Assessing Capacity for Self-Care Among the Aged

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Data drawn from the Supplement on Aging (SOA) to the 1984 National Health Interview Survey (NHIS) were used to identify correlates of older persons' assessments of their capacity to provide self-care. The SOA data set consists of responses, based on personal interviews with 16,148 persons 55 years of age and older. Most assessed their capacity to care for themselves in positive terms; only 11% assessed their capacity to provide self-care as fair or poor. Based on stepwise regression, self-reported health status and perceived control of health accounted for approximately 15% of the 17% of variation explained in the dependent variable. The Health Belief Model may provide a theoretical context in which to understand better the self-care component of the health-care continuum.

Researchers placing emphasis on the continuum of long-term care services (Dunkle & Kart, in press), the duality or interplay of informal and formal supports (Cantor & Little, 1985), and/or the utilization of professional medical care services (Shanas & Maddox, 1985) have generally neglected the issue of health care that older persons provide to themselves. Recently, as a result of an examination of health care practices around the world, self-care has been recognized as an important part of every health care system (Coppard, Riley, Macfadyen, & Dean, 1984). The World

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Health Organization provides a working definition of self-care: "All the actions and decisions that an individual takes to prevent, diagnose, and treat personal ill health; all individual behaviors calculated to maintain and improve health; and decisions to access and use both informal support systems and formal medical services" (Coppard et al., 1984: 3). With this in mind and using data from a large nationally representative sample, we have, in this study, attempted to identify the correlates of older persons' assessments of their capacity to provide self-care.

Although limited, the literature clearly indicates that professional or formal care constitutes the lesser amount of health care provided to people today, regardless of age (for example, Alpert, Kosa, & Haggerty, 1967; Roghmann & Haggerty, 1972). Self-evaluation of symptoms and self-treatment are the basic and predominant forms of primary health care (Dean, 1981; Scambler & Scambler, 1984). As Cassedy (1977) has observed: "Wherever people have been able to obtain their own medicines, or have read books about hygiene, or have had relatives, neighbors, or travelers to suggest remedies, they have been ready in large numbers to rely on such sources and on their own judgments rather than resort to physicians, even with serious ailments."

Last (1963) has used the term "illness iceberg" to describe the fact that most symptoms do not lead to a medical consultation; this refers to individuals with severe symptoms that would likely respond to treatment as well as those with mild, unobtrusive symptoms not necessarily requiring medical intervention (Epsom, 1969 [also cited in Scambler & Scambler, 1984]; Ingham & Miller, 1979; Morrell & Wale, 1976). Many who do have contact with medical care providers have treated their disorders themselves before seeking medical care from professionals (Williamson & Danaher, 1978). Even those who seek professional medical care and follow a prescribed treatment regimen often supplement this regimen with self-prescribed remedies (DeFriese & Woomert, 1983).

There have been several attempts to create conceptual models for self-care study. A number of these efforts have tried to understand self-care as an emerging social movement (DeFriese &

Woomert, 1983; Levin, Katz, & Holst, 1979). Butler and his colleagues (Butler, Gertman, Oberlander, & Schindler, 1979-1980) have conceptualized self-care in terms of three concentric circles. Each circle reflects acts performed as part of an individual's efforts to keep healthy. The inner circle includes acts regularly performed as part of daily living: good nutrition, routine hygiene and dental care, and common first aid. The second ring of self-care encompasses activities consciously designed to improve health knowledge and awareness. These activities include efforts at continuing preventive health education through formal education or mass media approaches to the dissemination of health information. The outside ring represents those activities that have generally been in the province of formal health-care providers: measuring heart rate or blood pressure, evaluating blood-sugar levels, and providing insulin injections, among many other actions formerly within the domain of professional health care.

At present, there is a need to identify and refine the theoretical frameworks within which the study of self-care among the aged can be examined. For example, self-care may be studied within the context of illness behavior (Aday & Andersen, 1975; Mechanic, 1982), the health belief model (Rosenstock, 1966), social stratification and health (Cockerham, Kunz, Lueschen, & Spaeth, 1986), and Orem's (1980) theory of nursing practice.

Theoretical development and refinement have been held back by the dearth of empirical investigations directly addressing self-care. Most of what we know has been gleaned from indirect studies of community samples of the general population. Dean (1980) studied self-care in response to a limited number of symptoms in Denmark. Giachello, Flemming, and Anderson (1982) did secondary analysis on three U.S. data sets, with the emphasis on nonprescription home treatments. Rakowski and his colleagues (Rakowski, 1986; Rakowski, Hickey, Verbrugge, & Halter, 1985), focusing on preventive health behaviors in a community sample of aged, analyzed personal interviews and health diaries. Of these researchers, only Rakowski and his associates concentrated on elderly self-care. As Dean (1981) points out, "More studies . . .

are needed to chart the dimensions of self-care and to determine the forces which shape reactions to illness in various subgroups of society."

A number of correlates of self-care have been proposed in the literature cited here and in additional literature on health promotion, illness behavior, and self-medication. The following discussion identifies those correlates used in our analysis.

AGE

Despite the limited number of studies on self-care among the aged, gerontological research in general identifies age categories useful for comparison in such issues. Much current literature tends to subdivide the older population into two (young-old versus old-old) or three groups (young-old, old-old, oldest-old). The National Health Interview Survey Supplement on Aging (SOA) data, on which this study is based, allowed us to examine seven age categories, permitting an even finer analysis of age differences in self-care. A central proposition of Orem's (1980) theory of self-care is that capacity for meeting self-care needs may be modified by age, sex, or developmental or health states of individuals. Data from the 1982 National Long-Term Care Survey show a strong relationship between age and the need for assistance with activities of daily living (ADL). Limitations in ADL are broadly accepted by gerontologists as indexing incapacities for self-care (Longino & Soldo, 1987).

GENDER

Some research does suggest that women participate more than men in a variety of self-care practices (Rakowski, Julius, Hickey, & Halter, 1987; Verbrugge, 1985). Bush and Rabin (1976) examined the use of nonprescription medicines in Baltimore, Maryland and found that the use of these medicines was more frequent among women. Gagnon, Salber, and Greene (1978) made a similar finding in a study of prescription drug use in a rural population. Cafferata, Kasper, and Bernstein (1983) identify a long list

of studies that support the observation that women are more likely than are men to use prescription drugs and, in particular, psychotropic drugs. One explanation for male/female differences in prescription drug use is that society permits women to perceive more morbidity and use more medical care service than it permits men, who are expected to be stoic in the face of illness (Nathanson, 1977; Verbrugge, 1978).

RACE

Racial differences in mortality, morbidity, and service utilization are well known and generally advantage whites, although some of this difference has been explained in terms of differences in socioeconomic status (Kart, Metress, & Metress, 1988). Gagnon, Salber, and Greene (1978) found that whites used more prescription drugs than did blacks. In the case of nonprescription medications, the rates reported were essentially the same. Rabin and Bush (1975) also found nonwhites in Baltimore less likely than whites to use medications.

SOCIAL SUPPORT

Differences in health status and use of health services have been attributed to the adequacy or inadequacy of a person's integration into a social-support network (e.g., Antonovsky, 1979; Kaplan, Cassel, & Gore, 1977). Consistent with Durkheim's (1951) concept of egoistic suicide, researchers working in this tradition argue that the absence of social supports are seen as causing mental and physical illness. Presumably, inadequate supports may also produce self-care deficits.

SOCIOECONOMIC STATUS

Although in recent years quantity of physician visits have generally equalized among the poor and those more affluent, the literature suggests that the affluent are more likely to visit doctors for preventive care (Dutton, 1978; Harris & Guten, 1979; Rundall

& Wheeler, 1979). Arluke, Kennedy, and Kessler (1979) argue that lower-income persons may tend to have a more passive orientation toward life in general and less willingness to take responsibility for their health problems. Cockerham and his colleagues (1986) found considerable similarity in life-styles among status groups with regard to appearance, food, exercise, smoking, and drinking of alcohol. But they also found important differences in symptom perception, physician utilization, and health locus of control. Higher-income persons were more consumer-minded and expressed greater personal responsibility for their own health.

HEALTH STATUS

The actual presence of a chronic illness is often not as important to people as the impact the condition has on their ability to carry out usual activities. Limitation of activity and need for assistance with ADLs are likely to reduce capacity for self-care (Longino & Soldo, 1987) and increase "readiness for self-referral" to professional medical-care providers (Gurin, Veroff, & Feld, 1960). On the other hand, although Harris and Guten (1979) report a general similarity in engaging in health-preventive behaviors (HPB) across health conditions, those who define themselves as being in poor health (as opposed to moderate or good health) are less likely to consider proper food and nutrition habits and physical exercise as important HPBs and more likely to adopt the sick role.

In short, the objective of this research is to extend the study of self-care from mostly community samples to direct evidence in a recent national survey of the older population. In addition, whereas these previous community studies have operationalized self-care in terms of specific health prevention or sick-role behaviors, this study employs a single global indicator of self-care capacity. Using data from a large, population-based sample of persons aged 55 or older, we examined factors, at both the bivariate and multivariate levels, that are presumed to be associated with a person's assessment of his or her capacity to provide self-care.

Methods

Sample. The data for this study were drawn from the 1984 Supplement on Aging (SOA) to the National Health Interview Survey (NHIS) (National Center for Health Statistics, 1986). Based on a multistage probability design, the NHIS is the National Center for the Health Statistics' continuing survey of the civilian, noninstitutionalized U.S. population. In 1984, a special supplement for older persons added questions on physical limitations, chronic conditions, housing, retirement status, interactions with family and organizations, use of community services, and other health-related topics.

The SOA data set consists of responses, based on personal interviews from 16,148 persons 55 years of age and older. All members of sampled households aged 65 and older and a 50% sample of those aged 55 to 64 years were asked the questions on the supplement wherever possible. Information was obtained from proxies, when physical or mental conditions or extended absence made it impossible to interview an eligible respondent.

Measures. The major dependent variable, assessment of self-care, was measured by a single, global question: "How good a job do you feel you are doing in taking care of your health? Would you say excellent, very good, good, fair, or poor?" The limitations of such a question are readily apparent. Such a question is not able to elicit information on specific self-care practices of the aged. In addition, the availability of the single item does not allow for testing for the multidimensionality of the dependent variable. However, as has already been noted, the availability of the single item makes it possible for us to examine the prevalence and correlates of assessed self-care capacity in a recent, large, and nationally representative sample of community-dwelling older people.

Based on the review of potential correlates, a number of variables were examined in the analysis: age, sex, race, marital status, educational attainment, family income, and measures of health status. Operationalizations of these variables are evident in Table 1.

For example, age was divided into seven groups. Marital status was employed as a surrogate for social support and divided into four categories: married, widowed, divorced or separated, and never married. Two measures of socioeconomic status were operationalized as follows: Education level was divided into four groups (0 to 8 years, 9 to 11 years, 12 years or high school graduates, and 1 or more years of college); family income was grouped into nine categories (under $5,000, $5,000-6,999, $7,000-9,999, $10,000-14,999, $15,000-19,999, $20,000-24,999, $25,000-34,999, $35,000-49,999, $50,000 and over). Five measures of health and impairment were also included:

(1) Self-reported health status based on responses to the question, "Would you say your health in general is excellent, very good, good, fair or poor?"
(2) Perceived change in health status as measured by the question, "Compared to 1 year ago, would you say that your health is better, worse, or about the same as it was then?"
(3) Number of functional limitations (divided into none, 1 or 2, 3 or 4, 5 or more) based on whether the respondent has any difficulty doing the following activities alone and without aids: walking for a quarter of a mile, walking up 10 steps without resting; standing or being on your feet for about two hours; sitting for about two hours; stooping, crouching, or kneeling; reaching up over your head; reaching out (as if to shake someone's hand); using your fingers to grasp or handle; lifting or carrying something as heavy as 25 pounds; and lifting something as heavy as 10 pounds.
(4) Presence of a serious illness (yes or no) based on whether the respondent reported having heart disease, cancer, and/or cerebrovascular disease. These illnesses represent the three leading causes of deaths among the elderly. Together, these three account for approximately 75% of all deaths of elderly people in the United States.
(5) Perceived control of health based on the question, "How much control do you perceive you have over your own health, none at all, very little control, some control, a great deal of control?"

Results

The analysis is presented in two parts. First, correlates of self-care assessment are identified through bivariate percentage distributions. Second, multiple regression analysis is used to determine the "best fit" of correlates for explaining variation in the dependent variable of self-care.

The bivariate analysis. As Table 1 shows, over one-half (54.7%) of the respondents 55 years of age and older in the SOA assess their capacity to provide self-care as excellent or very good. Only about one in nine respondents (11.1%) assess how well they are doing in taking care of their own health as fair or poor. Substantial subsample variation in assessment of self-care exists along the lines of the proposed correlates described here and shown in Table 1. As can be seen from a cursory review of the table, all of the correlates show a statistically significant relationship with the dependent variable. On closer inspection, however, it is clear that some of these relationships reflect relatively small, nonsubstantive differences between large subsamples of the elderly.

While age, sex, race, and marital status all have statistically significant relationships to the dependent variable, these differences are generally less than 3%. For example, 13.6% of those aged 55 to 59 years versus 11.0% of those 85 years and older assessed their capacity for self-care as fair or poor. This inverse relationship between age and self-care capacity likely reflects some selection processes. This is after all, a study of the older population living in the community. Nearly 22% of the total population of the United States aged 85 and older in 1977 were living in nursing homes (Rabin & Stockton, 1987). Thus a significant proportion of the oldest-old and those by definition least able to provide self-care have been excluded from the study sample.

Females and whites are advantaged in their respective assessments of self-care; 56.4% of females versus 52.3% of males assess the job they are doing as excellent or good. In all, 55% of whites as opposed to 52% of blacks assess self-care in similar terms. The widowed are less likely than the married (9.9% versus 11.3%) to assess their self-care capacities as fair or poor. Selection processes may be at work here. Because of the availability of

TABLE 1
Percentage Distribution of Assessment of Self-Care

	Assessment of capacity to provide self-care					
	Poor	*Fair*	*Good*	*Very Good*	*Excellent*	*(n)*
Total	1.6	9.5	34.2	31.6	23.1	(14527)
Age						
55–59	2.4	11.2	34.2	29.6	22.6	(2118)
60–64	2.0	10.6	34.1	31.2	22.0	(2097)
65–69	1.2	9.0	34.2	32.4	23.2	(3663)
70–74	1.4	9.8	33.7	31.9	23.2	(2878)
75–79	1.2	7.3	31.5	33.1	23.9	(2083)
80–84	1.6	8.9	33.4	32.2	23.8	(1099)
85+	1.7	9.3	37.9	28.0	23.1	(589)
	$\chi^2 = 50.49$, d.f. = 24, $p < .01$					
Gender						
Males	1.8	10.6	35.3	30.0	22.3	(5923)
Females	1.4	8.7	33.4	32.8	23.6	(8604)
	$\chi^2 = 31.27$, d.f. = 4, $p < .001$					
Race						
White	1.6	9.3	34.2	31.7	23.3	(13268)
Black	2.3	11.8	33.9	31.6	20.4	(1093)
	$\chi^2 = 13.84$, d.f. = 4, $p < .01$					
Marital status						
Married	1.7	9.6	34.7	31.6	22.4	(8866)
Widowed	1.3	8.6	33.9	32.3	24.0	(4097)
Divorced/Separated	2.7	11.5	33.0	28.7	24.1	(882)
Never married	1.4	11.4	31.1	31.7	24.4	(643)
	$\chi^2 = 29.80$, d.f. = 12, $p < .01$					
Educational attainment						
0 to 8 years	2.2	13.2	38.6	27.5	18.5	(4203)
9 to 11 years	1.6	10.2	37.3	31.8	19.1	(2522)
12 years	1.1	7.5	32.8	33.8	24.9	(4655)
1+ years of college	1.5	7.0	28.0	33.9	29.7	(3147)
	$\chi^2 = 347.82$, d.f. = 12, $p < .001$					

(continued)

TABLE 1 Continued

	Assessment of capacity to provide self-care					
	Poor	*Fair*	*Good*	*Very Good*	*Excellent*	*(n)*
Family Income						
under $5,000	2.4	13.9	36.4	29.8	17.5	(1319)
$5-6,999	2.4	11.0	37.0	29.5	20.1	(1102)
$7-9,999	1.8	12.3	35.2	29.4	21.4	(1709)
$10-14,999	1.6	9.6	34.7	32.1	22.0	(2287)
$15-19,999	1.0	8.0	35.7	34.0	21.3	(1683)
$20-24,999	1.6	9.2	30.8	33.3	25.0	(1248)
$25-34,999	0.5	6.7	33.4	31.6	27.9	(1473)
$35-49,999	1.1	6.6	31.0	33.4	27.9	(973)
$50,000+	2.6	6.3	26.2	37.2	27.6	(583)
	$\chi^2 = 204.95$, d.f. = 32, $p < .001$					
Self-reported health status						
Poor	7.7	21.3	36.8	21.9	12.3	(1294)
Fair	2.2	19.0	40.5	25.6	12.6	(2827)
Good	0.8	6.8	43.7	30.2	18.5	(4599)
Very Good	0.5	4.9	25.8	43.4	25.4	(3119)
Excellent	0.6	3.2	19.7	31.4	45.1	(2630)
	$\chi^2 = 2436.56$, d.f. = 16, $p < .001$					
Self-reported health status compared with a year ago						
Worse	5.8	20.4	37.7	23.2	12.8	(1955)
Same	1.0	8.0	34.2	33.0	23.8	(10717)
Better	0.7	6.5	30.1	32.8	29.9	(1825)
	$\chi^2 = 734.47$, d.f. = 8, $p < .001$					
Number of functional limitations						
None	0.7	6.0	32.0	33.2	28.2	(7103)
1 to 2	1.2	9.3	35.4	32.1	22.1	(3097)
3 to 4	2.1	12.1	37.8	31.4	16.7	(1849)
5+	4.4	17.8	36.6	26.8	14.4	(2478)
	$\chi^2 = 690.49$, d.f. = 12, $p < .001$					
Presence of a serious illness						
No	1.4	8.7	33.8	32.3	23.7	(10693)
Yes	1.8	11.0	35.1	30.4	21.7	(3426)
	$\chi^2 = 25.67$, d.f. = 4, $p < .001$					

TABLE 1 Continued

	Assessment of capacity to provide self-care					
	Poor	*Fair*	*Good*	*Very Good*	*Excellent*	*(n)*
Preceived control of health						
None at all	5.8	14.1	38.9	22.9	18.2	(907)
Very little	5.8	22.7	36.1	23.3	12.0	(1043)
Some control	0.9	10.7	41.0	32.7	14.7	(6656)
Great deal	0.8	4.4	23.9	34.1	36.7	(5321)
$\chi^2 = 1656.26$, d.f. = 12, $p < .001$						

a spouse, those who are married though less able to care for themselves may be able to reside at home in the community. On the other hand, in the absence of this support, widows are more likely to be institutionalized.

Measures of socioeconomic status show strong, positive relationships with the global assessment of self-care. The most educated (1+ years of college) are considerably more likely than the least educated (0 to 8 years of school) to assess self-care capacity in the most positive terms (63.6% versus 46.0%). Family income shows a similar pattern; the most affluent ($50,000 or more) are considerably more likely than are the poor (under $5,000) to assess self-care as excellent or very good (64.8% versus 47.3%).

The health measures show the most positive, substantive relationships with the dependent variable. Those who reported their current health status as excellent were almost four times as likely as those who perceived their health status as poor to assess how well they were taking care of their own health as excellent (45.1% versus 12.3%). The dependent variable is also related to perceived changes in health status. Almost 30% (29.9%) of those reporting their health as better than a year ago, compared with 12.8% of those reporting it as worse, assessed their self-care as excellent. More than 26% of those who perceive their current health as worse than it was a year ago evaluate their capacity to care for self as fair or poor.

When health was indexed by the number of functional limitations, a significant relationship with assessment of self-care was revealed: those with no functional limitations are considerably more likely than those with five or more limitations (61.4% versus 41.2%) to perceive capacity for self-care as excellent or very good. Aged in the community who perceive themselves as having a great deal of control over their health represent a population that seems most able to provide self-care. More than 70% appraised their self-care capacities as excellent or very good; only 5.2% believed they had done a fair or poor job in taking care of their own health.

The multivariate analysis. In the analysis described here, a number of correlates of an individual's assessment of capacity to provide self-care were identified in the U.S. population aged 55 years and older. As the coefficients in Table 2 indicate, however, a number of these correlates are interrelated. (For purposes of the multivariate analysis, the variables age, educational attainment, and number of functional limitations were entered in their original state as interval-level variables.) Older respondents were more likely to be not married (.16), less educated (−.20), and with low family income (−.34). Women also tended to be not married (.21), to have low income (−.17), and to report more functional limitations (.15). More education is associated with better health status (.25), fewer functional limitations (−.28), and greater perceived control over health (.15). The health measures were all interrelated, although some relationships show more strength than do others. For example, those who report their health status as fair or poor also report a greater number of functional limitations (−.50); those with fewer limitations perceive themselves as having a great deal of control over their own health (−.27). Self-care also shows a moderate correlation with the health measures (from .17 to .35), except for the presence or absence of a serious illness.

In order to disentangle the various effects of these interrelated correlates on the dependent variable, a multiple regression analysis was carried out. This analysis allows for estimating the variance in the dependent variable explained by each correlate independent of the other correlates. A stepwise approach to build-

TABLE 2

Correlations Coefficients for Assessment of Self-Care and Correlates of Self-Care

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
						(N = 11,382)						
(1) Self-care		.04	.04	−.02	.02	.15	.10	.35	−.20	−.04	.27	.17
(2) Age			.07	−.01	.16	−.20	−.34	−.06	.19	.11	−.09	−.09
(3) Gender				.01	.21	−.01	−.17	−.00	.15	−.05	.01	−.01
(4) Race					.08	−.19	−.18	−.10	.08	−.05	−.05	−.01
(5) Marital						−.05	−.32	.00	.10	−.00	−.04	−.00
(6) Education							.45	.26	−.21	−.01	.15	.08
(7) Income								.25	−.28	−.04	.15	.09
(8) Health Status									−.50	−.23	.28	.22
(9) Number of Limitations										.24	−.27	−.24
(10) Serious Illness											−.09	−.04
(11) Control of Health												.20
(12) Change in Health												

NOTE: Coefficients of .03 or greater have $p < .001$ (one-tail test of significance).

ing the regression equation was employed with "forced" entry of those variables that fail to meet the PIN criterion (0.05) and the tolerance test (0.01) (SPSS, 1983). This approach allows for presenting the unstandardized coefficients (b), standard errors of b (SE), and standardized coefficients (beta) for all the independent variables (see Table 3).

Overall, the regression analysis allows us to identify the strongest correlates of assessment of capacity for self-care. The strongest correlates are self-reported health status (beta = .27) and perceived control of health (beta = .17). As was displayed in Table 1, those who perceived their health status as excellent or very good as well as those who perceived their control over health to be great were likely to assess their capacity for self-care as excellent or very good. While the group of correlates explained approximately 17% of the variance in the dependent variable, these two variables account for 15% of the variance in the dependent variable. No other single variable examined added more than .005 to the total explained variance. As reflected in Table 3, the contributions of marital status, family income, and number of functional limitations were not significant at the .001 level.

Discussion

According to self-reports from a large nationally representative sample of older people, most of the aged in the United States assess their capacity to care for themselves in very positive terms. Only about 11% of these community-dwelling aged assess their capacity to provide self-care as fair or poor. While each of the proposed correlates showed a statistically significant relationship with the dependent variable, only education, family income, self-reported health status, change in health status from a year ago, number of functional limitations, and perceived control of health reflected relationships involving relatively large, substantive differences between subgroups of elderly.

The multivariate analysis allowed us to identify the strongest correlates of the elderly's assessment of their capacity to provide

TABLE 3
Multiple Regression Estimates for Assessment of Capacity for Self-Care

Variables	*b*	*SE*	*Beta*	*R Square Change*
Self-Reported Health Status	.22	.01	.27	.121
Perceived Control of Health	.21	.01	.17	.031
Age	.01	.00	.09	.005
Change in Perceived Health	.14	.02	.07	.005
Education	.02	.00	.06	.004
Gender	.08	.02	.04	.001
Serious Illness	.08	.02	.04	.001
Race	.13	.03	.03	.001
Income	.01*	.00	.02	.000
Marital	.02*	.01	.01	.000
Functional Limitations	-.01*	.00	-.01	.000
Constant	.62	.12		
R Square				.169

*Coefficient not significant at .001.

self-care, while considering the effects of the remaining variables. Based on a stepwise regression, two subjective measures, self-reported health status and perceived control of health, accounted for approximately 15% of the 17% of variation explained in the dependent variable. And both of these variables showed a direct relationship with self-care: The more positive the self-report of health status and the greater the perceived control over health, the more positive is a person's assessment of the job he or she is doing in taking care of his or her own health.

Several methodological limitations of the study should be identified. First, this study employed a single-item subjective assessment of self-care and, thus, can provide no objective measure of actual self-care health practices engaged in by older people. Second, based on this study, we still have no indication of whether older people utilize self-care practices in dealing with certain illness symptoms while relying on the efficacy of physicians for other illness symptoms or at what rate older people employ self-care. Nor do we know what influence correlates identified in this study, perceived health status and health locus of control,

have on self-care practices. In addition, while self-care *may* be a multidimensional concept, distinguishing response to perceived illness symptoms from preventive health behaviors, for example, no test for multidimensionality is possible here.

Finally, an argument can be made that individuals will assess their capacity to provide self-care as excellent or very good as a result of their use of the formal medical care system. From this perspective, individuals are thought to be taking care of their own health through appropriate contact with a physician or other health service institution. If this argument has merit, the relationship between self-care and physician visits, one measure of contact with the formal care system, should be strong. In fact, the strength of the relationship between assessment of self-care and the number of physician visits reported by SOA respondents was found to be quite minimal (−.04). Also, in a subsequent regression analysis not presented here, with physician visits added to the list of correlates cited here, the model was basically unchanged. Physician visits contributed .001 to the sum of explained variance. These results are consistent with Chappell's (1987) finding of no relationship between self-care responses to a list of symptoms and the use of formal medical care services among respondents in a pilot study in Winnipeg, Manitoba.

Despite the limitations identified, the SOA data set provides an opportunity to explore older persons' assessments of their capacity to provide health-related self-care using a national sample.

Placing these findings in a theoretical context is difficult primarily because self-care is a little understood dimension of the health care continuum. For example, Andersen and his colleagues (1975) have attempted to explain the use of professional medical services in terms of predisposing, enabling, and illness (need) variables. Findings from this study identified similar variables as predictive of self-care; self-perceived state of health has been defined as a need variable, whereas perceived control of health may be defined as a personal resource or predisposing variable. The relevance of the Andersen model in explaining self-care is unclear, however. Haug, Wykle, and Namazi (in press) conclude that the Andersen model is not useful for understanding self-care

because "since one's perception of a bodily state as a symptom is conceptualized as the trigger for self-care, the need variable is an unmeasured given in applying the Andersen model to this form of illness behavior." This conclusion has yet to be tested on a nationally representative sample.

Finally, in recent years, a substantive amount of health care research has been guided by the Health Belief Model (HBM). The HBM has emphasized the subjective perceptions of the individual over, for example, "the objective world of the physician" (Rosenstock, 1966) in trying to understand the utilization of health services and the degree to which sick persons adhere to their treatment regimens (Stone, 1979). Employing data on individuals 45 years and older from three communities in a midwestern state and using an HBM framework, Haug, Wykle and Namazi (in press) found support for the following propositions that are consistent with our own findings: Persons who perceived their health as good would have confidence in their own resilience and be ready to care for themselves without resorting to professional help, especially for ailments viewed as minor. Similarly, individuals who believe in the ineffectiveness of medical care, either because they attribute illness symptoms to the aging process or because they desire to retain control over their own health, favor self-treatment, even when the symptoms are viewed as more serious. The commonality between these findings and our own appears to be related to individual self-perceptions, especially those regarding an ability to be successful in helping oneself.

In summary, this study provides a beginning effort at identifying some correlates of older persons' assessments of their capacity to provide self-care in a national sample. It is clear much additional work needs to be done in specifying a theoretical context in which to understand the self-care component of the health care continuum. The Health Belief Model appears to point in a fruitful direction for future developments. Health care utilization is obviously related to need for and availability of care. But the dynamics that promote use of self-care health practices are complex and likely involve some important, and as yet unex-

plained, aspects of self-perception. The involvement of this concept in self-care is only beginning to be defined.

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