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A research study on emotional adjustment of a spouse following stroke

John P. Vlasic II

A RESEARCH STUDY ON EMOTIONAL ADJUSTMENT

OF A SPOUSE FOLLOWING STROKE

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

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by

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ABSTRACT

The spouses of survivors of stroke are presented with sudden permanent changes in life style and emotional stress. How they cope with these changes has a profound affect on them self and their life partner.

This research project focused on age as a predictor in the emotional adjustment of a spouse following his/her partner's stroke. The medical records of 80 stroke cases were reviewed at Kaiser Permanente Medical Center, Fontana, California. Patients and spouses were examined in two (2) age groupings, age 55 and below, and ages 56 and above. Study of these two age groups afforded the most meaningful division to study spouse adjustment.

Clinical experience of the researcher suggested that the age of the spouse was the primary factor in the emotional adjustment of the spouse. The data did not support this. The findings suggested four predictors of successful spouse adjustment: the spouse's degree of activity in the in-patient rehabilitation program, social problems identified early in the rehabilitation program, spouse arranging for care-taking help following discharge from the rehabilitation program, and recommended modifications made to the home by the spouse.

ACKNOWLEDGMENTS

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INTRODUCTION

After cardiovascular disease and cancer, stroke is the third most common cause of mortality as well as the leading cause of disability in adults in the United States. The Agency for Health Care Policy and Research at Duke University, Medical Center Durham, North Carolina funded the Port study (1994) which estimated that 550,000 strokes occur each year, killing more then 150,000 patients and leaving more than 300,000 with disability.

Within 2 weeks of stroke, no less then 20% and as many as 60% of stroke patients require some assistance with activities of daily living (Dobkin 1995). Individuals who suffer a stroke are often left with impairment of physical function, speech, cognition, and emotional stability. In most cases, a stroke causes a significant change in both individuals and in their families lives. Issues surrounding return to work for people not yet retired, adapted housing, the ability to live independently, the availability of a care giver, and income are at the forefront for all stroke victims. When a person has a stroke numerous changes occur in his or her life that require emotional adjustment by the spouse. Adjustment must be made on many fronts at a time when emotional resources are limited or impaired because of the situation. The relationship of spouse adjustment and rehabilitation outcome is an important issue. If adjustment to the patient's condition is poor, spouses may be unable to

provide the support needed by the patient. On the other hand, spouses who make an appropriate adjustment to the situation are able to support the patient in a manner that allows for his or her ability to resume life to the maximum degree possible.   The emotional adjustment of a spouse is critical to the patient's rehabilitation and to the patient's success in remaining at home. Family systems are challenged to respond to the patient's condition and situation with little time for preparation. The family must adjust to an often severely changed image of its member, and at the same time, provide care-giving assistance to that individual.

Following admission to the acute hospital, rehabilitation starts in 48 to 72 hours. Rehabilitation centers are either acute at 3 to 4 hours of intense therapy a day, or skilled at 1 hour of therapy per day.   The Joint Commission on Accreditation Manual for Rehabilitation Centers, 1993 edition, mandates that a social worker be on staff. The manual defines social work services as, "assessment and intervention relative to psychosocial factors and the social context in which the physically impaired patient lives." The scope of social work practice in the rehabilitation center includes assessment of immediate and extended family members and other persons relative to support networks.

In the past payments were made to hospitals using,

"Diagnostic Related Groupings " (DRG), Medicare set a rate
of reimbursement for each diagnosis. DRG's reduced the
stroke patient's average length of stay in a acute hospital
rehabilitation center to 19 days. The length of stay before
DRG's, for stroke patients averaged a stay of 29 to 35 days
(Kotelchuck 1984).

In the last several years the emergence of managed
care, by health maintenance organizations (HMO) has made a
significant change in how health care is provided today. To
lower cost of health care, the trend is to reduce time spent
in a hospital. At the HMO were this research was
undertaken, the average length of stay for a stroke patient
is 14 days.

PROBLEM STATEMENT

Reduced length of stay in the rehabilitation center by
stroke patients has presented social work practice with
reduced time to facilitate the emotional adjustment of the
patient's spouse. If the patient's spouse is unable to make
an appropriate emotional adjustment to the patient's
condition, rehabilitation outcome will be effected and the
quality of life for the patient and his or her spouse will
be impaired.

Although the issues of adjustment stated above are
faced by all stroke patients, age of the patient causes a
different perspective of these issues. As an example, the

issue of income is very different for the 51 year old as opposed to the 70 year old. The family income of the 51 year old who is employed and at the peak of his or her earning years, may face a significant reduction. The spouse of the 70 year old who is on a fixed income, may face increased cost to provide care and be unable to meet the demand. It is important to understand how these spouses make an emotional adjustment following their partner's stroke, in different age groups. Age groups also have a different perspective that is related to the life cycle. Neugarten (1979) developed a theory of "out of time event" that life events if out of time in relation to one's place in the life cycle can present adjustment problems. The 70 year old may not be surprised by his or her partner's stroke, because there is an expectation of major health problems in older age. A 40 year old is not expecting his or her 41 year old partner to have a stroke.

LITERATURE REVIEW

Judith Dobrof (1991) reviewed the literature on social work in health care and concluded that hospital social workers are pressured to complete social work tasks as quickly as possible because of DRG's and their impact on reducing the length of stay in hospitals. As a consequence, the social worker is able to spend less time with the patient. Another area of conflict involves the social worker's allegiance to

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the patient versus the health care institution, and how best to serve both. The research project sought to improve the function of the social worker within these DRG caused time restraints by providing additional insight into the predictors of spouse adjustment.

As social workers attempt to comprehend the issues of spouse adjustment and its relationship to age, understanding of the spouse's perception must be increased. Rusinowitz and Hofland (1993) reported on the movement to develop a coalition among the aging and younger disability communities to jointly address common problems of disability. Rusinowitz and Hofland state that the two communities differ significantly in perceptions, definitions, and values about disabilities however, they provide no data to support this notion. Data from their project can provide support to improve social work advocacy and effectiveness on behalf of stroke patients.

In a study of continuity after a stroke and the implications of life-course disruption in old age, Becker (1993) found in his review of the literature that information was surprisingly limited. However, he raised several questions on the topic: 1) Does disruption due to chronic illness late in life differ socially and emotionally from disruption in earlier phases of life, and if so how? 2) Do efforts to maintain continuity despite late-onset chronic illness differ from efforts made at younger ages?

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3) If so, what variables differentiate the discontinuity experienced by persons in old age from that experienced by younger persons.

Studying the adjustment of family members as caregivers to a stroke patient, Silliman, Earp, Fletcher, and Wagnar (1987), interviewed 89 family caregivers, primarily wives and daughters. This represented two age groups of the caregiver but not of the stroke patient. Results were that the majority were satisfied with the role of caregiver, and would do it again. This raises questions about 1) what differences would result if the patients were in a younger age group, and 2) what are the determinants of caregivers' heterogeneous responses to the demands of caregiving. Thurston (1980) presented through a fictionalized case study the consequences and impact of a massive stroke on each member of a family. Using the model for predicting the impact of severe illness in families developed by Kaplan, Grobstein, and Smith,(1976), Thurston stressed the need for early crisis intervention by social workers in addition to the importance of sensitivity to each family member's needs. His focus on how a serious illness is experienced, what changes take place in the family's lifestyle, and how coping skills emerge supports the need for better understanding of a family's adjustment as a means to improve social work practice. Norris, Stephans and Kinney (1990) examined ways in which caregivers coped with stressful caregiving

situations and the relations between coping strategies and caregivers' psychosocial well being. In studying 58 family caregivers, each was asked to recall a recent situation in caregiving that they appraised as stressful. In addition, they were asked to complete the Ways of Coping checklist(Revised;Lazarus & Folkman, 1984). Analyses suggested that younger caregivers engaged in more escape-avoidance coping strategies, then did older caregivers.

Stephen, Kinney, Norris, and Grotz (1980) investigated the relationship between caregivers' coping strategies and their positive and negative effects and disruptions in their social network in addition to restrictions on their social activity. Fifty-eight family caregivers were studied. The mean age of the caregivers and patients was 60 years and 70.3 years respectively. These researchers found that those caregivers engaging in more escape avoidance coping strategies reported greater depression and more conflict in their relationships as opposed to those caregivers using more positive reappraisal. In identifying characteristics of the caregivers, findings also revealed that the younger caregivers, particularly females, tended to use escape-avoidance coping strategies more intensely, then males did. Consequently, it can be deduced that age will be a predictor in spouse adjustment process following stroke.

Payne (1988) examined the role changes and role problems in a family case study of a stroke client. She

concluded that assisting the family through emotional upheaval with regard to role problems, role changes, and role reintegration was an important factor in facilitating optimum wellness of the client.

Enterlante and Kern (1995) studied role changes in wives following a husband's stroke. Only ten subjects participated in this pilot study. Therefore, results must be viewed with extreme caution because of the small sample size. Enterlante & Kern had hypothesized that the wife's degree of unhappiness increased after her husband's stroke. Their findings supported this hypotheses and further indicated the importance of evaluating the stroke patient's spouse early in treatment.

Evans and Bishop (1987) attempted to predict post stroke family function by using typical stroke outcome variables such as problem solving, general family functioning, roles, affective involvement, behavior control, and communication. However, these predictors were not useful in accounting for variance in family function after stroke in their sample of 78 families. They hypothesized that the nature of the family dynamics after stroke would need further research due to its complex nature.

Norris, Stephans, and Kinney (1990) indicated that a stroke is a major life crisis which produces future stressors resulting in poor psychological and physical health outcomes. Their research examined the role of family

interactions in the recovery of older adults from stroke. Findings indicated that the family network of the older adult disabled by stroke provided various social supports and social problems. Those patients who reported more problems concerning receiving instrumental support from their family network reported a decline in activities of daily living (ADL) and independence following hospital discharge. Furthermore, those reporting problems concerning communication and affect within the family resulted in poorer personal adjustment. They concluded that intervention strategies ought to seek not only to increase supportive interactions but also to modify negative interactions in the family network of older rehabilitation patients.

Evans, et al. (1992) reviewed literature regarding the clinical problems that make rehabilitation a family issue. A majority of stroke victims reside at home with family members which results in dramatic changes in family life style. The problems most often reported involved emotional reactions, role changes, and communication ability. Several conclusions were drawn: 1) Family influence on recovery has a buffering effect on psychosocial dysfunction; 2) Expecting compliance with treatment instructions when families are already coping poorly can be futile; 3) Education is a necessary but not sufficient means of helping families cope with emotional and behavioral changes associated with

strokes; 4) Families most in need of supportive care are most likely not to participate in support programs, usually because of practical problems; and 5) Family is as important as patient in determining outcome. Thus, the client's family has to be focused on in the rehabilitation of a client because the family support is needed to assist patients in the carrying over of the therapy. Consequently, the family needs as much support and guidance in coping with the disability as the client.

Sandin, Cifu, and Nott (1994) highlighted major psychological and social considerations in stroke rehabilitation. The negative impact of stroke on family has been consistently demonstrated. Families and caregivers may respond by either physically or emotionally withdrawing or by bonding closer together.

The home management of stroke often relies upon family caregivers, mainly spouses, who have been shown to experience a considerable burden in providing day to day care. Anxiety, depression, and fatigue are common emotional disorders exhibited by these caregivers. These adverse effects are often associated with the breakdown of community care which results in "social" hospital readmission and entrance into long term institutional care.

Daper, Poulos, Cole, Poulos, and Ehrlich (1992) compared elderly co-resident caregivers of stroke and dementia patients on measures of burden and psychologic

morbidity. However, only caregivers over the age of 60 were included in the study. They found no difference in the burden experienced by the caregivers of dementia or stroke patients. On the other hand, psychiatric aspects of the disability rather than the physical aspects were found to be more stressful to the caregivers.

There is controversy as to what factors contribute or inhibit a stroke patient's recovery. Baker (1993) did a chart review of 67 stroke patients who received rehabilitation at Pitt County Memorial Hospital Rehabilitation Center in Greenvill, North Carolina. Findings revealed that the patients who had a spouse achieved a higher level of adaptation than did comparable patients without a spouse.

RESEARCH DESIGNS AND METHODS

PURPOSE OF THE STUDY

The purpose of this research was to facilitate social work practice. With an improved base of knowledge about what factors predict the emotional adjustment of a spouse, the rehabilitation social worker can modify his or her practice to address the issues identified. Specifically, this study was interested in exploring whether spousal age can predict his/her emotional adjustment following the stroke of their partner.

HYPOTHESIS

Based on clinical experience, hypothesis one predicted that spouse adjustment could be predicted by age grouping as the primary factor. The study was also interested in investigating whether the spouse's activities and actions were a factor in his or her adjustment. The medical record provided six areas of information that related to the spouse's activities or actions:

1. Destination of patient following discharge

2. Spouse made modifications to home

3. Social Worker report of problems at time of admission

4. Spouse active in rehabilitation program

5. Spouse arranged for help in care of patient following rehabilitation

6. Social worker reported spouse having problems in adjustment early in patient's rehabilitation program

Hypothesis two predicted that these factors would be significant predictors of spouse emotional adjustment.

RESEARCH SITE

The research site was selected because of the diversity of its service population. The site is a 300 bed acute hospital with a 16 bed acute physical rehabilitation center. As a health maintenance organization (HMO), the site served 300,000 patient's. From employer funded groups, private pay

members, Medi-Care pre-paid enrollment and MediCal programs, it serviced a diverse social-economic, age, and ethnic population. Physical rehabilitation had been provided for 15 years, the last 10 in a separate rehabilitation unit.

SAMPLE SELECTION

A stratified sampling design was used. Stratified sampling provided a greater degree of representation of spouses from the two age groups that were studied. To reduce the degree of sampling error the research project selected samples that ensured appropriate numbers with-in each age group.

Medical records of 80 patients treated at the research site over the preceding three years were selected to form two (2) groups,: middle life (age 55 and below), and late life (age 56 and above). The selection criteria were diagnosis of Stroke, and a stay in the rehabilitation center of at least 5 days. Restricting the study to patients with a rehabilitation center stay of at least 5 days provided a sample that had a minimum of other medical complications. In most cases medical complications that reduce the possibility of effective rehabilitation will surface in the first 5 days following transfer from the acute hospital to the rehabilitation center, causing rehabilitation services to be terminated.

INSTRUMENT

A data extraction instrument (see appendix A) was used

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to record information from four areas of the medical record.

1. The admitting history: information about patient's age, gender, medical history, complications and hospital stay.

2. Social work assessment: patient and family social history, mental status of patient, family resources, plans and possible problems.

3. Social service progress notes: reports regarding social worker counseling sessions with patient's spouse, reports on spouse activity (i.e. attending education and training sessions, visiting patient and following staff recommendations).

4. Discharge summaries: reports on rehabilitation outcome, (i.e. destination of patient, spouse follow through on staff recommendations).

The data instrument was designed to collect more extensive information than what this study required, in order to provide data for future research which can be undertaken in other areas of stroke. The data extraction instrument was designed for use with the SPSS Real Stats.Real Easy.sm Graduate Pack standard Windows version computer software.

VARIABLES

The dependent variable for hypothesis 1 was spouse adjustment. The level of measurement was nominal (yes or no), as recorded in the social worker's discharge summary

narrative. The independent variable for hypothesis 1 was spouse age. The level of mearsurement was nominal with age group, group 1, age 56 and above, and group 2, age 55 and below. Spouse age was determined in the social work assessment.

The dependent variables for hypothesis 2 were spouse age and adjustment. The independent variables for hypothesis 2 were, 1) destination of patient following discharge, 2) spouse made modifications to home, 3) report of social problems at time of admission, 4) spouse active in rehabilitation program, 5) spouse arranged for help in care of patient following rehabilitation, and 6) spouse reported to be having problems in adjustment early in patient's rehabilitation. The level of measurement for each variable was nominal (yes or no). Measurement was determined from review of the medical record.

DATA COLLECTION

Data were collected by review of the medical records of the subjects selected. A data instrument was completed for each chart review. To test reliability of instrument and reviewer, 3% of cases were examined by a second reviewer. Findings were the same in 97% of the cases.

DATA ANALYSIS METHOD

Uni-variant, bi-variant, and multiple regression analyses were undertaken to examine the overall correlation between each set of variables and spouse adjustment.

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RESULTS

DEMOGRAPHICS

Sixty-four percent,(n=51) of spouses sampled were in the age group 56 years and older, while thirty-six percent,(n=29) of the spouses were in the age group 55 and below. Sixty-eight percent, (n=54) of the spouses were female, while thirty-two percent,(n=26) were male. (see table 1)

VARIABLES

Ninety-one percent,(n=73) of the stroke patients returned home, nine percent,(n=7) were placed out of their home. Eight-six percent,(n=69) of spouses made recommended modifications to their home to provide an environment that accommodated the patent's limitations. Fifteen percent,(n=12) of cases had reported social problems at the time of the patient's admission to the rehabilitation center. Problems included care of other family members, limited income, lack of family support, and pre-existing medical problems of the patient. Eighty percent,(n=64) of the spouses were active in the rehabilitation program. Seventy percent, (n=56) of spouses arranged for help in the home to care for the patient. In forty-nine percent,(n=39) of the cases the social worker reported early in the rehabilitation program that the spouse was having problems in making an emotional adjustment. (see table 2)

In age group 1, 56 and above, seventy-one percent, (n=36) were reported to have made a sound emotional

TABLE 1

Demographic comparison

Characteristic of spouse	Group 1 56 and above	Group 2 55 and below
	63.75% n 51	36.25% n=29

Characteristic of spouse	female	male
	67.5% n 54	32.5% n=26

adjustment, twenty-nine percent, (n=15) were not. Age group
2, 55 and below, sixty-two percent, (n=18) were reported to
have made a sound adjustment, and thirty-one percent, (n=11)
did not. In age group 1, ninety-four percent, (n=48) of
spouse's returned their partner to the family home, compared
to eighty-seven percent, (n=25) in age group 2. Recommended
modifications to the home were made by eighty-six percent,
(n=44) in age group 1, and eighty-six percent, (n=25) in age
group 2. Twelve percent, (n=6) of spouse's in age group 1
were reported to have social problems at time of patient's
admission to the rehabilitation center, Twenty-one
percent, (n=6) of age group 2 spouse's, had social problems

Table 2

Variable Frequency

Destination of patient following discharge

Value Label	Value	Frequency	Percent
Home	1	73	91.3
Out of home	2	7	8.8
		-------	-------
	Total	80	100.0

Spouse made modifications to home

Value Label	Value	Frequency	Percent
no	1	11	13.8
yes	2	69	86.3
		-------	-------
	Total	80	100.0

Social worker report of problems at time of admission

Value Label	Value	Frequency	Percent
no	1	68	85.0
yes	2	12	15.0
		-------	-------
	Total	80	100.0

Spouse active in rehabilitation program

Value Label	Value	Frequency	Percent
no	1	16	20.0
yes	2	64	80.0
		-------	-------
	Total	80	100.0

Spouse arranged for help in care of patient following rehabilitation

Value Label	Value	Frequency	Percent	
no	1	24	30.0	
yes	2	56	70.0	
		-------	-------	
	Total	80	100.0	100.0

Social worker reported spouse having problems in adjustment early in patients rehabilitation program

Value Label	Value	Frequency	Percent
yes	1	39	48.8
no	2	41	51.3
		-------	-------
	Total	80	100.0

at admission. Seventy-six percent. (n=39) of age group 1 spouse's were active in the rehabilitation centers program, eighty-six percent,(n=25) Of spouse's in age group 2, were active. Seventy-one percent,(n=36) of age group 1 spouse'sarranged for help to provide care to the patient at home, sixty-nine percent,(n=20) of spouse's in age group 2 arranged for help in providing care. The rehabilitation social worker reported that, sixty-one percent,(n=31) of spouses in age group 1, and twenty-one percent,(n=8) in age

group were having adjustment problems, early in the rehabilitation program. (see table 3)

ANALYSES

Pearson correlational analyses with two-tailed significance tests were executed to determine the relationships of spouse emotional adjustment and the other predictors. Results indicated that spouse emotional adjustment was not positively correlated with the age of the spouse (r=.09,p =.44), destination of patient following discharge from rehabilitation (r=-.07,p=.55),or social problems at time of admission to rehabilitation (r=-.16,p=.16). Spouse adjustment was positively correlated to modifications made to the home (r=.42,p =.000), spouse participation in a rehabilitation program (r=.52,p =.00), and spouse making arrangements for assistance in care-taking of the patient when home (r=.42,p =.00). In other words, if a spouse made modifications in the home to accommodate the stroke partner, participated in the rehabilitation program with the stroke partner, and arranged for assistance in care-taking of his/her stroke partner, he/she will be more likely to have a sound emotional adjustment. Furthermore, results indicated that spouse emotional adjustment was negatively correlated with reported adjustment problems early in the stroke partner's rehabilitation program, (r=-.62,p =.00). That is, if the social worker reported that a spouse was having problems in adjustment early in the stroke partner's

Table 3

Hypothesis 1

Spouse Age as Predictor of Adjustment

Dependent Variable, Spouse Adjustment	Yes		No	
	Percent	N	Percent	N
Independent Variable Age				
Group 1 56 and Above	70.6	36	29.4	15
Group 2 55 and Below	62.1	18	37.9	11

Hypothesis 2

Dependent Variable, Souse Adjustment

Independent Variable	Age Group 1 56 and Above		Age Group 2 55 and below	
	Percent	N	Percent	N
Destination				
Home	94	48	87	25
Out of Home	6	3	14	4
Home Change				
Made	86.3	44	86.2	25
Not Made	13.7	7	13.8	4

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<u>Social problems at Admission</u>

Yes	11.8	6	20.7	6
No	88.2	45	79.3	23

<u>Spouse Active in RehabilitationProgram</u>

Yes	76.5	39	86.2	25
No	23.5	12	13.8	4

<u>Spouse Arranged for Help in Care</u>

Yes	70.6	36	69	20
No	29.4	15	31	9

<u>Spouse Having Problems in Adjustment Early in</u>

<u>Rehabilitation Program</u>

Yes	60.8	31	27.6	8
No	36.2	20	72.4	21

rehabilitation program, the spouse was more likely to have an emotional adjustment problem following the partners completion of rehabilitation. (see table 4)

Multiple regression analysis was undertaken to study the effects and magnitudes of the effects of the seven independent variable on one dependent variable. The results indicated that spouse age was not a significant predictor of spouse emotional adjustment, F (1,78)=.601, n.s., Results also indicated that three of the independent variables, destination of the patient, spouse arrangement for assistance in care-taking and modifications made to the home, were

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found to be not significant. Social problems at time of admission approached significance. Degree of spouse participation in the rehabilitation program, and reported early spouse adjustment problems were significant predictors of spouse adjustment, $F(7,72)=10.72, p=.001$. Two of the seven variables, reported early spouse adjustment problems and degree of participation in the rehabilitation program, contributed significantly to the prediction of the spouse's emotional adjustment following the stroke of his/her partner. These two variables accounted for a total of 46.8% (45.4% adjusted) the variability in spouse adjustment. Early spouse adjustment problems accounted for 38.9% (38.0% adjusted) of the variance while the degree of participation in the rehabilitation program accounted for 27.0% (26.1% adjusted) of the variance. The seven variables in combination contributed fifty percent (46%adjusted) of the variability in spouse emotional adjustment. (see table 5)

DISCUSSION

The results of this study reveal that the two most important predictors of spouse emotional adjustment are, the spouse being active in the rehabilitation program and the early reporting of problems in the emotional adjustment of the spouse. To a lesser degree, the reporting of social problems at time of admission to the rehabilitation center was important.The more actively involved the patient's

Table 4

Correlations of the Variables

	Spouse Age	Destin	Home change	Social prob.	Spouse active	Spouse help	Spouse prob.	Spous adjust.
spouse age	–	−.13	.01	−.12	−.12	.02	−.32*	.09
Destin.		–	−.00	.24	−.18	.01	.21	.07
Home Change			–	−.14	.44*	.53*	−.39*	.42*
Social Problems				–	.04	−.26*	.05	−.16
Spouse Active					–	.42*	−.43*	.52*
Spouse Help						–	−.42*	.42*
Spouse Problems							–	−.62*
Spouse Adjust.								–

* Correlation is significant at the 0.01 level (2-tailed)

Table 5

Standard Multiple Regression of Seven Predictors on Spousal Emotional Adjustment

Variables	R	R2	R2 Adjusted	B	Beta	Sig.T
Age	.087	.008	− .005	8.5	.087	.677
Destination	.068	.004	− .008	.206	.125	.173
Home Change	.420	.177	.166	.101	.074	.474
Social problems at Admission	.157	.025	.012	−.212	−.162	.081
Spouse arranged for help in care	.419	.176	.165	2.7	.003	.980
Spouse active in program	.520	.270	.261	.351	.300	.005*
Spouse problems early in program	.623	.389	.380	−.464	−4.62	.000*
(Spouse active and spouse problems)	.684	.468	.454			
(Seven variables)	.714**	.510	.463			

* Significant at .05
** Significant at .01

spouse was in the rehabilitation process the greater the

spouse's emotional adjustment to the problems they faced.

If a spouse was active in the rehabilitation process, they

were able to learn to cope with situations and develop

skills in providing care to their partner. Spouse's who had

emotional adjustment problems reported early in the

rehabilitation program, were less likely to make a good

emotional adjustment by the end of in-patient

rehabilitation. Finally, contrary to expectation, age of

spouse was not a significant predictor of spouse emotional

adjustment. Findings indicated that the younger spouses did

just as well in emotional adjustment as the older spouses.

Although destination of the patient following

rehabilitation, was not a significant predictor of spouse

emotional adjustment, institutional placement of patients

following discharge occurred twice as often in the younger

age group than the older. It is worth noting because the

goal of rehabilitation was to return victims of stroke to

their home. Review of the medical records for the four

institutionalized patients indicated that their level of

physical impairment and other medical complications required

significant nursing care. In each case, the rehabilitation

center staff had recommended custodial care in a skilled

nursing facility.

CONCLUSION

The hypothesis that age was a significant predictor of how the spouse of a stroke patient would make an emotional adjustment was not supported. We can assume each age group has problems specific to that group, but we can not ignore age as a factor. Knowing that age is not a significant predictor though, we can focus on the other predictors studied. When we exam the results of this study, they point to the rehabilitation program as the center of impacting spouse emotional adjustment.

Two of the seven predictors, spouse active in the rehabilitation program and reporting of spouse emotional adjustment problems early in the program, found to be the most important in the emotional adjustment of the patient's spouse can be related to the rehabilitation program. A rehabilitation program must develop components that increase and enhance opportunities for the patient's spouse to be actively involved in the rehabilitation program. The rehabilitation social worker's early interview of a patient's, spouse and frequent contact with his or her can identify when their are problems in the spouse's emotional adjustment, that may hamper a positive out come to the patient's rehabilitation.

From this study, several conclusions can be made about the role of the spouse in stroke rehabilitation. First, the spouse's influence on recovery may abate some aspects of the

patient's reaction to loss of function. If the
rehabilitation center program can influence spouse behavior
early in the course of treatment, there often is a positive
influence on the outcome. Second, expecting compliance with
treatment instructions when spouse's are coping poorly can
be unproductive. Third, spouses should be a focus for
evaluation and treatment during rehabilitation. Fourth,
spouses most in need of supportive care may not participate
in support groups often because of practical problems.
Studies are needed to test the value of interventions aimed
at providing support to spouses of stroke survivors.

The current state of knowledge could be enhanced by
several areas of inquiry. Comparative research between the
major family functioning assessment techniques could be
conducted to see when self-report inventories may need to be
supplemented with observational or interview techniques.
Research is also needed to compare the capabilities of
screening instruments in predicting risk of spouse
dysfunction. Perhaps most importantly, intervention research
focused on an additive treatment effects model would be
useful in isolating the differential effects of education,
support, and individual therapy in resolving or preventing
post stroke spouse dysfunction.

The findings of this study must be applied to health
care policy. Current trends in the managed care health
industry to reduce the amount of time for in-patient

rehabilitation, may be limiting the treatment of the stroke patient's spouse, causing increased placement into long term care, resulting in higher cost to families, insurance companies, and government programs.

As the American population ages, we are faced with the need to care for those who become unable to care for themselves. This study demonstrates that the need for treatment of a patient's spouse must be given increased importance. The rehabilitation social worker, must act as an advocate for the spouse who is to become caregiver when treatment decisions are made and rehabilitation programs are developed.

APPENDIX A: DATA EXTRACTION INSTRUMENT

SPOUSE ADJUSTMENT FOLLOWING STROKE

DATA EXTRACTION INSTRUMENT

SUBJECT ###

BACKGROUND INFORMATION

AREA 1: REVIEW OF ADMITTING HISTORY AND PHYSICAL;

1.1 GENDER; MALE <Y> FEMALE <Y>

1.2 AGE ##

1.3 SIDE OF STROKE LEFT <Y>   RIGHT <Y>

1.4 PREVIOUS STROKES <Y>

1.5 COMPLICATIONS   <Y>

1.6 ACUTE HOSPITAL DAYS ##

1.7 SKILLED NURSING DAYS ##

1.8 ACUTE REHAB DAYS ##

AREA 2: REVIEW OF SOCIAL WORK ASSESSMENT;

2.1 PRESENT AT FIRST INTERVIEW; PATIENT <Y> SPOUSE <Y>

2.2 PATIENTS MENTAL STATUS, ALERT <Y>

2.3 PATIENT ORIENTATED TO TIME;   <Y>

2.4 PATIENT ORIENTATED TO PLACE;   <Y>

2.5 PATIENT ORIENTATED TO PERSON; <Y>

2.6 MEMORY INTACT;   <Y>

2.7 IS PATIENT EXPRESSIVELY APHASIAC <Y>

2.8 IS PATIENT RESEPTIVLEY APHASIC <Y>

2.9 IS PATIENT DEPRESSED <Y>

2.10 WAS PATIENT PREMORBIDLEY INDEPENDENT IN FUNCTION <Y>

2.11 NUMBER OF YEARS PATIENT MARRIED TO CURRENT SPOUSE; ##

2.12 NUMBER OF PATIENTS PREVIOUS MARRIAGES; ##

2.13 NUMBER OF CHILDREN; ##

2.14 DO SOME CHILDREN LIVE WITH-IN 30 MILES OF PATIENT; <Y>

2.15 ARE PROBLEMS REPORTED IN Pt's RELATIONSHIP WITH CHILDREN

   <Y>

2.16 EXTENDED FAMILY WITH-IN 30 MILES OF PATIENT;   <Y>

2.17 EMPLOYMENT: 1 EMPLOYED <Y> 2 DISABLED <Y> 3 RETIRE <Y>

2.18   PATIENTS   EMPLOYMENT;1.PROFESSIONAL   <Y>2.TECH.

   <Y>3.SERVICE <Y>

2.19 PATIENTS EDUCATION;1.BELOW 12 <Y> 2.H.S. GRAD <Y> 3.

   ATTENDED COLLEGE <Y> 4.BACHELORS <Y> 5.GRAD.SCHOOL

   <Y>6.UNKNOWN <Y>

2.20 INCOME 1. SOCIAL SECURITY <Y> 2.SDI <Y> 3.PENSION <Y>

   4.EMPLOYMENT <Y>

2.21 SPOUSE INTERVIEWED; <Y>

2.22 AGE OF SPOUSE; ##

2.23 NUMBER OF SPOUSE'S PREVIOUS MARRIAGES; ##

2.24 SPOUSE IS;1. EMPLOYED <Y> 2. UNEMPLOYED <Y> 3.HOMEMAKER

   <Y>4. RETIRED <Y>

2.25 SPOUSE EMPLOYMENT; 1.PROFESSIONAL <Y> 2.TECH.<Y>

   3.SERVICE <Y>

2.26 SPOUSE EDUCATION; 1.BELOW 12 <Y> 2.H.S.GRAD <Y>

3. ATTENDED COLLEGE <Y> 4. BACHELORS <Y>5. GRAD.SCHOOL <Y>6.

   UNKNOWN <Y>

2.27 SPOUSE INCOME 1.EMPLO. <Y>2.SOCIAL SECURITY <Y>

   3.PENSION <Y>

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2.28 IS SPOUSE IN GOOD HEALTH;   <Y>

2.29 IS SPOUSE ABLE TO PROVIDE PHYSICAL HELP TO PATIENT; <Y>

2.30 IS SPOUSE PROVIDING HELP TO ANOTHER FAMILY MEMBER;   <Y>

2.31 ARE THEIR OTHER CARE GIVERS IN HOME <Y>

2.32 FAMILY OR FRIENDS OUT OF HOME WHO CAN HELP WITH CARE <Y>

2.33 SPOUSES INITIAL PLAN FOR POST REHAB. CARE;

RETURN HOME AND PROVIDE CARE <Y>

RETURN HOME AND EMPLOY HELP TO CARE FOR PATIENT <Y>

RETURN HOME AND HAVE OTHER FAMILY MEMBERS HELP <Y>

PLACE PATIENT IN BOARD & CARE <Y>

PLACE PATIENT IN CONVALESCENT HOSPITAL <Y>

UNSURE OF PLAN <Y>

NO PLAN <Y>

2.34 PROBLEMS REPORTED BY SOCIAL WORKER;

NONE <Y>

FINANCIAL <Y>

HOME ENVIRONMENT <Y>

HEALTH OF SPOUSE <Y>

LACK OF FAMILY SUPPORT <Y>

TRANSPORTATION <Y>

LACK OF COMMUNITY SUPPORT <Y>

LEVEL OF PATIENTS FUNCTION<Y>

PRE-MORBID CONDUCTION   <Y>

AREA 3; FIM SCORE:

                     ADMIT;   GOAL;   DISCHARGE;

A. FEEDING	#	#	#
B. GROOMING	#	#	#
C. BATHING	#	#	#
D. DRESSING UPPER BODY	#	#	#
E. DRESSING LOWER BODY	#	#	#
F. TOILETING	#	#	#
G. BLADDER MANAGEMENT	#	#	#
H. BOWEL MANAGEMENT	#	#	#
I. TRANSFER:BED,CHAR,W/C	#	#	#
J. TRANSFER:TOILET	#	#	#
K. TRANSFER:TUB/SHOWER	#	#	#
L. WALKING	#	#	#
M. WHEEL CHAR	#	#	#
N. STAIRS	#	#	#
O. COMPREHENSION	#	#	#
P. EXPRESSION	#	#	#
Q. SOCIAL INTERACTION	#	#	#
R. PROBLEM SOLVING	#	#	#
S. MEMORY	#	#	#

AREA 4; PROGRESS REPORTS;

4.1 IS SPOUSE ACTIVE IN REHAB. PROGRAM; <Y>

4.2 SPOUSE ATTENDING SESSIONS; <Y>

4.3 SPOUSE ADAPTING HOME; <Y>

4.4 SPOUSE VISITING PATIENT; <Y>

4.5 SPOUSE ARRANGING FOR EQUIPMENT; <Y>

4.6 SPOUSE APPEARING STRESSED; <Y>

4.7 SOCIAL WORKER REPORTING PROBLEMS IN SPOUSES ADJUSTMENT;
   <Y>

4.8 ARE PROBLEMS BEING RESOLVED; <Y>

4.9 IS CONFLICT IN FAMILY REPORTED; <Y>

   AREA 5; DISCHARGE REPORT;

5.1 STAFF RECOMMENDED DESTINATION FOR PATIENT;

   PATIENTS HOME WITH SPOUSE PROVIDING <Y>

   PATIENTS HOME WITH SPOUSE EMPLOYING HELP IN CARE OF

   PATIENT <Y>

   PATIENTS HOME WITH FAMILY MEMBERS HELPING IN CARE <Y>

   BOARD AND CARE HOME <Y>

   ASSISTED LIVING CENTER <Y>

   SNF <Y>

   CONVALESCENT HOSPITAL <Y>

5.2 ACTUAL DESTINATION AT DISCHARGE;

   PATIENTS HOME WITH NO HELP FOR SPOUSE <Y>

   PATIENTS HOME WITH SPOUSE EMPLOYING HELP IN CARE OF

   PATIENT <Y>

   PATIENTS HOME WITH FAMILY MEMBERS AND/OR FRIENDS HELPING

   WITH CARE   <Y>

   FAMILY MEMBERS HOME <Y>

   BOARD AND CARE HOME <Y>

   ASSISTED LIVING CENTER <Y>

   SNF <Y>

   CONVALESCENT HOSPITAL <Y>

5.3 DID SPOUSE ARRANGE FOR RECOMMENDED HELP <Y>

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5.4 DID SPOUSE MAKE RECOMMENDED MODIFICATIONS TO HOME <Y>

5.5 DID SPOUSE FOLLOW THROUGH ON REFERRALS MADE <Y>

5.6 REPORTED THAT SPOUSE MADE APPROBATE ADJUSTMENT <Y>

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