

Development and preliminary validation of the Anaphylaxis Quality of Life Scale for Adults (A-QoL-Adults)

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Abstract

Background: Anaphylaxis is a severe and potentially life-threatening allergic reaction which can have a detrimental impact on quality of life (QoL). There are no validated scales to measure the impact of anaphylaxis on QoL of adults. The aim of this study was to develop and assess the reliability and validity of a QoL scale for adults with anaphylaxis (the A-QoL-Adults). **Methods:** Interviews were conducted with 13 adults with anaphylaxis; data was analysed using thematic analysis to extract items for a QoL scale. A 28-item prototype QoL scale was then completed by 115 participants (with a confirmed diagnosis of anaphylaxis as per the WAO diagnostic criteria) alongside validated scales to measure generic QoL (WHOQoL BREF), anxiety and depression (HADS) and stress (PSS). All participants were recruited from a specialist allergy clinic. **Results:** After factor analysis, the A-QoL-Adults scale was reduced to 21 items which had excellent internal reliability (Cronbach's alpha=0.96). Factor analysis produced 3 sub-scales: Emotional Impact; Social Impact; Limitations on Life. Each had excellent internal reliability (0.92; 0.92; 0.91 respectively). Poorer anaphylaxis-related QoL (total A-QoL-Adults score and sub-scale scores) correlated significantly with poorer general QoL and greater anxiety, depression and stress (all $p < 0.01$ with medium to large effect sizes). **Conclusions:** The A-QoL-Adults scale is a reliable measure of QoL in adults with anaphylaxis and shows good construct validity. It will offer healthcare professionals a means to further understand the impact of anaphylaxis on adult patients and could help direct and monitor clinical care and the need for further psychological intervention.

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