# Relationship of Stroke Caregiver Mutuality and Preparedness for Caregiving to Role Strain

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#### **Abstract**

Mutuality and preparedness have been found to be predictors of caregiver role strain. Caregiver role strain is a complex concept that includes physical, emotional, social, and financial consequences. The sudden transition to the stroke caregiver role can impede effective role adaptation.

The purpose of this study was to investigate the relationship between stroke caregiver mutuality and preparedness for caregiving to role strain.

#### Introduction

- Approximately 795,000 people have a stroke annually in the United States and the number of survivors is expected to rise due to the increase in an aging population (Mozaffarian et al., 2016).
- Just as the stroke is a sudden event for the survivor, the informal caregiver is abruptly thrust into their new role.
- Hypotheses tested:
  - H1: There will be a negative relationship between stroke caregiver mutuality and caregiver role strain.
  - H2: There will be a negative relationship between preparedness for caregiving and caregiver role strain.
- The Roy Adaptation Model was the framework used to study the relationship of stroke caregiver mutuality and preparedness for caregiving to caregiver role strain.

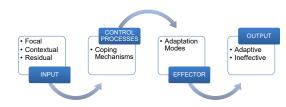


Figure 1. Theoretical Framework: Roy Adaptation Model

#### Method

- A cross-sectional correlational research design was used to examine the relationship between the predictor variables of stroke caregiver perception of mutuality and preparedness for caregiving, and the response variable of caregiver role strain.
- Data was collected from 140 participants from nine online stroke caregiver support groups from October 11, 2017 to October 24, 2017. After reviewing inclusion criteria, a final sample size of 123 (87.9% of 140) was analyzed. This exceeded the desired sample size of 82.

#### **Table 1. Caregiver Characteristics**

Variable	Frequency	Percent of participants
Gender (n-120)		
Female	114	95.0
Male	6	5.0
Caregiver Age (n=122)		
31-40	10	8.2
41-50	42	34.4
51-60	41	33.6
61-70	26	21.3
71 and older	3	2.5
Race/ethnicity (n=123)		
Black/African American	3	2.4
Hispanic	4	3.3
White/Caucasian	114	92.7
Multiple ethnicity/other	2	1.6
Average household income (n=103)		
\$0 - 49,999	44	42.7
\$50,000-99,999	38	36.9
\$100,000-149,999	13	12.6
\$150,000-199,999	5	4.9
\$200,000 and up	3	2.9

Table 2. Stroke Survivor Characteristics

Variable	Frequency	Percent of participants
Stroke Survivor Age (n=123)		
21-40	6	4.9
41-60	51	41.5
61-80	57	46.3
81 and older	9	7.3
Relationship to stroke survivor (n=123)		
Spouse	89	72.4
Child	18	14.6
Parent	2	1.6
Daughter/son-in-law	1	0.8
Significant other/friend/other	13	10.6

#### **Procedure**

- Approval for this study was received from the Office of Sponsored Programs at William Paterson University.
- A convenience sampling of stroke caregivers were recruited from online stroke caregiver support groups. SurveyMonkey was used to collect data.
- 3. The research questionnaire consisted of:
  - Caregiver Data Collection Tool measured caregiver and stroke survivor demographic data; and caregiver role strain
  - Mutuality Scale measured the quality of the relationship between the caregiver and care receiver
  - Preparedness of Caregiving Scale measured how well prepared the caregiver was for caregiving tasks and the stress of caregiving
- 4. Descriptive statistics were performed for all relevant variables. Primary hypotheses were assessed by examining the Pearson's correlational coefficient. Significant findings were entered into a regression model to identify strength of the predictor variables.

#### Results

- H1: There was a statistically significant negative correlation with medium strength between mutuality and role strain, r(115) = -.40, p < .001.</li>
- H2: There was a statistically significant negative correlation with moderate strength between preparedness and role strain, r(120) = -.34, p < .001.</li>
- Other findings: Three other variables that predicted role strain were identified: income, r(100) = -.29, p = .003, hours per week providing care, r(119) = .28, p = .002, and frequency of caregiving r(119) = .32, p < .001.</li>

Table 3. Correlation of Independent Variables and Dependent Variables

		Mutuality	Preparedness	Role Strain
Mutualitya	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	118		
Preparednessa	Pearson Correlation	.384**	1	
	Sig. (2-tailed)	.000		
	N	118	123	
Role Strain <sup>b</sup>	Pearson Correlation	398**	335**	1
	Sig. (2-tailed)	.000	.000	
	N	117	122	122

<sup>&</sup>lt;sup>a</sup> Independent variables. <sup>b</sup> Dependent variable. \*\* Correlation is significant at the 0.01 level (2-tailed)

#### Conclusion

This study demonstrated that there was a statistically significant negative relationship between caregiver mutuality and caregiver role strain. Additionally, there was a statistically significant negative relationship between preparedness for caregiving and role strain from caregiving. Therefore, these hypotheses were supported. Other demographic variables correlated with role strain included income, frequency of caregiving, and hours per week providing care.

### **Significance**

Role strain is an ineffective response to the new caregiver role. The stroke caregiver role transition is a dynamic process that begins with the acute stroke event. The goal of nursing is to assess stimuli and behaviors of caregivers. Interventions are stimuli that will facilitate transition to the new normal.

#### References

- Archbold, P., Stewart, B., Greenlick, M., & Harvath, T. (1990). Mutuality and preparedness as predictors of caregiver role strain. Research in Nursing & Health, 13(6), 375-384.
- Mozaffarian, D., Benjamin, E. J., Go, A. S., Arnett, D. K., Blaha, M. J., Cushman, M., & ... Mackey, R. H. (2016). Heart disease and stroke statistics-2016 update: A report from the American Heart Association. Circulation, 133(4), e38-e360.
- Roy, C. & Andrews, H. (1999). The Roy Adaptation Model. Connecticut: Appleton & Lange.