The Health of Grandparents Raising Grandchildren: Results of a National Study

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ABSTRACT

Objectives. This study sought to compare the functional and self-rated health of grandparents raising grandchildren with that of noncaregiving grandparents.

Methods. A secondary analysis of data from the 1992 to 1994 National Survey of Families and Households was conducted. Bivariate and logistic analyses compared 173 custodial and 3304 noncustodial grandparents in terms of functional health limitations, self-rated health, and satisfaction with health.

Results. Custodial grandparents were significantly more likely to have limitations in 4 of the 5 activities of daily living (ADLs) examined, with more than half reporting some limitation in 1 of the 5 ADLs. A logistic regression analysis indicated that caregiving grandparents had 50% higher odds of having an ADL limitation. Caregivers were significantly more likely to report lower satisfaction with health, and a statistical trend indicated that the caregivers had lower self-rated health.

Conclusions. Further research is needed to determine whether the differences observed reflect artifacts or actual differences in functional abilities and other health measures. The need for policies that support rather than penalize grandparents raising grandchildren is stressed. (*Am J Public Health.* 1999;89: 1384–1389)

An often overlooked consequence of the public health epidemics of drug abuse, teen pregnancy, HIV/AIDS, and violence resides in their contribution to the growing number of American grandparents raising grandchildren.[1–4] Between 1980 and 1990, close to a 44% increase occurred in the number of children living with grandparents or other relatives.[5] By 1997, approximately 4 million children, or 4.1% of White, 6.5% of Hispanic, and 13.5% of African American children, were living with grandparents.[6] The fastest growth in the 1990s, moreover, has been found in those "skipped generation" families in which neither of the children's biological parents was present.[7]

Although more than 1 in 10 (10.9%) American grandparents report raising a grandchild at some point for at least 6 months, and usually for 3 or more years,[8] the prevalence of grandparent caregiving is particularly high in inner cities, where health and social service providers have estimated that between 30% and 50% of children are in the care of grandparents.[3,9,10]

Both qualitative studies[9,11–15] and quantitative research using representative national or regional data[1,8,16–18] have suggested that caregiving grandparents are vulnerable to a host of problems, including depression, social isolation, and poverty. Research examining the physical health of grandparent caregivers, however, has been limited to date to studies of small, convenience samples in particular geographic areas.[9,14,15,19] These studies have been useful in demonstrating poorer self-assessed health status, considerable comorbidity, delayed help seeking, and a frequent tendency to "play down" the severity of personal health problems among grandparents in the study samples. The lack of generalizability of findings, however, underscores the need for larger, representative studies of the relationship between physical health and serving as a primary caregiver for one's grandchildren. In an attempt to help fill this gap, the current study used nationally representative data to examine self-assessed health, satisfaction with health, and functional limitations among caregiving and noncaregiving grandparents in the 1990s.

Methods

Subjects

In the most recent wave of the National Survey of Families and Households, conducted during 1992, 1993, and 1994, a probability sample of 10 008 respondents was interviewed. All data are weighted to adjust for nonresponse and for oversampling of ethnic minorities, nontraditional families, and recently married people. This weighting produces a sample that is demographically representative of the coterminous United States.[20] Our study's subsample consisted of the 3477 respondents to the 1992 to 1994 waves who reported having 1 or more grandchildren.

Respondents were defined as grandparent caregivers if they replied affirmatively to the following: "For various reasons, grandparents sometimes take on the primary responsibility for raising a grandchild. Have you ever had the primary responsibility for any of your grandchildren for 6 months or more?" To determine the subsample of recent grandparent caregivers, we selected those

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caregivers who had responded yes to the preceding query and who reported beginning or ending caregiving during the 1990s. We were unable, with this data set, to determine the recency of grandparenthood for the comparison group, but the nature of the present research did not make this temporal variable necessary. Our final sample included 173 grandparents who had been primary caregivers at some point during the 1990s for at least 6 months. These caregivers were compared with noncaregivers (n = 3304) in terms of activity limitations and self-rated health status. Despite large differences in the size of our samples, there was adequate power to detect both medium and large effect sizes.

This study builds on our previous work with the National Survey of Families and Households data set. In earlier analyses,[8] we determined that although custodial grandparenting cuts across lines of class, race, and sex, grandparent caregivers were significantly more likely than other grandparents to be poor (22.9% vs 13.7%), African American (27% vs 10%), and female (77% vs 56%). They also were significantly more likely to be unmarried (46% vs 32%), to live in the South (42.5% vs 34.8%), and to have not completed high school (43% vs 29%) than their noncaregiving peers. Finally, custodial grandparents were significantly more likely to be younger than 55 years (34.7% vs 27.4%) or between 55 and 64 years (35.3% vs 28.7%) and less likely to be 65 years or older (30.1% vs 43.9%), than other grandparents.

Measures

Using bivariate techniques, we compared recent caregiving grandparents with noncaregiving grandparents in regard to their ability to accomplish daily tasks, their self-reported health status, and their satisfaction with their health. As a means of determining whether they had limitations with a variety of daily activities, respondents were asked the following: How much do physical or mental conditions limit your ability to (1) care for personal needs such as bathing, dressing, eating, or going to the bathroom? (2) move about inside the house? (3) do day-to-day tasks? (4) climb a flight of stairs? (5) walk 6 blocks? (6) do heavy work like shoveling snow or heavy housecleaning? and (7) do work for pay (e.g., the amount or type of work you do)? There were 3 possible answers to each of these questions: does not limit at all, limits a little, and limits a lot. The first 5 questions refer to activities of daily living (ADLs), while the sixth question refers to an instrumental ADL. Although the final question (concerning work for pay) typically is not included as either an ADL or an instrumental ADL, it offers important additional insights into functional ability at more advanced levels and therefore was retained as a separate independent variable.

Two summary measures of the ADL questions were constructed. The first measure was coded 1 if the participant reported some limitation in response to any of the 5 ADL questions and 0 if the participant reported no limitation in these 5 activities. The second measure recorded the total number of ADLs in which some degree of limitation was reported. This measure had a potential range from 0 (no limitations) to 5 (limitations in 5 ADLs).

A logistic regression analysis of the first summary measure of ADL limitations was conducted. The independent variable of particular interest was grandparent caregiving status during the 1990s. Other independent variables controlled for were self-reported health status (dichotomized into good–excellent vs very poor to fair health), age, education (high school graduation), living below the poverty line, sex, race (African American vs other), and marital status (married vs unmarried). Most of these variables have been demonstrated to be associated with ADL status, and each (with the exclusion of self-reported health status) also has been shown to be significantly associated with being a grandparent caregiver in nationally representative studies.[1,8,16] Controlling for these variables, therefore, appeared critical if we were to determine the independent association between functional health and being a primary caregiver to 1 or more grandchildren. Analysis of zero-order correlations indicated that none of the independent variables had a correlation exceeding 0.30, and thus multicollinearity did not pose a problem.

Satisfaction with health was determined by the grandparent's response to a 7-point Likert scale (1 = very dissatisfied, 7 = very satisfied). Unfortunately, no information on chronic health conditions was available.

Results

Custodial grandparents were significantly ($P<.05$) more likely than noncaregiving grandparents to report limitations in each of 6 areas: mobility inside the house, completing daily household tasks, climbing stairs, walking 6 blocks, doing heavy tasks, and working for pay (see Table 1). Seventeen percent of the caregiving grandparents were limited in their ability to move about inside the house. Three in 10 caregivers had trouble doing their day-to-day household tasks. Four in 10 caregiving grandparents experienced problems climbing a flight of stairs, and a comparable number had trouble walking 6 blocks. More than half of the caregiving grandparents reported some degree of limitation in doing heavy work, such as shoveling snow or heavy housecleaning, and more than 4 in 10 reported that their physical or mental condition limited their ability to work for pay. More than half of the caregiving grandparents had some limitation in 1 of the 5 ADLs, and a statistical trend ($P<.10$) suggested that the caregivers had more trouble attending to personal needs such as bathing or dressing.

Caregiving grandparents' satisfaction with their health was significantly lower ($P<.05$) than that of their noncaregiving counterparts. Finally, there was a statistical trend ($P<.10$) indicating that custodial grandparents had poorer self-reported health than noncaregiving grandparents. The Spearman correlation between these 2 measures was 0.62, indicating that they were not measuring the same construct.

In the logistic regression analysis (see Table 2), caregiving grandparents had 50% higher odds of having an ADL limitation than noncaregiving grandparents. This relationship existed even though self-reported health status and pertinent demographic variables known to affect ADL status were simultaneously included in the analysis. As expected, limitations in ADLs also were significantly associated with poorer self-reported health (those in poor health had more than 7 times higher odds of having at least 1 ADL limitation than those in good or excellent health), age (45% higher odds for those aged 55 to 64 years and almost 3 times higher odds for those 65 years and older in comparison with grandparents younger than 55 years), being unmarried (36% higher odds than married grandparents), and being female (85% higher odds). Contrary to expectation, associations with education, living below the poverty line, and being African American failed to reach the level of significance.

In addition to the point estimate of the odds ratio, Table 2 presents 95% confidence intervals. Table 2 also presents R values, which are estimates of the partial correlation between each independent variable and the dependent variable, limitation in ADLs. The value can range from –1 to 1; the greater the absolute value of the R value, the greater the partial contribution to the model.

Earlier research involving the National Survey of Families and Households indicated that grandparent caregivers were almost twice as likely to report clinically relevant levels of depressive symptoms as were noncaregiving grandparents (25.1% vs 14.5%).[17] In light of the potential relevance of this variable for the current study, the logistic regression analysis whose results are described in

TABLE 1—Comparative Profile of Health-Related Variables for Caregiving Grandparents vs Noncaregiving Grandparents: National Survey of Families and Households, 1992–1994

	Noncaregiving Grandparents (n = 3304), %	Caregiving Grandparents (n = 173), %
Physical or mental conditions that limit respondent's ability to:		
Care for personal needs such as bathing, dressing, eating, or going to the bathroom		
Does not limit at all	90.6	85.5*
Limits a little	6.9	10.2
Limits a lot	2.5	4.2
Move about inside the house		
Does not limit at all	88.2	82.9***
Limits a little	9.2	10.4
Limits a lot	2.7	6.7
Do day-to-day tasks		
Does not limit at all	78.8	71.1****
Limits a little	15.6	15.1
Limits a lot	5.6	13.9
Climb a flight of stairs		
Does not limit at all	72.8	58.5****
Limits a little	17.1	24.5
Limits a lot	10.1	17.0
Walk 6 blocks		
Does not limit at all	69.6	61.3***
Limits a little	16.6	15.3
Limits a lot	13.7	23.3
Do heavy work like shoveling snow or heavy housecleaning		
Does not limit at all	50.0	48.2**
Limits a little	23.7	17.7
Limits a lot	26.3	34.1
Work for pay (e.g., amount or type of work)		
Does not limit at all	68.2	57.0****
Limits a little	12.1	9.9
Limits a lot	19.7	33.1
Limitation in at least 1 activity of daily living (n = 3315)[a]		
No limitations	60.5	47.6****
At least some limitation in 1 activity	39.5	52.4
No. of limitations in activities of daily living (n = 3219)[b]		
None	62.3	49.4***
1	12.2	14.6
2	9.0	8.9
3	6.7	10.8
4	4.3	8.2
5	5.6	8.2
Health status		
Very poor or poor	7.6	11.9*
Fair	22.0	23.8
Good or excellent	70.4	64.3
Respondent's satisfaction with his or her health		
1 (very dissatisfied)	5.1	7.4**
2	3.3	6.1
3	7.1	8.0
4	13.5	19.0
5	19.4	15.3
6	25.7	19.0
7 (very satisfied)	25.9	25.2

[a]The slight difference in percentages between caregiving grandparents with no limitations in this and the subsequent item is due to the different sample sizes in the respective analyses. Any respondents for this item who reported some limitation in at least 1 activity but had missing data on some of the other questions was still included in the analysis, resulting in a sample of 3315.

[b]Only those with complete data on the first 5 items were included in the analysis, resulting in a sample of 3219.

*$P<.10$; **$P<.05$; ***$P<.01$; ****$P<.001$.

Table 2 was rerun with dichotomized Center for Epidemiological Studies Depression Scale[21] score (above or below the traditional cut point of 16 indicating clinically relevant levels of depression) included as an independent variable. This analysis (data not shown) indicated that depression was a significant predictor, but its inclusion in the analysis had no substantial effect on the values or significance of the other independent variables, including grandparent caregiving status.

Finally, we conducted a multiple regression analysis predicting the number of ADL limitations with the same independent variables as were used in the logistic regression (data not shown). The findings were similar to those from the logistic regression, with all of the significant independent variables in the original regression, including caregiving status, significantly associated with the number of ADL limitations in the multiple regression analysis. Three factors that failed to reach the level of significance in the logistic regression—those of education level ($P = .09$), living below the poverty line ($P = .11$), and being African American ($P = .11$)—reached the level of significance ($P<.05$) in the multiple regression. The direction of the relationships remained the same.

Discussion

Our finding that grandparent caregivers were significantly more likely than noncaregivers to have limitations in 4 of the 5 ADLs examined is subject to several possible interpretations. Reports of higher levels of limitation, for example, could be an artifact of the stressful lives and lack of resources experienced by many caregiving grandparents. Such an interpretation would be consistent with our earlier finding that custodial grandparents had almost twice the rate of depression of their noncaregiving peers.[17] Earlier research by Guralnik et al.[22] and others[23,24] demonstrated discrepancies between performance measures and self-reports, some of which may be accounted for by the pessimism often associated with depressive symptoms. Because we were unable to explore the direction of causality with respect to depression in the present study (i.e., whether disability increased depression or depression led to increased reports of functional disability), this variable was intentionally omitted from the analysis reported in Table 2. However, the similarity in results when depression was included and when it was excluded in our exploratory analysis indicated that higher levels of depression among caregivers did not explain our findings. Further research on the relationship between depression and self-reported activity

TABLE 2—Logistic Regression Analysis of Limitation in at Least 1 Activity of Daily Living Among Grandparents (n = 2988): National Survey of Families and Households, 1992–1994

	Odds Ratio	95% Confidence Interval	*R*
Grandparent raising grandchild(ren) during the 1990s	1.50**	1.03, 2.20	0.02
Very poor to fair health status[a]	7.50****	6.24, 9.00	0.33
Age in categories[b]			0.16
Aged 55–64	1.45***	1.15, 1.82	0.04
Aged 65 and over	2.93****	2.37, 3.62	0.15
Grade 11 or less	1.18*	0.98, 1.43	0.01
Living below the poverty line	1.21	0.95, 1.55	0.01
Not married	1.36***	1.13, 1.64	0.04
Female	1.85****	1.55, 2.21	0.10
Black	1.26	0.95, 1.67	0.01

Note. Model $\chi^2 = 809.6$, $df = 9$, $P < .001$.
[a]Reference category: good or excellent self-reported health status.
[b]Reference category: grandparents under age 55 years.
*$P < .10$; **$P < .05$; ***$P < .01$; ****$P < .001$.

limitations among grandparent caregivers is needed to provide a better understanding of the role that depression may play in self-assessed measures of limitation in function in this population.

Our findings of elevated functional limitations among custodial grandparents may be explained in part by the fact that such grandparents may be more frequently exposed to their functional limitations as a consequence of their child care roles, giving these limitations greater salience. The fact that close to three quarters (72%) of grandparent caregivers take in children when they are infants or preschoolers,[8] along with the often substantial physical demands of caring for youngsters in this age range, is consistent with this interpretation. A noncaregiving grandparent without young children in the home, for example, may encounter her or his limitation in climbing stairs far less often than a similarly limited custodial grandparent who has no choice but to take the stairs many times a day when caring for a young child. Confronted more frequently by the difficulty in performing this task, the custodial grandparent may be more prone to report it as an ADL limitation.

Similar confounders and ambiguities also may apply in attempting to interpret our findings of significantly lower satisfaction with health and of trends toward poorer self-rated health among grandparent caregivers. Each of these findings may reflect pessimism associated with depression and/or greater awareness of functional limitations as a consequence of the physical demands of child care. Conversely, however, empirical research showing self-rated health to be significantly correlated with physician ratings and other more "objective" health measures,[25,26] as well as research demonstrating a relationship between poor self-rated health and short-term mortality,[27–29] underscores the need for more thorough examination of self-rated health in grandparent caregivers. It should be noted, too, that if custodial grandparents with poor self-rated health are at elevated risk for mortality, the well-being of the grandchildren in their care also may be threatened. Further prospective research on the physical as well as the mental health status of grandparents raising grandchildren is needed to understand and document the full extent—and personal and family consequences—of health problems in this population. As Aneshensel et al.[30] have noted, such longitudinal studies also would enable us to explore the "caregiving careers" or trajectories of such caregivers, including information about how physical/functional and mental health are maintained (or not maintained), in this case, during periods of primary caregiving for one's grandchildren.

Expanded research on the health status of grandparent caregivers should include particular attention to their physical environment. As Satariano[31(p2)] has suggested with regard to public health studies in general, such research should include home interviews and home assessments and should both "ask more informed questions of study respondents [and] learn how to measure their physical environment independently of individual characteristics." Particularly for grandparent caregivers who have low incomes and are likely to be living in substandard housing, and/or for those with functional limitations, the need for studies that explore the physical context of caregiving is underscored.

Although the present research used national data from a panel study, the failure of the National Survey of Families and Households to ask identically worded questions concerning functional health status and several other relevant variables and the considerably smaller sample size of caregiving grandparents limited our ability to take advantage of the longitudinal nature of the study. As a consequence, our research was able to report on associations but not on causal relationships between caregiving status and poor functional health. Further longitudinal research with larger samples would allow us to explore the effects of caregiving on functional health status and other health outcomes and to detect small effect sizes. Finally, our examination of the health status of grandparent caregivers was limited by the failure of the National Survey of Families and Households to collect data on chronic illnesses among respondents; more research in this area is needed.

Despite these limitations, the results of this study have several implications for policy. Our finding of elevated rates of limitations in ADLs and in the one instrumental ADL examined among caregiving grandparents suggests the need for policies that increase the availability of and access to assistive devices, home modifications, and in-home supportive services among grandparent caregivers who may benefit from such aid. The finding of Verbrugge et al.[32] that assistive devices provide the most efficacious strategy for reducing limitations in functioning underscores the utility of making such devices easily available to grandparent caregivers in need.

The need for policies supporting multigenerational clinics and other health care delivery systems providing "one stop shopping" for grandparents and the children in their care also is underscored. Earlier research suggested that grandparent caregivers, like other family caregivers, often delay seeking help for their own physical and emotional health problems to focus on meeting the needs of the children in their care.[3,14,15,19,33] These tendencies, combined with our findings of functional limitations, lower satisfaction with health, and a trend toward poorer self-rated health in grandparent caregivers, suggest the advantage of programs that enable such grandparents to receive health and medical attention for themselves at the same time that they are obtaining immunizations, counseling, and other health services for the children in their care. Some promising models of such intergenerational programs are already under way[34,35] and should be carefully studied to determine their impacts on individual and family health.

Several of the findings of this study also have policy implications in light of recent

welfare reform efforts. As noted earlier, grandparents raising grandchildren were significantly more likely than other grandparents to report limitations in the amount or type of work they are able to do for pay. Yet, under the 1996 Personal Responsibility and Work Opportunity Act (Public Law 104-193),[36] grandparents raising grandchildren are not exempted from the requirement that they go to work after 2 years (and less in many states) as a condition of continuing to receive aid. Although states are allowed to exempt up to 20% of their Temporary Assistance to Needy Families caseloads from work requirements and time limits on aid, many grandparents, particularly if they are younger than 60 years, are unlikely to receive exemptions. Finally, states are permitted under the federal welfare reform law to remove from the Medicaid rolls any grandparent who loses Temporary Assistance to Needy Families as a result of failure to comply with the state's work requirement.[37]

As Mullen[38] has noted, the changes embodied in the welfare reform act "were not made with grandparent-headed households in mind, and by and large they do not help these households." Our study findings suggest that for low-income grandparent caregivers with activity limitations and those who may need to provide full-time care for grandchildren beyond the allotted time limit of 5 years or less, the new welfare reform stipulations may be particularly detrimental. Although some initial research on the potential effects of welfare reform on grandparent caregivers is under way,[39,40] further study is needed to determine the actual effects of the legislation on grandparent caregivers. Welfare policy reforms should be undertaken to ensure that grandparent caregivers are supported, rather than penalized, for the critical role they are playing in raising some of the nation's most vulnerable children.

Conclusion

The growing number of American grandparents raising grandchildren presents a public health challenge on multiple fronts. Not only are such grandparents likely to be poorer, less educated, more socially isolated, and more depressed than their noncaregiving counterparts; as this study has demonstrated, they are also more likely to report significant functional health limitations. This finding, coupled with the fact that grandparent caregivers report lower satisfaction with their health and a trend toward poorer self-rated health, suggests the importance of far greater research attention to the health and well-being of grandparents raising grandchildren and the potential health consequences of such caregiving. Public health policies that promote health, enhance physical accommodation to the environment, and provide outreach and access to health clinics and services geared to families, rather than individuals, also are needed. Finally, increased policy attention should be directed to the potential and actual effects of recent welfare reform measures on grandparent caregivers and their families. □

Contributors

M. Minkler and E. Fuller-Thomson conceptualized the study. E. Fuller-Thomson conducted the data analysis, with M. Minkler contributing most of the writing of the paper, including the introduction, literature review, and discussion of findings. E. Fuller-Thomson wrote the Methods and Results sections and designed the tables. Both authors contributed to addressing reviewer comments, with M. Minkler undertaking final editing of the manuscript.

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