

# Association of Demographic Variables and Stress Level in Grandparents Rearing Grandchildren of Employed Parents

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## ABSTRACT

**INTRODUCTION:** The responsibility of grandparents caring for their grandchildren comes with stress to the grandparents that can have an impact on their emotional health and psychological well-being. The aim of the study was designed to assess the level of stress and associated factors among grandparents raising their grandchildren of employed parents at selected area of Bangalore. **MATERIALS AND METHODS:** A cross-sectional descriptive research design and non-probability purposive sampling technique was used among 100 grandparents rearing their grandchildren at selected area of Bangalore. Modified parental stress scale (Berry and Jones 1995) was used to collect data from subjects. Descriptive, inferential statistics and chi-square was used to observe the association. P-value <0.05 level was considered as significant. **RESULTS:** The majority (53%) of the respondents had moderate level of stress. A significant association was found with stress and selected socio-demographic variables like age, marital status, education level, religion, type of family, number of grandchildren, number of hours involved in child rearing per day, pre-existing medical/mental illness, and reasons for providing basic need of grandchildren ( $p < 0.05$ ). Female grandparents had more stress compare to male grandparents. **CONCLUSIONS:** The grandparents rearing their grandchildren have mild and moderate level of stress and with comparison of male and female grandparent's stress, female grandparents are more stressed compare to male grandparents. **Keywords:** Employed parents, grandparents, grandchildren, rearing, stress

## INTRODUCTION

Parenting or child-raising is the process of promoting and supporting the physical, emotional, social, financial and intellectual development of a child from infancy to adulthood [1]. Around the world, an estimated 3 million grandparents are parenting their grandchildren. Approximately 2.7 million grandparents are parenting grandchildren in parent-less families across the country; 63% are grandmothers who are responsible for all of their grandchildren's basic needs [2]. Centers for Disease Control and Prevention, roughly estimates 3% of children in the United States live without their parents, with nearly two-thirds of them being raised by grandparents. 2.6 million Grandparents are raising their grandchildren, either as a result of a temporary change in circumstances for the parents, such as military deployment or joblessness, or something more serious and devastating, such as

mental illness, divorce, incarceration, death, or, as in Barb and Fran's case, substance abuse [3]. Mental or neurological illnesses account for 20% of all illnesses in the elderly, with dementia and depression being the most common [4]. Grandparents face stress as a result of their responsibilities to care for their grandchildren, which can affect their emotional and psychological well-being. Lack of access to health care, psychological anguish, poverty, lack of access to services, and having grandkids with special needs are all factors that put grandparents at risk for health problems [5].

A growing number of mothers and fathers are unable to handle the demands of parenthood, forcing their children's parents to assume main responsibility for their grandchildren. Grandparents who are raising their grandchildren are more likely to have their own physical and

mental health issues [6]. Grandparents parenting grandchildren have been demonstrated in multiple studies to have higher levels of depression than grandparents who are not raising grandchildren [7-9]. The mechanisms underlying this low level of happiness, however, are unknown. Grandparent caregivers appear to be inclined to depression even before a grandchild arrives in the home [10]. While all primary caregivers are likely to encounter pressures related to child care, grandparents appear to be more stressed than parents [11]. Due to expectations about the right timing and sequencing of life events and transitions, stress may arise as a result of the inconvenient and untimely nature of the grandparent caregiving position. When the expectations of grand parenting and parenting collide, raising a grandchild can be stressful. Grandparents who are raising their grandchildren are more prone to experience health problems as a result of the stress that comes with childrearing. Many grandparents already have health problems, and providing more care for their grandchildren puts them at greater risk of physical and mental degeneration [12].

Evidences of scientific literature focusing on grandparental concern are very scarce. To the best of our knowledge, this is the first study to assess the caregiver stress in grandparents raising grandchildren of employed mothers. Therefore, the objective was designed to assess caregiver stress among grandparents in raising their grandchildren of employed parents from selected areas of Bangalore.

## MATERIALS AND METHODS

### Study design and setting

This study was cross-sectional descriptive design conducted in K Narayanpura community area of Bangalore in the month of March 2020. Narayanpura is in Bangalore City in Karnataka State, India. It belongs to Bangalore Division where Kannada and Konkani, Tulu, Telugu, English, Kodava, Hindi, Marwari are the common languages which are spoken.

### Participants, sample size and sampling technique

The target population in the present study was 100 grandparents (45-65 years) those who were taking care of grandchildren in K Narayanpura community area of Bangalore. Non probability purposive sampling technique and modified Berry

and Jones parental stress index scale was used for grandparents [13]. Grandparents understanding Kannada, English and Hindi in the age between 45-65 years and grandchildren between the ages of 6 month to 15 years were included whereas age above 65 years having geriatric problems were excluded from the study.

### Data collection procedure and study variables

The study comprised of Berry and Jones Parental Stress Scale to measure the grandparents stress level and an information booklet was prepared on grandparental stress and their management technique. Socio-demographic characteristics were included as age, gender, religion, types of the family, educational status of grandparents, occupational status, marital status, monthly family income, number of grandchildren, age of grandchildren, number of hour involved in child rearing per day, challenges face while raising grandchildren, pre-existing medical or mental illness, the legal status of relationship with grandchildren and reasons for providing basic needs of grandchildren. This Modified parental stress scale is the standard tool prepared by Berry and Jones 1995; use to assess the level of stress among grandparents who raising their grandchildren. It consists of 20 items with each being rated on 5 point Likert's scale, ranging from 1 (strongly disagree), 2 (disagree), 3 (undecided), 4 (agree), and 5 (strongly agree). It comprises of items which reflects the feelings and perceptions about the experience of being a grandparents, their social concern, and relationship concern, a measure that considers positive and negative aspects of grand parenting.

### Statistical analysis and data management

Data were entered into SPSS 18 and frequency and percentage distribution was computed to analyse the demographic variables. A chi-square ( $\chi^2$ ) test was done to determine the association between the stress and the selected socio-demographic variables of grandparents raising grandchildren.  $p > 0.05$  level was considered as significant.

### Ethical considerations

An ethical approval was obtained from Faran College of Nursing, Rajiv Gandhi University of Health Sciences Karnataka, Bangalore. A permission letter was obtained from the K Narayanpura PHC, Bangalore prior to commencement of the study.

## RESULTS

Out of 100 samples, majority of the samples 38% were in the age group of 56-60 years, 34% were in the age group of 61-65 years, 16% were in the age group of 45-50 years, 12% were in the age group of 51-55 years. With regards their gender, the majority of the samples, 76% were female, followed by 24% were male. Most of the grandparents 61% take care of two grandchildren, 27% take care of one grandchild and 12% take care of three grandchildren. According to hours involved child rearing per day 57% were involved 4-6 hours, 26% were involved 6-8 hours, 10% were involved for more than 8 hours and remaining 7% were involved less than 3 hours per day. Majority 79% of

**Table 2|** Challenges faced by caregivers while rearing grandchildren (n=100).

| Challenges faced by caregivers while rearing grand children           | Respondents |         |
|---|-------------|---------|
|   | Number      | Percent |
| Financial burden  | 13          | 13.0    |
| Feeling tied down   | 56          | 56.0    |
| Lack of sleep   | 15          | 15.0    |
| Impact on my physical health  | 16          | 16.0    |
| <b>Legal status of relationship of caregivers with grand children</b> |             |         |
| Guardianship  | 88          | 88.0    |
| Legal custody   | 12          | 12.0    |
| <b>Reasons for providing basic needs of your grand children</b>       |             |         |
| Parents with poor mental status                                       | 2           | 2.0     |
| Parents are dead  | 2           | 2.0     |
| Employed parents  | 92          | 92.0    |
| Abandoned by parents  | 4           | 4.0     |

**Table 3|** Pre-existing medical/mental illness and level of stress among caregivers (n=100)

| Characteristics                     | Respondents |         |
|-------------------------------------|-------------|---------|
|                                     | Number      | Percent |
| <b>Pre-existing medical illness</b> |             |         |
| Yes                                 | 44          | 44.0    |
| No                                  | 56          | 56.0    |
| <b>Type of illness*</b>             |             |         |
| Blood pressure                      | 19          | 19.0    |
| Diabetes                            | 8           | 8.0     |
| Osteoarthritis                      | 14          | 14.0    |
| Depression                          | 3           | 3.0     |
| <b>Level of Stress</b>              |             |         |
| No stress                           | 0           | 0.0     |
| Mild                                | 47          | 47.0    |
| Moderate                            | 53          | 53.0    |
| Severe                              | 0           | 0.0     |
| *Multiple Responses                 |             |         |

were involved 6-8 hours, 10% were involved for more than 8 hours and remaining 7% were involved less than 3 hours per day. Majority 79% of

**Table 1|** Socio-demographic status of Grandparents and Grandchildren (n=100)

| Characteristics  | Number | Percent |
|--|--------|---------|
| <b>Age group (years)</b>                                 |        |         |
| 45-50  | 16     | 16.0    |
| 51-55  | 12     | 12.0    |
| 56-60  | 38     | 38.0    |
| 61-65  | 34     | 34.0    |
| <b>Gender</b>  |        |         |
| Male   | 24     | 24.0    |
| Female   | 76     | 76.0    |
| <b>Marital status</b>                                    |        |         |
| Married  | 57     | 57.0    |
| Widow/Widower  | 32     | 32.0    |
| Separated/Divorced                                       | 11     | 11.0    |
| <b>Educational level</b>                                 |        |         |
| No formal education                                      | 36     | 36.0    |
| Primary  | 37     | 37.0    |
| Secondary  | 12     | 12.0    |
| Higher education   | 15     | 15.0    |
| <b>Occupational status</b>                               |        |         |
| Unemployed   | 47     | 47.0    |
| Self employed  | 33     | 33.0    |
| Pensions   | 20     | 20.0    |
| <b>Religion</b>  |        |         |
| Hindu  | 33     | 33.0    |
| Muslim   | 39     | 39.0    |
| Christian  | 28     | 28.0    |
| <b>Type of family</b>                                    |        |         |
| Nuclear  | 25     | 25.0    |
| Joint  | 75     | 75.0    |
| <b>Family income/month (Rs)</b>                          |        |         |
| Rs.11,000-20,000   | 29     | 29.0    |
| Rs.21,000-30,000   | 53     | 53.0    |
| >Rs.30,000   | 18     | 18      |
| <b>Number of Grand children</b>                          |        |         |
| One  | 27     | 27.0    |
| Two  | 61     | 61.0    |
| Three  | 12     | 12.0    |
| <b>Number of hours involved in child rearing per day</b> |        |         |
| < 3 hrs  | 7      | 7.0     |
| 4-6 hrs  | 57     | 57.0    |
| 6-8 hrs  | 26     | 26.0    |
| >8 hrs   | 10     | 10.0    |
| <b>Age of grand children</b>                             |        |         |
| 1-4 year   | 79     | 79.0    |
| 5-9 years  | 77     | 77.0    |
| 10-12 years  | 26     | 26.0    |
| 13-15 years  | 3      | 3.0     |

respondent reared 1-4 years of age of grandchildren followed by 77% of respondent raise 5-9 years of age of grandchildren. Around 26% of respondent

**Table 4** | Mean Stress scores for various statement among Grandparents (n=100)

| S N | Statements   | Stress scores (Mean $\pm$ SD) |                 | 't' Test |
|-----|--|-------------------------------|-----------------|----------|
|     |  | Male                          | Female          |          |
| 1   | I am happy in my role as a grandparent   | 46.7 $\pm$ 12.7               | 47.4 $\pm$ 14.9 | 0.25     |
| 2   | Caring for my grandchildren sometimes takes more time and energy than I have to give.                              | 35.8 $\pm$ 10.2               | 37.4 $\pm$ 11.0 | 0.72     |
| 3   | I sometimes worry whether I am doing enough for my grandchildren.  | 80.0 $\pm$ 9.2                | 76.3 $\pm$ 9.5  | 1.97*    |
| 4   | I feel close to my grandchildren.  | 52.5 $\pm$ 9.9                | 56.1 $\pm$ 13.1 | 1.97*    |
| 5   | My grandchildren are an important source of affection for me.  | 50.0 $\pm$ 13.2               | 51.6 $\pm$ 13.6 | 0.59     |
| 6   | Having grandchildren gives me a more certain and optimistic view for the future.                                   | 51.7 $\pm$ 13.1               | 50.5 $\pm$ 15.5 | 0.40     |
| 7   | The major source of stress in my life is my grandchildren.   | 54.2 $\pm$ 17.2               | 52.4 $\pm$ 15.7 | 0.55     |
| 8   | Rearing grandchildren leaves little time and flexibility in my personal life.                                      | 42.5 $\pm$ 6.8                | 43.7 $\pm$ 11.6 | 0.62     |
| 9   | Having grandchildren has been a financial burden.  | 74.2 $\pm$ 9.3                | 71.8 $\pm$ 14.3 | 0.96     |
| 10  | The behavior of my grandchildren is often embarrassing or stressful to me.   | 70.8 $\pm$ 11.8               | 68.2 $\pm$ 14.7 | 1.01     |
| 11  | Sometimes I curse or abuse my grandchildren when they irritate me.   | 54.2 $\pm$ 11.0               | 59.2 $\pm$ 19.7 | 2.32*    |
| 12  | I force my grandchildren to obey my rules so that I don't feel disappointed.                                       | 57.5 $\pm$ 18.0               | 58.7 $\pm$ 17.1 | 0.34     |
| 13  | When I do something for my grandchildren, I feel that my efforts are not appreciated, it makes me more stressed.   | 69.2 $\pm$ 11.8               | 72.6 $\pm$ 10.8 | 1.54     |
| 14  | I often feel spending most of the time with my grandchildren has a negative impact in my privacy.                  | 67.5 $\pm$ 11.5               | 71.6 $\pm$ 11.4 | 1.99*    |
| 15  | I often feel spending most of the time with my grandchildren has a negative impact in my social life.              | 73.3 $\pm$ 9.6                | 73.9 $\pm$ 9.2  | 0.33     |
| 16  | I often feel spending most of the time with my grandchildren has a negative impact in my relationship with spouse. | 59.2 $\pm$ 19.1               | 64.7 $\pm$ 11.3 | 2.61     |
| 17  | Caring for grandchildren in the absence of their parents make me physically and mentally exhausted.                | 76.7 $\pm$ 9.6                | 74.5 $\pm$ 9.6  | 1.14     |
| 18  | I often feel my grandchild's parent don't cooperate with me, so that I feel my entire life is hopeless.            | 67.5 $\pm$ 9.9                | 64.7 $\pm$ 14.2 | 1.13     |
| 19  | I prefer staying away from my grandchildren during my stress.  | 69.2 $\pm$ 10.2               | 63.4 $\pm$ 20.0 | 2.85*    |
| 20  | I think an informational booklet on stress management is helpful in reducing stress.                               | 80.8 $\pm$ 15.0               | 81.3 $\pm$ 12.4 | 0.18     |

\*Significant at 5% level

raise 10-12 years of age of grandchildren and very less 3 % of respondents raise 13-15 years age group of grandchildren. Other demographic variables are as shown in Table 1. Table 2 reveals that most of the grandparents 56% were feeling tired, 16% were facing impact on their health, 15% were facing lack of sleep and 13% were facing financial burden. The distribution of respondents by legal status of relationship with grandchildren 88% grandparents has guardianship with their grandchildren and 12% have legal status with their grandchildren. Also, 92% grandchildren were raised because of employed parents, 4% were raised because of abundant by parents, 2% were raised due to parents are dead and 2% were raised because of parents poor mental health. Table 3 depicts that out of 100 samples, majority 56% respondents have no any pre-existing medical illness and 44% were facing different kind of medical problems. Among them 19% were facing high blood pressure, 14% were

facing osteoarthritis and 5% were facing depression. The result revealed that majority 53% of the respondents experience moderate stress, 47% of respondents experience mild stress level and none of the respondents experience severe stress. Table 4 shows the statement wise mean stress scores of male and female grandparents. Out of 20 statements, it was found that in 11 statements female grandparents mean stress score were higher than male mean stress scores grandparents. So it indicates that compare to Male grandparents female grandparents have higher stress than male grandparents in raising their grandkids. And in remaining 9 statements male mean stresses were higher than female mean stress scores. Only 5 statement showed (statements 3, 4, 11, 14, and 19) significant difference in the stress level of grandparents between male and female grandparents who raising their grandchildren. Table 5 depicts the association of socio-

Table 5 | Association between demographic variables and stress level of grandparents (n=100)

| Demo-graphic Variables                            | Category                     | Sample     | Stress Level |             | $\chi^2$ Value | P-Value |
|---|------------------------------|------------|--------------|-------------|----------------|---------|
|   |                              |            | Mild         | Moderate    |                |         |
|   |                              |            | n(%)         | n(%)        |                |         |
| Age group (years)                                 | 45-50                        | 16         | 9(56.3)      | 7(43.7)     | 8.36*          | p<0.05  |
|   | 51-55                        | 12         | 1(8.3)       | 11(91.7)    |                |         |
|   | 56-60                        | 38         | 20(52.6)     | 18(47.4)    |                |         |
|   | 61-65                        | 34         | 17(50.0)     | 17(50.0)    |                |         |
| Gender  | Male                         | 24         | 12(50.0)     | 12(50.0)    | 0.11           | p>0.05  |
|   | Female                       | 76         | 35(46.1)     | 41(53.9)    |                |         |
| Marital status                                    | Married                      | 57         | 19(33.3)     | 38(66.7)    | 13.89*         | p<0.05  |
|   | Widow/Widower                | 32         | 18(56.3)     | 14(43.7)    |                |         |
|   | Separated/Divorced           | 11         | 10(90.9)     | 1(9.1)      |                |         |
| Educational level                                 | No formal education          | 36         | 13(36.1)     | 23(63.9)    | 13.88*         | p<0.05  |
|   | Primary                      | 37         | 21(56.8)     | 16(43.2)    |                |         |
|   | Secondary                    | 12         | 10(83.3)     | 2(16.7)     |                |         |
|   | Higher education             | 15         | 3(20.0)      | 12(80.0)    |                |         |
| Occu-pational status                              | Unemployed                   | 47         | 22(46.8)     | 25(53.2)    | 3.80           | p>0.05  |
|   | Self employed                | 33         | 19(57.6)     | 14(42.4)    |                |         |
|   | Pensions                     | 20         | 6(30.0)      | 14(70.0)    |                |         |
| Religion  | Hindu                        | 33         | 9 (27.3)     | 24(71.7)    | 20.18*         | p<0.05  |
|   | Muslim                       | 39         | 15(38.5)     | 24(61.5)    |                |         |
|   | Christian                    | 28         | 23(82.1)     | 5(17.9)     |                |         |
|   | Hindu                        | 33         | 9 (27.3)     | 24(71.7)    |                |         |
| Type of family                                    | Nuclear                      | 75         | 27(36.0)     | 48(64.0)    | 14.57*         | p<0.05  |
|   | Joint                        | 25         | 20(80.0)     | 5(20.0)     |                |         |
| Family income/month (IRs)                         | Rs.11,000-20,000             | 29         | 10(34.5)     | 19(65.5)    | 3.35           | p>0.05  |
|   | Rs.21,000-30,000             | 53         | 26(49.1)     | 27(50.9)    |                |         |
|   | >Rs. 30000                   | 18         | 11(61.1)     | 7(38.9)     |                |         |
| Number of Grand children                          | One                          | 27         | 23(85.2)     | 4(14.8)     | 25.12*         | p<0.05  |
|   | Two                          | 61         | 23(37.7)     | 38(62.3)    |                |         |
|   | Three                        | 12         | 1(8.3)       | 11(91.7)    |                |         |
| Number of hours involved in child rearing per day | < 3 hrs                      | 7          | 6(85.7)      | 1(14.3)     | 18.55*         | p<0.05  |
|   | 4-6 hrs                      | 57         | 33(57.9)     | 24(42.1)    |                |         |
|   | >6 hrs                       | 36         | 8(22.2)      | 28(77.8)    |                |         |
| Challenges faced                                  | Financial burden             | 13         | 5(38.5)      | 8(61.5)     | 2.90           | p>0.05  |
|   | Feeling tied down            | 56         | 25(44.6)     | 31(55.4)    |                |         |
|   | Lack of sleep                | 15         | 10(66.7)     | 5(33.3)     |                |         |
|   | Impact on physical health    | 16         | 7(43.8)      | 9(56.2)     |                |         |
| Pre-existing medical illness                      | Yes                          | 44         | 15(34.1)     | 29(65.9)    | 5.26*          | p<0.05  |
|   | No                           | 56         | 32(57.1)     | 24(42.9)    |                |         |
| Legal status                                      | Guardian ship                | 88         | 41(46.6)     | 4 (53.4)    | 0.05           | p>0.05  |
|   | Legal custody                | 12         | 6(50.0)      | 6(50.0)     |                |         |
| Reasons for providing basic needs                 | Employed parents             | 92         | 43(46.7)     | 49(53.3)    | 8.06*          | p<0.05  |
|   | Abandoned by parents or dead | 6          | 2(33.3)      | 4(66.7)     |                |         |
| <b>Combined</b>                                   | <b>Total</b>                 | <b>100</b> | <b>47.0</b>  | <b>53.0</b> |                |         |

\*Significant at 5% level,

demographic variables and caregivers. Stress level was found to be significant with demographics and others factors such as age group (p<0.05), marital status (p<0.05), educational level (p<0.05), religion (p<0.05), type of family (p<0.05), number of grandchildren (p<0.05), number of hours involved in child rearing per day (p<0.05), pre-existing

medical illness (p<0.05), reasons for providing basic needs (p<0.05) respectively. However, there was insignificant relation for gender (p>0.05), occupational status (p>0.05), family income/month (p>0.05), challenges faced (p>0.05), legal status (p>0.05).



## DISCUSSION

Grandparents have always played a vital role in a family's life. Grandparents have a lot more freedom to enjoy and have fun with their grandchildren. In most cases, the relationship between grandparents and grandchildren is positive [14]. Grandparents are at risk of developing health problems as a result of the stressors connected with caregiving. Caring for grandchildren who come from abusive or neglectful families is likely to be significantly more difficult for grandparents. Grandparents need the energy and motivation that comes with good physical and mental health if they are to meet the new parenting obligations that have been imposed upon them [15]. The present study depicts that majority of the 38% were in the age group of 56-60 years, 34% were in the age group of 61-65 years, 16% were in the age group of 45-50 years, 12% were in the age group of 51-55 years. With regards their gender, the majority of the samples, 76% were female, followed by 24% were male. Similarly, the majority of grandparents 46% were in the age category of 50 to 55 years, 38% of grandparents were in the age group of 56-60 years, and just 16% of grandparents were in the age group of 61-65 years. Females constituted 53% of the population, while males made up 47% [16]. This might be due to that the old age group is generally found in this age group. With regard to educational level out of 100 samples, majority of the samples 37% had primary education, 36% had no formal education, 15% had higher education and 12% had secondary education. The possibility might be due to higher average literacy rate of Bangalore. Majority of the samples 47% were unemployed, 33% were self-employed and 20% were getting pensions. Similar types of results were noted by Kumari and Sharma in a study carried out to assess the level of stress among grandparents [16]. Although, Bangalore offers better jobs opportunities as it is known for its development in IT sector and start-ups which in turn creates job opportunities. But, due to the old age of respondents nearly half of the respondents might be unemployed. With regard to religion, majority of subjects 39% were belongs to Muslim religion followed by 33% subjects were belongs to Hindu religion, and 28% were belongs to Christian religion. This could be due to dominance of Muslim region in the study area. With regards to marital status out of 100 samples, majority of the samples 57% were married, followed by 32% were

widow, and 11% were separated/ divorced. Similar type of results parallel to our study was obtained where majority of grandparents 73% were married, 26% were widow/widower and only 1% was separated [16]. With regards to type of family, majority 25% were belongs to nuclear family and 25% belonged to nuclear family background. With regards to family income majority 53% earn between Rs. 21000-30000, 29(29%) earn between Rs. 11000-20000 and 18% earn Rs. more than 30000. According to monthly family income (in rupees), majority i.e 37% grandparents family income was 10001-20,000 also 37% was income above 30,000 and remaining 26% family income was 20,001-30,000 [16]. The nuclear family might be related due to urban civilization in Bangalore. Most of the grandparents 61% took care of two grandchildren, followed by 27% of one grandchildren, and 12% of three grandchildren. The time spent in child rearing per day was that 57% for 4-6 hours, 26% for 6-8 hours, 10% for more than 8 hours and remaining 7% were involved less than 3 hours per day. Similarly, majority 79% of respondent raised 1-4 years of age of grandchildren followed by 77% of respondent raised 5-9 years of age of grandchildren. Around 26% of respondent raised 10-12 years of age of grandchildren and very less 3 % of respondents raised 13-15 years age group of grandchildren. According to number of grandchildren, majority of grandparents 59% had 2 Children, 32% had  $\geq 3$  children only 9% had 1 Child [16]. With regards to facing challenges, majority of the respondents 56% were feeling tired, 16% were facing impact on their health, 15% were facing lack of sleep and 13% were facing financial burden. With regard to presence of pre-existing medical/mental illness, majority 56% respondents had no any pre-existing medical illness and 44% were facing different kind of medical problems. Among them 19% had high blood pressure, 14% had osteoarthritis and 5% had depression. With regards to legal status of relationship with grandchildren 88% grandparents had guardianship with their grandchildren and 12% had legal relationship with their grandchildren. With regards to reasons for providing basic need of grandchildren majority 92% grandchildren were raised because of employed parents, 4% were raised because of abundant by parents, 2% were raised due to parents are dead and 2% were raised because of parents poor mental health. The possibility might be that the

grandparents raising grandchildren are at particular risk for financial strain, are at elevated risk of living in inadequate housing conditions [17] and are likely to experience poor health outcomes [18]. These problems may contribute to the high levels of depression observed among grandparents who have recently begun care for a grandchild as much as the emotional strain experienced by these grandparents. The finding of the present study shows that majority of the respondents experienced moderate stress, less number of respondents experienced mild stress level and none of the respondents experienced severe stress. In the line with this study, Kumari and Sharma in Mohali, Panjab showed that among total sample, 82% had moderate level of stress and 18% had mild level of stress [16].

The analysis revealed that majority of the grandparents has moderate level of stress. Likely, the level of stress with percentage out of 40 samples 10% having mild level of stress, 77.5% having moderate level of stress and 12.5% are having severe level of stress were reported by Andal et al. [19]. This might be due to the possibility of social isolation and inadequate social support, and experiencing loneliness. The association was depicted between grandparents stress with their selected socio-demographic variables. Among these the significant association was found between the age, marital status, education level, religion, type of family, number of grandchildren, number of hours involved in child rearing per day, pre-existing

medical/mental illness, and reasons for providing basic need of grandchildren. Similarly, demographic variables such as caregivers, educational status, types of family, presence of any health issue for grandparent are showed significance in a similar study carried out at kalyanpur, kanpurindian [19]. In contrast, there was no significant association between level of stress with age group, gender, marital status and number of grandchildren in a similar study carried out at in Mohali, Punjab [16]. The study was conducted only in selected area of Bangalore and generalization is possible only selected setting. Less number of participants can be the one of the limitation.

## CONCLUSION

The findings of the study concludes that the grandparents rearing their grandchildren have mild and moderate level of stress and with comparison of male and female grandparent's stress. Female grandparents were more stressed compare to male grandparents. A significant association was found between the stress and all the selected demographic variables of grandparents in raising their grandchildren. The study can be replicated using the probability random sampling technique on a large sample size. More research into grandparents rearing grandchildren and their effects on both grandparents and grandchildren is needed. In societies, regular motivational programs on stress management techniques should be promoted.

## ADDITIONAL INFORMATION AND DECLARATIONS

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