



AC049

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

DEPRESSION DEFINES A DISTINCT NON-CARDIOPULMONARY SYMPTOM PHENOTYPE IN ACUTE HEART FAILURE: EVIDENCE SUPPORTING PSYCHOLOGICAL MODULATION OF SYMPTOM EXPRESSION

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Stand: POSTER #AC049 | **Venue:** Poster Exhibition Hall & Gallery - Eko Convention Centre | **Online Ref:** <https://nigeriancardiacsociety.com/abstracts/AC049>

Background Depression commonly coexists with acute heart failure, worsens outcomes, and may influence symptom presentation, although its effect on AHF phenotype remains unclear. Our aim was to determine if depression correlates with distinct symptom clusters in AHF patients.

Methodology This cross-sectional study included 153 adults admitted with AHF in University College Hospital, Ibadan. Depression was assessed using the Patient Health Questionnaire-9 (PHQ-9), and defined as a score ≥ 10 . Demographic and clinical characteristics were recorded. Symptoms were classified into typical and atypical. Atypical symptoms were further grouped a priori into gastrointestinal and neurocognitive clusters based on biological plausibility. Associations between depression and symptom phenotypes were evaluated using Pearson's chi-square or Fisher's exact tests, and effect sizes were expressed as odds ratios (ORs) with 95% confidence intervals (CIs).

Results The prevalence of depression was 26.8%. Depression was strongly associated with a distinct non-cardiopulmonary symptom phenotype. Patients with depression were significantly more likely to report gastrointestinal symptoms, including nausea, vomiting, abdominal swelling, bloating and anorexia, as well as neurocognitive symptoms including headache, dizziness, and confusion. Composite symptom analysis demonstrated seven-fold higher odds of gastrointestinal symptom clusters (OR 7.67, 95% CI 3.40–17.28; $p < 0.001$) and more than six-fold higher odds of neurocognitive symptom clusters (OR 6.53, 95% CI 2.65–16.11; $p < 0.001$) among patients with depression.

Conclusion Depression was associated with a distinct non-cardiopulmonary symptom phenotype in acute heart failure despite similar cardiopulmonary symptoms, supporting integrated cardiovascular-mental health assessment and earlier depression screening.

Keywords: Acute Heart Failure, Depression, Phenotype, Signs and Symptoms, Comorbidity