

Evaluation of an Assessment Battery for Estimating Dementia Caregiver Needs for Health and Social Care Services

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Abstract

Objectives: The aim of this study was to examine a battery of questionnaires for assessing the personal resources and vulnerabilities of family caregivers of persons with dementia (Alzheimer or other). **Methods:** A cross-sectional survey design was used to obtain dementia caregiver responses to questionnaires that targeted caregiver stress response, physical/mental health status, self-efficacy, personality, and social support. **Results:** A personality factor (neuroticism) explained over 20% of the variance in caregiver mental health status and depression. With caregiver distress as the dependent variable, personality and self-efficacy accounted for 15% to 17% of the explained variance. **Conclusions:** The results suggest that measures of personality factors, self-efficacy, mental health status, and distress response could be used for assessing caregiver vulnerabilities and health service needs. This individualized approach could ensure allocation of multicomponent intervention programs that have been shown to be more effective in sustaining caregiver role functions.

Keywords

caregivers, assessment, service needs, dementia

Introduction

Despite the fact that health care systems universally depend on family caregivers to provide much of the physical and social care needed by patients with dementia, there is little acknowledgment of caregiver needs when health support services are allocated. Rather, the quantity and intensity of community and health care support services provided are estimated according to the level of deterioration and autonomous functioning capacity of the patient with dementia. Consequently, assessment tools have focused primarily on determining the patient's level of functioning in terms of managing activities of daily living (ADLs) and instrumental activities of daily living (IADLs).¹

While families willingly provide health care to dependent family members, they need health and social support services to ward off deterioration of their own physical and mental health which, left unattended, can result in premature admission of the care recipient to institutional care. An assessment system focused on determining caregiver resources and vulnerabilities can assist community health and social welfare providers to understand what caregivers need to manage caring tasks without compromising their own health status.

While a number of caregiver self-report assessment tools exist, few are used by health care and social service agencies to systematically assess caregiver needs.² The American Medical Association has developed a brief self-assessment questionnaire that health professionals can use to infer service

needs for caregivers.³ Two caregiver assessment tools, that provide a comprehensive overview of caregiver burden, stress, and difficulties, provide important information for determining health care service needs; however, both are lengthy and require considerable amount of clinical professionals' time to be trained, administer, and interpret the responses.^{4,5} Several organizations provide guidelines for identifying areas of risk for caregivers.⁶ Some of the reviewed caregiver assessment tools are not based on a coherent conceptual framework, while others draw on a stress coping model to assess caregivers' needs.⁷ Some of the tools can be used to assess caregiver needs in a broad spectrum of caregiver situations⁴; others are specific to caregiving with regard to a specific disease.⁸

Conceptual Framework

For dementia caregivers, the degree of stress experienced is often related to the stage of dementia severity,⁹ the number and

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intrusiveness of difficult, dementia-related behaviors,¹⁰ and the management of ADLs and IADLs.^{11,12} Caregiver stress may also be related to the provision of psychosocial stimulation and supervision and the occurrence of other life stressors. Individual caregiver factors that affect stress response and health include psychiatric history, personality, ethnicity, comorbidities, social support, socioeconomic status, coping capacity, and spirituality.¹³ Similarly, there is considerable evidence to suggest that the interaction between caregiving stressors and person-specific factors contributes to physical and emotional problems for the caregiver.^{13,14} However, the reasons for differences among caregivers' responses to stress are not well understood. Typically, studies of dementia caregiving¹⁵ have relied on a stress-coping paradigm for understanding caregiver reactivity (stress) to managing caregiving tasks (coping).¹⁶ Although this model has been challenged and alternate perspectives focusing on dimensions of personality have been suggested,¹⁷⁻¹⁹ a theoretical model that includes a spectrum of predisposing factors and current situational issues that explain caregiver resources and vulnerabilities has not been developed. An alternate model for understanding the variability in dementia caregiver stress response would include person-specific resources (relationship capacity, personality traits, self-efficacy beliefs) as well as the caregiver's social context (social support). While self-efficacy and social support are part of cognitive models of stress and adaptation,¹⁶ relationship capacity and personality traits, typically considered in separate psychological models, can be integrated into a theoretical model that expands our understanding of the variability in caregiving experiences. Studies show associations between competent performance and personality traits (self-esteem, self-efficacy, locus of control, emotional stability–low neuroticism).²⁰ Because personality traits, self-efficacy beliefs, and task performance are manifested in interpersonal relational contexts, they influence the ways that social relationships affect physical and mental health²¹ and determine prosocial behavior and life satisfaction.²² Thus, the integration of social, cognitive, and psychosocial perspectives of the human condition provides a comprehensive theoretical model for understanding caregiver responses to the challenges of caring for a family member with dementia.

Dementia Caregiver Health Risk Factors

Relationship capacity and personality. For family caregivers, the task of coping with the stresses of caring for a family member with dementia is largely concerned with managing multiple relationships, frequently in the context of high intrafamilial emotional intensity. The presence of a problematic personality trait, such as neuroticism, results in variations in the experience of troubling emotions that interfere with optimal functioning in interpersonal family-caregiver contexts.¹⁷ Facets of neuroticism include anxiety, hostility, depression, self-consciousness, impulsivity, and vulnerability.²³ Numerous studies have shown associations between neuroticism factors and (a) general health outcomes,²⁴ (b) stress management,²⁵⁻²⁷ (c) well-being,^{28,29}

and (d) dementia caregiver health outcomes.¹⁸ Researchers of caregiver stress and burden have speculated that the discrepant findings in terms of caregiver stress response may be explained by caregiver personality factors and/or previous history of psychiatric disorders.^{19,30}

Self-efficacy beliefs. Self-efficacy beliefs affect psychosocial, interpersonal functioning in ways that determine the type and intensity of effort needed to deal with problems. In addition, self-efficacy beliefs can have an impact on vulnerability to emotional distress and depression.³¹ Self-efficacy theory is important for explaining the variability in family members' ability to cope with the persistent demands and challenges of caregiving.³² Caregivers with high self-efficacy beliefs would actively assume the caregiving role, persist in providing care as the patient's cognitive and physical conditions deteriorates, experience less distress, and require less support in maintaining their own physical and mental health. In contrast, caregivers with low self-efficacy beliefs would experience more stress, depression, and anxiety, all of which would inhibit appropriate and sustained action taking. Understanding caregivers' beliefs about their abilities to manage specific caregiving tasks would help health care providers to identify areas of vulnerability in coping with the multiple demands of caring for a family member with dementia.

Social support. Social support and the nature of intrafamilial relationships are factors that function as mediators in terms of coping with the stress of caring for a person with progressive dementia.^{33,34} Caregivers are in need of diversions and relief from caregiving tasks because they frequently find themselves isolated and unsupported by family members or friends with consequent intensification of anxiety and depressive affect.³⁵ Caregivers with neurotic traits may be especially vulnerable in their capacity to initiate and maintain positive, mutually supportive relationships. In 1 study, dementia caregiver family relationship problems and decreased social support were predictors of the desire to institutionalize the care recipient.³⁶ These findings suggest an interaction between the availability of support and the quality of support; that is, family and friends may be available but their support fails to mediate caregiver stress due to the contentious nature of the relationships.

In summary, an evaluation strategy based on a theoretical model with a focus on personality, self-efficacy, and social support can determine which health care and social services best address caregiver vulnerabilities and resources and result in reduced stress concomitant with improvement in physical and mental health status. The purpose of this study was to evaluate the potential for improving the process of assessing and determining the health care and social care needs of dementia caregivers by including measures of caregiver characteristics that are not typically included in existing caregiver assessment tools. We examined relationships between caregiver characteristics (personality and caregiving self-efficacy), caregiver social support, and indicators of caregiver health care needs (physical health, mental health, caregiver distress, and plans for

continued caregiving at home). Ultimately, a caregiver assessment battery that measures these characteristics and is easy to administer and interpret could enhance care providers' understanding of what caregivers need to sustain their caregiving role functions while avoiding deterioration in their own and the care recipient's health status.

Methods

A cross-sectional survey design was used to obtain dementia caregiver responses to a multicomponent battery of questionnaires. Two hundred thirty-two caregivers of family members with dementia were recruited through various health service provider organizations located in Canada. The study was approved by the human subjects review boards of 2 universities and all participants provided informed, signed consent to be interviewed. Eligible participants included spouses or adult children of a family member diagnosed with Alzheimer's dementia or other dementias, who spoke English, and who identified themselves as the care recipient's primary care provider.

Procedures

Data collection procedures were similar to a clinical assessment interview. Data were collected by trained graduate and senior undergraduate allied health students. The interviewers attended half-day training workshops. In addition to reviewing each of the questionnaires, their structure and purpose, all interviewers were trained to be sensitive to the participants' need to talk about their personal situations and their need of supportive, empathic responses from the interviewer. The interviews were held in the caregivers' homes using laptop computers to complete the questionnaires and enter participant responses. The interviewer read each question. Participants selected a response from the response options for each questionnaire. There was no option for recording open-ended responses. This allowed the interviewer to clarify any confusion experienced by each respondent. This method of data collection, with direct data entry, was not dependent on participants' reading ability, minimized missing data, and minimized potential for data entry errors. Each participant received a small honorarium and a handbook on dementia care.

Questionnaires

Caregiver characteristics and social support were measured using 3 well-validated measures: the 12 item neuroticism subscale of the Eysenck Personality Questionnaire Revised (EPO-R),³⁷ a brief measure of neuroticism (higher scores indicate higher neuroticism); the Revised Scale for Caregiver Self-efficacy,³⁸ a measure dementia caregivers' beliefs about managing certain caregiving tasks (higher scores reflect great confidence in managing tasks); and the Multidimensional Scale of Perceived Social Support, developed and tested by Zimet et al³⁹ to measure the caregiver's perceptions of the availability

of support from significant others, family, and friends (higher scores indicate greater satisfaction with support).

Caregiver health was measured by the Health Status Questionnaire (HSQ 12);⁴⁰ mental health and physical health subscale scores (score range 0-100 with higher scores reflecting better health). Depressive symptoms were measured using the Center for Epidemiologic Studies Depression Scale (CES-D),⁴¹ a well-validated self-report questionnaire (score range 0-60 with higher scores indicating more depression). Caregiving distress was measured in relation to care recipient levels of function in 5 domains, and distress related to the provision of social stimulation. The Functional Autonomy Measurement System (SMAF)¹ is a validated measure designed to clinically evaluate disabilities and care needs of older persons in 5 functional areas including ADLs (7 items), mobility (6 items), communication (3 items), mental functions (5 items), and IADLs (8 items). The SMAF was modified to include assessment of caregiver distress. For each item endorsed, the caregiver was asked to rate on a 5-point scale the degree of distress experienced in providing support to the patient (higher mean distress scores for each function domain indicated higher stress). A questionnaire that asked caregivers to rate levels of stress response to providing the care recipient with daily social stimulation was developed because we could not locate a published measure of this aspect of caregiving distress (higher scores indicated higher distress). Current service use was determined by self-report to a series of questions about whether the participant or the person with dementia was currently receiving any of a number of possible health and social services. Sample of services listed: in-home ADL care, respite care, meals-on-wheels, transportation, counseling, support groups, home nurse, doctor office visits, and so on. Finally, intent to continue caregiving at home versus making plans for institutionalization was measured by asking 1 question with 6 response categories; score 0 = *no plans for institutionalization* and score 6 = *application for institutionalization in process*. Demographic information was obtained at the onset of interview followed by completion of the questionnaires.

Data Analysis

Cronbach coefficient α s were computed for each scale to confirm internal consistency of response by our sample. Pearson correlation coefficients were computed for all variables. Two series of regression analyses were conducted. The first series of analyses tested independent associations between caregiver characteristics (neuroticism, caregiving self-efficacy, and social support), caregiver distress, and each of caregiver mental health, physical health, depression symptoms, service utilization, and plans for institutionalization. The second series of analyses tested independent associations between caregiver characteristics and each measure of caregiver distress. All analyses controlled for caregiver gender, age, relationship to care recipient, education, years caregiving, and hours per day caregiving. All predictor variables were entered simultaneously.

Results

The demographic descriptions of our sample of dementia caregivers parallel information (eg, age, gender, education, years of caregiving) reported in most studies of dementia caregivers. Three quarters of the respondents were women. The care recipients were evenly split by gender. Fifty-six percent of the caregivers were spouses, 36% were children, and the remainder were family relatives or friends. About 64% had college or university degrees, 21% had completed high school, and the remainder had less than high school level education. Respondents had been caregivers for an average of 5 years and spent an average of 15 hours per day providing care.

For the internal consistency of the measures, the α coefficients ranged between .70 and .90. Of importance were the α coefficients for the caregiver distress response to each area of care recipient autonomous functioning (all in the range of .70 and .90). Bivariate correlations are presented in Table 1. As expected, correlations among variables showed significant associations between the measures of physical and mental health status, self-efficacy, neuroticism, social support, and levels of caregiver distress.

Statistically significant predictors of caregiver physical health, mental health, depression symptoms, service utilization, and plans for institutionalization are presented in Table 2. After controlling for the effects of caregiver age, gender, kin relationship to care recipient, education, years caregiving, and hours per day caregiving, there were between 1 and 4 independent predictors for each of the dependent variables. Caregiver personality traits explained 24% of the response variance in caregiver mental health and 29% response variance in caregiver depressive symptoms. All other significant predictors accounted for small portions of variance (between 1% and 7%).

Results of analyses examining relationships between neuroticism, self-efficacy, and social support and each of the caregiver distress variables are presented in Table 3. Self-efficacy explained 15% of the variance in caregiver distress response to care recipient mental function; and 11% of distress related to managing IADLs. The personality variable (neuroticism) explained 17% variance in caregiver distress related to providing social stimulation to the care recipient; 11% variance to caregiver distress related to care recipient mobility; and 10% variance to caregiver distress associated with care recipient mental function.

Discussion

The analysis of the demographic data showed that the participant profiles matched those typically reported for dementia caregivers. Of note is the fact that the majority were women, were spouses, had been caregiving for an average of 5 years, and on average provided 15 hours of care a day. This means that caregiving for this population of respondents was more demanding than a full-time job. Our sample was not diverse in terms of race and ethnicity (all Caucasian). In terms of education and economic status, the sample profile was similar to

that reported in other studies that have demonstrated associations between these factors and caregiver stress response. For example, having more education and higher incomes¹⁴ and being female⁴² affect levels of experienced stress and the ability to manage caregiving tasks effectively.

The regression models showed, not surprisingly, that personality characteristics (neuroticism) independently explained portions of the variance in caregiver mental health status, as well as explaining variance in caregiver distress response to managing caregiving activities associated with care recipient functioning deficits. Similarly, self-efficacy explained significant portions of caregiver distress response to managing caregiving tasks associated with care recipient functioning limitation. Consequently, these measures of caregiver neuroticism and self-beliefs are important for estimating caregiver capacity to manage the care of a relative with dementia.

Most studies of caregiver factors associated with levels of experienced stress/burden include issues such as social support, hours of caregiving per day, years of caregiving, age, and health status.⁴³ We did not find any studies that looked at caregiver personality or relationship capacity as predictors of distress or health status. Yet a conflicted relationship between caregiver and care recipient has been shown to be associated with negative caregiving behaviors, the decision to end home care, and overall family functioning.⁴⁴ In combination with the caregiver self-efficacy measure that has been shown to be correlated with caregiver stress, we found that these person-specific factors are important for explaining caregiver levels of experienced distress as well as overall physical and mental health status. This finding parallels results of a study that linked self-efficacy for caring for a person with dementia with caregiver health risk.⁴⁵ Because experienced caregiver distress is associated with planning for institutional care, it could be postulated that those caregivers who are more vulnerable due to personality characteristics and traits and who have lower self-efficacy would need support services that take into account these particular vulnerabilities. Community services allocated on this basis would result in extending home care of the person with dementia. For example, a caregiver assessed with high neuroticism would benefit less from an educational support group and might need instead psychological assessment and counseling. In contrast, a caregiver with high self-efficacy, which is inversely related to neuroticism, could expand their repertoire of positive response behaviors by attending an educational support group or by accessing print or digital information resources. However, most organizations that provide community services to patients with dementia and their caregivers do not assess caregiver person-specific vulnerabilities or resources. Rather, the assessment strategies used to determine service needs, type, frequency, and duration are usually based on the health needs of the patient. Thus, it is not surprising that as caregiver distress escalates, personal vulnerabilities are exacerbated, frequently resulting in deterioration in caregiver physical and mental health status. In consequence, more health care services are needed for the caregiver, and planning for institutional care of the care recipient is a logical outcome.

Table 1. Correlations All Variables (N = 232)

	Stimulation Distress	Eysenck Neuroticism	Self-Efficacy	Physical Health	Mental Health	Depression	Multidimensional Scale of Perceived Social Support	Service Utilization (Caregiver)	Service Utilization (Patient)	Institutionalization
Caregiver distress (ADL)	0.34 ^a	0.26 ^a	-0.25 ^a	-0.03	-0.32 ^a	0.25 ^a	-0.12	0.17 ^c	0.10	0.23 ^a
Caregiver distress (mobility)	0.35 ^a	0.33 ^a	-0.20 ^b	-0.03	-0.40 ^a	0.34 ^a	-0.15 ^c	0.22 ^b	0.19 ^b	0.18 ^b
Caregiver distress (communication)	0.28 ^a	0.22 ^b	-0.27 ^a	-0.08	-0.31 ^a	0.28 ^a	-0.06	0.16 ^c	0.11	0.13
Caregiver distress (mental functions)	0.49 ^a	0.37 ^a	-0.43 ^a	-0.01	-0.40 ^a	0.40 ^a	-0.19 ^b	0.13 ^c	0.14 ^c	0.30 ^a
Caregiver distress (IADL)	0.40 ^a	0.25 ^a	-0.34 ^a	-0.09	-0.36 ^a	0.31 ^a	-0.20 ^b	0.06	0.02	0.12
Stimulation distress	1	0.43 ^a	-0.30 ^a	-0.01	-0.40 ^a	0.43 ^a	-0.18 ^b	0.10	0.14 ^c	0.15 ^c
Eysenck neuroticism	1	1	-0.34 ^a	-0.08	-0.53 ^a	0.56 ^a	-0.18 ^b	0.05	0.07	0.06
Self-efficacy	1	1	1	0.16 ^c	0.41 ^a	-0.37 ^a	0.29 ^a	-0.04	0.09	0.01
Physical health	1	1	1	1	0.14 ^c	-0.18 ^b	0.08	0.08	0.17 ^c	0.05
Mental health	1	1	1	1	1	-0.73 ^a	0.28 ^a	-0.03	0.06	-0.07
Depression	1	1	1	1	1	1	-0.26 ^a	0.11	0.02	0.13
MSPSS	1	1	1	1	1	1	1	0.13	0.07	-0.01
Service utilization (caregiver)	1	1	1	1	1	1	1	1	0.41 ^a	0.18 ^b
Service utilization (patient)	1	1	1	1	1	1	1	1	1	0.27 ^a
Institutionalization	1	1	1	1	1	1	1	1	1	1

Abbreviations: ADL, activity of daily living; IADL, instrumental activity of daily living; MSPSS, Multidimensional scale of perceived social support.

^a P < .001.^b P < .01.^c P < .05.

Table 2. Prediction of Caregiver Health, Service Utilization, and Plans for Institutionalization (N = 232)^a

Dependent Variables	Independent Variables	R ²	t Value
Caregiver physical health	Caregiver self-efficacy scale	.032	2.72 ^b
Caregiver mental health	Caregiver distress (mobility)	.061	-2.86 ^b
	Caregiver distress (instrumental activities of daily living)	.032	-2.06 ^c
	Eysenck personality	.243	-5.72 ^d
	Caregiver self-efficacy scale	.068	3.03 ^b
Caregiver CES-D scale	Caregiver distress (mental functions)	.056	3.39 ^d
	Eysenck neuroticism	.290	7.69 ^d
	Multidimensional scale of perceived social support	.032	-2.54 ^c
Caregiver service utilization	Caregiver distress (mobility)	.048	3.41 ^d
	Multidimensional scale of perceived social support	.019	2.19 ^c
Patient service utilization	Caregiver distress (mobility)	.035	2.79 ^b
Plan for institutionalization	Caregiver distress (mental functions)	.071	4.44 ^d
	Caregiver Self-efficacy Scale	.016	2.15 ^c

Abbreviation: CES-D, Center for Epidemiologic Studies Depression Scale.

^a Control variables in each analysis: caregiver gender, age, relationship to care recipient, education, years caregiving, and hours per day caregiving. Predictor variables entered in each analysis: caregiver distress related to each of activity of daily living (ADL), mobility, communication, mental functions, instrumental activity of daily living (IADL), and social stimulation; Revised Scale for Caregiver Self-efficacy; Multidimensional Scale of Perceived Social Support; and Eysenck Personality Questionnaire Revised. Only statistically significant predictors are reported.

^b $P < .01$.

^c $P < .05$.

^d $P < .001$.

Table 3. Prediction of Caregiver Distress (N = 232)^a

Dependent Variables	Independent Variables	R ²	t Value
Distress due to activities of daily living	Eysenck neuroticism	.055	3.14 ^b
	Self-efficacy scale	.030	-2.30 ^c
Distress due to mobility	Eysenck neuroticism	.111	5.05 ^d
Distress due to communication	Eysenck neuroticism	.035	2.42 ^c
	Self-efficacy scale	.057	-3.09 ^b
Distress due to mental functions	Eysenck neuroticism	.096	4.28 ^d
	Self-efficacy scale	.153	-5.30 ^d
Distress due to instrumental activities of daily living (IADLs)	Eysenck neuroticism	.032	2.27 ^c
	Self-efficacy scale	.108	-4.14 ^d
Distress due to social stimulation	Eysenck neuroticism	.170	5.59 ^d
	Self-efficacy scale	.033	-2.47 ^b

^a Control variables in each analysis: caregiver gender, age, relationship to care recipient, education, years caregiving, and hours per day caregiving. Predictor variables entered in each analysis: Revised Scale for Caregiver Self-efficacy; Multidimensional Scale of Perceived Social Support; and Eysenck Personality Questionnaire Revised. Only statistically significant predictors are reported.

^b $P < .01$.

^c $P < .05$.

^d $P < .001$.

Despite the significant associations between personality dimensions, self-efficacy, and caregiver distress, it is to be noted that the caregivers in this study were recruited from service agencies that determine allocation of services by assessing the needs of the patients with dementia. Consequently, this is not a representative sample of informal caregivers as only 1 in 3 dementia caregivers access health and/or social services.⁴⁶ It may be that dementia caregivers who do reach out for support services do so because of their own decline in health status, which in turn may be exacerbated by person-specific vulnerabilities. Little is known as to why dementia caregivers do not

access services until very late in the progress of the disease. Lack of information about dementia at time of diagnosis, living in rural areas with few services, and the stigma attach to the diagnosis of dementia have been suggested as possible reasons for caregiver's lack of interest in obtaining support services.⁴⁷

Of particular note is the fact that social support contributed minimally to response variance in the dependent measures—a finding that contrasts with previous studies of caregiver stress response. Possibly, the personality measure explained variance associated with relationship factors that are central to understanding the impact of social support on caregiver levels of

distress. As indicated in our theoretical framework, relationship capacity is an important factor captured in the Eysenck Personality measure and clearly an important aspect of understanding the effects of supportive relationships on caregiver management of caregiving tasks. That is, if caregivers have difficulties in developing and sustaining mutually gratifying relationships, their relationships with support systems (relatives and friends) and the relationship with the care recipient are apt to be troubled. Studies show that premorbid and current negative caregiver-care recipient relationships contribute to escalation in caregiver distress, demands for support services, and the desire to institutionalize.^{36,44}

Conclusions

The results of this study suggest that caregiver person-specific characteristics need to be taken into consideration when determining the combined health care and social service needs of the care recipient and caregiver. The Eysenck neuroticism scale (EPO) is short, easy to administer, and could be used routinely to assess caregiver service needs. Similarly, the dementia caregiver self-efficacy scale could be used to show the degree to which the caregiver is confident in being able to manage specific caregiving challenges. Finally, level of distress can be determined from response to providing care in relation to ADLs and IADLs. We modified the SMAF—a scale for assessing patient functioning autonomy, by adding a distress response to each item endorsed for level of the care recipient's autonomous functioning. The distress level is computed in relation to specific caregiving demands. Consequently, service needs for the patient and the caregiver can be specified according to areas of dysfunction—that is, each caregiver's unique stress response to each area of dysfunction can be observed and taken into consideration when allocating services.

For rapid completion and interpretation of the assessment battery, agencies could have caregivers complete the questionnaires online, submit electronically for immediate computation, yielding output of mean scores and interpretation of score levels. For example, mean scores HSQ-12, the Eysenck neuroticism scale, the self-efficacy measure, and the measure of distress related to specific areas of care recipient dysfunction could be displayed by level (low-high) with descriptors as to clinical meaning. A caregiver who scores in the upper range of the personality measure (6+) has probable relationship capacity issues and might need to be referred for psychological assessment and follow-up counseling; that is, an educational support group would not meet the needs of caregivers with personality vulnerabilities. In contrast, caregivers who show low scores on the personality measure (5 or less) but high distress scores (mean = 2+) related to managing ADLs and IADLs would benefit from allocation of practical home support services and possibly an educational support group.

By using such a system, agency staff would not need to be trained to carry out an extensive assessment interview nor how to interpret caregiver narrative responses. Instead, they could focus their interview on exploring with the caregiver

those areas of concern identified by their responses to the questionnaires. Furthermore, the interviewer could ask the caregiver to identify which services would help them most in addressing the identified vulnerabilities and needs. In this way, individual caregiver characteristics/profiles could be matched with specific services that address their individual needs and thereby prevent deterioration in the health of the caregiver and care recipient. Studies have shown that individualized, multi-component intervention programs for dementia caregivers are the most efficacious.⁴⁸ Caregivers who obtain the multicomponent support services that they need are better able to maintain their relative in the community and delay admission to institutional care, which is far more costly whether paid for privately or subsidized by government health care systems.⁴⁹ In addition, an individualized assessment procedure that links caregiver-specific needs to support service allocation could prove to be cost-effective because services that are allocated according to agency mandate and rules may over serve some while under serving others, with possible negative consequences for the underserved.

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