

Preliminary Efficacy of a Stroke Caregiver Intervention Program for Reducing Depressive Symptoms

Tamilyn Bakas, DNS, RN, FAHA, FAAN;¹ Joan K. Austin, DNS, RN, FAAN;¹ Janice M. Buelow, PhD, RN;¹ Barbara Habermann, PhD, RN;¹ Yong Li, PhD;² Susan M. McLennon, PhD, RN;¹ Michael T. Weaver, PhD, RN, FAAN;¹ Linda S. Williams, MD, FAHA, FAAN³

¹ Indiana University School of Nursing; ² Indiana University School of Public and Environmental Affairs; ³ Richard L. Roudebush Veterans Administration Medical Center, Indiana University School of Medicine

Indiana University – Purdue University Indianapolis

Abstract

Background and Purpose: Stroke caregivers who lack skills because of unmet needs are at increased risk for depressive symptoms; which can impede rehabilitation of the survivor and increase the survivor's risk for costly, long-term institutionalization. The Telephone Assessment and Skill-Building Kit (TASK) is an 8-week follow-up program based on individualized assessment of caregiver needs. The purpose of this study was to explore preliminary efficacy of the TASK program for improving stroke caregiver depressive symptoms.

Methods: A subgroup of 15 caregivers who screened positive for mild to severe depressive symptoms at baseline (PHQ-9 ≥ 5) were randomized to the TASK program (n=8) or an attention control group (n=7). Data were analyzed using Univariate ANCOVA, controlling for baseline scores and number of minutes spent with the nurse for each timepoint (4, 8, and 12 weeks after baseline). Partial η^2 was used to estimate effect sizes ($\leq .08$ small, .09-.24 medium, $\geq .25$ large).

Results: Although not statistically significant because of the small sample size, medium to large improvements based on effect sizes were found in depressive symptoms for the TASK group relative to the control group at 4 weeks [$F(1,11) = 4.15, p=.07, \eta^2=.27$], 8 weeks [$F(1,11) = 1.66, p=.22, \eta^2=.13$], and 12 weeks after baseline [$F(1,11) = 1.47, p=.25, \eta^2=.12$]. Adjusted PHQ-9 means for the TASK group at 4, 8, and 12 weeks ranged from 4.9 to 5.9; adjusted PHQ-9 means for the control group at 4, 8, and 12 weeks ranged from 9.0 to 10.8.

Conclusions: Caregivers in the TASK group reduced their depressive symptoms to the mild range, while caregivers in the control group maintained their scores primarily in the moderately depressed range. Further testing of the TASK program in a larger randomized controlled clinical trial is warranted and is currently underway.