

Original Article

Caring for Grandchildren: Assessing the Psychological Well-being of Urban Grandparents

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Abstract

Introduction: Grandparents hold significant responsibility alongside parents in nurturing and raising their grandchildren. This dynamic not only strengthens familial ties but also supports employed parents. **Methods:** This household study aimed to assess the psychological well-being (PSW) of 171 urban grandparents, selected purposively, through face-to-face interviews using a semi-structured questionnaire conducted from January to December 2018 in Uttara, Dhaka. **Results:** The mean age of the grandparents was 57.9 years, and more than half of them (53.8%) were under 60 years old. A significant number of grandparents experienced severe stress (70.8%), along with mild anxiety (69.6%) and depression (61.4%). In contrast, only a small portion of grandparents (5.3%) reported feelings of loneliness within their family. Individuals under the age of 60 exhibited higher mean scores for stress, loneliness, anxiety, and depression in comparison to those aged 60 and above. There was also a positive correlation observed between the total scores of loneliness, anxiety, and depression with the total scores of stress ($p < 0.05$). **Conclusion:** The majority of grandparents experienced high levels of stress, and some were suffered from loneliness, anxiety and depression. To enhance the PSW of grandparents, efforts should focus on improving their quality of life.

Keywords: Psychological well-being, grandparents, caregiving, grandchild.

Received on: 21.02.2024; Accepted on: 15.04.2024

Introduction

Globally, grandparents play a crucial role in providing caregiving support to children requiring parental guidance. They serve as primary caregivers and supplement other forms of family care. With rising life expectancy and reduced child mortality rates worldwide, more people are living to become grandparents and experiencing an extended period of grandparenthood. This life phase may have implications for their psychological well-being.¹ A fundamental classification has been devised to delineate two types of grandparental care: supplementary childcare for employed parents and primary care for grandchildren in cases where adult children are unable to raise their own offspring. Supplementary grandchild care has proven to be a valuable support for employed mothers, facilitating greater female participation in the labor market.² Grandchild supplementary care is widespread in Asian nations and increasingly gaining popularity in numerous

European and Western countries.^{3,4} Grandparents are anticipated to participate in extensive co-parenting and childcare arrangements for their grandchildren; however, they encounter various practical challenges such as cultural adaptation, language barriers, as well as financial and housing constraints.⁵

Psychological well-being encompasses the overall quality of our lives, reflecting a balance between feeling content and functioning effectively.⁶ A significant degree of stress from grandparent role participation, such as providing intensive care to grandchildren, may have a negative impact on psychological well-being.⁷ More importantly, grandparents who offer extensive care may have role strain and similar impacts on their career, self-care, or connection with their spouse or others.³ Furthermore, caring for grandchildren benefits

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grandparents psychologically by providing them with a feeling of purpose and meaning in life, as well as strengthening bonds between grandparents, parents, and their grandchildren.⁸

Extensive caregiving represents a stressful situation that detrimentally impacts the caregiver's mental and physical health, constrains their activities and social connections, and escalates the financial strain.⁹ The ongoing cohabitation of grandchildren and their parents correlates with depressive symptoms in grandmothers, especially among those who are retired. Conversely, married, older, and employed grandparent caregivers exhibit fewer depressive symptoms.⁶

Asian grandparents view caring for their grandchildren as a parental duty and a familial obligation.¹⁰ In Bangladesh, grandparents hold a significant role in the upbringing of their grandchildren. Employed parents often choose to have their elderly parents reside with them to assist in childcare duties.¹¹ Grandparents' active involvement invariably enriches the lives of both adult children and grandchildren. Engaged in caregiving, grandparents experience both fulfillment and challenges. With increasing life expectancy, grandparents have more opportunities for interaction with their grandchildren, likely leading to heightened demand for supplementary childcare in the future. To promote the health and well-being of elderly parents and grandparents, extensive research in this domain is imperative.

Providing intensive care to grandchildren, may have a negative impact on psychological well-being.⁷ More importantly, grandparents who offer extensive care may have role strain and similar impacts on their career, self-care, or connection with their spouse or others.³ Furthermore, caring for grandchildren benefits grandparents psychologically by providing them with a feeling of purpose and meaning in life, as well as strengthening bonds between grandparents, parents, and their grandchildren.⁸

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Methods

Study design and settings

This cross-sectional study, conducted at household level, aimed to evaluate the psychological well-being of urban grandparents who were caring for their grandchildren. The study took place from January to December 2018 in the urban area of Dhaka city named as Uttara Model Town (Sector 11, 12 & 13), which was purposively selected for the study.

Sample selection criteria

A total of 171 grandparents (both grandfathers and grandmothers) were purposively chosen for the study, all of whom had been providing supplementary care to their grandchildren for over three months. Grandparents with illnesses or psychological instability were excluded from participation in the study.

Data collection procedures

Data from participants were collected using a pretested semi-structured questionnaire administered through face-to-face interviews at their convenience. The questionnaire underwent pre-testing in Mohammadpur, Dhaka. This study evaluated psychological well-being by measuring levels of stress, loneliness, anxiety, and depression. Stress levels were assessed using the 'Perceived Stress Scale' (PSS), loneliness was measured through the 3-item 'R-UCLA Loneliness Scale', anxiety was measured via the 'Hospital Anxiety and Depression Scale-Anxiety' (HADS-A), and depression was evaluated using the 'Hospital Anxiety and Depression Scale-Depression' (HADS-D).

Statistical analysis

Data were coded, entered, edited, and cleaned cautiously and then exported into SPSS v25 (Armonk USA). Continuous variables were computed using measures of central tendency and dispersion such as mean, percent, and standard deviation. The Chi-square test and Fisher exact test was carried out to assess the relationship of qualitative variables. For significance, the independent sample 't' test was used to compare the mean of continuous variables, and the correlation coefficient was done to assess the strength of associations with a 95% confidence level were computed and the p-value <0.05 was considered as having a significant association. The results were presented in tables and charts.

Ethical approval

Each participant provided informed written consent. Data confidentiality was rigorously maintained, and unauthorized access to data was prohibited. Ethical approval for the study was obtained from the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM), Dhaka 1212, Bangladesh (Reference: NIPSOM/IRB/2018/471).

Results

Table 1 presents the socio-demographic attributes of the grandparents. The average age of the grandparents was 57.9 years, with a standard deviation of 7.6 years, and over half of them (53.8%) were under 60 years old. A significant portion, nearly three-fourths, was women (71.3%) and married (74.9%). Only 11.7% had received formal education, while the majority was homemakers (46.8%) or retired (37.4%). On average, there were 5.6 family members per household, mostly residing in joint families (89.5%). The mean monthly income for the families was 75,555.6 Taka, with a standard deviation of 41,640.8 Taka; and above half of them (55.6%) had no personal income.

Table 1: Socio-demographic characteristics of the grandparents (n=171)

Attributes	n(%)	
Age groups (years)	<60	92(53.8)
	≥60	79(46.2)
	Mean±SD	57.9±7.6
Gender	Male	49(28.7)
	Female	122(71.3)
Marital status	Married	128(74.9)
	Widowed or widower	43(25.1)
	Education	
Education	Informal	20(11.7)
	Primary	34(19.9)
	Secondary	61(35.7)
	HSC and above	56(32.7)
Occupation	Homemakers	80(46.8)
	Retired persons	64(37.4)
	Service holders	12(7.0)
	Businessmen	15(8.8)
	Family type	
Family type	Nuclear	18(10.5)
	Joint	153(89.5)
Number of family members	≤4	25(14.6)
	>4	146(85.4)
	Mean±SD	5.6±1.3
Monthly family income (Taka)	≤50,000	72(42.1)
	50,001-1,00,000	77(45.0)
	>1,00,000	22(12.9)
	Mean±SD	75,555.6±41,640.8
Monthly personal income (Taka)	No income	95(55.6)
	≤10,000	33(19.3)
	10,001-30,000	26(15.2)
	>30,000	17(9.9)
Mean±SD	9,848.0±15,293.6	

The average number of grandchildren cared for by participants was 1.6±0.5. Participants spent an average of 6.3±3.3 hours per day providing care, and the average number of days spent caregiving was 6.7±0.8. Over one-third of the grandparents (35.7%) experienced difficulties during caregiving; with the most commonly cited problems being limited self-care time and lack of sleep (47.5%). Three-quarters of the grandparents (76.0%) reported having existing health problems (Table 2).

Table 2: Information related to caregiving of the grandparents (n=171)

Attributes	n(%)	
Number of grandchildren cared by grandparents	1	75(43.9)
	≥2	96(56.1)
	Mean±SD	1.6±0.5
Duration of care (hour/day)	≤8	125(73.1)
	>8	46(26.9)
	Mean±SD	6.3±3.3
Duration of care (day/week)	<7	29(17.0)
	7	142(83.0)
	Mean±SD	6.7±0.8
Problems faced during caregiving	Yes	61(35.7)
	No	110(64.3)
Type of problems felt (n=61)	Less self-care	29(47.5)
	Lack of sleep	29(47.5)
	Conflicts with biological parents	16(26.2)
	Less privacy	2(3.3)
	*Multiple responses	
Existence of any health problems	Yes	130(76.0)
	No	41(24.0)

Figure 1 illustrates that a significant proportion of grandparents experienced severe stress (70.8%), in addition to mild anxiety (69.6%) and depression (61.4%). Only a small percentage of grandparents (5.3%) reported feeling lonely within their family.

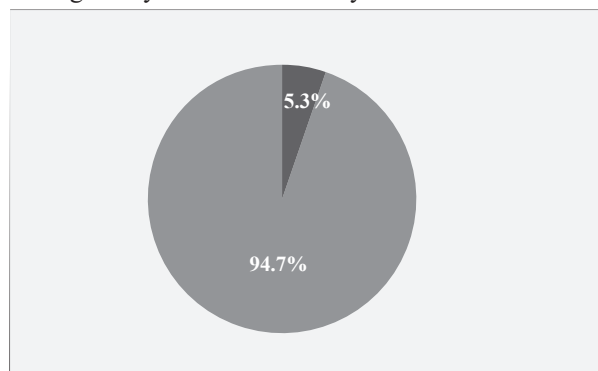


Figure 1 (a): Psychological well-being of grandparents (n=171)

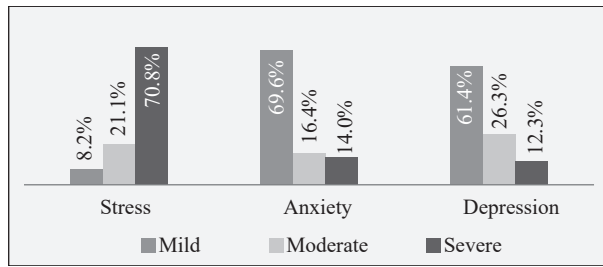


Figure No. 1 (b): Psychological well-being (loneliness) of grandparents (n=171)

Table 3 elucidates the association between stress levels and various characteristics of grandparents. Stress levels showed statistical significance with family type, number of family members, problems faced during caregiving, and anxiety levels ($p < 0.05$). Stress was higher in nuclear families (83.3%), families with four or fewer members (80.0%), those experiencing caregiving difficulties (67.2%), and individuals with severe anxiety (54.2%). Loneliness levels were statistically significant ($p < 0.05$) in relation to anxiety and depression levels. Those with severe anxiety (29.2%) and depression (19.0%) found increased levels of loneliness (Table 4).

Table No. 3: Association of levels of stress with different attributes (n=171)

Attributes	Levels of stress			Total n(%)	χ^2 value	p-value
	Mild n(%)	Moderate n(%)	Severe n(%)			
Family type						
Nuclear	3(16.7)	0(0.0)	15(83.3)	18(100)	†7.568	*0.019
Joint	11(7.2)	36(23.5)	106(69.3)	153(100)		
Family members						
≤4	4(16.0)	1(4.0)	20(80.0)	25(100)	6.581	*0.037
>4	10(6.8)	35(24.0)	101(69.2)	146(100)		
Problems faced during caregiving						
Yes	0(0.0)	20(32.8)	41(67.2)	61(100)	14.134	*0.001
No	14(12.7)	16(14.5)	80(72.7)	110(100)		
Levels of loneliness						
Not Lonely	14(8.6)	34(21.0)	114(70.4)	162(100)	†0.334	1.000
Lonely	0(0.0)	2(22.2)	7(77.8)	9(100)		
Levels of anxiety						
Mild	14(11.8)	23(19.3)	82(68.9)	119(100)	18.783	*0.001
Moderate	0(0.0)	2(7.1)	26(92.9)	28(100)		
Severe	0(0.0)	11(45.8)	13(54.2)	24(100)		
Levels of depression						
Mild	11(10.5)	16(15.2)	78(74.3)	105(100)	†7.378	0.131
Moderate	2(4.4)	15(33.3)	28(62.2)	45(100)		
Severe	1(4.8)	5(23.8)	15(71.4)	21(100)		

*Statistically significant value, †Fisher's exact test value

Table No. 4: Association of levels of loneliness with different attributes (n=171)

Attributes	Levels of loneliness			χ^2 value	p-value
	Not lonely n(%)	Lonely n(%)	Total n(%)		
Levels of anxiety					
Mild	118(99.2)	1(0.8)	119(100)	†20.960	*0.000
Moderate	27(96.4)	1(3.6)	28(100)		
Severe	17(70.8)	7(29.2)	24(100)		
Levels of depression					
Mild	104(99.0)	1(1.0)	105(100)	†11.951	*0.001
Moderate	41(91.1)	4(8.9)	45(100)		
Severe	17(81.0)	4(19.0)	21(100)		

*Statistically significant value, †Fisher's exact test value

Table 5 demonstrates the statistical significance of anxiety levels concerning age groups, gender, education, problems faced during caregiving, and depression levels ($p < 0.05$). Anxiety was mild among individuals aged 60 years and above (75.9%), males (81.6%), those with a secondary level of education (78.7%), individuals facing caregiving difficulties (49.2%), and those with mild depression (81.0%).

Table No. 5: Association of levels of anxiety with different attributes (n=171)

Attributes	Levels of anxiety				χ^2 value	p-value
	Mild	Moderate	Severe	Total		
	n(%)	n(%)	n(%)	n(%)		
Age groups (years)						
<60	59(64.1)	14(15.2)	19(20.7)	92(100)	7.229	*0.027
≥ 60	60(75.9)	14(17.7)	5(6.3)	79(100)		
Gender						
Male	40 (81.6)	8 (16.3)	1(2.0)	49 (100)	8.471	*0.014
Female	79(64.8)	20(16.4)	23(18.9)	122(100)		
Education						
Informal	10(50.0)	3(15.0)	7(35.0)	20(100)	12.663	*0.049
Primary	22(64.7)	5(14.7)	7(20.6)	34(100)		
Secondary	48(78.7)	9(14.8)	4(6.6)	61(100)		
HSC & above	39(69.6)	11(19.6)	6(10.7)	56(100)		
Problems faced during caregiving						
Yes	30(49.2)	16(26.2)	15(24.6)	61(100)	18.829	*0.000
No	89(80.9)	12(10.9)	9(8.2)	110(100)		
Levels of depression						
Mild	85(81.0)	14(13.3)	6(5.7)	105(100)	22.993	*0.000
Moderate	25(55.6)	10(22.2)	10(22.2)	45(100)		
Severe	9(42.9)	4(19.0)	8(38.1)	21(100)		

*Statistically significant value, †Fisher's exact test value

Table 6 indicates that depression levels exhibited statistical significance with gender, occupation, number of family members, daily caregiving duration, caregiving challenges, and health issues ($p < 0.05$). Depression tended to be mild among males (79.6%), retired individuals (83.3%), those providing care for eight hours or less per day (77.6%), individuals facing caregiving difficulties (39.3%), and those with existing health problems (56.2%).

Table No. 6: Association of levels of depression with different attributes (n=171)

Attributes	Levels of depression				χ^2 value	p-value
	Mild	Moderate	Severe	Total		
	n(%)	n(%)	n(%)	n(%)		
Gender						
Male	39 (79.6)	9 (18.4)	1 (2.0)	49 (100)	11.213	*0.004
Female	66 (54.1)	36 (29.5)	20 (16.4)	122 (100)		
Family members						
≤4	21 (84.0)	3 (12.0)	1 (4.0)	25 (100)	6.350	*0.042
>4	84 (57.5)	42 (28.8)	20 (13.7)	146 (100)		
Occupation						
Homemakers	39 (48.8)	24 (30.0)	17 (21.3)	80 (100)	†15.955	*0.009
Retired persons	10 (83.3)	2 (16.7)	0 (0.0)	12 (100)		
Service holders	9 (60.0)	6 (40.0)	0 (0.0)	15 (100)		
Businessmen	47 (73.4)	13 (20.3)	4 (6.3)	64 (100)		
Duration of care by the grandparents (hour/day)						
≤8	85 (77.6)	31 (20.9)	9 (1.5)	125 (100)	20.305	*0.000
>8	20 (43.5)	14 (30.4)	12 (26.1)	46 (100)		
Problems faced during caregiving						
Yes	24 (39.3)	24 (39.3)	13 (21.3)	61 (100)	19.929	*0.000
No	81 (73.6)	21 (19.1)	8 (7.3)	110 (100)		
Health problems of grandparents						
Yes	73 (56.2)	37 (28.5)	20 (15.4)	130 (100)	7.636	*0.022
No	32 (78.0)	8 (19.5)	1 (2.4)	41 (100)		

*Statistically significant value, †Fisher's exact test value

In table 7, the mean scores of stress, loneliness, anxiety, and depression were higher among individuals below 60 years of age compared to those aged 60 and above. These differences were statistically significant ($p < 0.05$). Table 8 unveiled a positive correlation between the total scores of loneliness, anxiety, and depression with the total scores of stress ($p < 0.05$), which was significant at the 0.01 level.

Table No. 7: Comparison of the mean of psychological well-being attributes by age groups (n=171)

PSW	Age groups		t-value	p-value
	<60 years	≥60 years		
	Mean±SD	Mean±SD		
Levels of stress	17.1±5.0	14.7±6.1	2.835	*0.005
Levels of loneliness	4.9±1.7	4.3±1.5	2.125	*0.035
Levels of anxiety	6.5±4.4	4.9±3.8	2.525	*0.012
Levels of depression	7.0±3.7	6.3±3.5	1.186	0.237

*Statistically significant value

Table No. 8: Correlation between total scores of stress and psychological well-being (n=171)

PSW	Total scores of stress		Total scores of loneliness		Total scores of anxiety		Total scores of depression	
	r	p	R	p	r	p	r	p
Stress	1		0.472**	*0.000	0.576**	*0.000	0.455**	*0.000
Loneliness	0.472**	*0.001	1					
Anxiety	0.576**	*0.033			1			
Depression	0.455**	*0.073					1	

**Correlation is significant at the 0.01 level (2-tailed).

*Statistically significant value

Discussion

The mean age of the grandparents was 57.9 years, with over half of them (53.8%) were under the age of 60 years. A study conducted in the USA found that the mean age of grandparents was 57.7 years.¹² This suggests that grandparents around this age may exhibit greater potential for caregiving. Of the population, homemakers (46.8%) and retirees (37.4%) made up the majority, with only 11.7% having a formal education. According to a study, 45% of elderly Bangladeshi citizens were illiterate.¹³ This discrepancy might result from the study's urban setting. The majority of respondents lived in joint families (89.5%). A study among Bangladeshi elders found that 80% of them resided in similar joint family.¹³ The prevalence of joint families might be attributed to the study's focus on caregiver grandparents, assuming that living with their son or daughter was necessary for caring for grandchildren, thus fostering a joint family structure. The average monthly income for the families stood at 75,555.6 Taka. Additionally, more than half of them (55.6%) reported having no personal income. Participants devoted an average of 6.3 hours per day to caregiving, and the average duration of caregiving was 6.7 days. The majority of grandparents spent all seven days caring for their grandchildren. This pattern is likely influenced by the fact that most of the grandparents in this study lived in joint family households, where they stayed at home and provided care throughout the week. Over one-third of the grandparents (35.7%) experienced difficulties during caregiving; with the most commonly cited problems being limited self-care time and lack of sleep (47.5%). Another studies revealed that the majority experienced insignificant problems, while the fewest reported encountering problems during caregiving.^{1,14} This suggests that most grandparents enjoyed caring for children, hence the absence of significant issues.

A substantial portion of grandparents underwent severe stress (70.8%), alongside mild anxiety (69.6%) and depression (61.4%). Conversely, a mere fraction of grandparents (5.3%) reported feelings of loneliness within their family. In the studies conducted among grandparents, the majority reported experiencing no depressive symptoms, while a significant proportion reported moderate to severe symptoms, mirroring

the findings of this study.^{15,16} However, concerning psychological well-being, most grandparents experienced high levels of stress, likely attributable to the combined responsibilities of home care and childcare in the absence of their own children.

The mean scores of stress, loneliness, anxiety, and depression were higher among individuals below 60 years of age compared to those aged 60 and above. These differences were statistically significant ($p < 0.05$). A study revealed a significant association between age and depressive symptoms ($p < 0.01$), indicating that the younger age group experienced higher levels of stress compared to the older age group.¹⁷ This could be attributed to the younger age group's potentially lower ability to cope with the pressures of caregiving in comparison to their older counterparts.

The stress levels demonstrated statistical significance in relation to family type, number of family members, caregiving challenges, and anxiety levels ($p < 0.05$). The study's findings nearly resembled those of previous studies.^{18,19} This could be attributed to the fact that grandparents were responsible for caring not only for their grandchildren but also for other family members. Consequently, they may have experienced increased workload, leading to physical strain and psychological stress. Loneliness levels were statistically significant ($p < 0.05$) in relation to anxiety and depression levels. Those with severe anxiety (29.2%) and depression (19.0%) found increased levels of loneliness. The heightened levels of anxiety and depression among some individuals may be attributed to the absence of their life partner.

The statistical significance of anxiety levels was evident across various factors including age groups, gender, education, problems encountered during caregiving, and depression levels ($p < 0.05$). Depression levels exhibited statistical significance with gender, occupation, number of family members, daily caregiving duration, caregiving challenges, and health issues ($p < 0.05$). The women are more susceptible to caregiving stressors and tend to cope with them differently from men. Alongside, individuals with lower levels of education tend to experience higher levels of psychological distress. The study's findings nearly resembled those of previous studies.^{20,21}

Conclusion

The study revealed that the majority of grandparents were educated but currently had no personal income. Additionally, most grandparents reported experiencing health problems, yet the majority of them did not encounter any problems while caregiving. The most common issues experienced during caregiving were a lack of time for themselves and insufficient sleep. The majority of grandparents experienced high levels of stress, with some also dealing with feelings of loneliness, anxiety, and depression. To improve their psychological well-being, it's crucial to offer support aimed at mitigating these factors through various interventions and caregiving strategies. This may include family support, recreational activities, and initiatives aimed at enhancing their overall quality of life.

Acknowledgments: The authors are grateful to all participants for their enthusiastic collaboration.

Competing interests: No competing interest.

Funding: This research was not funded by any grants.

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