation for children**, paramedics are required to allocate **pain ratings to adult patients** using this scale.

METHOD: A prospective, quantitative pilot study was conducted to assess whether ambulance paramedics could **accurately** and **precisely** determine pain ratings in adults using the FACES® scale. Five members of the ambulance service were prepared as **standardised simulated patients** (vignettes) with varying pain ratings and associated facial expression. Paramedics had to individually assess each patient vignette presenting in random order and record their pain rating allocation.

5 Vignettes

35 Paramedics

175 Assessments

$$\kappa = 0.146$$

RESULTS: **35** Paramedics participated and completed **175** pain assessments. Overall accuracy was poor with sensitivity at **29.7%** and specificity at **92.9%**. Overall precision through Inter-Rater Reliability was poor at **κ = 0.146**. There was further overall poor correlation of pain ratings across the vignettes, with some inter-class resemblance. An Analysis of Variance also indicated a significant difference between pain rating allocations.

CONCLUSION

This study has shown that an allocation of a pain ratings by paramedics in adult patients, using the Wong-Baker FACES® Pain Rating Scale, is not an accurate or precise method of pain assessment, nor for the purpose of its management.