# Social Support Status of the Elderly Population in Selected Villages in a Central India District 

Herschel Dafal ${ }^{1}$, Kishor Uikey ${ }^{2}$, Tushar Talhan ${ }^{3}$, Anshuli Trivedi ${ }^{4}{ }^{*}$<br>${ }^{1}$ Associate Professor, Department of Community Medicine, LNMCH, Indore, MP, India<br>${ }^{2}$ Assistant Professor, Department of Orthopedics, CIMS, Chhindwara (MP)<br>${ }^{3}$ Assistant Professor, Department of Psychiatry, CIMS, Chhindwara (MP)<br>${ }^{4}$ Associate Professor, Department of Community Medicine, GMC Bhopal, India

Received: 25-11-2023 / Revised: 23-12-2023 / Accepted: 26-01-2024
Corresponding Author: Dr. Anshuli Trivedi
Conflict of interest: Nil


#### Abstract

: Background and Objectives: Social support is a crucial social factor affecting health as it helps individuals meet their physical and emotional requirements. The purpose of the study was to evaluate the level of social support that elderly people in rural central India received. Material and Methods: The observational cross-sectional study was carried out in four chosen villages in central India; involving 460 older adults who completed the MSPSS (Multi-dimensional Scale Perceived Social Support) questionnaire. Univariate analysis and multivariate analysis were carried out using R software. Results: Out of $460,37(8.04 \%)$ of the elderly were found to have low, 177 (38.47\%) were moderate, and 246 $(53.48 \%)$ were having high social support. The result showed age and education of the elderly were significantly associated with social support. Conclusion: Intergenerational activities, provision and strengthening of social platforms and the addition social support components with comprehensive geriatric assessment can improve the current status.


Keywords: Elderly; Geriatric; MSPSS; Social support.
This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0) and the Budapest Open Access Initiative (http://www.budapestopenaccessinitiative.org/read), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

## Introduction

Approximately 864 million people, or $12 \%$ of the global population of 7.3 billion, are elderly. By $2050,22 \%$ of the global population will be elderly. [1] Compared to the Population Census of 2011, the Technical Group on Population Projections for India and States estimated that there will be around 34 million more senior citizens in 2021. [2]
We shall witness a demographic shift marked by the projected patterns of population ageing. It is crucial to prepare society to tackle the challenges related to population ageing, including psychiatric problems and famine. Social assistance significantly affects the health of older persons by assisting them in fulfilling their physical and emotional requirements and reducing the effects of stressful situations on their well-being. [3] The older population becomes more vulnerable due to a decrease in informal social support structures. An Iranian study on elderly persons revealed that robust social support can increase happiness by improving confidence in oneself, selfdisclosure, and self-esteem, resulting in goal attainment, life contentment, and overall well-being. Enhanced well-being and strong social networks boost the efficiency of older individuals and recognize their impact on society. [4]

For promoting healthy aging, it is essential for the government, non-government groups, and families to all contribute to the well-being of the elderly. [5] Customized services are now required in order to meet the demands of a growing elderly population and promote healthy ageing. It is essential to incorporate social support in the service offering for older people to encourage good ageing.

There is a lack of research on the elements that impact social support in older people in central India. Examining the social organization in rural regions for older individuals to enhance healthy ageing is essential for offering suggestions for the future. This study aims to investigate the social support available to older individuals in rural locations in order to provide ideas for enhancing the existing support system.

## Aim and Objectives:

To assess the level of social support among older individuals residing in rural locations.

## Material and Methods:

The current study started after the approval received from Institutional Ethical Committee. Informed
consent was taken from the study participants before the application of the questionnaires.
Study design: This was a cross-sectional observational research.

Study setting: Four different villages in central India were chosen for the study, and they also served as the medical school's field practice locations. The selected communities each have a population between 2000 and 8000. The institutional department carries out fieldwork in all four villages, involving weekly clinics, attending VHNSC meetings, doing school health evaluations, organizing health camps, and engaging in many other activities. Villages with a sizable population were chosen based on the practicality of commuting to ensure the recruitment of the required sample size.

Study population: The study covered individuals aged 60 years or older, regardless of gender.

## Sample size:

An investigation involving 460 senior citizens was conducted. Using the OpenEpi programme, the sample size was calculated with $5 \%$ absolute precision and a $95 \%$ confidence level. [6] This computation includes a $1.5 \%$ design impact and was based on a $25 \%$ prevalence of poor socioeconomic status among the elderly from a prior research [7].

## Sampling technique:

There was a stratified random sample. A list of senior citizens from certain localities was obtained from the database of the Health and Demographic Surveillance System (HDSS). The elderly subject of the study was the main focus. Age-based classification was applied to the list. Based on their relative distribution within each grouping, elderly individuals were selected at random from each of the subgroups.

## Method of selection:

## Exclusion criteria:

- The older individual was bed-ridden
- Past history of reduced auditory and/or visual perception


## Method of measurement:

Socio-demographic data- Pretested semi-structured interviews were employed to gather information on the socio-demographic factors. Age, gender, religion, degree of education, employment status, socioeconomic background, contact details, and family structure are among the details that have been supplied.

## Tool for measuring social support status-

The MSPSS comprises 12 surveys with 7 response possibilities, scored from 0 to 6 . A person can attain a maximum score of 72 points. Higher scores
correspond to higher levels of perceived social support. [8] A dedicated subscale on the 12 -item MSPSS assesses how much a person feels their friends, family, and significant others are helping them. To calculate subscale scores-

- Calculate the Significant Other subscale by summing up items $1,2,5$, and 10 , then dividing the total by 4 .
- Calculate the Family subscale by summing up $3,4,8$, and 11 , then dividing the total by 4 .
- Calculate the Friends subscale by summing up items $6,7,9$, and 12 , and then divide the total by 4 .
- Calculate the total scale by summing all 12 components and then dividing by 12 .


## Results:

A total scale score between 1 and 2.9 indicates minimal support, between 3 and 5 indicates moderate support, and between 5.1 and 7 indicates significant high support. [9] Numerous researches in India have used and validated the tool. [10-12] The MSPSS questionnaire was translated into the language of the region, pre-tested with a small group in the field to see if any changes were required, and then used to gather data.

## Data collection methods:

In the first phase, a survey was created using the KOBO toolbox and then imported into the mobile device version of the KOBO collect programme. Whether using paper or an internet connection, the KOBO tool is useful for data collection. Data was sent to the KOBO toolbox after being gathered on an Android handset using KOBO Collect. A file in Excel was then used to hold the data.

Pretesting was conducted to assess the potential for enhancement. Data gathering in the field commenced after analyzing participants' replies and identifying improvement initiatives. Upon obtaining informed consent from chosen individuals, the second step, which involves data collection, commenced. Interviews were conducted through door-to-door visits. The study tool was administered while considering the individuals' privacy and comfort.

## Statistical Analysis:

An Excel file with the data from the KOBO tool was created. The R programme was used to conduct the study; version 1.4.1717. Frequencies and proportions were established using univariate analysis. Ordinal logistic regression techniques were employed for multivariate analysis.
This study classified social support status into three distinct levels: low, moderate, and high. Ordinal logistic regression was used due to the ordinal nature of the social support status variable. The study utilized the proportional odds model, assuming that the

## Dafal et al.

impact of exposure remains consistent across all divisions of the outcome variable categories. [13] The study analyzed categorical explanatory factors such as age, gender, caste, education, employment, type of family, and socio-economic status of the participants. A P value less than 0.05 (often $\leq 0.05$ ) was regarded as statistically significant.

## Results:

## Socio-demographic details:

Table 1 contains the socio-demographic information of all participants in the study. 344 individuals, including $74.78 \%$ of the study population, were in the 60-70 years age bracket. There were 278 female participants, making up $60.43 \%$ of the study. Most of the subjects, 345 (75\%), identified as Hindu, with Buddhism being the second most common at 96 ( $20.87 \%$ ). 205 subjects ( $44.57 \%$ ) were classified under the OBC group, while 45 subjects ( $9.78 \%$ ) belonged to other categories, such as Nomadic tribes (NT1, NT2, NT3, VJ-NT). Of the research participants, 20 (4.35\%) had earned master's or graduate
degrees, whereas 151 (32.83\%) were uneducated and had never attended school. Out of the 129 senior individuals in the study, $28.04 \%$ were homemakers, while $21.52 \%$ were not engaged in any occupation. 247 individuals, representing $53.70 \%$ of the research population, were from three-generation families. All elderly families possessed ration cards. 217 families ( $47.17 \%$ ) were classified as above poverty line (APL).

Table 1 showed a strong correlation between senior citizens' age, education, and social assistance. Ages 71 to 80 were associated with a reduced likelihood of having strong social support ( $\mathrm{P}=0.021$ ). Over 80-year-olds were less likely to report strong levels of social support ( $\mathrm{P}=0.041$ ). Elderly individuals with lower than secondary education, those with completed secondary education, those with high secondary education, and those with a graduate or master's degree had higher odds of receiving high social support ( $\mathrm{P}<0.051, \mathrm{P}<0.051, \mathrm{P}<0.001$, and $\mathrm{P}<0.006$ respectively).

Table 1: Socio-demographic variables and association of social support

| Variables |  | N | \% | P-value |
| :---: | :---: | :---: | :---: | :---: |
| Age groups | 60-70 years | 344 | 74.78 | Ref |
|  | 71-80 years | 100 | 21.74 | 0.021 (S) |
|  | $>80$ years | 16 | 3.48 | 0.041 (S) |
| Gender | Female | 278 | 60.43 | Ref |
|  | Male | 182 | 39.57 | 0.431 |
| Education | Uneducated | 151 | 32.83 | Ref |
|  | Below primary school education | 83 | 18.04 | 0.301 |
|  | Primary school finished | 54 | 11.74 | 0.321 |
|  | Below secondary school education | 61 | 13.26 | 0.001 (S) |
|  | Secondary school finished | 63 | 13.70 | 0.001 (S) |
|  | Below higher secondary education | 06 | 1.30 | 0.201 |
|  | Higher secondary school finished | 22 | 4.78 | 0.001 (S) |
|  | Graduation completed/Masters degree | 20 | 4.35 | 0.006 (S) |
| Occupation | Homemaker | 129 | 28.04 | Ref |
|  | Business person | 22 | 4.78 | 0.631 |
|  | Retired person | 74 | 16.09 | 0.571 |
|  | Laborer/worker | 69 | 15.0 | 0.661 |
|  | Farmer | 67 | 14.57 | 0.051 |
|  | Others | 99 | 21.52 | 0.421 |
| Type of family | Nuclear | 203 | 44.13 | Ref |
|  | Generation | 247 | 53.70 | 0.301 |
|  | Joint | 10 | 2.17 | 0.281 |
| Socio-economic status | Above Poverty Line | 217 | 47.17 | Ref |
|  | Below Poverty Line | 153 | 33.26 | 0.054 |
|  | Antyodaya Anna Yojana | 90 | 19.57 | 0.055 |

## S- Statistically Significant

## Social support status:

The total score of MSPSS range from 12 to 84 . Social support status was categorized as low, moderate, or high based on the average score. The range of the average score was 1 to 7 .

## Social support status of elderly by the use of MSPSS questionnaire:

Out of the elderly participants in the study, 37 individuals ( $8.04 \%$ ) had low social support, 177 individuals ( $38.47 \%$ ) had moderate social support, and 246 individuals ( $53.48 \%$ ) had high social support. [Table 2]

Table 2: Social support status

| Social support MSPSS total scoring | Frequency (N=460) | Percentage (\%) |
| :--- | :--- | :--- |
| Low level support (1 to 2.9) | 37 | 8.04 |
| Moderate level support (3 to 5) | 177 | 38.47 |
| High level support (5.1 to 7) | 246 | 53.48 |

MSPSS subscales: Table 3 displays the mean values and standard deviations (SD) for each of the 3 subscales and overall scale.

Table 3: MSPSS subscales

| MSPSS subscale | Range of mean score | Average Mean | Standard Deviation (SD) |
| :--- | :--- | :--- | :--- |
| Family | $1-7$ | 5.26 | 1.20 |
| Friends |  | 4.53 | 1.54 |
| Special ones |  | 5.06 | 1.33 |
| Total |  | 4.95 | 1.11 |

## MSPSS questionnaire items:

Family subscale: About $50 \%$ of the senior participants said that they would talk to friends and family about their current worries, receive emotional support and direction from them, and ask for assistance and decision-making support from their relatives.

Friends subscale: Approximately $1 / 3$ of the elder individuals have friends with whom they share happiness as well as despair, discuss problems, provide support in times of need, and offer assistance.

Special ones: Approximately 50\% of the elderly expressed the importance of having a compassionate and supportive somebody in their lives to provide emotional care, comfort, and companionship at times of need, as well as to share moments of happiness as well as sadness.

## Discussion:

"A group consisting of family, friends, neighbors, and people in the community that is readily accessible during moments of necessity to provide emotional, physical, and financial help" is how the National Cancer Institute's Dictionary of Cancer Terms describes social support. [14] The research tool assessed the sense of social support from close friends, family, and significant others. Personal social networks can offer chances for social interaction as well as emotional support. It provides fresh hope and direction throughout life, lessens depressive symptoms, and elevates mood (structural support dimension). Active involvement in community activities fosters a sense of connection to society, enhancing self-esteem and self-worth, and providing fulfillment in life (functional aspect of support). Age and education were identified as factors linked to social support, as shown in Table 1. In a cross-sectional study in Taiwan, it was revealed that increasing age and education may be associated with elderly social support. [3] Social support encompasses addressing practical requirements such as transportation, housing, and personal care, in addition to providing emotional support. Elderly individuals over 80 years old
limit their outdoor activities owing to weakness, which might result in a lack of social network and support. Older individuals living without a companion or alone are at a significant risk of developing a low social standing. Kawachi referenced a study indicating that men who are socially isolated, meaning they are not married, have fewer than six friends or relatives, and are not part of a church or community group, are more likely to experience cardiovascular disease mortality, deaths from accidents and suicides, and stroke incidence compared to men with strong social networks. [15] Advanced education leads to increased community involvement. Active involvement in community activities enhances social connections, boosts self-esteem and self-worth, and provides a sense of fulfillment due to increased social support. According to a Taiwanese study, people should take societal standards into account while making judgments. Prioritizing social harmony is more prevalent in Asia than it is in the West. [3] Social support plays a crucial role in helping people achieve their emotional and physical requirements and lessens the negative consequences that stressful events have on their quality of life. [3] Family members offer practical and emotional assistance in the form of gifts, cash, and services. Support and information are given by family and friends.

Elderly individuals' friends are more likely to go along with them in social events than their kids or other relatives. [16]

Based on the findings, older people can enhance their societal support status by implementing the following advice.

- Creating senior-focused social media platforms or improving already-existing ones, like Kisan Manch or Bhajan Mandal, to increase community engagement.
- Encouraging intergenerational activities at the village level, like Kutumb mela, to reinforce family bonds and foster social and emotional support.
- Comprehensive geriatric assessment is utilized
to assess and enhance preventative, promotional, and rehabilitative treatment for aged adults who have social assistance. The study's strengths were utilizing established study measures and doing a community-based assessment of elderly individuals. However, the study has various shortcomings. Initially, it was impossible to prevent self-reporting inaccuracies. Secondly, consider the possibility of recollection bias. The study did not include older individuals who were bedridden. Nevertheless, it sets the stage for forthcoming possibilities to comprehend their viewpoint.


## Conclusion:

Strong social support was demonstrated by $53.48 \%$ of the elderly, a link that was clearly related to both age and educational attainment.
In order to strengthen the social support within the family, elderly people who limit their activities at home may participate in intergenerational activities.

Enhancing social networks for the elderly through engaging in activities while prioritizing health can enhance their well-being. When dealing with health difficulties in a geriatric clinic, it is important to enhance their social support by involving family or friends.

## References:

1. Kumar S. Caring for our elders: Early Responses India Ageing Report-2017.
2. National Statistical Office. Elderly in India 2021. New Delhi 2021.
3. Dai Y, Zhang CY, Zhang BQ, Li Z, Jiang C, Huang HL. Social support and the self-rated health of older people: A comparative study in Tainan Taiwan and Fuzhou Fujian province. Medicine (Baltimore) 2016; 95:e3881.
4. WHO. World Report and Ageing on Health. 2015.
5. Michel JP, Sadana R. "Healthy Aging"Concepts and measures. J Am Med Dir Assoc 2017; 18:460-4.
6. Dean AG, Sullivan KM, Soe MM. Open Source Epidemiologic Statistics for Public Health. OpenEpi Menu.
7. Bøen H, Dalgard OS, Bjertness E. The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home : A cross sectional study. BMC Geriatr 2012; 12:27.
8. Stewart RC, Umar E, Tomenson B, Creed F. Validation of the multi-dimensional scale of perceived social support (MSPSS) and the relationship between social support, intimate partner violence and antenatal depression in Malawi. BMC Psychiatry 2014; 14:180.
9. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. J Pers Assess 1988; 52:30-41.
10. Osmany M, Ali MS, Rizvi S, Khan W, Gupta G. Perceived social support and coping among alcohol/cannabis dependents and non-dependents. Delhi Psychiatr J 2014; 17:375-82.
11. Guan NC, Sulaiman AR, Seng LH, Ann AYH, Wahab S, Pillai SK. Factorial validity and reliability of the tamil version of multidimensional scale of perceived social support among a group of participants in University Malaya Medical Centre, Malaysia. Indian J Psychol Med 2013; 35:385-8.
12. Kaur K, Beri N. Psychometric properties of multidimensional scale of perceived social support (MSPSS): Indian adaptation. Int J Sci Technol Res 2019; 8:2796-801.
13. Kirkwood BR, Sterne. JAC. Essential Medical Statistics 2nd ed. Massachusetts: Blackwell Science Ltd; 2003 212-3.
14. National Cancer Institute Dictionary of Cancer Terms. Social Support.
15. Kawachi I, Colditz GA, Ascherio A, Rimm EB, Giovannucci E, Stampfer MJ, et al. A prospective study of social networks in relation to total mortality and cardiovascular disease in men in the USA. J Epidemiol Community Health 1996; 50:245-51.
16. Moeini B, Barati M, Farhadian M, Ara MH. The association between social support and happiness among elderly in Iran. Korean J Fam Med 2018; 39:260-5.
