

**Conclusions:** The COPD empowerment scale was found to be psychometrically valid and reliable.

**Key messages:**

- The developed scale is a valid and reliable tool to determine the reinforcement needs of COPD patients.
- The scale can be used to evaluate the effectiveness of empowerment initiatives.

**Abstract citation ID: ckae144.1336**

**COPD empowerment scale: a scale development and validation study**

Zahide Aksoy

Z Aksoy<sup>1</sup>, S Eroglu<sup>2</sup>, Ö Oruç<sup>3</sup>

<sup>1</sup>Nursing, Istanbul Kent University, Istanbul, Türkiye

<sup>2</sup>Nursing, Marmara University, Istanbul, Türkiye

<sup>3</sup>Medicine, Süreyyapaşa Chest Diseases and Thoracic Surgery Training and Research, Istanbul, Türkiye

Contact: zahide.aksoy@kent.edu.tr

**Background:** The fact that COPD symptoms seriously affect daily life makes it different from other chronic diseases. The purpose of this study was to develop the COPD Empowerment Scale and test its psychometric properties.

**Methods:** This study, carried out with a methodological design, was carried out in a Chest Diseases Hospital in Istanbul, Turkey, between June 2023 and March 2024. A scale item pool was created by literature review and semi-structured interviews with COPD patients, and opinions were obtained from 16 experts. The draft scale, consisting of 55 items, was applied to 30 COPD patients as a pilot study. The draft scale was applied to 275 COPD patients and its psychometric properties were tested. The validity of the scale was evaluated by Content Validity Index (CGI) and exploratory and confirmatory factor analysis. Its reliability was evaluated by internal consistency analysis (Cronbach Alpha coefficient), item-total score correlations and test-retest analyses. Statistical significance level was accepted as  $p < 0.05$ .

**Results:** The KGI of the scale was found to be 0.97. The draft scale was transformed into a scale with five sub-dimensions and 31 items as a result of exploratory factor analysis. Cronbach's Alpha value of the total scale is 0.896, and its sub-dimensions Cronbach's Alpha values are; knowledge and understanding was found to be 0.731, access to health services was 0.816, self-efficacy was 0.719, symptom management was 0.842, and psycho-social coping was 0.728. Factor loadings of all items were 0.40 and above. As a result of confirmatory factor analysis,  $\chi^2/df$  (2.59), RMSEA (0.076), NFI (0.92), NNFI (0.95), SRMR (0.03) and CFI (0.95) measurements are within the desired fit values. In the test-retest reliability study of the scale, the Pearson moment correlation coefficient was found to be  $r_{tt} = 0.996$  ( $p < 0.01$ ).