

# **Nurse-Led Psychological Health Screening and Hierarchical Intervention Model for Stroke Patients: Development and Application**

**Objective:** To construct and evaluate a nurse-led psychological health screening and hierarchical intervention model for stroke patients, aiming to improve early identification and management of psychological disorders post-stroke.

**Methods:** This prospective study was conducted from January 2023 to December 2024 in a tertiary hospitals . A total of 286 stroke patients were enrolled and randomly assigned to intervention (n=60) or control groups (n=60). The nurse-led model incorporated standardized screening protocols using the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder-7 (GAD-7), followed by three-tier interventions: routine psychological education for low-risk patients, nurse-delivered cognitive behavioral therapy for moderate-risk patients, and psychiatric referral for high-risk cases. Outcomes included depression and anxiety scores, quality of life (SF-36), and medication adherence at 3 and 6 months post-discharge.

**Results:** The intervention group demonstrated significantly lower depression (PHQ-9:  $6.2 \pm 3.1$  vs.  $9.8 \pm 4.2$ ,  $P < 0.001$ ) and anxiety scores (GAD-7:  $5.4 \pm 2.8$  vs.  $8.6 \pm 3.7$ ,  $P < 0.001$ ) at 6 months. Quality of life improved notably in the intervention group (SF-36:  $72.3 \pm 12.4$  vs.  $63.7 \pm 15.8$ ,  $P < 0.001$ ). Early detection rates of psychological disorders increased by 43%.

**Conclusion:** The nurse-led hierarchical intervention model effectively improved psychological outcomes in stroke patients through systematic screening and risk-stratified management, offering a practical framework for clinical implementation.

**Keywords:** stroke; psychological health; nurse-led intervention; hierarchical management; depression; anxiety

## **References:**

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