

# An Evaluation of Caregiver Strain Experienced by Family Members Living with the Elderly in Selected Villages of Tapi, Gujarat

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## Abstract

**Background:** Caregiver strain or burden is a strain experienced by a person who is taking care of a disabled or chronically ill, and an old age person in the family. Caregivers experience burdens in emotional, physical, psychological, economical, and social aspects of their day-to-day life. **Objectives:** The objective of the study was to identify and compare caregiver strain experienced by them in physical, physiological, social, emotional, and economic areas and to find the association of caregiver strain with selected demographic variables. **Methods:** Using convenience sampling technique 247 caregivers were recruited in the selected villages of Tapi District, Gujarat. And after obtaining their consent caregivers were interviewed using the caregiver strain index by Robinson BC. **Results:** 52% of the samples had mild levels of strain, 40% moderate levels, and eight percent of them with severe levels of strain. The economic strain was the highest (54%) and the physiological strain was the least (13%). Relationship with elderly and ability of an elder person to perform Activities of Daily Living had an influence on caregiver strain. **Conclusion:** Caregiver burden and its impact need to be explored in detail and measures need to be taken to reduce their burden in physical, economical, and emotional areas.

**Key words:** Evaluation, Caregiver strain, elderly

## Introduction

Care giving responsibilities are the most rewarding responsibilities but it is a stressful and challenging duty as well. The caregiver feels strain when he or she is not able to accomplish their task due to economic burdens, more responsibility,

change in the role, and family lifestyle. Caregiver strain or burden experienced can affect a person emotionally, physically, psychologically, socially. The strain experience or symptoms may vary from an individual basis. Caregivers may have symptoms like frustration, depression, unemployment, economic burden. Remedial action is needed to prevent or avoid such types of serious effects. <sup>[1][2]</sup>

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According to the American association of retired persons (AARP) and the National Alliance for care giving (NAC) 2015, around 65 percent million caregivers provided care to the elderly from them 20 percent of caregivers experience burden or strain. According to the National Alliance for care giving

(NAC) And AARP, from 2015 to 2020 numbers of family caregivers (9.5 million) increased in the US. The study also said that family caregiver's health condition was worse compared to the last five years. With the aging population of caregiver's, health demand is raised. Private and public sectors have the opportunity to work together to find solutions for family caregivers.<sup>[3]</sup>

According to World Population Prospects: the 2019 Revision, reported that there will be one in six people over the age group of 65 (16%) by 2050. The elder people 80 years and above are expected to triple, from 14.3 crores in 2019 to 42. 6 crores in 2050.<sup>[4]</sup>

In a report published by Help-Age global network (2019), it states that 139 million populations are above 60 years of age. This is representing 10 percent of India's total Populations. An elders population is predicted to doubles to 19.5 percent in 2050. It is said that 319 million populations are above 60 years of age and it is estimated that in India 1 out of 5 will be a senior citizen age is 60 years and above.<sup>[5]</sup> The study from India reported that family caregiver's burden is strongly associated with old age persons with physical impairment. <sup>[6]</sup> The study showed that cognitive impairment in the elderly increases the family caregiver's burden.<sup>[7]</sup> The earlier study also reported that a daughter-in-law in a care giving role sacrificed her career and separated from her husband.<sup>[8]</sup>

K.K Gulani in his textbook of Community Health Nursing (2013) reported that in India, the life expectancy is increased and it is estimated that the elderly population will be 142 million by the year 2020 and about 14 % of the population of the country is expected to increase by 2025. <sup>[9]</sup> The exact population of the elderly is yet to be decided as a census of 2021 is not yet completed. The study

studies that caregiver strain depends on gender, types of family, and location of care.<sup>[10]</sup>

Though there is more elder population in India there is no study done on caregiver strain experienced by family members living with the elderly yet many studies done on caregiver burden experienced by family members living with elders with health problems are available. This study is trying to find an answer to the question of does the family members caring for the elderly feel the strain at different aspects of their life.

**The Purpose of the study** is to assess and compare caregiver's strain experienced by caregiver's living with the elderly in the following areas: physical, physiological, social, emotional, economic, and to find association of caregiver strains with selected demographic variables.

### **Material and Methods**

The present study was done based on a quantitative approach. A descriptive survey design was used to evaluate the caregiver strain experienced by family members living with the elderly. The study was done in selected villages of the Tapi District, Gujarat. The study population was comprised of caregivers living with the elderly. Non-probability convenient sampling technique was used to select the sample from the target population based on sample selection criteria.

**Inclusion criteria** were: Caregivers such as a spouse, children, daughter/son-in-law, brother and sister, Caregivers who are willing to participate in the study, and Caregivers who can read and understand English and Gujarati language. **Exclusion criteria** were Members living in the nuclear family. The Tool of the present study was divided into two parts. **PART-A** tool consists of socio-demographic data of caregivers living with elders and elders profiles Caregivers living

with elders have 4 parameters as Relationship with elderly, Age of caregiver, Family income and duration of stay with elderly and elders profile has 5 parameters such as No. of elders in the family, Relationship, Age of elders, Co-Morbid condition and Performance of ADL. **PART -B** included Caregiver strain index by Robinson BC.<sup>[11]</sup> It consists of thirteen items that are divided into physical, emotional, social, physiological, and economic areas. Each Correct response was given a score of 1. The total score for a correct response was thirteen and it was converted into arbitrary grades such as 1-3 scores indicates the mild level of stress, 4-7 scores indicate moderate level of stress and more than 7 Score indicate a higher level of stress. Content validity of the socio-demographic tool was done by 7 experts. The internal Reliability coefficient is 0.90. The plan for data analysis included Frequency and percentage distribution of socio-demographic data of the caregiver, Mean and standard deviation to assess caregiver strain experience, and Chi-square for

the association of caregiver strain experience score with the selected demographic variables.

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## Results

**Demographic details of the samples:** 65 % of the elders were living with their son/daughter, 33 % of the caregiver was from the age group of 41-50 years, 78 % of them were having an income between 5000-10,000 Rs. per month, 82 % of them were involved in the care giving more than 10 years of duration, 37 % of them were caring for 2 elder person and 13 % of them had more than 3 elders at home. 80 % of the elders were parents living with their children, 50% of them were above 65 years of age, 32% of the elders were dependent on a caregiver for their ADL, 29 % of them had co-morbid condition and 17 % of them were on treatment.

### Section A: Assessment of caregivers strain.

**Table No. 1. Distribution of overall care giver strain score of the sample.**

**N=247**

Grading of Score		Care giver strain	Percentage (%)
Grade	Score	F	
Mild	1-3	128	52
Moderate	4-7	100	40
High	> 7	19	8
Total Score	13	247	100

As shown in the table no.1 52 percent of caregivers were having a mild level of strain. 40 percent were having a moderate level of strain and Eight percent of them were having a high level of strain.

### Section B: Comparison of caregivers strain.

**Table No.2.Comparison of Mean, Median, Mode, SD of care giver strain of family members living with elderly within the identified areas.**

N=247

Sr no.	Emotional	Physical	Physiological	Social	Economical	Total
Total score	361/988 (37%)	211/988 (21%)	31/247 (13%)	109/494 (22%)	268/494 (54%)	980/3,211 (31%)
Mean	1.46	0.85	0.12	0.44	1.08	3.95
Median	2	1	1	0	1	-
Mode	2	0	0	0	1	-
SD	1.12	1.0	0.33	0.65	0.64	3.75

As shown in Table no: 2 caregiver strains was highest (Mean % 54, Mean 1.08) in the economical area and least (Mean % 13, Mean 0.12) in physiological area.

### Section C: Association of caregiver strain with selected demographic variables.

Association of caregiver strain with selected demographic variables showed that relationship of elderly with caregiver and elder person's ability to perform ADL was positively associated with caregiver strain ( $\chi^2 = p < 0.05$ ).

### Discussion

In this study caregiver strain was identified in physical (21%) physiological (13%), social (22%), emotional (37%) and economical (54%) areas.

A study was done to investigate the caregiver strain, age, and psychological well-being of older adults in Hong Kong reported that 22.9 % of

caregivers had a high level of strain and 9.9% high levels of depression.<sup>[12]</sup> however in this study, the emotional strain was higher than the population in the above study.

The findings of the present study revealed that Majority 54 % of caregivers experienced strain in the economical areas compared to 37 % in the emotional area, 22 % in the social area, 21 % in the physical area, and 13 % in physiological area. High level of economical strain experienced by the care givers can be attributed to their low level of socio-economic status.

The association was found significant using chi-square test and the present study results showed that there was a significant association found between caregivers strain with the relationship of caregivers

with elderly ( $\chi^2=13.84$  at  $p < 0.05$ ) and elders ability to performance ADL ( $\chi^2=95.82$  at  $p < 0.05$ ). It means relationship and activity of daily living can influence the caregiver strain.

The above finding is supported by a study was conducted on older persons and caregiver burden and satisfaction in the rural family context. The study finding showed that there were associations found between caregiver's burden and satisfaction care giving with age, Sex, and income of the family. As a care giving role, caregivers expressed satisfaction on a large scale whereas very few women expressed satisfaction as a care giving role. More caregivers (women) reported worsening health and tiredness. Also, evidence found that more age and low family income letdown the satisfaction level of caregivers of elderly.<sup>[13]</sup>

### Conclusion

The study concluded that the caregivers strain experienced by family members living with the elderly having more strain in the economical areas followed by emotional, social, physical, and physiological areas. Family income is the main strain among family caregivers so for at least to reduce the economical burden government or NGO have to offer remedial measures and for rest of the areas such as emotional, social, physical, and physiological, counseling and support measures need to be implemented to prevent adverse effects among caregivers.

### Ethical Consideration:

Permission was obtained from the chief district health officer, Zilla panchayat, health, and family welfare department, Tapi, Gujarat. The Researcher took consent from family caregivers meeting the inclusion criteria.

### Recommendations:

1. The study can be repeated on a large-scale sample to validate and for better generalization of the findings.
2. The study can be done by using different teaching strategies.
3. The study can be done on factors associated with the quality of life of caregivers.
4. The study can be done on economic strain on family caregivers for the elderly.

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**Conflicts of Interest:** No conflict of interest was reported.

### References

1. String fellow A. What is Caregiver Role Strain? [Internet]. Seniorlink.com. 2021 [cited 7 December 2021]. Available from: <https://www.seniorlink.com/blog/what-is-caregiver-role-strain>.
2. What is Caregiver Strain? [Internet]. Carepartnersct.com. 2021 [cited 7 December 2021]. Available from: <https://www.carepartnersct.com/caregiver/what-caregiver-strain>.
3. Care giving N. Care giving in the United States 2020 [Internet]. AARP. 2021 [cited 7 December 2021]. Available from: <https://www.aarp.org/ppi/info-2020/caregiving-in-the-united-states.html>
4. Ageing [Internet]. Unsecretariat.net. 2021 [cited 7 December 2021]. Available from: <https://www.unsecretariat.net/sections/issues-depth/ageing/index.html>

5. Ageing population in India [Internet]. HelpAge Asia. 2021 [cited 7 December 2021]. Available from: <https://ageingasia.org/ageing-population-india/>
6. Ajay S, Kasthuri A, Kiran P, Malhotra R. Association of impairments of older persons with caregiver burden among family caregivers: Findings from rural South India. *Archives of Gerontology and Geriatrics*. 2017;68:143-148.
7. Misra S, Oswal R, Patel M. Family burden in caregivers of elderly with cognitive impairment residing in rural and tribal population of a district in Western India—A baseline study. *Indian Journal of Community Medicine*. 2020;45(4):445.
8. Ugargol A, Bailey A. Family care giving for older adults: gendered roles and caregiver burden in emigrant households of Kerala, India. *Asian Population Studies*. 2018;14(2):194-210.
9. Duxbury L, Higgins C, Smart R. Elder care and the impact of caregiver strain on the health of employed caregivers. *Work*. 2011;40(1):29-40.
10. Gulani K.K, *Community Health Nursing (Principles & Practices)*. 2nd ed. Delhi: Kumar publication; 2017.
11. [Internet]. [Nslhd.health.nsw.gov.au](https://www.nslhd.health.nsw.gov.au). 2021 [cited 7 December 2021]. Available from: <https://www.nslhd.health.nsw.gov.au/carer/Documents/Caregiver%20Strain%20Index%20PDF.pdf>
12. Caregiver strain, age, and psychological well-being of older spousal caregivers in Hong Kong - Esther Oi-wah Chow, Henry CY Ho, 2015 [Internet]. *SAGE Journals*. 2021 [cited 7 December 2021]. Available from: <https://journals.sagepub.com/doi/10.1177/1468017314549709>.
13. Rani i. Older Persons, and Caregiver Burden and Satisfaction in Rural Family Context [Internet]. *Academia.edu*. 2021 [cited 7 December 2021]. Available from: [https://www.academia.edu/9789444/Older\\_Persons\\_and\\_Caregiver\\_Burden\\_and\\_Satisfaction\\_in\\_Rural\\_Family\\_Context](https://www.academia.edu/9789444/Older_Persons_and_Caregiver_Burden_and_Satisfaction_in_Rural_Family_Context)