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Coping Style and Depressive Symptoms in Family Decision Makers of the Chronically Critically Ill

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Abstract

BACKGROUND—Overwhelmed family decision makers (FDMs) of the chronically critically ill (CCI) must receive and comprehend vital information to make complex treatment decisions that are consistent with the patient's preferences. Exploration of informational coping styles (ICS) of FDMs may result in evidence for tailored communication practices supporting psychological and informational needs of these vulnerable family members.

OBJECTIVES—The aims of this study were to describe patterns of FDM demographic characteristics and ICS, to assess differences in informational satisfaction, role stress, and depressive symptoms between FDMs classified as monitors and blunters, and to describe the predictive associations between ICS, informational satisfaction, and role stress on depressive symptoms in FDMs.

METHODS—A secondary data analysis of 210 FDMs of cognitively impaired patients who required ≥ 3 days of mechanical ventilation. On enrollment FDMs completed the abbreviated Miller Behavioral Style Scale to assess ICS, the Critical Care Family Satisfaction Survey's informational sub-scale to assess informational satisfaction, a single-item measure of role stress, and the Center for Epidemiological Studies Depression (CES-D) scale to assess depressive symptoms.

RESULTS—No associations emerged between FDM demographic characteristics and ICS. FDMs classified as monitors had higher CES-D scores compared to blunters. Both information coping style and informational satisfaction had influence on depressive symptoms, however role stress was the most significant predictor.

CONCLUSIONS—FDMs who were classified as monitors were at higher risk for depression than those who appear to avoid information. Targeting FDMs who are monitors with additional psychological and informational support may mitigate their psychological impairment.

Keywords

informational coping style; role stress; informational satisfaction; family decision makers;
depressive symptoms; chronically critically ill

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INTRODUCTION

Technological and pharmacological advancements have enabled more acutely critically ill patients to survive and transition to a state being chronically critically ill (CCI). The symptoms associated with the syndrome of chronic critical illness include metabolic derangements, alterations in neuroendocrine function, muscular atrophy, infection, psychological disturbances, cognitive impairment, and the clinical hallmark of prolonged dependence on mechanical ventilation. The CCI constitute a relatively small but growing proportion of the critically ill. Zilberberg et al¹ estimated that the age-adjusted annual growth of the CCI is 5.5% and, given this rapid rate of annual growth, the incidence of chronic critical illness is projected to be greater than 600,000 persons by 2020. This emerging cohort of the critically ill also consumes a significantly greater amount intensive care and post-hospital resources compared to acutely critically ill.¹⁻³ Despite the resource intensiveness of the CCI, survival and functional status outcomes for these patients are poor.

The acuity of the CCI, their impaired cognitive status, and poor survival outcomes despite aggressive use of health care resources increase the complexity of the decision making process. Clinical characteristics such as the severity of illness, mechanical ventilatory support, sedation, and analgesics limits communication, comprehension, and the active participation of the CCI in decision making. Daly et al⁴ reported a prevalence of impaired cognitive status for those CCI who required at least three days of mechanical ventilation of 37%; cognitive impairment has also been reported as high as 82% in the CCI who received an elective tracheotomy.⁵

The lack of decision making capacity, the enormous resource consumption, and the clinical features of the CCI often results in family members actively participating in the decision making process on the behalf of a cognitively impaired patient. During an occurrence of critical illness, family members are more than visitors and informal care providers; they assume the role of the family decision maker (FDM). A FDM is a surrogate decision maker who makes medical decisions on the behalf of a cognitively impaired critically ill patient. Although often overwhelmed by the psychological stress of a loved one's critical illness, FDMs must receive and comprehend medical information in order to make medical decisions that are in accordance with the preferences of the cognitively impaired. FDMs of the critically ill routinely are faced with life-sustaining or life-limiting decisions while coping with situational and role uncertainty.

The complexity and vulnerability of the critically ill patient establishes unique informational and psychological needs for FDMs during the acute and chronic phase of critical illness. Although there has been a great deal of discussion in the literature of the need for frequent high-quality communication, there has been no study of the informational coping style of these families and how to tailor this communication to their psychological and informational coping needs. However, there is a growing body of literature in the social sciences that suggests individuals differ in the way in which information is processed to facilitate effective coping processes. The examination of pattern of informational processing style is relevant to FDMs, since these family members are expected to process information in order to formulate an informed decision for the cognitively impaired patient. Therefore, the purpose of this article is to describe a method of assessing informational coping styles of FDMs and report the results of a preliminary exploration of relationships among informational coping style, role stress, and depressive symptoms of FDMs of cognitively impaired CCI.

BACKGROUND

The traditional approach to understanding the relationship between stress and coping employs a transactional model. The most common philosophical approach explaining stress and coping is a transactional process which entails the cognitive appraisal of a stressor as potentially harmful and the initiation of coping behaviors to mitigate the effects of the stressor.⁶ The second philosophical approach applied to the stress and coping process assumes that individuals initiate preferential coping behaviors based on personality traits without regard to the context or psychological stressor; this form of dispositional coping is known as the individual's coping style.⁷

There is an array of coping style classifications. Approach and avoidance coping styles are two of the most well known methods of classifying the way individuals cope with psychological threats.⁹ During a stressful event, some individuals attempt to gain closer proximity with the stressful situation through information-seeking; this coping behavior is characteristic of approach coping. In contrast, individuals who prefer to withdraw from the stressor have an avoidant coping style. Approach and avoidance coping styles reflect cognitive and emotional activity and orient the person either toward or away from the threat.⁹ This article will further examine informational coping style, a variation of approach and avoidance coping that describes an individual's disposition for processing information while exposed to stressful conditions, such as being the FDM for a cognitively impaired CCI patient.

In the early 1980's the concept of informational coping style emerged as a method of categorizing informational coping behaviors. The Cognitive-Social Health Information Processing (C-SHIP) model developed by Miller, Shoda, & Hurley¹⁰ consists of a cognitive-affective construct that categorizes individuals based on informational coping disposition as either "monitors" or "blunters". The C-SHIP model assumes that monitoring and blunting coping styles are conceptually independent and a person is likely to employ both dimensions with a primary dimension being the most preferential.

Informational Coping Style

Dispositional coping styles, information seeking (monitoring) and information avoidance (blunting), are stable characteristics of the individual. Individuals who consistently seek additional, detailed information from nurses, physicians, and the environment as a method of coping with psychological stress exemplify monitoring behaviors. When there is insufficient information from these sources monitors may have alterations in their psychological well-being, due to their loss of the predictability, control and certainty acquired from gaining information.^{11, 12}

Information for individuals classified as monitors can mitigate or perpetuate the effects of exposure to threatening health information. The persistent psychological arousal related to the constant scan for information and the fixation on the negative aspects of the stressor contribute to the psychological distress in individuals classified as monitors; however, when there is sufficient available information psychological arousal will decrease.¹³ FDMs who are monitors are likely to report more depressive symptoms and a greater amount of perceived stress associated with being a surrogate decision maker if the availability of information is limited or their informational needs are not satisfied.¹⁴

Unlike monitors, blunters will avoid or distract themselves from sources of information deemed as threatening. The avoidance behaviors of blunters towards information are protective preferences, and exposing these individuals to a great deal of detailed information may actually be harmful to their psychological well-being.¹¹ Blunting behaviors in the

FDMs of the CCI may appear as resistance to meeting with health care providers or passive participation by the FDM in the decision making process.

The preference for avoidance of informational sources by FDMs could be thwarted by the recommended practice of a shared medical decision making paradigm, resulting in unwanted exposure to sources of threatening information. In contrast to monitors, individuals who are blunters perceive information as stress inducing and when no longer exposed to sources of threatening information their psychological arousal is likely to subside.¹⁵ However, to date there has been no study of the patterns of informational coping style in this population.

Role Stress

Family members of the critically ill are exposed to multiple sources of psychological stress. Those family members designated as FDMs may experience additional stress from being in the role of surrogate decision maker. FDMs are faced with comprehending complex medical terminology, deliberating on the decision choices, and then making a decision that is in accordance with the patient's preferences. Several studies have validated the perception of role stress in FDMs of cognitively impaired persons who were faced with life-limiting or life-sustaining decisions.^{16–18} Experiencing role stress may reduce the FDM's ability to make appropriate treatment decisions and can further increase the risk for impaired psychological well-being.

Informational Satisfaction

Previous studies^{19–23} have shown that family members of the critically ill perceive the amount and quality of the information they receive as being insufficient and not satisfying their informational needs. Lilly and Daly²⁴ suggest the use of a structured communication system during formal family meetings, in an effort to provide sufficient informational support, to enhance informational satisfaction, and to reduce unnecessary consumption of intensive care resources. However, these clinical recommendations may only support the informational coping style of individuals who employ the monitoring informational coping style and may induce unintended psychological harm for those who use the blunting informational coping style to manage threatening health information.

Depressive Symptoms

Few studies have explored the psychological impairment of family members of the CCI. As a consequence of a loved one's critical illness, family members of critically ill patients have symptoms associated with anxiety, post-traumatic stress disorder, and depression which contribute to their impaired psychological well-being.^{25, 26} Douglas et al^{27, 28} were among the first to cite the psychological impairment of caregivers of the CCI, as part of a clinical trial of a post-hospital disease management program for families and patients who required prolonged mechanical ventilation. Their findings indicate that at hospital discharge most (51.2%) caregivers were at risk of clinical depression (CES-D ≥ 16), although there was a statistically significant reduction in depression symptoms by 6 months after hospital discharge. Adding to this scant body of literature, Im et al²⁹ and Van Pelt et al³⁰ noted that a third of caregivers of patients who required ≥ 48 hours of mechanical ventilation were at risk for clinical depression at 2 months after the initiation of prolonged mechanical ventilation, and, contrary to Douglas' findings, there was not a statistically significant decrease in these symptoms over time in caregivers of the CCI.

METHODS

This is a secondary data analysis investigating patterns in FDM demographic characteristics and informational coping style as well as differences in informational satisfaction, role

stress, and depressive symptoms between FDMs classified as monitors and those classified as blunters. Predictive associations between informational coping style, informational satisfaction, and role stress on depressive symptoms at the onset of chronic critical illness in FDMs of cognitively impaired CCI were also examined.

Setting and Sample

A convenience sample of 210 FDMs was recruited from 5 ICUs at two Midwestern academic medical centers, as part of a larger study of the use of a structured communication system during formal family meetings. The eligible criteria for the interventional study was maintained; therefore, potential participants were age 18 years or older, the next-of-kin or legal representative for a cognitively impaired patient, requiring at least 72 hours of mechanical ventilation. Potential subjects for the present study had to also be available to meet with the healthcare team for formal and informal family conferences while the patient was in the ICU. Prior to subject recruitment, approval from each institutional review board and written informed consent from each FDM was obtained.

The participants included in our secondary data analysis represent a sub-group of participants who were administered additional questionnaires upon entry to the clinical trial of a structured communication system. All participants in the present study were enrolled during the intervention phase of the clinical trial but had not received a dose of the intervention. The intervention consisted of weekly multidisciplinary, family conferences held away from the bedside, intend to assist FDMs and the healthcare team with establishing a plan of care consistent with the patient's treatment preferences.

Procedures

Patients were screened daily during weekdays by a research assistant (RA) for study eligibility. Once a patient met the eligibility criteria, the RA would refer to the Glasgow Coma Scale (GCS) to determine the patient's decisional capacity. If the patient was sedated, confused or had GCS eye score less than 3 or a GCS motor score less than 6, the patient was deemed to lack decisional capacity. To verify impaired cognitive status of the patient, the attending ICU physician was asked to assess the decisional capacity of the patient. FDMs were identified from the patient's medical record or if there were multiple family members listed family members were asked to identify the primary decision maker for the patient. After identifying the FDM for each patient, the RAs contacted each FDM to explain the purpose of the study and obtain informed consent to participate in the study and review the patient's medical record. After enrollment, the abbreviated Miller Behavioral Style Scale (MBSS), the Critical Care Family Satisfaction Survey (CCFSS), a single-item measure of role stress, and the Center for Epidemiological Studies Depression (CESD) scale were administered during the first week of the ICU admission.

Instruments

The full-version Miller Behavioral Style Scale (MBSS), a measure of informational coping style, has established internal reliability and validity as well as stable test-retest reliability. The MBSS is constructed to represent the two dimensions of informational coping and has two sub-scales, monitoring and blunting. The full-version MBSS¹¹ has 4 stress-provoking scenarios (possible job loss, a dental procedure, airplane flight, and a hostage situation) and series of 4 monitoring and 4 blunting behaviors for each scenario. The abbreviated MBSS only uses two of the original 4 stress-provoking hypothetical scenarios (job loss and a dental procedure) and is thought to reflect the more commonly experienced stress evoking events.

31

Several methods of scoring the MBSS have been reported.^{11, 13, 32, 33} In the present study, we employed the most widely used method to score the abbreviated MBSS. Responses to the abbreviated MBSS are scored as 1 (yes) or 0 (no). To obtain the total monitoring or the total blunting sub-scale scores, each monitoring and blunting response is summed to produce a total score with a range of 0 to 8 for each sub-scale.³¹ The median of the total monitoring sub-scale score of the sample serves as a cut-off for categorizing subjects as either monitor or blunter.³⁴ Those subjects whose total monitoring sub-scale score on the abbreviated MBSS were above the median were classified as high monitors and those below this cut-off were categorized as blunters (or low monitors).¹² The full version and abbreviated versions of the MBSS has been validated in samples of patients and their spouses^{11–13, 33}. The internal reliability consistency (Kuder-Richardson 20) for the abbreviated MBSS was .60 in this sample of FDMs.

The Critical Care Family Satisfaction Survey (CCFSS) assesses family satisfaction with ICU care. The CCFSS was developed as a 5-factor, 18-item tool to assess family member satisfaction as a proxy for patient satisfaction. The 5 sub-scales of the CCFSS are: assurance, proximity, support, comfort, and information. The information satisfaction sub-scale consists of 4-items, on a 5-point Likert scale 1 (very dissatisfied) to 5 (very satisfied). The items of this sub-scale measure satisfaction with the information provided by critical care physicians and nurses. The higher the information sub-scale score, the more satisfied the family member is with the information s/he received from physicians and nurses. The CCFSS has established reliability and validity in a sample of family members of the critically ill³⁵ and the internal reliability consistency coefficient of .73 was estimated for the information sub-scale in this study.

A single item measure, “How stressful has it been making medical decisions for your family member?” was employed to measure the stress associated with surrogate decision making as perceived by the FDM. Similar single-item measures have been established as a reliable and valid method of measuring stress.³⁶ Therefore, our single-item measure is an acceptable method of assessing the stress associated with surrogate decision making by FDMs given the lack of a reliable and valid multi-dimensional measure of this latent construct. This measure was constructed as a graphic rating scale with the labels “not at all stressful” at one end and “very stressful” at the other end of a 10 centimeter horizontal line. The subject was asked to place an “X” on the scale to reflect the magnitude of perceived stress. The distance, in millimeters, from zero to the “X” mark was then divided by the total length of the scale (100 millimeters) and multiplied by 100 to transform the raw score to a percentage. Higher scores indicate the FDM’s perception of the psychological stress associated with being a patient’s surrogate decision maker.

The Center for Epidemiological Studies Depression scale (CES-D) is a widely used instrument that measures depressive symptoms and the clinical risk for depression. It is constructed as a 20 item self-report measure of depressive symptoms on a 4-point Likert scale from 0 (rarely or none of the time) to 3 (most or all of the time). Total CES-D scores range from 0 to 60 and the cut point for risk of clinical depression is a total CES-D score >16.^{37, 38} Validity of the CES-D has been confirmed among diverse samples of hospitalized and community dwelling adults.^{37, 38} The CES-D has well established reliability in community dwelling adults³⁵ as well as in this sample of FDMs (Cronbach’s $\alpha = .89$).

Data Analysis

Data were managed and analyzed using SPSS software version 15.0 (SPSS Inc., Chicago, Illinois). Missing data were managed by mean substitution and case deletion for missing data for the abbreviated MBSS. Total monitoring and blunting scores were computed and the median score on the total monitoring sub-scale determined the assignment of

informational coping style of each participant. To examine the differences between categories of informational coping style (monitor versus blunter) and continuous dependent variables a series of student *t* tests were performed. Chi-square (χ^2) analyses were conducted to assess difference between informational coping style and nominal level dependent variables. Prior to conducting multiple regression, we confirmed that all the bivariate correlations between the predictors and the outcome variable were statistically significant ($p \leq .05$) were retained for insertion into the regression models and at least .20 in magnitude.

Our data met the statistical assumptions of multiple regression and a two step hierarchical multiple regression was conducted to explore the predictive associations between informational coping style (total monitoring score), role stress, and informational satisfaction on the FDM's CES-D scores at enrollment. Guiding the hierarchical entry of the study variables was the conceptualization of informational coping style as a stable characteristic activated by the individual's perception of a psychological threat. Therefore, the monitoring score was entered in step one. Role stress and informational satisfaction were entered simultaneously in step two of the hierarchical multiple regression. Statistical significance (α) was set at $\leq .05$ for all analyses.

RESULTS

Sample Description

Figure 1 shows the distribution of the total sample and subject enrollment. As shown in Table 1, our sample of FDMs consisted primarily of white females who had prior experience with a critically ill family member. A total of 210 (43%) participants completed all of the questionnaires; however, this sub-group of participants represents less than one-fourth (21%) of the total number of eligible FDMs. The refusal rate was calculated excluding the number of FDMs who could not be contacted by the research team ($n = 217$); therefore, the refusal rate for this study was 35% for eligible FDMs who were contacted for informed consent. The mean CES-D score in for the FDMs was 24.8 ($SD = 11.1$) at enrollment, which categorizes the sample as reporting a moderate amount of depressive symptoms.

Comparison of Informational Coping Style and FDM Demographic Characteristics

Two fundamental aims of this study were to describe informational coping style in FDMs of cognitively impaired CCI and to provide preliminary evidence of the need for tailored communication practices. As presented in Table 2, there were no statistically significant differences between individuals classified as "monitors" or "blunters" based on demographic characteristics of the FDMs.

Comparison of Informational Coping Style and FDM Psychological Outcomes

There also were no statistically significant differences between informational coping style of monitors versus blunters in the perceptions of informational satisfaction and role stress at the beginning of chronic critical illness (Table 3). However, FDMs who were classified as monitors had significantly higher CES-D scores ($M = 26.1$, $SD = 10.9$) compared to blunters upon entry to the study ($M = 23$, $SD = 12$, $t = -2.0$, $p = .04$).

Predictors of Depressive Symptoms in FDMs

Given the incidence of depressive symptoms and high risk for clinical depression in these FDMs, we also were interested in examining predictors of depressive symptoms at the onset of an episode of chronic critical illness. As shown in Table 4, a hierarchical multiple regression was conducted and these results confirmed that a three predictor model (informational coping style, informational satisfaction, and role stress) accounted for 24.5% of the explained variance of depressive symptoms reported by FDMs at study entry. All

three predictors included in the model met the criterion for statistical significance; however, role stress ($\beta = .381, p = .001$) was the most influential predictor of CES-D scores.

DISCUSSION

First, this study found that demographic characteristics of surrogate decision makers do not have an effect on the FDM's classification of informational coping style. Previous studies have shown the absence of significant differences in demographic characteristics between individuals classified as monitors and blunders. However, these findings have been reported in samples of patients receiving primary care at an internal medicine practice¹² and among family caregivers of women diagnosed with breast cancer³³. This study is the first to assess informational coping style in FDMs of cognitively impaired CCI patients.

The independence of informational coping style and the FDM's demographic characteristics suggests that the assessment of informational preferences and psychological needs should not be triggered by demographic characteristics of FDMs. Tailoring communication practices based on the FDM's demographic characteristics is unlikely to facilitate comprehension, effective decision making, improve satisfaction or address the informational preferences and psychological needs of these individuals. Therefore, we believe that routine clinical assessment of informational coping style is likely to be a more useful approach to tailoring communication practices designed to provide the informational and psychological support necessary for family members exposed to surrogate decision making for the CCI.³³

Second, this study found no statistically significant differences between information coping style (monitors vs. blunders) and information satisfaction, and between informational coping style and the perception of role stress in this sample of FDMs. These findings are inconsistent with the C-SHIP model and may reflect the marginal internal reliability consistency of the information satisfaction sub-scale of Critical Care Family Satisfaction Survey and the lack of psychometric evaluation of the single-item measure of role stress.

However, a significant difference between informational coping style and CES-D scores was noted in this study. Consistent with previous studies^{5, 41} assessing informational coping style and depressive symptoms, we found FDMs classified as monitors (high monitors) had significantly higher CES-D scores compared with those who were classified as blunders (low monitors). Our sample of FDMs had significantly higher CES-D scores overall compared to estimates for a general population of community dwelling adults.³⁷ Possible explanations for these high scores include: exposure to a steady decline in the patient's health status, overinflated report of depressive symptoms associated with the acute phase of the patient's critical illness, the burden of the FDM role. In addition, items on the CES-D may overlap with symptoms of another affective state, such as anxiety, that was not assessed in our study. Future research should address these possible influences on mood among FDMs at the beginning of chronic critical illness.

The third significant result of this study was the association of higher informational satisfaction with lower appraisal of depressive symptoms. However, role stress and the monitoring informational coping style are likely to increase the appraisal of depressive symptoms, which suggests that interventional research should address the informational needs and psychological stress among family members subject to the role of surrogate decision maker for CCI patients.

While several studies^{32, 39, 40} have examined the characteristics of informational coping styles for patients there is limited understanding of the concept among family members acting as surrogate decision makers for the CCI. We suspect that patients and FDMs differ in their appraisal of health information. For instance, patients are likely to perceive a direct

threat from information regarding their diagnosis and treatment of cancer. This same health information given to the patient's spouse is likely to present a different kind of threat associated with the potential loss of a loved one and role change or strain, rather than the fear associated with one's own health. Differences in the appraisal of meaning or the threat associated with information are likely to be influenced by the individual's role in the communication process. To date, informational coping style has been presumed to function consistently within the individual despite the individual's cognitive role. The relationship between informational coping style and the cognitive role of the individual is not well understood. However, it is possible that being a FDM who does not receive informational support tailored to informational coping style can result in inability to make a rational and informed decision on the behalf of cognitively impaired patient.

Although the focus of this study was on the informational coping style, our findings indicated that role stress was the most influential contributor to self-reported depressive symptoms. Family members who are in the decision-making role and appear to be active information-seekers might be at greater risk for depression compared to family members who are not faced with making decisions for their loved one and those who appear to be avoiding information. Given this, it would be appropriate for critical care nurses to target family members who appear to be information-seekers for a more careful assessment of psychological status and the allocation of additional informational and social support resources.

Limitations

There are several limitations of this study which should be noted. First, the study only collected data on FDMs at one point in time, at the onset of chronic critical illness. Second, the sample consisted primarily of white females who were either a spouse or an adult child to a cognitively impaired CCI patient and thus may not adequately represent male FDMs or non-white FDMs. In addition, more than half (63%) of FDMs had prior experience with a family member who had been critically ill. Third, our study used several instruments, MBSS, CCFSS, and the single-item measure of role stress, that had not been used in a sample of family members of critically ill patients and were found to have poor internal reliability consistency in this sample of FDMs. Fourth, our refusal rate was 35%, and most FDMs who refused reported being too overwhelmed from the stress of having their loved one in an ICU to participate in our study. Given our moderately high rate of refusal to participate in this study, we recognize that our sample may only represent FDMs who were moderately distressed rather than those experiencing the highest levels of stress. Our study focused on the primary FDM designated to make decisions for a CCI patient; however, most decisions about the care of the patient are made by the primary FDM with input from other key members within a family system. This study has examined the role of the FDM from a family member's perspective and does not take in account the family's involvement and experience in the decision making process, which we acknowledge as a limitation.

Conclusion

The emphasis on family-centered care in the ICU recognizes both the patient and family as the focus of concern to critical care nurses providing care to this vulnerable dyad.⁴² As critical care nurses it is our responsibility to provide psychological support and to facilitate communication to patients and their family members during an episode of critical illness. Moreover, the American Association of Critical-Care Nurses (AACN) advocates for further study of nursing interventions focused on family members of the critically ill, coaching family members on how to communicate with healthcare providers, and interventions to provide tailored emotional support.⁴⁰ Exploring psychological factors such as role stress and informational coping style is a logical direction for future interventional studies focused on

improving information delivery and emotional support among FDMs of critically ill patients.

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Figure 1. Family Decision Maker Enrollment

1. MVS = Mechanical Ventilatory Support

2. FDMs = Family Decision Makers

Table 1

Demographic Characteristics of Family Decision Makers of Cognitively of Cognitively Impaired CCI

Family Decision Makers (n=210)	
Variables	No. (%)
Age, years (mean $\pm$ SD)	51.2 $\pm$ 13.1
Gender: Female	160 (76.2)
Race: White	131 (62.4)
Relationship to Patient:	
Spouse	72 (34.3)
Adult Child	59 (28.1)
Parent	45 (21.4)
Other Relative	34 (16.2)
Married: Yes	150 (71.4)
Education:	
High School or less	131 (62.4)
2–4 years of College	56 (26.7)
Graduate Studies	23(11.0)
Employed: Yes	124 (59.0)
Household Income	
\$20 000 or less	44 (22.7)
\$21 000 to \$49 000	84 (43.3)
\$50 000 or greater	66 (34.0)
First ICU experience: Yes	79 (37.6)

Table 2
Comparison of Informational Coping Style (Monitors and Blunters) and Demographic Characteristics

Variable	Monitors (n=116)		Blunters (n=94)		Z	p
	Mean	SD	Mean	SD		
Age, years	52.8	14.1	50.1	11.8	-.789	.43
	No.	%	No.	%	χ^2	p
Gender: Female	85	73.3	75	79.8	1.21	.27
Race: White	71	61.2	60	63.8	.152	.70
Married: Yes	83	71.6	66	70.2	.045	.83
Caregiver prior to admission [†] : Yes	36	31.3	23	24.7	1.09	.30
First ICU experience: Yes	44	39.3	35	38.5	.014	.90
Relationship to patient					5.97	.11
Spouse	47	40.5	24	25.5		
Adult Child	28	24.1	32	34.0		
Parent	22	19.0	23	24.5		
Other Relative	19	16.4	15	16.0		
Annual Household Income [‡]					.990	.61
\$20 000 or less	24	22.2	20	23.3		
\$21 000 to \$49 999	50	46.3	34	39.5		
\$50 000 or more	34	31.5	32	37.2		
Education ^{††}					3.56	.168
High School or less	68	59.1	66	71.7		
2–4 yrs. College	34	29.6	19	20.7		
Graduate Studies	13	11.3	7	7.6		
Employment Status					1.68	.20
Employed	63	54.3	61	64.9		

[†] n = 194,

[‡] n = 207,

^{††} n = 203

Table 3
Comparison of the Distribution of Psychological Variables between Monitors and Blunters

Variable	Monitors		Blunters		Mean Difference	95% CI Mean Difference	t	p
	n	Mean ± SD	n	Mean ± SD				
CCFSS-IS Score	115	4.3 ± .55	92	4.3 ± .55	-.007	-.16, .14	-.09	.93
Role Stress Score	95	60.9 ± 31.2	83	58.5 ± 30.8	-2.37	-11.6, 6.8	-.51	.61
CES-D Score [†]	116	26.1 ± 10.9	93	23.0 ± 12.0	-3.17	-6.3, -.02	-2.0	.04

[†] Effect size ($d = .30$)

Table 4

Regressions of Informational Coping Style, Role Stress, and Informational Satisfaction on FDM Depression

Model	Predictors	R^2	R^2_{adj}	ΔR^2	b	95% Confidence Interval for Unstandardized Coefficients	β	t	p
1	Monitoring Score	.088	.083		1.78	1.00, 2.75	.297	4.11	.000
2	Monitoring Score	.258	.245	.170	1.33	.554, 2.18	.224	3.57	.001
	Role Stress				.136	.086, .183	.381	5.67	.000
	Informational Satisfaction				-	-5.15, -.201	-	-	.03
					2.84		.140	2.12	