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The case for involving adult children outside of the household in the self-management support of older adults with chronic illnesses

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Abstract

Objectives—This study sought to (1) identify barriers to spousal support for chronic illness self-care among community-dwelling older adults; and (2) describe the potential availability of self-care support from adult children living outside of the household.

Methods—Nationally representative US sample of chronically ill adults aged 51þ were interviewed as part of the Health and Retirement Study ($N=14,862$). Both participants and their spouses (when available) reported information about their health and functioning. Participants also reported information about their contact with adult children and the quality of those relationships.

Results—More than one-third (38%) of chronically ill older adults in the US are unmarried; and when spouses are available, the majority of them have multiple chronic diseases and functional limitations. However, the vast majority of chronically ill older adults (93%, representing roughly 60 million Americans) have adult children, with half having children living over 10 miles away. Most respondents with children (78%) reported at least weekly telephone contact and that these relationships were positive. Roughly 19 million older chronically ill Americans have adult children living at a distance but none nearby; these children are in frequent telephone contact and respondents (including those with multiple chronic diseases) report that the relationships are positive.

Discussion—As the gap between available health services for disease management and the need among community-dwelling patients continues to grow, adult children—including those living at a distance—represent an important resource for improving self-care support for people with chronic diseases.

Keywords

Chronic disease; Disease self-management; Informal caregivers

INTRODUCTION

A perfect storm is brewing in the US for the care of older adults with chronic diseases. Along with alarming projected growth in the population of patients needing assistance,¹ health system resources are increasingly strained by long-standing budgetary shortfalls, exacerbated by the

more recent financial crisis. Interventions designed to improve chronic illness outcomes through the use of health professionals or information technology too often show little effect on outcomes,² and any increases in resources are unlikely to fully meet the growing needs of chronically ill elders.

Informal caregivers have long been central to effective self-care support for older adults with significant functional limitations.^{3,4} As health systems strain under the weight of growing caseloads, these caregivers will become even more important as supporters for chronic illness management of patients who are more functionally independent, such as those with diabetes, mild heart failure and depression. In-home caregivers—mainly spouses—are often integrally involved in these patients' self-care, providing practical services such as shopping, motivation for self-management adherence and emotional support.^{5–7} Epidemiologic studies demonstrate that having a spousal caregiver improves patients' quality of life and even longevity.^{8–10}

Unfortunately, caregiver strain can lead to depression, anxiety, declines in caregivers' physical health and may even increase mortality.¹¹ Increasingly spousal caregivers must balance those responsibilities with jobs, child-rearing or other competing demands;¹² and these pressures lessen spouses' ability to fill the gaps in formal care management, particularly for patients with complex self-management needs.

Due to the growing need for self-care support and the potential limits on in-home caregiving resources, social network members outside of the household, including adult children, may need to play a larger role. However, new models for supporting these potential caregivers must take into account the increasing distances between those children and their chronically ill parents¹³ and should be realistic, given the intensity and quality of these relationships.

Using a large nationally representative US sample, the current study sought to describe the health status and functional limitations of spouses of chronically ill older adults, in order to better understand possible limits on these spouses' ability to support chronic disease self-care. We also describe the potential availability of additional support for self-management through adult children outside of the household and the quality of the relationships that chronically ill older adults have with these potential informal caregivers. While other social network members such as friends, church members and siblings also can provide support for chronic illness care, the current study focussed exclusively on adult children in order to explore the issues that would need to be addressed to allow these individuals to be more effective in sustaining their older parents in the community.

METHODS

Sample

Data were drawn from the 2006 survey wave of the Health and Retirement Study (HRS). The HRS is a biennial longitudinal survey of a nationally representative sample of Americans aged 51 and older.¹⁴ We limited the sample to community-dwelling participants who reported one or more of the following chronic health conditions: high blood pressure, diabetes, lung disease, heart problems, cancer, stroke, psychiatric problems or arthritis. For 5% of this sample with cognitive impairments, proxies reported objective information such as the index respondent's diagnoses, financial status and family structure, but not more subjective data such as the index respondent's perceived relationship with their children or depressive symptoms.

Measurements

Respondents' Chronic Illness Burden and Functional Status

Respondents reported whether or not they had ever been told by a doctor that they had the following diagnoses: high blood pressure, diabetes, lung disease, heart problems and cancer of any type except minor skin cancers, stroke, psychiatric problems or arthritis. For the current analyses, respondents were grouped according to their number of chronic conditions (1, 2 or 3+). Participants also reported their perceived health status (excellent, very good, good, fair or poor) and depressive symptoms using an eight-item version of the Center for Epidemiologic Studies Depression Scale (CES-D).¹⁵ Limitations in activities of daily living (ADLs) were measured using the standard stem 'do you have difficulty doing the following activities'? and separate items asking about walking, dressing, bathing, eating, transferring in and out of bed, and toileting. Need for assistance with instrumental activities of daily living (IADLs) such as shopping for groceries, managing money or taking a phone call, were identified by first asking respondents to report which of the activities they 'never do' and then asking whether that was because of a health problem. For self-respondents, the presence and severity of cognitive impairment was defined using a modified version of the Telephone Interview for Cognitive Status (TICS).¹⁶ On the basis of prior studies,¹⁷⁻¹⁸ we defined three groups corresponding to normal cognitive function, borderline cognitive impairment and cognitive impairment. For proxy respondents, participants' cognitive status was categorized based on a combination of structured interviewer- and proxy-assessments of their memory.¹⁹

Spousal Health and Functioning

For respondents with a spouse, those spouses also completed a detailed survey of their health status and functioning, including chronic conditions, cognitive status, ADLs and IADLs. Items were identical to those used in the index respondent survey.

Communication with Adult Children

All respondents were asked to report information about adult children living within and outside of their household. We used these data to create the following mutually-exclusive categories which characterize the potential accessibility of in-person support for chronic illness care: respondents with any adult children living in the household; respondents with no children in the household but one or more within 10 miles; respondents with only children greater than 10 miles away, and respondents with no children. A random subsample of respondents (representing 39% of those included in the current study) was asked to report on the process of communication with their children (e.g. the frequency of in-person visits and telephone calls) and on the quality of these relationships, using items such as 'How much could you rely on your children if you had a serious problem?' and 'How much can you open up with your children about your worries?' Negative relationship perceptions included questions such as 'How often do your children make too many demands on you?' and 'How often do your children criticize you?' For each item, respondents reported their perceptions of the quality of the relationship using a four-item Likert scale (a lot, some, a little, not at all).

Analysis

All analyses were adjusted for the complex sampling design of the HRS, so that the results can be applied directly to the older-adult population in the US. Initial analyses examined variation in the characteristics of respondents across groups defined by their burden of chronic illness (1, 2 or 3+). For the subset of participants with a spouse, we examined the prevalence of chronic illnesses, cognitive deficits and functional limitations among those spouses. These analyses were stratified by participant/spousal gender, because caregiving behaviours and the health status of older adults frequently varies by gender.²⁰⁻²² Differences across groups defined by

respondents' burden of chronic disease were then examined with respect to the availability of adult children, the frequency and types of contact between the respondent and those children, and the perceived quality of those relationships from the respondent's perspective.

In auxiliary analyses, we examined these relationships within two particularly important subgroups: First, we examined contact patterns and relationship quality within the subgroup of respondents who were unmarried, since these individuals may need greater assistance from their children given the lack of a spouse. Second, in order to establish the potential reach of interventions designed to assist chronically ill elders who have dispersed social networks, we examined the process and quality of interactions between respondents and their children, within the large subgroup of respondents who reported only having children living 10+ miles from their household.

RESULTS

Characteristics of Respondents and the Availability of Spousal Caregivers

Of the 18,469 respondents interviewed in the HRS 2006 survey, a total of 14,862 were living in the community, reported one or more chronic health problems, and were included in the current sample. These individuals represent 64.5 million Americans or roughly 22% of the total US population in 2006. Respondents were on average 67 years of age, white and married, with one in five respondents reporting less than a high school education. Overall, 27% of respondents reported one chronic condition, 30% reported two and the remaining 43% reported three or more (Table 1). Among respondents with three or more chronic conditions, more than half had hypertension (86%), heart problems (53%) and/or arthritis (87%). Respondents with three or more chronic diseases were more likely to be female, had less education and were substantially more likely to have incomes within the lowest quartile. Participants, particularly those with multiple chronic conditions, reported a number of mental and physical limitations that could pose significant barriers to their chronic illness self-management. For example, more than 16% of all respondents and 25% of those with 3+ chronic conditions reported at least four symptoms of depression. Significant numbers of respondents also had at least borderline cognitive impairment (10%), as well as limitations in ADLs (23%) or IADLs (15%). Among participants with three or more chronic conditions, 37% reported difficulty with daily activities such as walking (25%), dressing (16%) or transferring in and out of bed (16%).

Health and Functional Limitations of Potential Spousal Caregivers

Roughly 62% of all respondents (representing 40 million Americans) were married at the time of their interview, while the remaining 38% (representing 24.5 million Americans) were unmarried. Among married respondents, a significant proportion of their spouses had chronic medical conditions and functional impairments that could limit their ability to provide self-management support (Tables 2 and 3). For example, 82% of wives had their own chronic conditions; more than half reported at least two, and 28% reported three or more conditions including hypertension (64%), arthritis (61%), heart problems (34%), diabetes (25%) and psychiatric problems (14%). As many as 10% of husbands and 6% of wives had cognitive deficits, and nearly one in five spouses (male or female) had limitations in activities of daily living such as bathing, dressing and toileting. Chronic illnesses and functional limitations were particularly common among spouses of respondents with greater chronic illness self-management needs. For example, nearly one in four wives for male respondents with three or more chronic illnesses reported ADL limitations, including walking (14%) or shopping for groceries (11%).

Availability of Adult Children Outside of the Household

The large majority of respondents had adult children (93%, representing roughly 60 million Americans), and 26% reported two out-of-home children within 10 miles (Table 4). Overall, nearly half of respondents with children (47%, representing 30.3 million US residents) had one or more children living more than 10 miles away from their household, and 30% reported children living at a distance greater than 10 miles but no children nearby. Among respondents with multiple chronic diseases, 28% had children living more than 10 miles away but none living nearby.

Among respondents with children, more than 44% met with those adult children in person at least once per week, and 78% were in phone contact at least this often (Table 4). Overall, more than 93% of respondents were in phone contact with their adult children at least once per month. Respondents reported that the quality of their relationships with their adult children was generally good. More than 85% of respondents reported that they could rely on their adult children at least ‘some’ if they had a serious problem, and 76% reported that they could open-up with their children about worries. Negative interactions were infrequent: 85% of respondents reported that their adult children criticized them only ‘a little’ or ‘not at all’, and 83% reported that their children rarely or never ‘let them down’. Overall, respondents with a greater burden of chronic conditions reported relationships with their children that were at least as strong as those with less complex self-management needs.

Auxiliary Analyses within Key Subgroups

Unmarried respondents tended to be older (mean age of 70 years) and to have more chronic illnesses than the sample overall, with nearly half (49%) reporting three or more chronic diseases. The majority of these respondents (86%) had adult children, with 61% having three or more. Relationships with their children were strong: nearly half reported that they met with their adult children at least weekly and 80% spoke with their children by phone at least this frequently. Most unmarried respondents (86%) reported that they could rely on their children if they had a serious problem.

A total of 4455 respondents, representing more than 19 million Americans, reported one or more children living 10+ miles from their residence and no children living nearby. These respondents were similar to the sample as a whole with respect to their chronic conditions, functional limitations and sociodemographic characteristics. Not surprisingly, fewer of these respondents reported seeing their children in person at least once per week (19%), although more than 71% reported talking with their children this often, and nearly a third (31%) reported telephone conversations several times per week. Despite the distance, these respondents felt confident that they could rely on their children for assistance if it were needed (Table 5). For example, 82% reported that they could rely on their children if they had a serious health problem and 64% said that they could open up to their children about their worries.

DISCUSSION

Summary of Main Findings

While spouses and other in-home family members will undoubtedly continue to play a central role in the care of older adults with chronic conditions, these data suggest that there are very real limits to what some of those loved ones will have the capacity to contribute. Even physically healthy spouses often have difficulty supporting patients’ self-management due to the complexity of the role and non-health-related competing demands.^{23,24} However, these data suggest additional challenges. First, many chronically ill older adults do not have a spouse at all—38% of older adults in the current study were unmarried. Even when a spouse is available, the vast majority of spouses, particularly partners of individuals with multiple

chronic diseases, struggle with their own chronic medical needs and functional limitations. These conditions present a challenge to their ability to provide ongoing self-management support.

Fortunately, the vast majority of respondents (representing roughly 60 million Americans) had adult children who could be another source of support for their chronic illness care. However, these relationships are increasingly strained as adult children move farther away from their parents in order to seek employment, find a more affordable living situation or follow their own partner. As many as 30% of all respondents in this study had adult children who lived at a distance of more than 10 miles from their household but no children who lived nearby. Some of these adult children are in frequent in-person contact with their ageing parents despite the distance, and many (particularly those within an hour's travel distance) no doubt already play a role in their parent's chronic illness care. Nevertheless, these distances pose a barrier to the monitoring and frequent support for behaviour change that many chronically ill patients' need.

The Implications for Future Research and Clinical Practice

To be effective, adult children and other out-of-home informal caregivers (particularly those living at a distance) need three types of resources: *Information about the person's health problems*: Particularly when these caregivers are unable to participate in the patient's medical visits, they may lack basic information such as the expected trajectory of the disease, the role of medications and the types of self-care behaviours and lifestyle adaptations that are important. *Timely information about the patient's status*: One of the main benefits of involving informal caregivers is that they can identify health and behavioural problems in early, reversible stages, between scheduled clinical appointments. At minimum, out-of-home caregivers need a mechanism for receiving regular information about important health and behavioural issues so that they can identify trends over time and prodromal symptoms of worsening health status. Finally, informal caregivers living outside of the household also need *information that they can use to communicate effectively and manage their own potential caregiving burden*. While adult children's bond with their parents is an important benefit of these caregiving relationships, long-standing negative communication patterns such as nagging and criticizing the individual can be a substantial detriment to effective support and behaviour change.^{25–28} Informal caregivers could be taught techniques such as motivational interviewing²⁹ to help ensure that their advice is productive and consistent with a relationship that can be maintained over an extended period of time. Moreover, new treatment models that incorporate greater support from out-of-home caregivers must provide monitoring and counselling to prevent caregiver burden, so that their assistance does not come at the price of their own health and well-being.

We are developing CarePartners as one possible approach to providing social network members with the information and resources they need to be effective in assisting a loved one in their chronic illness self-management.³⁰ Through CarePartners, adult children outside of the household and other social network members receive health education and up-to-date information about the patient's status that they can use to provide effective self-management counselling, emotional support and assistance with problem-solving barriers to self-care. Initial findings suggest that patients who receive automated telephone monitoring and behaviour change calls through CarePartners with feedback via the Internet and telephone messaging to informal caregivers are satisfied with the service, communicate more frequently with social network members about their chronic conditions and report being better informed about their self-care. Ongoing studies in the US and Latin America are developing and evaluating versions of this model for patients with heart failure, depression, diabetes and cancer. The current data suggest that these programmes could be relevant to millions of chronically ill older adults who either have no caregiver in the household or a spouse who is too burdened by their own health problems to fully meet the person's needs.

Strengths and Limitations of the Study

Although this study provides US nationally representative information about the potential availability of relationships that could be leveraged to improve chronic illness outcomes, it provides only a rough estimate of the potential resource for self-management. On the one hand, these data under-estimate possible informal support for chronic illness care because friends, non-married life partners, community groups (e.g. religious organizations) and other family members such as siblings were not considered. The focus here on spousal support emphasized the various barriers to spousal assistance represented by those individuals' own burden of chronic disease and functional limitation. Despite those barriers, it is well known that spouses (particularly wives) often provide an enormous amount of instrumental and emotional support for people living with chronic illness.²² On the other hand, adult children (even those who visit regularly and have a strong familial relationship with their parent) often juggle other significant responsibilities, such as child rearing, medical problems, their own spousal relationships and job demands.¹² Thus, it would be inaccurate to assume that these individuals are always available to provide effective assistance either in person or at a distance.

Beyond these caveats, an important limitation of this study is that it was conducted only in the US. Canada, Japan and European industrialized countries also are experiencing the demographic and epidemiologic changes affecting the US and may well also benefit from new models of care that integrate family more effectively. National surveys such as the English Longitudinal Study of Ageing³¹ could provide a framework for replicating the current study within those countries. Such efforts should be accompanied by more detailed examination of the process of informal caregiving within specific communities, since family structures, competing demands, communication styles and access to care all likely vary in ways that would affect the development of services supporting adult children.

Conclusions

Despite these caveats, these data suggest that for millions of chronically ill older adults, in-home informal caregivers are either absent or struggling with their own functional limitations. Given the growing crisis in healthcare, new treatment models that identify strategies for providing structured roles to adult children and other informal caregivers, including those living at a distance, could be relevant to millions of patients, helping to fill the gaps in care that will widen as health service resources become increasingly strained.

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TABLE 1
Respondent characteristics

	Number of chronic conditions				p-value
	Total (N=14862) ^a	1 (N=4017)	2 (N=4437)	3+ (N=6408)	
Age in years					<0.0001
50–59	30.5	44.4	29.3	20.6	
60–69	31.8	30.3	34.1	31.2	
70–79	22.7	16.3	22.2	28.0	
≥80	15.0	9.0	14.3	20.2	
Female gender	55.8	51.9	56.8	58.0	<0.0001
Race					0.0007
White/non Hispanic	81.2	82.7	80.7	80.4	
Black /non Hispanic	9.5	7.5	9.6	10.9	
Hispanic	6.8	7.3	7.1	6.2	
Other	2.5	2.4	2.6	2.4	
Education in years					<0.0001
<12	21.0	14.4	18.6	27.9	
12	33.9	31.7	35.1	34.6	
>12	45.2	53.9	46.2	37.6	
Net worth					<0.0001
Bottom income quart.	22.8	17.1	21.7	30.6	
Second income quart.	25.5	23.9	24.2	27.7	
Third income quart.	25.1	27.8	26.3	22.0	
Top income quart.	25.6	31.1	27.8	19.6	
Living arrangement					<0.0001
Married	61.9	68.4	63.6	55.5	
Single living w/another	15.6	13.2	14.6	18.3	
Single living alone	22.5	18.4	21.9	26.2	
Medical condition					
Hypertension	63.8	33.4	65.8	86.1	<0.0001
Diabetes	21.8	4.7	13.5	41.3	<0.0001

	Number of chronic conditions				p-value
	Total (N=14862) ^a	1 (N=4017)	2 (N=4437)	3+ (N=6408)	
Lung disease	11.3	1.9	6.6	22.3	<0.0001
Heart problem	27.7	6.4	16.8	52.5	<0.0001
Cancer	15.9	5.5	11.9	27.8	<0.0001
Stroke	7.5	1.0	3.1	15.8	<0.0001
Psychiatric problem	20.3	6.4	14.0	35.9	<0.0001
Arthritis	67.4	40.9	63.3	87.4	<0.0001
Perceived health status					<0.0001
Excellent	8.8	17.6	7.8	2.5	
Very good	28.5	40.7	31.6	16.5	
Good	32.2	28.7	35.1	32.8	
Fair	21.6	10.4	19.7	31.8	
Poor	8.9	2.6	5.7	16.4	
Depressive symptoms ^a					<0.0001
0	42.1	54.7	43.2	31.6	
1-3	41.0	36.7	42.2	43.4	
4-8	16.9	8.6	14.6	25.0	
Cognitive function					<0.0001
Normal	90.0	92.8	91.6	86.6	
Borderline impairment	5.0	3.8	4.4	6.3	
Cognitive impairment	5.0	3.4	4.0	7.1	
No. of ADL limitations					<0.0001
0	77.1	90.6	82.1	62.5	
1-3	18.8	8.2	15.8	29.4	
4-6	4.1	1.2	2.1	7.8	
No. of IADL limitations					<0.0001
0	84.6	93.6	88.7	74.6	
1-3	13.0	5.4	9.6	21.6	
4-6	2.3	1.0	1.7	3.8	

^a Asked only self-respondents

These data represent 64.5 million Americans. Total population estimates within subgroups can be obtained by multiplying table percentages by this number. Cell entries are column percents.

TABLE 2
Chronic conditions and functional limitations among husbands of married female respondents

Husbands' characteristics	Total (N=4103)	Female respondent's chronic diseases			p-value
		1 (N=1179)	2 (N=1324)	3+ (N=1582)	
Medical condition					
Hypertension	64.4	62.2	63.9	67.0	0.08
Diabetes	25.1	21.1	26.3	27.8	0.002
Lung disease	10.7	7.0	9.7	15.3	<0.0001
Heart problem	33.6	28.5	33.0	39.1	<0.0001
Cancer	16.5	14.5	16.9	18.1	0.02
Stroke	8.6	6.0	8.7	11.0	0.0004
Psychiatric problem	14.3	13.5	14.1	15.3	0.68
Arthritis	61.2	54.0	61.5	68.0	<0.0001
No. of chronic diseases					
0	15.5	22.7	14.2	9.5	<0.0001
1	25.3	29.0	24.9	21.9	
2	24.7	23.0	25.7	25.4	
3 or more	34.5	25.4	35.1	43.3	
Cognitive function					
Normal	89.6	92.9	90.0	86.1	<0.0001
Borderline impairment	6.3	5.0	6.1	7.6	
Cognitive impairment	4.1	2.0	3.9	6.3	
No. of ADL limitations					
0	82.4	88.4	83.5	75.4	<0.0001
1-3	15.1	10.6	14.2	20.4	
4-6	2.5	1.0	2.3	4.2	
No. of IADL limitations					
0	88.2	92.4	88.4	84.0	<0.0001
1-3	10.1	6.9	9.6	13.6	
4-6	1.7	0.7	2.0	2.4	

Cell entries are column percents. ADL=activities of daily living. IADL=instrumental activities of daily living.

TABLE 3
Chronic conditions and functional limitations among wives of married male respondents

Wives' Characteristics	Total (N=3916)	Male respondent's chronic diseases			p-value
		1 (N=1027)	2 (N=1171)	3+ (N=1718)	
Medical condition					
Hypertension	60.6	55.5	60.0	64.8	<0.0001
Diabetes	18.5	16.4	18.8	19.8	0.18
Lung disease	10.2	9.3	8.2	12.3	0.02
Heart problem	20.5	18.7	20.1	22.1	0.21
Cancer	15.4	13.5	14.7	17.2	0.09
Stroke	5.5	6.0	5.2	5.4	0.73
Psychiatric problem	22.6	19.9	22.0	24.9	0.03
Arthritis	75.1	68.8	73.7	78.1	<0.0001
No. of chronic diseases					<0.0001
0	18.2	25.5	19.2	10.6	
1	27.5	31.5	27.9	23.4	
2	26.3	24.1	25.3	29.1	
3 or more	28.0	18.9	27.6	36.9	
Cognitive function					0.57
Normal	93.7	94.3	94.1	93.0	
Borderline impairment	3.1	2.7	2.8	3.7	
Cognitive impairment	3.1	3.0	3.1	3.3	
No. of ADL limitations					0.001
0	80.8	84.2	82.7	77.0	
1-3	15.9	13.4	14.0	19.1	
4-6	3.3	2.4	3.3	3.9	
No. of IADL limitations					0.002
0	87.3	90.2	88.6	84.2	
1-3	11.0	8.5	10.3	13.5	
4-6	1.7	1.4	1.1	2.3	

Cell entries are column percents. ADL = activities of daily living. IADL = instrumental activities of daily living.

TABLE 4

Frequency of contact with children

	Number of chronic conditions				p-value
	Total	1	2	3+	
Number of children					<0.0001
0 children	7.6	7.8	7.1	7.9	
1–2 children	38.5	40.3	39.8	36.1	
3–4 children	35.4	35.2	36.0	35.2	
5+ children	18.4	16.7	17.1	20.8	
Distance to children					<0.0001
No children	7.6	7.9	7.1	7.9	
Resident children	24.3	27.8	23.4	22.4	
1+child within 10 miles	12.4	11.0	12.0	13.7	
Children >10 miles only	29.7	30.6	30.6	28.2	
Child meet up in person ^a					0.36
1+times/week	44.5	42.4	44.5	46.1	
1–2 times/month	23.1	24.3	22.0	22.8	
Every few months	15.5	16.4	16.5	14.0	
≤2 times/year or never	16.9	16.9	17.0	16.9	
Child speak on phone ^a					0.28
1+times/week	78.4	77.2	77.9	79.8	
1–2 times/month	14.1	14.0	14.8	13.6	
Every few months	4.0	5.0	3.4	3.5	
≤2 times/year or never	3.6	3.9	3.9	3.1	

^aEstimates based on a random subgroup of the overall sample with children (N=5,786).

TABLE 5

Quality of relationship with children^a

	Number of chronic conditions				p-value
	Total	1	2	3+	
Understand the way you feel					0.66
A lot	38.7	38.5	40.0	37.8	
Some	43.1	42.9	43.1	43.3	
A little	14.2	14.4	13.8	14.4	
Not at all	4.0	4.2	3.1	4.4	
Rely on if serious problem					0.60
A lot	61.8	60.2	64.2	61.3	
Some	23.3	24.7	22.1	23.1	
A little	9.9	10.0	9.2	10.4	
Not at all	5.0	5.1	4.6	5.1	
Open up about worries					0.85
A lot	39.0	38.5	39.2	39.4	
Some	37.0	37.1	37.7	36.5	
A little	17.1	17.6	17.0	16.7	
Not at all	6.9	6.8	6.2	7.5	
Too may demands on you					0.66
A lot	5.3	5.1	5.7	5.3	
Some	15.9	17.4	14.0	16.1	
A little	32.5	34.1	33.9	30.1	
Not at all	46.3	43.5	46.4	48.4	
Often criticize you					0.28
A lot	2.7	2.1	2.6	3.3	
Some	12.3	12.5	11.5	12.9	
A little	37.5	36.8	37.1	38.6	
Not at all	47.4	48.7	48.8	45.3	
Let you down					0.05
A lot	4.2	2.8	4.7	4.9	

	Number of chronic conditions				p-value
	Total	1	2	3+	
Some	13.1	12.7	12.7	13.9	0.07
A little	31.9	34.8	30.5	30.5	
Not at all	50.8	49.7	52.1	50.7	
Get on your nerves					
A lot	3.6	0.03	0.03	0.04	
Some	13.1	0.12	0.13	0.14	
A little	42.0	0.43	0.40	0.43	
Not at all	41.3	0.43	0.43	0.39	

^aEstimates based on a random subgroup of the overall sample with children. Cell entries are column percents.