

# Hindi Translation and Validation of the London Chest Activity of Daily Living Scale (LCADL)

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**Introduction:** Chronic Obstructive Pulmonary Disease (COPD) is a progressive condition leading to airflow limitation, disability, and reduced independence, particularly in older adults. Many severe COPD patients experience breathlessness during daily activities, significantly affecting their ability to perform Activities of Daily Living (ADL). However, tools to assess ADL limitations in advanced COPD are scarce. Existing tools, such as the Pulmonary Functional Status and Dyspnea Questionnaire (PFSDQ) and Nottingham Extended Activities of Daily Living Scale (EADL), are either too lengthy or fail to detect changes after pulmonary rehabilitation.

The London Chest Activity of Daily Living (LCADL) Scale, developed by Garrod et al., is a validated tool to assess ADL impairment in COPD, covering personal care, household tasks, physical activities, and leisure activities. However, cultural and linguistic adaptations are necessary for its effective use across diverse populations. This study focusses on translating and validating the LCADL Scale into Hindi for North Indian patients with severe COPD to ensure cultural relevance and clarity for better patient assessment.

**Aim:** To develop and validate a Hindi version of the LCADL Scale, ensuring its cultural and linguistic appropriateness for evaluating activity limitations in North Indian patients with COPD.

**Materials and Methods:** The translation process included forward translation by two bilingual translators—one with a medical background and the other a linguist. The synthesised version was back-translated into English by two independent translators. The final version was reviewed by a panel of cardiothoracic physiotherapists with at least three years of clinical experience.

**Results:** The Hindi version of the LCADL Scale was adapted using standardised cross-cultural guidelines. Content validity was confirmed by experts, ensuring the scale effectively captured dyspnoea's impact on daily activities and was relevant to the experiences of COPD patients in North India.

**Conclusion:** The Hindi LCADL Scale is a valid, culturally appropriate tool for assessing activity limitations due to dyspnoea in North Indian COPD patients. It can be used in clinical practice and research to improve interventions and quality of life for COPD patients.

**Keywords:** Activities of Daily Living, Chronic Obstructive Pulmonary Disease, Nottingham Extended Activities of Daily Living Scale, Pulmonary Functional Status and Dyspnea Questionnaire