



Original Article

Analysis of Quality of Life Expectancy among Geriatric Population in Tamilnadu, India

Pramila M¹, Arya Chandran S^{2,*}, Prabhusaran N³

¹Department of Biotechnology, Nehru Memorial College, Tiruchirapalli, India

²Department of Medicine, Chennai Medical College Hospital and Research Centre (SRM Group), Tiruchirapalli, India (Affiliated to The Tamilnadu Dr. M.G.R. Medical University, Chennai)

³Department of Microbiology, Chennai Medical College Hospital and Research Centre (SRM Group), Tiruchirapalli, India (Affiliated to The Tamilnadu Dr. M.G.R. Medical University, Chennai)

ARTICLE INFO

A B S T R A C T

Received: 09 Jan 2018

Accepted: 16 Feb 2018

Ageing is the slow retreating physiological process by which the elderly population has felt unsecured in physical, physiological and psychological issues. Care of elderly is an art and duty for the young adults and family members. Even though, family providing lot of support for geriatric groups, the insecurity among themselves may reduce their lifespan and quality of life. The major objective of this study is to analyze the quality of life expectancy among elderly population in Tamilnadu. A battery of 112 geriatric age grouped individuals was included in this study after obtaining their consent. The interview was conducted among the study groups using pretested questionnaire consisting of 40 questions that are grouped under 6 categories including basic life expectancy, handling the situations, psychological concepts, social behavior, about personal life and health related issues. As a result, 59 males and 53 females were included with the maximum age group between 61 and 70. By analyzing the family system, 41 (36.6%) and 42 (37.5%) males and females are living with their children as a joint family respectively. Among them, 29 females and 8 males are living single after the death of their spouse. The financial situation of the subjects found maximum to government pension for males and self employment for females. The overview of the analysis basic life expectancy among geriatric population showed moderate. Thus the requirement of special care and positive encouragement will be the necessary interventions for the betterment and quality life for future geriatric groups.

Keywords: Geriatrics, Life expectancy, quality of life, interventions.

1. INTRODUCTION

In life, ageing is also a natural process that happens due to the loss of regeneration capacity of body cells and the gradual decrease of organ functional capacity^{1,2}. Ageing cause physical, psychological, hormonal and the societal changes, that may be expected to disturb the quality life of the elders which may create health issues^{3,4}. Geriatric period denotes the slow non-functional period of the life span, those who are above the age of 60. They are all must be ready for adjusting according to the changes, so they are in need to

Corresponding author *

Dr. S. Arya Chandran,

Assistant Professor of Geriatric Medicine,
Department of General Medicine, Chennai Medical College
Hospital and Research Centre
(SRM Group), Tiruchirapalli, India.
E Mail: leptoprabhu@gmail.com

flexible and have to develop skills to accompanying the changes happening in and around them⁵.

The population rate of elderly people was increasing, because of high economic value of a country and better health care system, medical devices and medicines etc, which have rapidly reduced the mortality rate in the society. This may be increasing the range of population of elder all over the world. According to the Ministry of Statistics and Programme Implementation, Government of India highlighted that between 2001 and 2011 the elderly people population rise up to 36%, whereas in the earlier decades the percent is only 25%. In 2011, there are 98 million elders in India, and this number is expected to increase up to 143 million by 2021. The elderly population now stands at 100 million and is predictable to grow to 324 million, constituting 20% of the total population, by 2050⁶.

The physical and mental fitness of elderly people may affect their day to day activities and also experiencing multiple health disorders including metabolic syndromes. Disturbances in the emotional value cause loneliness, psychological imbalance etc, may decrease the quality life of the elderly⁷. Some diseases are occurring very commonly among elderly population including eyesight and hearing problems, hair colour and hair loss, reduced metabolic reaction time, low level of thinking ability, memory loss, bone related disease⁸, hypertension, respiratory disease, ischaemic heart disease, gout is considered as a chronic disease⁹. Most of the elderly population feels discomfort due to the physical infrastructure in residing or relative homes that leads to several health and psychological issues. Changing family structure, lack of social inequalities, health care availability, accessibility and affordability, economic dependency are major issues that create several physical, physiological and psychological disturbances among elderly population¹⁰.

According to the psychological aspect, fear is the foremost issue next to idleness. Inactivity, lack of personal goals, relieve from the responsibilities is the biggest reason of elders tend to reach into psychological problems². Sociability done a crucial role in protecting the elder people from the psychological distress and leads the life in a calm way. Social isolation is a high risk factor that increases the depression and difficulties among elderly^{11,12}. Once the elder's loss their relationship with someone, leads to depression and emptiness in their life. Whenever a person has a stronger relationship, depression level is very low and their everyday needs were fulfilled. It gives confidence and independence among the elders which will encourage in a positive way to lead the life with the high level of expectancy¹³. The major objectives of the present study are to study the social and health problems faced by elders and their approach towards life, to examine the relationships among loneliness, depression and sociability in elders and to know the psychological distress of the elders using General Health Questionnaire (GHQ) score.

2. MATERIALS AND METHODS

This is a prospective cross sectional study which was carried out among 112 individuals of the geriatric age group (>60 years of age) visiting the tertiary care teaching hospital at Tiruchirapalli over the two months from July to September 2017. The individuals less than 60 age and not willing persons are excluded.

The socio-demographic details including age and gender were recorded. Health problems among elderly were divided into physical and psychological problems. This study was evaluated the Quality of Life (QOL), of 112 elderly people (age >60 years) by using pretested general health Questionnaire (GHQ) in order to screen the cognitive impairments. The GHQ consist of 40 questions that are grouped under 6 categories including basic life expectancy (6 items), handling the situations (3 items), psychological concepts (9 items), social behaviour (11 items), about personal life (4 items) and health related issues (7 items).

Basic life expectancy- life is interesting, social status, achievements, accomplishment, present life and happiness using things

Handling the situation- managing unexpected situations, handling the crisis situation and confident about the future

Psychological concepts- Faith in god, intense happiness experience, mankind happiness, upset in unexpected situations, feel sad without reason, irritate and sensitive easily, lose temper in a bad situation, upset for criticism.

Social behavior - Feel confident with relatives, relationship with your children, get help from relatives during illness, need family to solve the problems, relationship between family members, meet family after some health issues, relationship with a spouse, get help from friends, relationship with your children, like to have more friends and feel that don't have true friends.

About Personal life- life is boring, worry about the future, life is useless and minor things upset yourself.

Health related issues- worried about your health, suffer due to pains, disturbing by palpitations, giddiness feeling, getting tired easily, disturbed sleep and worried about don't have personal relationship.

In order to motivate the elders to talk with the interviewer, the investigator interviewed the elderly subjects (Not issued the questionnaire). The collected data were analyzed by basic statistics in order to understand the demographic and intense thoughts of the elderly population.

3. RESULTS AND DISCUSSION

The age and sex wise details of the elderly subjects included in this study were impregnated in table 1. The data depicted the incorporation of more or less equal number of male and female population in this study to provide equity among gender (atleast in the elderly population).

Table 1: Age and sexwise distribution of the subjects

Age (in years)	Male	Female
61-65	23 (39)	14 (26)

66-70	16 (27)	21 (40)
71-75	10 (17)	8 (15)
76-80	6 (10)	6 (11)
Above 80	4 (7)	4 (8)
Total	59 (52.7)	53 (47.3)

[Figure in parenthesis denoted percentages]

Among the subjects included, 9 males (8%) and 6 females (5.3%) are living alone. Some of them are having children and few are having not. As the style of Indian family system, most of the members are like to live along with their parents or children. By rendering such family analysis, 41 (36.6%) and 42 (37.5%) males and females are living with their children as a joint family system respectively. Among them, 9 males (8%) and 5 females (4.5%) are living in the old age homes and are impregnated in figure 1.

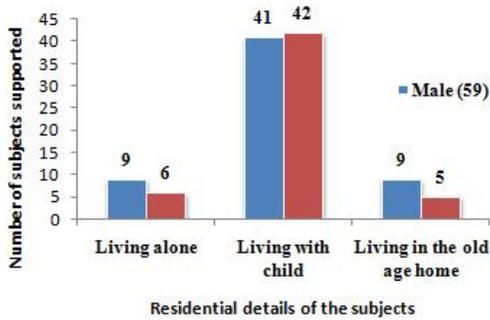


Fig 1: Residential details of Elderly

Out of 59 males, 51 (86.4%) are having spouse and 8 are widower. Twenty nine females (54.7%) are widow among 53 subjects (Figure 2). Among the subjects living with their spouse, 20 are couples (Figure 3 and 4).

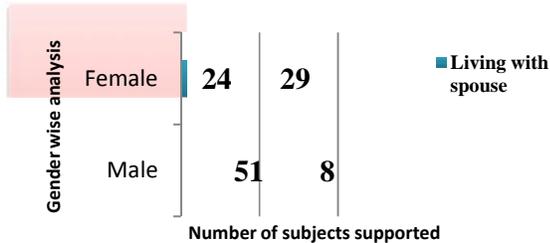


Fig 2: Subjects living with spouse

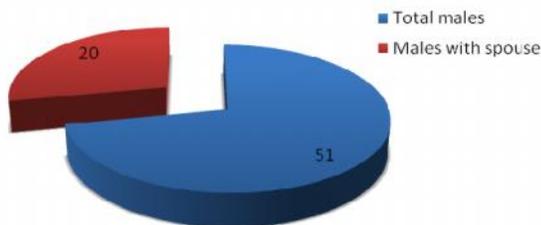


Fig 3: Couples among male population

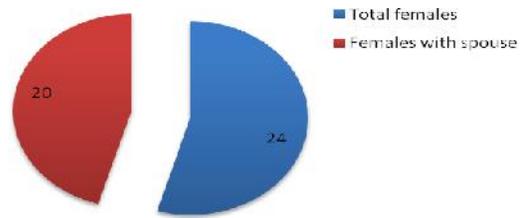


Fig 4: Couples among female population

The financial status of the male subjects included in this study are analyzed thereby retired government employees (37.3%) who are receiving pension are dominating followed by self employed or daily wages (32.2%) (Figure 4). Among the female population, 21 are self employed or daily wages, 15 individuals depend on the children etc and the detailed description is impregnated in figure 5.

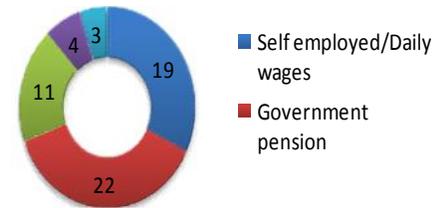


Fig 5: Financial status of elderly males (n=59)



Fig 6: Financial status of elderly females (n=53)

In the basic life expectancy category, the maximum elders are feeling very happy and expressed as interesting of their life (54%), social status (60%), achievements (61%), accomplishment (63%), present life (46%) and happiness by using their things (50%) are not create that much of happiness, but they are just satisfied (Figure 6).



Fig 7: Basic life expectancy

Among managing unexpected situations, maximum of 56% of subjects feel very happy followed by 34% felt satisfied (Figure 7). Handling the crisis situation, maximum of 60% felt satisfied where 32% are very happy (Figure 8).

Maximum people satisfied by getting confident about the future (61%) (Figure 9).

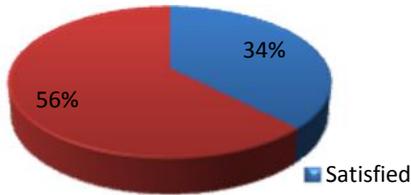


Fig 8: Managing unexpected situations

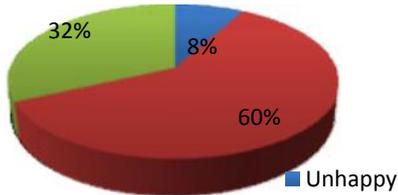


Fig 9: Handling crisis situation

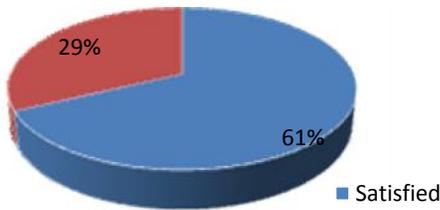


Fig 10: Confident about future

The psychological concepts among the elderly population included in this study are categorized into three groups including rare, sometimes and very much. The maximum responses of very much in various categories with percentages are upset for criticism (58%), faith on god (57%), mankind happiness (57%), feel disturb by tension and anxiety (55%), intense happiness experience (54%) and irritate and sensitive easily (51%). The other response including rare and sometimes are also well analyzed and depicted in figure 10.

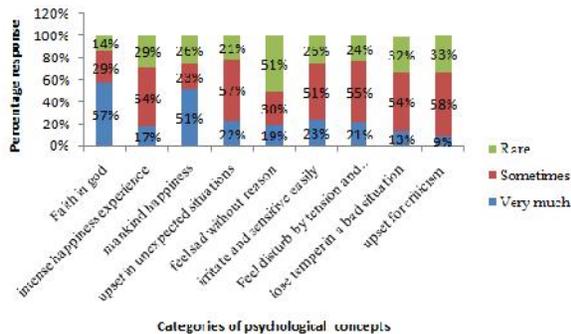


Fig 11: Response to psychological concepts

The Questionnaire related to social behavior highlighted that the maximum responses in “very happy” are ‘need family to solve the problems’ (48%), ‘meet family after some health issues’ (45%) and ‘relationship between family members’ (43%). The maximum responses towards “sometimes” are ‘Get help from friends’ (58%) and ‘get help from relatives during illness’ (48%) where the response “rarely” found among 61% and 51% in ‘relationship between family members’ (61%) and ‘relationship with a spouse’ (51%). Further detailed descriptions in relation with social behavior among elderly were depicted in table 2.

Table 2: Response to Social behavior among elderly

Categories	Very happy	Sometimes	Rarely
Feel confident with relatives and friends	29%	47%	24%
Relationship with your children	30%	39%	31%
Get help from relatives during illness	20%	48%	32%
Need family to solve the problems	48%	32%	20%
Relationship between family members	43%	37%	20%
Meet family after some health issue	45%	34%	21%
Relationship with a spouse	18%	21%	61%
Get help from friends	28%	58%	14%
Relationship with children	23%	28%	51%
Like to have more friends	32%	30%	38%
Feel that don't have true friends	21%	28%	51%

The response related to the personal life is scarred among the subjects due to their unhappiness and fear on various situation including get upset and worry about the future etc (Figure 11).

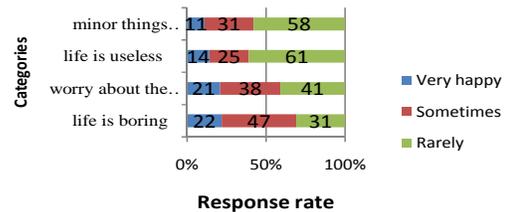


Fig 12: Response to personal life

Among health related issues, most of the elderly population respond maximum to sometimes. The criteria “disturbing by palpitations” have the response of 53% in the category rarely. The detailed comparative descriptions of various categories related to health issues were impregnated in table 3.

Table 3: Response to health related issues

Categories	Frequently	Sometimes	Rarely
Worried about your health	19%	48%	33%
Suffer due to pains	21%	31%	48%
Disturbing by palpitations	23%	24%	53%
Giddiness feeling	24%	43%	33%
Getting tried easily	18%	47%	35%
Disturbed sleep	16%	52%	32%
Worried about personal relationship	21%	32%	47%

In this study, the elderly populations have a relatively better quality of life compared to other studies¹⁴. The perception of the subjects included in this study are determined based on their life condition including their culture, goals, expectations, standards, priorities and also the value system that they live in. The overall observation in this study was to understand the social relationship domain that depicted with average score when compared to other studies that showed higher scores of social relationship domain^{15,16}, while other three domain namely physical, psychological and environmental were found to be comparable.

Our study found that age independently, influence with older age-group had lesser observation similar to another study¹⁵. It is also determined that education status, type of family and marital status had an influence in scoring quality life. The collegiate educated individuals are having better score compared to higher levels and primary schooling persons¹⁶. The individual who are living with spouse have better score compared to widow and widowers. Even though widows are prone to face social stigma and ostracism¹⁷ but better they adjust with their environment than males¹⁵. When analyzing the family structure of the subjects included in this study showed better quality of life among the geriatric population who are living with their children as joint families than living alone¹⁸.

In India, the urbanization and modernization has collapse the family values and the framework of family support, economic insecurity, social isolation and elderly abuse including financial threatening leading to slow progression or sudden chronicity of psychological diseases. The lack of social security and inadequate facilities for health care, rehabilitation and recreation are observed as the major socio-economic problems among elderly. In developing countries, the dependence on government pension and social security with finance may improve the quality of life among elderly people compared to the individual who are depending on children for even day to day life and are having psychological imbalance in financial insecurity and loneliness¹⁹.

Based on the study experiences, the authors learned some interesting features and recommended some points to the policy makers and other authorities for taking necessary action to save and protect elderly population who are considered as the asset for the family and society.

1. Improve professional training in geriatrics
2. Train the medical and para-medical professionals at undergraduate level itself.
3. Develop Geriatric psychiatry, orthopedics and dentistry as an independent specialty at supplementary course for post-graduate level.
4. Motivate and encourage research on Geriatrics
5. Monitor the nutritional, physiological functioning and immunological status periodically.

6. Train the family members to understand the early symptoms of neuro-degenerative disorders like Alzheimer's diseases, depression etc.
7. Provide active role and importance to geriatric persons in the family, society and working environment.
8. Implement regulations for caring the elderly group by the family members.
9. Formulate welfare policies to improve the quality of life among elderly population.
10. Develop day care hospitals that provide close supervision and follow-up of geriatric population.

4. CONCLUSION

The understanding of ageing as a universal phenomenon is very important that leads to provide special care and treatment with advanced facilities, thereby the quality of life and its expectancy has improved. It has also handling the geriatric groups better by improving individual status in the family, busy day to day life schedule, health consciousness and financial security, societal importance, policies and legal protection given by the government.

5. REFERENCES

1. Datta PP, Gangopadhyay N, Sengupta B. Association of psychological morbidity with socio-demographic characteristics among elderly: a cross-sectional study from Eastern Indian. *Int J Med Public Health* 2013; 3: 94-99.
2. Bishak YK, Payahoo L, Pourghasem B, Asghari Jafarabadi M. Assessing the quality of life in elderly people and related factors in Tabriz, Iran. *J Caring Sci* 2014; 3: 257-263.
3. Saroj SP, Singh CK, Balda S. Psycho-social status of senior citizen and related factors. *J Hum Ecol* 2007; 22: 255-259.
4. Hameed S, Brahmabhatt KR, Patil DC, Prasanna KS, Jayaram S. Quality of life among the geriatric population in a rural area of Dakshina Kannada, Karnataka, India. *Glob J Med Public Hlth* 2014; 3: 1-5.
5. Singh A, Misra N. Loneliness, depression and sociability in old age. *Ind Psychiatr J* 2017; 18: 51-55.
6. Zahir H, Saswata G. Is healthy status of elderly worsening in India a comparison of successive rounds of National sample survey data. *J Biosoc Sci* 2011; 43: 211-231.
7. Farzianpour F, Hosseini SH, Rostami M, Pordanjani SB, Hosseini SM. Quality of life in elderly residents. *Am J Applied Sci* 2016; 9: 71-74.
8. Ranjita singh. Social conditions of elders and problems. *Res Hum Soc Sci* 2015; 3: 52-54.
9. Sidik SM, Rampal L, Afifi M. Physical and mental health problems of the elderly in a rural community of Sepang, Selangor. *Malay J Med Sci* 2004;11: 52-59.

10. Mane AB. Ageing in India: some social challenges to elderly care. *J Gerontol Geriatr Res* 2016; 5: 2-3.
11. Hansen RO, Carpenter BN. Relationship in old age: copying with the challenge of transition. Guilford Press, Newyork 1994.
12. Archana Singh and Nishi Misra. Loneliness, depression and sociability in old age. *Industr Psychiatr J* 2009; 18: 51-55.
13. Bjorklof GH, Engedal K, Selbaek G, Kouwenhoven SE, Helvik AS. Copying and depression in old age: A literature review. *Dement Geriatr Cogn Disord* 2013; 35: 121-154.
14. Farajzadeh M, Gheshlagh RG, Sayehmiri K. Health related quality of life in Iranian elderly citizens: a systematic review and meta-analysis. *Int J Comm based Nurs Midwif* 2017; 5: 100-111.
15. Barua A, Mangesh R, Kumar Harsha HN, Mathew S. A cross-sectional study on quality of life in geriatric population. *Ind J Community Med* 2007; 32: 146–147.
16. Ganesh KS, Anindo M, Pavithra G. Quality of life (QOL) and its associated factors using WHOQOL-BREF among elderly in urban Puducherry, India. *J Clin Diagn Res* 2014; 8: 54-57.
17. Vitorino LM, Paskulin LM, Viana LA. Quality of life among older adults resident in long-stay care facilities. *Rev Lat Am Enfermagem* 2012; 20: 1186–1195.
18. Jakobsson U, Hallberg IR. Loneliness, fear, and quality of life among elderly in Sweden: a gender perspective. *Ageing Clin Exp Res* 2005; 17: 494–501.
19. Goel PK, Garg SK, Singh JV, Bhatnagar M, Chopra H, Bajpai SK. Unmet needs of the elderly in a rural population of Meerut. *Ind J Community Med* 1999; 28: 165–166.

Conflict of Interest: None

Source of Funding: Nil