

## Statistical Analysis of Socio-Economic and Health Conditions of Senior Citizens of Belgaum City.

Smt. Sumitra S. Chobari,

Associate Professor, Dept. of Statistics. K.L.E Society's R. L. Sc. Institute (Autonomous), Belagavi

**ABSTRACT:** The purpose of this paper is to study the probe into the Socio-economic factors which influence the Socio-economic psychological and health conditions of senior citizens: A study of senior citizens of Belgaum city. A sample of 323 senior citizens was randomly selected from 6 wards by using multistage purposive sampling.

Data collected is qualitative and quantitative in nature by using a schedule consists of 48 open and closed ended questions. Modifications in the schedule are made after the pre-test. The Statistical analysis of data is made by using Coefficient of correlation, regression, Chi-square test and Z test.

The present study reveals that the financial status is found to have the significant positive association with level of adjustment, where there is mere poverty, those the aged are suffering a lot. A large section of respondents have good health condition. A huge majority i.e. 90% were in favor of the view that, Day care centers, mobile library, weakly health care checkup and also the special services needed for the aged persons. 82% of the respondents reported that they were respected in the family and society.

**Keywords:** Socio-Economic, Health, Senior citizen

### I. INTRODUCTION

**“About the only thing that comes to us without effort is old age”Gloria Pitze Womb of a mother has a place for children many Home of a children has no place for mother any**

Ageing is natural and continuous process and it affects each human being in the world. From his birth to death a man needs care, support, love and affection in the society. *‘Man is a social animal’* hence it goes without saying that irrespective of one’s age, social comforts and status, he is dependent on others. The trend of increase of old age people would uninterruptedly continue in the years to come, faster than the general population. The graying of India has become more visible than ever. The gradual increase in number of old people in the country is due to better health care system and medical advancement. With the fact of growing elderly citizens of our country we need to address the needs of these people of our population. It would be a mounting and complex challenge to formulate policies aimed at providing the adequate income, housing, healthcare and psychological stability to aging population. The most important aspect of this challenge comprises of socio-economic and health conditions of the elderly. If their social, socio-economic and health condition is properly taken care of, then only we would be achieving remedies for the problems from all aspects. With this perspective, the present study was taken up as an attempt to examine the socioeconomic and health status of the aged of Belgaum city.

#### Meaning of aged:

The Indian census has adopted 60 years for classifying a person as old. For the purpose of the present study men and women of 60 years and above have been included in the sample as aged. The aged are also known as elderly or old people. This age group is called as “Geriatric Age Group”.

#### Reasons for Aging

- Demographic conditions responsible for aging.
- Social and economic implications for aging.
- Chronologically with the passage of time.

#### Importance of the aged:

The aged have a definite place in the community which varies from culture to culture according to their status, age, sex, caste and occupation. The aged are regarded as symbols of the divine and given utmost respect

in some families as they are the repositories of wisdom, carriers of traditions and transmitters of experience. They can take up the advisory role admirably and be of immense help in guiding the youth with regard to economic, social and religious matters. They transmit the values of tolerance, co-operation and concern for others as they experienced from their elders (Dr.Pankjam, in Prachi).

### **Problems of aged:**

In every stage of life, there are problems to be faced. But the problems faced by people who are old may be more severe. Again the problems faced by people who are in their 60's may be different from problems faced by people who are in their 80's. The problems of aged men and women are also different. The aged living in enforced retirement have altogether a different kind of problem when compared to those still working in unorganized sector or having a self employment. Psychological problems are more common in old age which includes cognitive impairment depression, Anxiety and other health are also common. Some of the aged have economic and health problems because of that they feel very insecure.

### **Economic/Financial Problems:**

The majority of the elderly people have financial problems. Even those who are the recipients of retirement benefits after superannuation find it difficult to meet their basic requirements with the decrease in their income and increase in the cost of living. In case of the other aged people the situation is still worse as our poor country where the young are unemployed and under employed cannot afford to give employment to the elderly people. Moreover excepting those living in rural areas, the aged people have no control over family, as was the case in the past. In the absence of their own regular source of income, they have to depend on their sons and daughters who find it difficult to meet their demands because of the difficult situation created by the price rise and the fast changing life style.

### **Health And Medical Care:**

This is the second major problem of the aged. Lucky are those who are able to maintain good health as they advance in age. Even when one is not suffering from any disease, one experiences a gradual decline in physical strength with growing age. But in most cases the advanced ages brings with it some chronic ailment and the aged get bedridden and depend on others for their mobility and need medical care for their treatment.

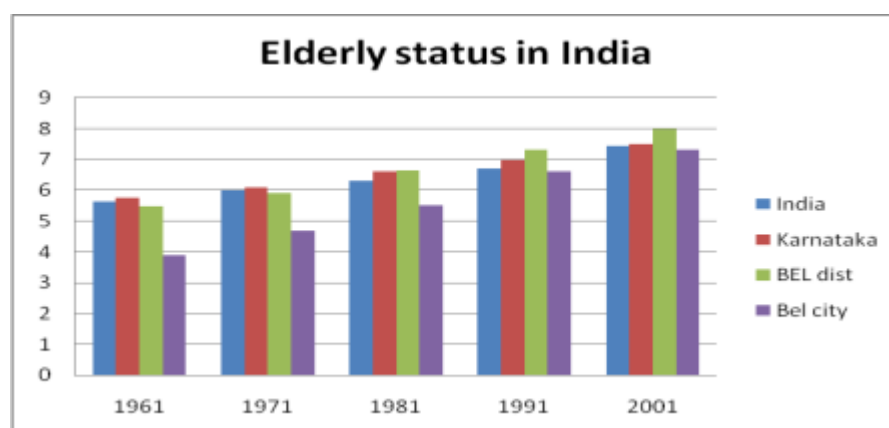
### **Review Of Literature:**

It is only in the recent part that there has been an effort by psychologist and sociologist to dwell deeply on quality of life of aged. In this context an attempt is made to highlight some of the researchers in the field of economic (financial), health, social, loneliness, psychological distress, overall life satisfaction of the aged.

I made an effort to study the economic and health conditions of elderly of Belgaum city.

### **Census wise elderly population of India, Karnataka, Belgaum district and Belgaum city in percentage.**

1961	5.62	5.74	5.49	3.9
1971	6	6.09	5.9	4.68
1981	6.3	6.62	6.64	5.52
1991	6.69	6.98	7.31	6.61
2001	7.44	7.5	7.99	7.32



**The above graph shows there is continuous increase in the elderly population of India and Karnataka**

**Objectives of the study**

- 1) To study the socio – economic and health conditions of senior citizens of Belgaum city.
- 2) To study the support and security given by the family and Government.
- 3) To suggest the remedies for the problems faced by senior citizens.

**To explain the above objectives the following hypothesis were formulated.**

- 1) There is no association between sex and living arrangement, age and living arrangement.
- 2) Income and sex, Income and literacy, Income and size of the family, Income and expenditure are independent of each other.
- 3) There is no association between literacy and occupation, literacy and income, occupation and income.
- 4) Health and age, health condition and sex, health and literacy, health and fitness activities, health and habits are also independent of each other.

**Methodology**

**Need for study:** To understand the issues relating to old people with regard to their socio- economic and health conditions, their existing support and security system at the family and government level

The present study was conducted on senior citizens of Belgaum city of Karnataka state was conducted during the year 2011-12 (2001 census information are used wherever needed.) are explained.

**Study Area (Population for study):**

The present study has been carried out in Belgaum city of Belgaum district. Belgaum district has ten taluks. The population of Belgaum district and city as per the 2001 census 4214505 and 423278 respectively. This population is distributed among 58 wards.

**Sampling Design:**

To study the whole population of aged to arrive at generalization is not that practicable. Here comes the importance of sampling technique in field research. The multistage purposive random sampling is adopted to select sample for the study. The total size of the sample and the size of the sample from different wards( strata) are selected as follows.

The population of Belgaum city is divided among 58 wards For this study I have taken 10% of the wards that is 6 wards at random. As per 2001 census the population of Belgaum city is 423278 and senior citizen population is 31107 Which is distributed among 58 wards. Concentration is made only on the following wards (areas) for field survey.

No. of senior citizen in 6 wards = 3218

10% of 3218= 322 ie sample size is 322.

**Selection of sample size from selected wards**

Sl.No	Ward No.	Name of the ward	Population of ward	Sample size $n_i=(n/N)N_i$
1	1	Cantonment,Udyambag,Majagan	$N_1=6988$	$n_1=43$
2	19	Shahapur	$N_2=8677$	$n_2=53$
3	29	Fhulbagalli,Bandurgalli.	$N_3=6325$	$n_3=38$
4	39	Badakalgalli,Kotawalgalli&jalagar Galli	$N_4=5445$	$n_4=33$
5	43	Hanuman Nagar,civil Hospital area.	$N_5=12656$	$n_5=77$
6	52	Gandhinagar.	$N_6=12797$	$n_6=78$
Total			$N=52888$	$n=322$

Where

$N$ =Total population of six randomly selected wards,  $n$ = Total Sample Size.

$n_i$ = Size of the sample from ith ward(Stratum sample size),

$N_i$ = Size of the ward(size of the strata)

**Pre-tests**

The required primary data had to be collected from 6 wards consisting of male, female, literates, illiterates, pensioners and non-pensioners by the interview method through personal contact to get the required

information. The interview schedule was pre-tested on a sample of 25 aged (elderly) selected from non sampled area. The pretest helped to restructure the interview schedule.

**Collection of Data**

The samples have been taken only from households having elderly people and also from 3 old age homes out of five. The study is mainly based on primary data. Our questionnaire contains the information of Economic, Health, Social status and Social security etc...

All the information has been collected by interviewing the respondents at their residence with the help of interview schedule consisting of close and open ended questions. Observation method was followed while interviewing the informants during the course of field work. Before starting the interview the respondents have been assured that all the information would be kept confidential and used for research purpose only.

**Survey on senior citizens**

It includes aged male, female literates, illiterates and retired from government and private sector, private business, Agriculture, labors, family pension holders etc... On the whole the response of the educated people has been quite satisfactory. The region for good response may be that almost all the respondents are able to understand the purpose of this type of study.

**Statistical Analysis**

The data collected for the study were both qualitative and quantitative in nature. For the analysis of the data SPSS (Statistical Package for Social Science) software was used and qualitative interpretations were drawn validity. So the data were presented in tabular form representing through frequencies and simple percentage. The parametric and non-parametric tests were used for the analysis of the data (Students't' Test, Chi-Square test, Coefficient of correlation and Linear regression and Analysis of Variance).

**II. RESULT ANALYSIS**

**Demographic Table(Note : Survey is conducted for 323 individuals)**

Sl.No.	Variable	Category	Frequencies		Total	Percentage (%)	Total (%)
			Male	Female			
1	Age	a. 60-70	94(57.3%)	100(63%)	194	60.43	100
		b. 71-80	60(36.59%)	54(34%)			
		c. Above 80	10(6.1%)	05(3%)	15	4.672	
			164	159			
2	Type of family	a. Nuclear	118(72%)	117(74%)	235	73.20	100
		b. Joint	46(28%)	42(26%)	88	27.41	
3	Religion	a. Hindu	118(72%)	91(57%)	209	65.10	100
		b. Muslim	18(11%)	20(13%)	38	11.83	
		c. Christian	11(7%)	33(21%)	44	13.70	
			17(10%)	15(9%)	32	9.968	
		d. Others	31(19%)	35(22%)	66	20.56	
4	Marital Status	a. Married	140(85%)	73(46%)	213	66.35	100
		b. Unmarried	03(2%)	07(4%)	10	3.115	
			21(13%)	79(50%)	100	31.15	
		c. Widow /Widower					
5	Education level	a. Illiterate	22(13%)	65(41%)	87	27.10	100
		b. Educated	89(54%)	69(43%)	158	49.22	
			53(33%)	25(16%)	78	24.29	
6	Work Satus	a. Re-employed	35(21%)	32(20%)	67	20.87	100
		b. Non-reemployed	129(79%)	127(80%)	256	79.75	
7	Size of family	a. Small	73(45%)	63(40%)	136	42.12	100
		b. Midium	53(32%)	63(40%)	116	35.90	

8	Health status	c. Large	38(23%)	33(20%)	71	22.00	100
		a. Poor(major/>3 diseases)	114(70%)	106(67%)	220	68.53	
			29(18%)	21(13%)	50	15.57	
		b. Fair(2 diseases)	21(12%)	32(20%)	53	16.51	
		c. Very good/good					

Agewise living arrangement of elderly of belgaum city

H<sub>0</sub>: There is no association between the age and living arrangement.

Living arrangement	Age Group					Total
	60to 64	65 to 69	70 to 74	75 to 84	85 and Above	
Spouse, son & grand children	40	33	21	12	2	108
Old age home	1	1	2	2	2	8
son & grand children	30	24	20	21	8	103
Daughter	8	3	5	3	0	19
Spouse	15	17	10	5	1	48
Alone	5	2	5	1	0	13
Care taker	1	1	0	0	0	2
Others	4	0	3	1	0	8
daughter in law	3	1	0	0	2	6
Spouse, Daughter & grand children	2	3	2	1	0	8
<b>Total</b>	<b>109</b>	<b>85</b>	<b>68</b>	<b>46</b>	<b>15</b>	<b>323</b>

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.950 <sup>a</sup>	36	.044
Likelihood Ratio	45.152	36	.141
N of Valid Cases	323		

Living arrangement of older people are influenced by several factors such as Gender, health status, socio economic status and societal traditions. With urbanization families are becoming nuclear, smaller and are not always capable of caring old. Still there is a strong cultural pressure to "look after" the parents in the family. The above chi-square value is found to be significant at 5% level of significance. Therefore there is a relation between Age and Living arrangement. In general once the children become independent and get married, they go away from their parents due to various reasons. The above table shows that in Belgaum city most of the elderly (about 70%) are staying with their children. That shows there is a very good association between parents, children and daughter in law and son in law as their children are staying with them.

### III. INCOME AND EXPENDITURE

H<sub>0</sub>: Income and Expenditure are independent

Total expenditure(Rs)	Income(Rs)				Total
	0-5000	5001-20000	20001-50000	50001-200000	
0-1000	14	3	0	0	17
					4.8%
1001-5000	72	21	0	0	93
					28.7%
5001-10000	9	107	8	1	125
					38.4%
10001-20000	3	62	23	0	88
					28.1%
<b>Total</b>	<b>98</b>	<b>193</b>	<b>31</b>	<b>1</b>	<b>323</b>
<b>% of Total</b>	<b>29.7%</b>	<b>60.0%</b>	<b>10.0%</b>	<b>.3%</b>	<b>100.0%</b>

The relationship between income and expenditure is computed the by using Karl-Pearson’s correlation coefficients for bivariate frequency distribution.

$$r_{xy} = \frac{N \sum f_{uv} - (\sum fu)(\sum fv)}{\sqrt{[N \sum fu^2 - (\sum fu)^2]} \sqrt{[N \sum fv^2 - (\sum fv)^2]}}$$

$$r_{xy} = 0.730$$

**Conclusion:** The income and expenditure are highly positively correlated. We conclude that as the income increases, expenditure also increases. The financial condition of 70.3% respondents is good.

**Distribution of Health according to Age H<sub>0</sub>: Health condition and Age are independent**

		Health conditions				Total
Age		Very good	good	Fair	Poor	
	60-69	73	72	35	14	194
						60.1%
	70and above	39	42	39	9	129
						39.9%
	Total	112	114	74	23	323
		34.7%	35.3%	22.9%	7.1%	100.0%
<b>Chi-Square Tests</b>						
		Value	Df	Asymp. Sig. (2-sided)		
Pearson Chi-Square		6.711 <sup>a</sup>	3	.041		
Likelihood Ratio		6.616	3	.085		
Linear-by-Linear Association		3.279	1	.070		
N of Valid Cases		323				

Here Chi-square is found to be significant at 5% and 1% los. Health condition and age are dependent. By observing the above table we conclude that as the age increases, health status goes on decreasing.

**Findings:**

The present study reveals that more respondents were below the age of 70 years. In Belgaum city and Belgaum District, elderly population and elderly female population is more than the elderly population of Karnataka and India.

- Gender wise, male and female respondents are almost equal, female are more prone to this problem of aged.
- 73% of the respondents belong to nuclear family.
- % of literates is more but illiteracy is more among female.
- 34% of respondents are staying with Son, Spouse and Grand children.
- 33.7% were in service and retired. Almost equal number of male and female respondents were re-employed but 70% are not re-employed.
- 32% are house makers / house wives.
- 20% of female respondents have very good health than male.
- 33% respondents suffering from Diabetes, 25% Astama, 26.3% Hyper tension, 22.8% Eyesight & 10% Arthritis.
- Belgaum people and more aware of their health.
- About 50% respondents are not aware of all the schemes and facilities provided by Government for the benefit of old age people.
- Government is providing many schemes, health care services, old age pension, travelling concession, Annapura schemes for BPL etc. but 50% are aware of these schemes but all are not reaching to them.

The present study also reveals that all sociological variables vary with age, sex, type of family, living arrangement etc.

- Income and literacy, Income and occupation, Income and expenditure are highly significant.
- A significant positive relationship was noticed between leisure time utilization and social security.
- Social relationship was noticed to be higher among male compare to female.

- Leisure time utilization, social relationship, life satisfaction, loneliness has significant influence on social security.
- Health condition and age, sex, education, health care expenses, fitness activity, habits are highly significant.

#### **IV. CONCLUSION**

In the present study an attempt has been made to show the social situation of the aged belonging to different strata of population i.e. retired government servants, family pension holders, nonpensioners including house wives, agriculturist, labours, businessmen etc.

The findings clearly indicate that the increasing importance of achieved properties, the changing social structure, especially the family structure, individual values, negative attitudes of the younger generation towards the aged and retirement from the economic activity are the main contributing factors to the emergence of social problems of old age.

In Belgaum city most of the elderly (about 70%) are staying with their children and few are not staying with their children because they are working out of city. But most of the female respondents are living with their children.

Socio-economic status is traditionally measured by education, income, occupation and sometimes additional factors such as home ownership and other assets. Education plays an important role in predicting in socio-economic status.

The data reveals that the respondent's monthly income, per capita income and adequacy of income which demonstrate their financial status are found to have a significant positive association with the level of adjustment. Where there is mere poverty, thus the aged are suffering a lot. In some of the families aged are going for house hold work, begging and some will be there in the home with only one time food.

In our study a larger section of respondents have good health condition. Only few are suffering from some minor diseases. This is because, most of the respondents were not very old i.e. they are between the age group 60-70 at the time of survey. Since the people of Belgaum city are aware of their health.

Regarding important decisions, the larger section of the respondents have a liberal attitude they said that the children should manage their own affairs. More than 25% expressed the view that the parents' permission to be taken on such occasions.

Our survey has revealed some interesting facts, that the respondents with the positive attitude towards social changes and non interfering attitudes towards the personnel affairs of grown up children facilitate better adjustment, strong religious beliefs neither facilitate nor inversely affect the level of adjustment. This shows modern attitudes are very necessary for leading satisfying life in the present society. So the old age people are compromising in all cases of their children decisions.

Difference of opinion, liking and disliking (adjustment and non-adjustment) of old parents and family members is there, in all class of people, but it is in different way that goes on individual's attitude and adjustment.

#### **V. SUGGESTIONS**

1. Government has to provide free health treatment, medicine, food, clothes to those who are in need.
2. Government has to provide a mobile medical checkup & Separate clinic
3. Family members and society should obey elders. Children should be taught the values of respect for elders both at school and home.
4. Family support is needed in all respect. Old age people must be given dignity and honor. The love, affection and importance given to them by family members. The senior citizens can reduce the feeling of loneliness.
5. The old people should be given importance or they should at least be consulted in making the decisions in major issues.
6. They should have some amount of money with them. Savings of the old people should be invested in schemes which can yield maximum interest.
7. Comfortable and better managed old age homes and day care centers with library, canteen, indoor and outdoor games, outing once in a week, entertainment etc...
8. Work provision must be there, if they are interested in continuing the work in the field of their interest according to their physical and mental fitness.
9. In case of pensioners, especially those who have retired from lower class of service, there should be an increase in the amount of pension to maintain at least minimum standard of living. For non-earners and non-pensioners Government has to give monthly expenses of two square meals every day.
10. Old age pension should be increased as per the market conditions.

11. Actual benefit of government schemes and facilities are not reaching up to them. It is necessary that everyone can be benefited by advertising the schemes of Government.
12. A mobile library facility should be provided for the purpose of enlightenment of old persons. Old age people should also themselves find out ways and means to fulfill their requirements

#### REFERENCE BOOKS

- [1]. Misra arvind(1979):Aging an irreversible Biological process Sage Publications :An introduction to Social Gerontology
- [2]. **Mishra**: Social adjustments in old age
- [3]. **Cox** : The realities of ageing
- [4]. Sharma M.L &T.M Dak :Ageing in India
- [5]. Concepts, Methods & Issues :Researching social Gerontology
- [6]. Borgalta E.F: Ageing & Society
- [7]. Sharma. Dr. O.P.Geriatric Care, A text book of Geriatrics and Gerontology, Viva Books, New Delhi
- [8]. Rajan, Irudaya. S and Mathew, E.T2007: Social security for the elderly
- [9]. Jamuna D. Challenges of changing socio-economic & psychological status of the aged. Helpage India, journal 1999
- [10]. Ingle G.K, Nath A: Geriatric health in India: Concerns and solutions, Indian Journal of Community Medicine
- [11]. Praachi Journal of psycho-cultural dimensions
- [12]. Asha and Subramanian: Problems of aged
- [13]. Ara Shabeen: old age among slum dwellers, South Asian publishers, New Delhi.
- [14]. Census authority of India: District census handbook, Belgaum district.
- [15]. Desai, K.G and R.D.Naik: Problems of the retired in greater Bombay, T.I.S.S Bombay.
- [16]. Kaplan, M.: The uses of leisure : Leisure Life style and Lifespan
- [17]. Lehaman, H.C: Jobs for those over sixtyfive, Bombay- New Delhi.
- [18]. Marulsiddaiah , H.M.: Old people of Makunti, Karnatak University
- [19]. Publication Dharwad.
- [20]. Ramamurti,P.V,and Jamuna D : Psychological dimensions of ageing in India.
- [21]. Rayangoudar Sudha. :Life satisfaction among the elderly retired women university of agricultural science Dharwad.
- [22]. Wadakannavar A.R : Ageing of population in India : An investigation of emerging issues.
- [23]. Vijayakumar S., : Family life and socio-economic problems of the aged.