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NEWS & VIEWS

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Perceived Social Support and Life Satisfaction among Elderly People Living Separately from their Adult Children in the Community: A Cross-sectional Comparative Study

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ABSTRACT

The purpose of the present study was to assess and compare the perceived social support and life satisfaction among elderly people living separately from their adult children in the community. A cross-sectional comparative study was carried out among a total of 100 elderly people (50 living with their adult children or other family members as group-1 and 50 elderly people living separately/alone as group-2) aged 60 years and above living in some selected areas of Varanasi district. The respondents were interviewed using a semi-structured questionnaire including; socio-demographic variables, a Multidimensional Scale of Perceived Social Support (MSPSS) and Satisfaction with Life Scale (SWS). The mean age of the respondents was approximately 67 years in both study groups most of them belonged to the age group 60–69 years. The majority of the respondents in group-1 were male (54%) but in group-2 most of them were female (52%). Both study groups were matched on each socio-demographic variable. Most of the respondents (30%) were satisfied in their life in group-1 but in the group-2 majority of the respondents (30%) were slightly

dissatisfied. There was a significant difference found in life satisfaction and perceived social support in both study groups. Life satisfaction and perceived social support in elderly people were found positively correlated to each other. Based on the findings it can be concluded that support from the family members (especially from their adult children) is very important for life satisfaction among elderly people.

Keywords: Aging, Older Adults, Wellbeing, Mental Health, Living Arrangement

Ageing is a natural phenomenon. An individual has to go through different stages in his/her life, in which old age is also an important stage. Most people define old age as the end of life but it is not the end. The population of older people aged 60 years and above in India has jumped up to 35.5 per cent from 76 million in 2001 to 103 million in 2011 (Agingwell foundation, 2017). The population of older adults consists of approximately 9 per cent of the total population of India, which is projected to reach up to 20 per cent by the year 2050 (Jadhav *et al.*, 2013).

In recent decades there has been observed a dramatic change in the living condition of elderly people in India. This change in the living arrangement of elderly people is the result of the decline in the joint family system, urbanization, industrialization, and out-migration of young adults towards other cities or states in search of employment and a better future. According to UNESCO, about internal migration in India has been observed up to 31 per cent of the total population in the last few decades and 35 per cent of these migrant populations are youth (Rajan, 2013). Due to this out-migration of the young adults in search of better carriers and jobs in the other cities and states, some elderly people are being left alone at their homes especially in small cities or rural areas (Chandrasekhar & Sharma, 2014). There are about three fourth of the elderly people in India either living with their spouse only or separately (IIPS O, 2007). Further, this change in the living pattern of elderly people may lead to several types of psychosocial problems resulting in poor mental and physical health issues among them (Kharicha *et al.*, 2007). According to WHO (World Health Organization) living alone in later life increase the risk of poor

quality of life and other psychosocial problems (WHO, 1977). Some previous studies stated that living alone in old age is an undesirable state. It affects the health of elderly people and there is a need for paying special attention and support to them especially from their children, family, relatives, and others (Thapa *et al.*, 2018).

Social support can be defined as an experience or perception of an individual when he/she gets respect, care, value, security, and love provided by his/her relatives, friends, and all others who live with him/her. It can be also defined as the confidence of an individual about the availability of required help when needed (Osseiran-Waines & Elmacian, 1994; Gurung RA, 2006). Some previous studies had reported that social support protects the individual from negative situations such as life stressors; illness, bereavement, loneliness, etc. Psychiatric disorders such as depression and anxiety have also been found significantly associated with the level of perceived social support among elderly people living in the community.

Life satisfaction is an important indicator of the psychological wellbeing of an individual. It can be defined as the result of comparing expectations of the individual and what he/she achieved in his/her life. Although, it is a multidimensional approach. Life satisfaction can also be defined as the emotional response and attitude of an individual towards the entire life (Diener, *et al.*, 2015).

Studies have reported that perceived social support and life satisfaction plays an important role in the physical and mental health of elderly people (Borg, *et al.*, 2006, Harandi, *et al.*, 2017). But there are very few of the studies in India conducted to assess and compare the perceived social support and life satisfaction among elderly people living separately from their adult children in the community. Hence, the present study was conducted to assess and compare the perceived social support and life satisfaction among elderly people living separately from their adult children and elderly people living with their adult children or other family members in the community. And to assess the correlation between the level of life satisfaction and perceived social support among elderly people.

Hypothesis

There will be no significant difference in the level of perceived social support and life satisfaction between the groups (including elderly living with their adult children or family members as group-1 and elderly living separately as group-2).

There will be no significant correlation between perceived social support and life satisfaction among elderly people.

Materials and Methods

A cross-sectional comparative study was carried out in some selected areas in the Varanasi district in Uttar Pradesh. A total of 100 respondents (50 living with their children or other family members as group-1 and 50 living separately or alone as group-2) aged 60 years and above who fulfilled the inclusion and exclusion criteria were selected for the present the study. The ethical clearance was taken from the ethical committee of the institute of medical sciences, Banaras Hindu University.

Inclusion Criteria

- Aged 60 years and above.
- Elderly living with their adult children and Elderly living separately from their adult children in the community.
- Willing to participate and giving consent.

Exclusion Criteria

- Having any kind of hearing and visual impairment or any other chronic medical/physical disease.

Period of Data Collection

The data were collected during a period of 6 months from June 2019 to December 2019.

Study Tools

Socio-demographic questionnaire: A semi-structured socio-demographic questionnaire was prepared by the research scholar. It consists of socio-demographic variables such as age, gender,

marital status, education, residence and socioeconomic status [assessed using modified Kuppaswamy socioeconomic scale for the year 2018 (Saleem M, 2018)].

Satisfaction with life scale (SWLS): It is a 7 points Likert type scale ranged in strongly agree to strongly disagree, consisting of 5 items. It is designed to assess the global cognitive judgment of one's life satisfaction, and its score ranged from 0–35 is further divided into 7 satisfaction levels; extremely satisfied to extremely dissatisfied (Diener, *et al.*, 1985).

Multidimensional Scale of Perceived Social Support (MSPSS): Multidimensional Scale of Perceived Social Support (MSPSS): It is a 7 point Likert scale to measure perceived social support from three sources: Family, Friends, and a Significant Other. A high score indicates a higher degree of perceived social support (Zimet, *et al.*, 1988).

Procedure

The respondents who fulfilled the inclusion and exclusion criteria were selected with systematic random sampling from the selected study area in Varanasi district in Uttar Pradesh. All the selected respondents were interviewed using the prepared semi-structured interview schedule by the research scholar. The respondents who quit the interview before the interview finished they were excluded. Each interview was taken in approximately 30 minutes.

Statistical Analysis

The data was entered in M.S. Excel and exported to IBM SPSS software version 20 for the analysis. The categorical and continuous variables were analyzed using frequency, percentage, mean and standard deviation. Chi-square test was used to match the socio-demographic variable between the study groups. The comparison between the groups was analyzed using a t-test and the correlation between the variables was analyzed using Pearson's correlation.

Results

Table 1
Socio-demographic Distribution of Respondents

<i>Socio-demographic Variables</i>	<i>Elderly living with their children (Group-1) N=50 F (%)</i>	<i>Elderly living Separately (Group-2) N=50 F (%)</i>	<i>df</i>	<i>Chi square Value</i>	<i>P Value</i>
Age					
60–69	37 (74.0)	31 (62.0)	2	2.954	0.228
70–79	7 (14.0)	14 (28.0)			
80 and above	6 (12.0)	5 (10.0)			
X±SD	66.7±6.92	67.5±6.36			
Gender					
Gender	27 (54.0)	24 (48.0)	1	0.36	0.548
Male	23 (46.0)	26 (52.0)			
Female					
Marital Status	29 (58.0)	27 (54.0)	1	0.161	0.687
Married	21 (42.0)	23 (46.0)			
Widow/widower					
Education	24 (48.0)	16 (32.0)	1	2.667	0.102
Illiterate	26 (52.0)	34 (68.0)			
Literate					
Residence	19 (38.0)	16 (32.0)	1	0.396	0.529
Rural	31 (62.0)	34 (68.0)			
Urban					

Table 1 shows the distribution of the socio-demographic characteristics of the respondents between the study groups. The majority of the respondents 74 per cent in group-1 and 62 per cent in groups-2 were aged between 60–69 years. And the mean age of the respondents in group-1 was 66.7 ± 6.92 years and in group-2 67.5 ± 6.36 years. Most of the respondents 54 per cent in group-1 and group-2 52 per cent of respondents were females. The majority of the respondents in group-1 58 per cent and group-2 54 per cent were married. The majority of the respondents were literate in both study groups. Most of the

respondents belong to urban areas in both study groups. The majority of the respondents 28 (56%) belong to upper lower and upper-middle-class of socioeconomic status in group-1 and nearly 48 per cent of the respondents belong to upper lower and upper-middle class of socioeconomic status in group-2. Both study groups were matched on each socio-demographic variable.

Table 2
Level of Life Satisfaction between the Study Groups

<i>Level</i>	<i>Group 1</i>	<i>Group 2</i>
	<i>f (%)</i>	<i>f (%)</i>
Extremely Satisfied	0 (0)	0 (0)
Satisfied	15 (30.0)	4 (8.0)
Slightly Satisfied	8 (16.0)	10 (20.0)
Neutral	4 (8.0)	2 (4.0)
Slightly Dissatisfied	9 (18.0)	15 (30.0)
Dissatisfied	13 (26.0)	14 (28.0)
Extremely Dissatisfied	1 (2.0)	5 (10.0)

Table 2 shows the level of life satisfaction in the study groups. The life satisfaction of all the respondents was assessed and categorized in 7 levels (Extremely satisfied to extremely dissatisfied). The majority of the respondents (30%) were satisfied in group-1 but on the other hand, most of the respondents (30%) were dissatisfied in group-2.

Table 3
Comparison of Life Satisfaction between the Study Groups

<i>Study Groups</i>	<i>Mean</i>	<i>SD</i>	<i>t value</i>	<i>P value</i>
Group 1	20.14	6.34	2.222	0.029
Group 2	17.32	6.35		

Significance at 0.05

Table 3 shows the comparison of the life satisfaction between both study groups. Respondents of the group-1 were found with significantly ($p=0.029$) high life satisfaction compare to the groups-2.

Table 4
Comparison of Perceived Social Supports between the study groups

	<i>Groups</i>	<i>Mean</i>	<i>SD</i>	<i>t value</i>	<i>P value</i>
<i>Family perceived social support</i>	Group 1	4.77	1.05	3.098	0.003
	Group 2	4	1.42		
Friends perceived social support	Group 1	4.22	1.29	2.245	0.027
	Group 2	3.56	1.63		
Significant others	Group 1	4.72	1.03	2.951	0.004
	Group 2	4	1.38		
Overall Perceived Social Support	Group 1	4.57	1.01	2.979	0.004
	Group 2	3.85	1.38		

Significance at 0.05

Table 4 shows the comparison of the multidimensional perceived social supports between both study groups. There was a significant difference found in each dimension of multidimensional perceived social supports between both study groups. Respondents of group-1 have a higher degree of perceived social support compared to the respondent of group-2.

Table 5
Correlation between Satisfaction with Life and Perceived Social Supports

	<i>Life satisfaction</i>	<i>Family perceived social support</i>	<i>Friends perceived social support</i>	<i>Significant others</i>
Life satisfaction	1	0.241*	0.034	0.286**
Family perceived social support	0.241*	1	0.813**	0.844**
Friends perceived social support	0.034	0.813**	1	0.686**
Significant others	0.286**	0.844**	0.686**	1

Note: *significant correlation at the level of 0.05, **significant correlation at the level of 0.01,

Table 5 shows Pearson's correlation between life satisfaction and the dimension of multidimensional perceived social supports such as family perceived social support, friends perceived social support and significant others. There was a significant positive correlation between

life satisfaction and each dimension of multidimensional perceived social supports.

Discussion

The present study was conducted to assess and compare the level of life satisfaction and perceived social support between the groups of elderly people living with their adult children or other family members as group-1 and elderly people living separately in the community as group-2. And the second aim was to assess the correlation between perceived social support and life satisfaction among elderly people.

In the present study, the result was found that there was a significant difference in the level of life satisfaction between elderly people living with their adult children and elderly people living separately from their adult children in the community. Life satisfaction was found comparatively high among elderly people living with their adult children than elderly people living separately in the community. The present findings are consistent with the findings of the previous studies conducted in India and other countries (Borg, *et al.*, 2006; Kooshiar, *et al.*, 2012; Banjare *et al.*, 2015; Bai & Yang, 2018).

The result found after analyzing the level of perceived social support indicates that there was a significant difference in all the domains of multidimensional perceived social support such as perceived social support from family, perceived social support from friends, significant others and overall perceived social support between both study groups; elderly people living with their adult children and elderly people living separately from their adult children in the community. These findings are correspondence to findings of the previous conducted in many of the countries (Chen, *et al.*, 2014; Chruœciel, *et al.*, 2018; Ghimire, *et al.*, 2018).

The present study also revealed that there was a significant positive correlation between the level of life satisfaction and the level of perceived social support among elderly people. It means the level of life satisfaction will increase in a positive direction if the level of the perceived social support among older adults increases, similar findings have been found in the previous studies (Çimen & Akbolat, 2016, YURCU *et al.*, 2017).

Limitations

There are some limitations of the present study such as; the sample size was too small and respondents were selected from only some selected areas in the Varanasi district in Uttar Pradesh, therefore the result of the present study may not be generalized to the whole population.

Conclusion

Based on the findings it can be concluded that elderly people living with their adult children and other family members in the community have a significantly higher degree of perceived social support and life satisfaction compared to elderly people living separately from their adult children in the community. The present study also indicates that perceived social support is positively correlated with life satisfaction among elderly people. Therefore the support from the family members (especially from their adult children) is very important for life satisfaction among elderly people.

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References

- Agingwell foundation (2017), (retrieved, 03/05/20) Changing Needs & Rights of Older People In India A Review. https://social.un.org/ageing-working-group/documents/eighth/Inputs%20NGOs/ChangingNeeds_Rights.pdf
- Bai, X., Yang, S., & Knapp, M. (2018). Sources and directions of social support and life satisfaction among solitary Chinese older adults in Hong Kong: The mediating role of sense of loneliness. *Clinical interventions in aging*, 13, 63.
- Banjare, P., Dwivedi, R., & Pradhan, J. (2015). Factors associated with the life satisfaction amongst the rural elderly in Odisha, India. *Health and quality of life outcomes*, 13(1), 201.

- Borg, C., Hallberg, I.R., & Blomqvist, K. (2006). Life satisfaction among older people (65+) with reduced self-care capacity: the relationship to social, health and financial aspects. *Journal of clinical nursing*, 15(5), 607–618.
- Chandrasekhar, S., & Sharma, A. (2014). Internal migration for education and employment among youth in India. *Indira Gandhi Institute of Development Research, Mumbai*.
- Chen, Y., Hicks, A., & While, A.E. (2014). Loneliness and social support of older people in China: a systematic literature review. *Health & social care in the community*, 22(2), 113–123.
- Chruściel, P., Kulik, T., Jakubowska, K., & Nalepa, D. (2018). Differences in the Perception of Social Support Among Rural Area Seniors – A Cross-Sectional Survey of Polish Population. *International journal of environmental research and public health*, 15(6), 1288.
- Çimen, M., & Akbolat, M. (2016). Perceived Social Support And Life Satisfaction Of Residents In A Nursing Home In Turkey. *International Journal of Health Management and Tourism*, 1(1), 41–56.
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The life satisfaction scale. *Journal of Personality Assessment*, 49(1), 71–75.
- Ghimire, S., Singh, D.R., Nath, D., Jeffers, E.M., & Kaphle, M. (2018). Adult children's migration and well-being of left behind Nepalese elderly parents. *Journal of epidemiology and global health*, 8(3), 154–161.
- Gurung, Regan, R.A. (2006). *Health psychology: A cultural approach*. Belmont, CA: Thomson Wadsworth.
- Harandi, T.F., Taghinasab, M.M., & Nayeri, T.D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic physician*, 9(9), 5212.
- International Institute for Population Sciences. (2007). *National Family Health Survey (NFHS-3), 2005–06: India* (Vol. 1). International Institute for Population Sciences.
- Jadhav, A., Sathyanarayana, K.M., Kuma, S., & James, K.S. (2013). Living Arrangements of the Elderly in India: Who lives alone and what are the patterns of familial support. *Busan, Korea: IUSSP*. Session 301.

- Kharicha, K., Iliffe, S., Harari, D., Swift, C., Gillmann, G., & Stuck, A.E. (2007). Health risk appraisal in older people 1: are older people living alone an 'at-risk' group?. *Br J Gen Pract*, 57(537), 271-276.
- Kooshiar, H., Yahaya, N., Hamid, T.A., Samah, A.A., & Jou, V.S. (2012). Living arrangement and life satisfaction in older Malaysians: the mediating role of social support function. *PloS one*, 7(8).
- Osseiran-Waines, N., & Elmacian, S. (1994). Types of social support: Relation to stress and academic achievement among prospective teachers. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 26(1), 1.
- Rajan, S.I. (2013). *Internal migration and youth in India: main features, trends and emerging challenges*. United Nations Educational, Scientific and Cultural Organization.
- Saleem, S.M. (2018). Modified Kuppaswamy scale updated for year 2018. *Indian J Res*, 7(3), 6-7.
- Thapa, D.K., Visentin, D., Kornhaber, R., & Cleary, M. (2018). Migration of adult children and mental health of older parents 'left behind': An integrative review. *PloS one*, 13(10).
- World Health Organization (WHO) (1977). *Prevention of Mental Disorders in the Elderly*. WHO; Copenhagen.
- YURCU, G., KASALAK, M.A., & AKINCI, Z. (2017). The effect of perceived social support on life satisfaction among older adults who participate in recreational activities. *International Journal of Health Management and Tourism*, 2(1), 28-48.
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.

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Subjective Wellbeing through Social Support Networks among Indian Peri-Urban Elderly

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ABSTRACT

The aim of this study was twofold: firstly, it objectively measured the composite satisfaction index of a social support network on the elderly's wellbeing; and secondly, identified the subjective pivotal functional roles of the social support networks, which boost their psycho-physical wellbeing. The study is triangulated in nature which follows a multistage cluster sampling method to survey 390 elderly respondents of 60 years and above, residing in a peri-urban district of West Bengal, India. The composite satisfaction index revealed that the satisfaction derived from the components such as family, friends, and neighbours, are correlated with their psycho-physical wellbeing. Further, the principal component analysis is applied here, explores various psycho-social activities enabling the functional roles of the social network by enhancing perceived satisfaction amongst them. The present findings may give directions towards formulating appropriate policies by provisioning the functional roles of social support networks to achieve subjective wellbeing.

Keywords: Elderly, Social Support Networks, Composite Satisfaction Index of Social Networks, Functional Roles, Subjective Wellbeing.

The term social support implies a psycho-social mechanism engendered by social networks to provide assistance or comfort in a required state that has an equal influence on health behaviour and health status (Chi and Chou, 2001; Thanakwang and Soonthornthada, 2011). In social sciences, the strategic research on social networks mainly emphasizes on social relationships. The origin of the concept of 'Social network' dates back to the 1940s, to define the interrelationship by linking people with the structure of networks within the social system. This forms an alternative model by replacing the then-dominant structural-functional perception of social action (Auslander and Litwin, 1987). The concept of 'network' is also used by Barnes in 1954, to describe a group of fishing villages, organized across kinship and social class statuses (cited in Sharkey, 1989: 389). Social support delineates the existence of social relationships with family, friends and even with formal social institutions based on their functional content, quantity or quality aspects (Greener, *et al.*, 2004). The social relationship between the elderly and their adult children and relatives are their zone of comfort. The support from their friends is, also, known to have exerted a strong effect to reduce their psychological problems and enhancing their wellbeing (Matt and Dean, 1993).

The dimension of social networks may extend from the aspects of structural (size and density), interactional (frequency, duration, closeness, multiplexity, and symmetry) and descriptive (gender, composition, age, proximity) levels (Sharkey, 1989). Furthermore, the mapping techniques of social networks are been observed in the works of Tracy and Abell (1994) to denote the size and composition of the individual's social network, an extension of the relationship and frequency of contact. Later in some studies, the indicators to measure the social support from the networks includes the volume of a social network, marital status, contact frequency with members, instrumental support, emotional support, quality of social support, and the mutual helping of others (Chi and Chou, 2001). The pre-conditions to social supports are the availability or the existence of social relationships along with the source of support i.e. spouse, children, relatives and so on which are logically and empirically interrelated. However, the sources of support, as well as the support during crisis, impact the functional content and quantity of support provided to them

(Greener, *et al.*, 2004). The types of support received by the members vary with the network background i.e., support from kins is different from friends. Likewise, ties between parent and adult children are known to be the most supportive ones, whereas relations between two siblings and friends do exert a similar kind of emotional support. But the extended kins are least known to provide any kind of support (Wetherell, 1998). In this context, *functional specificity theory* suggests that the different social network members can render a certain support type from which individual selectively choose support form from their network members (LaValley, 2018).

The concept of 'social support' is adjoined with two components. The 'social' component refers to 'social integration and social networks', whereas, 'support' component involves the instrumental and expressive aids and also an efficacious tool of social control (McIntosh, 1989). However, Ranjan and Kumar (2003) have differentiated between the concepts of 'social support' with that of 'care'. The term support is associated with financial assistance including pension and social security benefits, whereas, care denotes the emotional support received from the family members. Additionally, Cantor (1989) mentions social care is a broader term that encompasses both formal and informal care units that may build a partnership for upcoming elderly care to improve their quality of life. The concept of 'care' may be extended to health-related services, enabling the independent functioning of the individuals, for socialization purposes, enhancing personal development, and help in carrying out daily living activities, etc. Wetherell (1998) proposes that the social network perspective include four propositions: firstly, the social network members in the social system are interdependent; secondly, the linkages or relations among the members are connected through information, affection and other resources; thirdly, the structure of ties or relationships among the members act as constraints, as well as it facilitates actions; finally, the pattern of relations among the members, define their economic, political and social structure of an individual.

The existing studies identified that support social networks lead to a positive ageing experience and promote elderlies' mental and physical wellbeing in their later life (Kendig and Browning, 2016). Furthermore, the social network supports rejuvenate the purpose in

life through social interaction and engagement (Thanakwang and Soonthorndhada, 2011). Moreover, to a large extent, health-related problems such as asthma, cancer, arthritis, cardiac disorders, depression, and neuroendocrine disease are known to have prevailed less amongst the elderly having strong social networks (Freidenberg and Hammer, 1998). The researches, so far, surveyed here, identified that the studies either considered the relationship between the psychological well-being (Matt and Dean, 1993; Chi and Chou, 2001; Thanakwang and Soonthorndhada, 2011; Chen. *et al.*, 2014; Liu, Gou, and Zou, 2014; Chao *et al.*, 2018) or on the physical wellbeing with that of elderlies' social supports network (Cantor, 1989; MacIntosh *et al.*, 1989; Freidenberg and Hammer, 1998; Greener *et al.*, 2004; Thanakwang and Soonthorndhada, 2011; Cornwell and Waite, 2012; Liu, Xiao, and Cai, 2015; Sabatier and Moore, 2015). Also, most of these studies based in the Western context (Austin, 1976; Iecovich *et al.*, 2004; Chen *et al.*, 2014; Lahouse *et al.*, 2014; Chao *et al.*, 2018) and Asian context (Kim and Kim, 2003; Liu, Xiao, and Cai, 2015). But the same kind of studies on Indian context can hardly be traced.

In *the Indian Context* elderly population is around 90 million people and projected to reach 177 million by 2025 (Help Age India 2006; 2008 cited in Gupta and Pillai, 2009: 69). Unfortunately, there is a dearth in government assistance programs here in, thus, the responsibility of elderly care falls on their families. Conventionally, familial piety in India holds a strong family-centric mindset with the elderly-care as the thrust value. The two major reasons for the elderly care lie on the Indian families are the respect for the elders and the principle of inheritance of property to their heirs. Thus, these factors assure a comfortable zone for the survival of the elderly (Patel and Prince, 2001). Meanwhile, modernization had adversely affected the multigenerational bonding and erosion of familial piety in the Indian context (Gupta and Pillai, 2009).

Therefore, the above backdrop, calls for studying India's contemporary context to understand the relevance of social network support for elderlies' wellbeing. Thus, the gaps from the previous studies give way to the objectives of our study. The objectives, here, are to explore firstly, the existence of a correlation between social network structure with that of physical and psychological wellbeing and secondly, to

explore the pivotal functional roles of the social support network that enable both psychological and physical wellbeing of the elderly in the Indian context.

Methods

Participants and Procedures

The survey composed of 390 elderly participants (age > 60 years). The total sampled population is determined by using Raosoft software, assuming a 95 per cent level of confidence; 5 per cent margin of error; and 50 per cent response distribution. Out of the total, 56 per cent of males and 44 per cent of the females are selected randomly from three subdivisions (viz. Kharagpur, Medinipur Sadar, and Ghatal) of *Paschim Medinipur district* of West Bengal (India). According to the 2011 census, Paschim Medinipur is the fifth largest district of West Bengal and ranks 14th in India with its total population of 59,43,300 people (Census 2011, 2019; Egiye Bangla, 2016). These sub-divisional towns are of peri-urban having both traditional and modernized cultural imprints. These towns in this chosen Indian district have a rich colonial history and are proximal to the megapolis city of Kolkata (Midnapore. in, 2018). Thus, these towns within the chosen district in West Bengal, India, qualify this study objective. The respondents are selected by the process of multistage cluster sampling techniques on the areas under study. The semi-structured interview schedule is used to understand the generalisability and distinctiveness of the studies problem. The natures of information gathered are mainly self-reported in the course of the survey, undertaken from May 2018 to January 2019.

Instruments

The indices for psycho-physical problems of the elderlies' are identified from the literature surveyed that include locomotion disabilities, visual impairments, respiratory diseases, psychiatric problems, joint diseases, high blood pressure (Dey and Soneja, 1999; Rajan, *et al.*, 2001) dementia, depression, anxiety (Patel and Prince, 2001; Chao *et al.*, 2018) frailty (Greener *et al.*, 2004; Lahousse *et al.*, 2014) isolation (Toepoel, 2013) loneliness (Iecovich *et al.*, 2004). At the same time, diseases like falls, heart diseases, diabetes are considered

from the self-reported cases during our empirical investigation. Again, the social network indices for this study are adopted from Lubben Social Network Scale (LSNS-6) (Lubben *et al.*, in 2006: cited by Thanakwang and Soonthorndhada, 2011: 1362) that includes social ties and intimacy between individuals and family members as well as friends. The items found in LSNS-6 scale are readapted based on our field investigation that includes i) existence of contacts within the social network structure (relatives, friends and neighbours); ii) frequency of meeting amongst the network members; iii) role performed by the network members; iv) level of satisfaction received from the networks. The level of satisfaction is perceived for each index in the social network scale for this study that is measured in 5 point Likert-scale ranging from (1= very unsatisfied, 2= unsatisfied, 3= moderately satisfied, 4= satisfied and 5= very satisfied). Thereafter, the results of the Likert scale are grouped into a composite index of satisfaction to increase its scalability. For example, higher the score of satisfaction perceived from each unit of social support network structure viz. family (5), relatives (5), friends (5) and neighbours (5), are transformed into the highest range of composite satisfaction index i.e., by adding the level of satisfaction from each unit. Likewise, range of the scores from (25–21) belongs to very satisfied, (20–16) = satisfied, (15–11) = moderately satisfied, (10–6) = unsatisfied, (5–1) = very unsatisfied.

Data Analysis

The study was conducted in two steps. The first investigative level involved identifying the existence of any correlation between the psychological and physical wellbeing with that of the composite index of satisfaction perceived from the social support networks. To measure it, 16 variables were considered here i.e., a perceived composite index of the satisfaction of social support network structure and the rest of them are psycho-physical problems of the elderly, viz. dementia, depression, anxiety disorder, loneliness, isolation, limited mobility, arthritis, frailty, falls, heart disease, respiratory problems, diabetes, eyesight problems, hearing problems and hypertension. The data becomes reliable at Chronbach's alpha (.703). Again, the second investigative level identifies the latent variables that promote the wellbeing of the elderlies through specific social activities or

functional roles performed by the members within the social network structure. This is measured by Principal Component Analysis (PCA) following 18 variables constituting the functional roles that are reliable at Chronbach's alpha (.779).

Findings

Social Support Network Structure and Psycho-physical wellbeing

The perceived satisfaction from social networks influences health behaviour and health status, and even health perception (Sabatier and Moore, 2015). A study indicated that a high level of social support had enhanced elderlies' mental health by reducing depression (Chi and Chou, 2001). The social network is directly related to the measures of wellbeing by lessening psychological stress, diminishing mental tension and improving social adaptability (Wang, 2014). The social support network can reduce mortality threat (Greener *et al.*, 2004) and promotes healthy ageing through different pathways that may include opportunities for social interaction and social engagement (Thanakwang and Soonthorndhada, 2011). In some cases, it was observed that the presence of face to face contact with family members, especially their adult children and relatives' assisting their activities of daily living (ADL) and instrumental activities of daily living (IADL) resulted in delaying physical and functional degeneration amongst the elderlies (Choi and Wodarski, 1996). Cornwell and Waite's (2012) observe that physical problems, such as hypertension, are controlled, with quality support from social networks. Generally, Lahousse (2014) noted that the restricted normal activities related to daily living results in functional loss out of frailty that in turn leads to associated adverse health risks such as falls, admission to institutions, hospitalizations, and even deaths.

Consequently, in later ages, the physical problems are associated with less mobility, which in turn, constrains social interaction and engagement with people. Thus, it is seen that the surrounded friends' network reduces loneliness and depression, and fosters a feeling of attachment-based on equalitarianism, harmony and sharing good times (Matt and Dean, 1993; Thanakwang and Soonthorndhada, 2011). Similarly, a study in Pune, India reveals that the social support received from the neighbours in time of illness can increase their

well-being. The assistance may extend from financial needs to medical emergency needs viz. taking the patient to the hospital, staying with them, providing consultation fees and medicine as well as moral support to the sick elderly through prayers, daily interaction, and by a sympathetic inquiry about the prevailing health conditions (Kaulagekar, 2007). Even, the health professionals and the practitioners reveal that the community care improves the mental and physical health status as well as it reduces admission of the elderly into the hospitals and nursing homes (Lowe, 1988). Thus, the social ties buffer the harmful effects of stress on physical and mental health as well as enhance longevity (Thoits, 2011).

The first level of investigation on Psycho-physical wellbeing: Table 1 depicts the health-related status of the elderly of Paschim Medinipur district of West Bengal. Among the sampled population, the eye-sight problems prevailed more in the elderly having the highest 66.4 per cent, followed by limited mobility with 47.7 per cent, diabetes 44.1 per cent and arthritis 42.6 per cent. Moreover, psychological problems such as dementia 44.7 per cent and depression 37.7 per cent are also observed amongst the elderly. The results indicate that the physical problems amongst the elderly appear to be higher than that of the psychological problems due to the presence of intra-neighborhood social bonding, evidenced by the predominance of '*para culture*' in this studied peri-urban region.

Further, table 2 reveals the existence of correlations among the variables of psychological problems i.e., each variable is inter-related such as dementia is positively correlated with depression, anxiety disorder, loneliness, and isolation. On the contrary, dementia is negatively correlated with the level of satisfaction perceived from social networks i.e. social networks are inversely correlated with the psychological wellbeing or increase in the composite index of satisfaction from social support networks shall lead to a decrease in psychological problems and *vice versa*.

The following narratives relate the ways by which social networked supports boost psychological well-being:

Case study 1#: Mr Ramanuj Pal (74 years) a pensioner residing with his family members said:

Now, I cannot travel a far distance and meet my brothers living in Kolkata, but I always like to meet and chat with them. Nowadays I have to wait for their arrivals to my place. They are the inspiration for my survival. In their presence, I forget, if at all I had any physical problems to the extent of altering my daily routine to accompany my brothers for buying fish in the market, otherwise, it is the routine activities for my son.

Case study 2#; Mrs VijayaHati (64 years) a widowed maid-servant living alone at her home, narrated:

“I have only one daughter and she is married. I work till now, not only for my survival but to cope with my lonely time. No other company may allow me to cope with my loneliness. Recently, I used to visit my neighbours house to watch TV and chat with her to do away with my loneliness and depression.”

Similarly, Table 3 reflects physical wellbeing is also inversely correlated with that of satisfying social network i.e. increase in the level of satisfaction from social networks can lead to a decrease in physical problems and vice versa. Here, limited mobility, frailty, falls, eye-sight problems and hypertension are negatively correlated with the satisfying social network. It is found that heart disease and the respiratory problem have a positive correlation with variables such as arthritis, frailty and falls that in turn negatively correlated with satisfying social networks. An observation may be drawn that heart diseases and respiratory problems have less impact on satisfying social networks.

The case studies underneath demonstrate how social network revives the elderlies' physical well being:-

Case study 3# Mrs Alpona Mitra (84 years) an old lady residing with her family members is partly bed-ridden. She cannot walk a-far and is dependent on her '*ayah*' (nurse) to go out of her room. She finds a company with her neighbourhood friends in the evening as they come to visit and chat with her. She narrates:

“As I come out of my room in the evening to chat with my friends, I feel an increase in mental abilities to think and connect with the

world that allows me to survive positively. It even inspires me to walk a little bit.”

Case study 4# Mr Ramlu (92 years) a former athlete. He had no physical problems till now, he is fearless, happy and tension free and having myriad social engagements. He narrates:

Age is just a number. Even now, I practice sports in the morning and take a long bicycle ride to the ‘retirement association’ to spend time with the members. Sometimes fear pops up, whether I can travel such a long distance, but at the same time, self-confidence empowers me. Also, my family and friends boost my confidence to go forward.

Interpretations: Cases #1 to #4 provide a positive way by which psychophysical wellbeing for the elderly is enhanced through the social support network. Their myriad psycho-physical disabilities may be significantly reduced with the effective role performance by the social-networked members. The members include family, friends, and neighbours, which render emotional and emergency support to the elderly, thus, enabling their wellbeing.

The field setting anecdotes the existence of a strong “*para-culture*” or ‘neighbourhood culture’ that forms a symbiotic relationship between the elderlies with that of the close relatives, neighbours, and friends, which in turn boost the formers’ well-being. This symbiotic relation consists of sharing issues of everyday lives, exchanging foods having enriched nutritive value for the lonely elderly, helping them during the emergencies such as informing the doctors, taking them to the hospitals during medical emergencies and to assist them while performing any instrumental activities such as withdrawal of money from banks, introduce any technological uses, or accompanying for shopping with active support from neighbourhood members, and also, decision making regarding any family matters, etc. are done in “*para*” or *neighbourhood* talks. Moreover, networks with the same age-grades friends help in sharing the common geriatric problems and allow them to share freely their inner feelings that can reduce tensions and depression and foster self-confidence to enhance their well being. In effect, many elderly persons find their safety and security by living in these strongly bound neighbourhood clusters that in turn cut down any dependence on the formal institutionalized elderly care.

The second level of an investigation involving the identification of significant functional roles of social support networks leading to promote Subjective Well-being: According to Wang, the physical and psychological well-being of the elderly are complemented by significant functional roles of social network structure to determine their subjective wellbeing (SWB). The SWB is the indicator that denotes the evaluation of a person based on the affection and cognition of the quality of their life (Wang, 2014). In some cases, it is found that family, friends, and community supports the elderly to increase their independent capabilities. However, the form of support differs for different members of social network structure, e.g. in case of family members, especially the spouse, children, and siblings are an important source to share permanence in a relationship by providing affection and mutual assistance; whereas, the friends' support added to another form of assistance that includes a choice to activate friends' groups amongst the same age-grades, gender, or socio-economic status, so to provide reciprocal assistance. In contemporary societies, community support is gradually placing its importance to promote social contacts and interactions leading to emotional well-being and extends its services to provide material services and goods to the elderly (Taylor and Chatters, 1986). Thus, a social support network is a wide spectrum of relations that actualize assistance to individuals to meet their specific purpose, which adds to their wellbeing.

Table 4 identifies the significant functional roles of the social support networks towards elderlies' wellbeing. The KMO and Bartlett's Test reveals the value of (.768) that signifies at (.000), allowing to conduct the Principal component analysis to identify the latent variables of the social support networks that cater wellbeing. Initially, 6 components have been formed with their factor loadings more than (.5). The initial Eigenvalues in the total variance explained are 4.904, 1.613, 1.528, 1.345, 1.229, and 1.073 for the components. However, as the Rotated component matrix has a component with a negative value, the component has been excluded. Thus, finally, we obtained 5 functional components that have been operationally defined as follows:

Operational Definitions

Seeking wellbeing: The members of the social support network structure such as family, friends, and neighbour enquire about the elderlies' wellbeing. These promote a sense of belongingness and inspire them to survive a long and healthy life as well as reducing depression.

Purpose in life: The presence of social support networks gives a purpose in the life of the elderlies by engaging them in some purposeful activities such as cultural activities, in any sort of creative works, welfare activities, and recreational activities. Besides, these activities reduce their negative thoughts and increase their positive survival outcomes.

Cognitive-social activities: Involvement in cognitive-social activities such as morning or evening walks or physical exercises promotes physical wellbeing as well as social interaction. Besides, these activities provide the scope for recalling old memories, nostalgic moments to rejuvenate and improve on the cognitive abilities as well as increase positive thoughts.

Variety in life: The presence of social support networks encourage them to choose from diverse life-choices available such as planning a tour, spend time in recreational activities or spiritual discussions, engagement in social activities which are difficult for a lonely elderly to splurge such time.

Provide suggestions: Providing suggestions in time of need is another important factor of social support networks. It is a reason for which we maintain our relations within the networks. This helps to build positive thoughts and cope with varied unexpected situations. The suggestions for the elderly may pertain to financial or legal suggestions, solving a family discord, or any other matters.

Discussion

In this study, we have examined the extent of support provided by the social networks that influence the psychological and physical wellbeing of the elderly and have also, identified the pertinent functional roles of the social support networks in promoting their well-being. The bivariate analysis indicates a negative correlation of satisfying social support networks to that of the psychological and

physical wellbeing. It was aforementioned that an increase of strong social support networks leads to a reduction in the disease's pattern of the elderly and vice versa (see Table 2 & Table 3). Moreover, previous studies have already resonated that satisfaction in life is one of the important indicators for one's well-being. Xie (2018) observes that the lower level of satisfaction in old age is inversely associated with many health-related problems, mortality and even suicides, whereas life satisfaction is positively associated with successful ageing in regards to the functional, affective, cognitive and productive status of the elderly. Another study conducted by Ji, Cornelius, and Meinholz, (2011) accounts for the presence of support from the social network that is directly linked with psychological well-being. It has been reported that childless couples feel lonelier in old age than that of the elderly parents due to perceived emotional and instrumental support that becomes imperative during the old age. Similarly, Jacobson (1987) mentions that there are some limitations in classifying the properties of social support as they depend on the meaning of the acts intended to be supportive from the perspective of the support receiver. This largely depends on different social circumstances and individual needs, which lead to a difference in interpretation of its significance of any supportive actions, even though have a similar understanding of standard or norms of the society i.e., everyone is conscious about the expectation in friendships but differs in viewpoints about how it is being met.

Thus, the present study identifies pivotal functions of social support networks that maybe highlighted in an informal support structure or that may be emulated by the formal support structure. Further, a partnership may be developed with the informal and formal support structure in some cases to sustain the elderlies' well-being. This paper provides guidelines to promote such policy measures that can cater to the wellbeing of the elderly and develop a partnered relation with formal and informal agencies by resonating social network roles. This study is a way forward for further research on social, cultural and curriculum practices towards the promotion of social wellbeing and functioning of the networks for the elderly and to provide inputs for amending the existing elderly policies in India. Some policies may be formulated such as social monitoring system (Challis and Chesterman, 1985), supportive services including medical surveillance systems; in-home personal care; companionship and respite care; transportation and shopping; home repair and

maintenance and financial services (Foundation Funds Supportive Services for the Elderly, 1987) for the welfare of the elderly.

Table 1

Percentage analysis of psycho-physical problems among the elderly respondents of Paschim Medinipur District, West Bengal (N=390)

<i>Variables</i>	<i>Percentage (%)</i>
Dementia	44.4
Depression	37.7
Anxiety disorder	27.4
Loneliness	37.4
Isolation	22.6
Limited mobility	47.7
Arthritis	42.6
Frailty	24.6
Falls	25.4
Heart diseases	39
Respiratory problems	26.9
Diabetes	44.1
Eyesight problems	66.4
Hearing problem	35.9

Source: Self-reported data May 2018–Jan 2019.

Table 2

Pearson Correlations of Psychological Health with the Level of Satisfaction from Social Support Networks (N=390).

	<i>Dementia</i>	<i>Depression</i>	<i>Anxiety disorder</i>	<i>Loneliness</i>	<i>Isolation</i>	<i>Satisfaction</i>
Dementia	1					
Depression	.179**	1				
Anxiety disorder	.342**	.328**	1			
Loneliness	.258**	.382**	.308**	1		
Isolation	.209**	.238**	.287**	.356**	1	
Satisfaction	-.192**	-0.01	0.059	-0.036	0.003	1

** Correlation is significant at the 0.01 level (2-tailed).

Source: Self-reported data May 2018–Jan 2019.

Table 3
Pearson Correlations of Physical Health with the Level of Satisfaction from Social Support Networks (N=390)

	<i>Limited mobility</i>	<i>Arthritis</i>	<i>Frailty</i>	<i>Falls</i>	<i>Heart diseases</i>	<i>Respiratory problems</i>	<i>Diabetes</i>	<i>Eyesight problems</i>	<i>Hearing problem</i>	<i>Hypertension</i>	<i>Satisfaction</i>
Limited mobility	1										
Arthritis	.372**	1									
Frailty	.324**	.194**	1								
Falls	.446**	.296**	.515**	1							
Heart diseases	-0.005	.152**	.105*	0.041	1						
Respiratory problems	0.08	.202**	.230**	.124*	.416**	1					
Diabetes	.134**	-0.044	.104*	.135**	0.084	0.066	1				
Eyesight problems	.157**	.140**	0.016	0.066	-0.066	-0.082	-0.013	1			
Hearing problem	.131**	.134**	.168**	.104*	.191**	0.088	0.078	0.068	1		
Hypertension	.306**	.124*	.261**	.160**	0.075	0.07	0.077	-0.055	.149**	1	
Satisfaction	-.141**	0.094	-.143**	-.136*	.188**	.142**	0.04	-0.015	0.036	-.195**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Self-reported data May 2018–Jan 2019

Table 4
Rotated Component Matrix displaying pertinent roles played by the social supports networks for elderly subjective wellbeing (N=390)

	<i>Component</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Seeks wellbeing	0.773					
Reduce depression	0.698					
Social interaction	0.684					
Spend leisure time						

Cont'd...

Cont'd...

Reduce negative thoughts	0.833	
Engaged in purposeful activities	0.803	
Reduce loneliness and isolation	0.51	
Help in need	0.505	
Morning and evening walk		0.901
Recall old memories		0.882
Provide variety in life		0.731
Spiritual discussion		0.612
Visit home		0.558
Provide positivity to survive		-0.71
Share emotional dealings		0.538
Make a sense of belongings		
Mental satisfaction		
Provide suggestion		0.837
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.a		
a. Rotation converged in 10 iterations.		

Source: Self-reported data May 2018–Jan 2019.

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References

- Auslander, G.K., and Litwin. H. (1987). The Parameters of Network Intervention: A Social Work Application. *Social Service Review*, 61 (2), 305–318.
- Austin, M.J. (1976). A network of help for England's elderly. *Social Work*, 21 (2), 114–119.

- Cantor, M.H. (1989). Social Care: Family and Community Support Systems. *The Annals of the American Academy of Political and Social Science*, 503, 99–112.
- Census 2011. (2019). Retrieved December 11, 2019, from census 2011.co.in:
<https://www.census2011.co.in/census/state/districtlist/west+be+ngal.html>
- Challis, D., and Chesterman, J. (1985). A System for Monitoring Social Work Activity with the Frail Elderly. *The British Journal of Social Work*, 15 (2), 115–132.
- Chao, Y.Y., Katigbak, C., Zhang, N.J., and Dong, X. (2018). Association Between Perceived Social Support and Depressive Symptoms Among Community-Dwelling Older Chinese Americans. *Gerontology & Geriatric Medicine*, 4, 1– 8.
- Chen, R., Simon, M.A., Chang, E-S., Zhen, Y.L., and Dong, X. (2014). The Perception of Social Support Among US. Chinese Older Adults: Findings From the PINE Study. *Journal of Aging and Health*, 26 (7), 1137– 1154.
- Chi, I., and Chou, K.L. (2001). Social Support and Depression among Elderly Chinese People in Hong Kong. *Aging And Human Development*, 52 (3), 231–252.
- Choi, N.G., and Wodarski J.S. (1996). The relationship between social support and health status of elderly people: Does social support slow down physical and functional deterioration? *Social Work Research*, 20 (1), 52–63.
- Cornwell, E.Y., and Waite L.J. (2012). Social Network Resources and Management of Hypertension. *Journal of Health and Social Behavior*, 53 (2), 215– 231.
- Dey, A.B., and Soneja, S. (1999). Ageing, illness and healthy ageing. *Social Change*, 29 (1&2), 145–157.
- Egiye Bangla. (2016). Retrieved November 9, 2016, from Egiye Bangla:
<https://www.paschimmedinipur.gov.in/>
- (1987). *Foundation Funds Supportive Services for the Elderly*. Sage Publications, Inc.
- Freidenberg, J., and Hammer, M . (1998). Social Networks And Health Care: The Case Of Elderly Latinos In East Harlem. *Urban*

- Anthropology and Studies of Cultural Systems and World Economic Development*, 27 (1), 49–85.
- Greener, H.T., Bajorska, A., Peterson, D.R., Kunitz, S.J., Gross, D., Williams, T.F., and Mukamel, D.B. (2004). Social Support and Risk-Adjusted Mortality in a Frail Older Population. *Medical Care*, 42 (8), 779–788.
- Gupta, R., and Pillai, V.K. (2009). Perceived Caregiver Burden in India. *Journal of Women and Social Work*, 24 (1), 69–79.
- Iecovich, E., Barasch, M., Mirsky, J., Kaufman, R., Avgar, A., and Fogelson, A.K. (2004). Social Support Networks and Loneliness among Elderly Jews in Russia and Ukraine. *Journal of Marriage and Family*, 66 (2), 306–317.
- Iecovich, E. (2014). Aging in place: From theory to practice. *Anthropological Notebooks*, 20 (1), 21–33.
- Jacobson, D. (1987). The Cultural Context of Social Support and Support Networks. *Medical Anthropology Quarterly*, 1 (1): 42–67.
- Ji, J., Cornelius, J.A. and Meinholz, K.M. (2011). Links to Psychological Wellbeing of the Urban Chinese Elderly. *American Journal of Chinese Studies*, 18 (1), 11–24.
- Kim, I.K and Kim, C.S. (2003). Patterns of Family Support and the Quality of Life of the Elderly. *Social Indicators Research*, 62 (63, The Quality of Life in Korea: Comparative and Dynamic Perspectives), 437–454.
- Kaulagekar, A. (2007). Ageing and Social Support: A Study of Low-income Urban Elderly in Pune. *Indian Anthropologist*, 37 (2), 45–53.
- Kendig, H., and Browning, C. (2016). Social research and actions on ageing well. In H. M. Kendig, *Population Ageing and Australia's Future* (pp. 137–164). ANU Press.
- Lahousse, L., Maes, B., Ziere, G., Loth, D.W., Verlinden, V.J.A., Zillikens, M.C., Stricker, B. H. (2014). Adverse outcomes of frailty in the elderly: the Rotterdam Study. *European Journal of Epidemiology*, 29 (6), 419–427.
- LaValley, S.A. (2018). End-of-Life Caregiver Social Support Activation: The Roles of Hospice Clinicians and Professionals. *Qualitative Health Research*, 28 (1), 87–97.

- Liu, H., Xiao, Q., and Cai, Y. (2015). The Quality of Life and Mortality Risk of Elderly People in Rural China: The Role of Family Support. *Asia-Pacific Journal of Public Health*, 27 (2), NP2232– NP2245.
- Liu, L., Gou, Z., and Zuo, J. (2014). Social support mediates loneliness and depression in elderly people. *Journal of Health Psychology*, 1–9.
- Lowe, B.F. (1988). Future Directions for Community-Based Long-Term Care Research. *The Milbank Quarterly*, 66 (3), 552–571.
- Matt, G.E., and Dean, A. (1993). Social Support from Friends and Psychological Distress Among Elderly Persons: Moderator Effects of Age. *Journal of Health and Social Behavior*, 34 (3), 187–200.
- McIntosh, W.A., Shifflett, P.A. and Picou J.S. (1989). Social Support, Stressful Events, Strain, Dietary Intake, and the Elderly. *Medical Care*, 27 (2), 140–153.
- Midnapore.in. (2018). Retrieved May 4, 2018, from Midnapore.in: <http://www.midnapore.in/>
- Mohapatra, S., and Narayan, K.L. (2009). Caring for the Aged: The Role of NGOs. *International Journal of Sociology of the Family*, 35 (1), 105–121.
- Patel, V., and Prince, M. (2001). Ageing and mental health in a developing country: who cares? Qualitative studies from Goa, India. *Psychological Medicine*, 31, 29–38.
- Rajan, S.I., Mishra, U.S. and Sarma, P.S. (2001). Health Concerns Among India's Elderly. *Int'l. J. Aging and Human Development*, 53 (3), 181–194.
- Ranjan, S.I., and Kumar, S. (2003). Living Arrangements among Indian Elderly: New Evidence from National Family Health Survey. *Economic and Political Weekly*, 38 (1), 75–80.
- Sabatier, L., and Moore, S. (2015). Do Our Friends and Relatives Help Us Better Assess Our Health? Examining the Role of Social Networks in the Correspondence Between Self-Rated Health and Having Metabolic Syndrome. *Sage open*, 1–8.
- Sharkey, P. (1989). Social Networks and Social Service Workers. *The British Journal of Social Work*, 19 (5), 387–405.

- Taylor, R.J., and Chatters, L.M. (1986). Patterns of Informal Support to Elderly Black Adults: Family, Friends, and Church Members. *Social Work*, 31 (6), 432–438.
- Thanakwang, K., and Soonthornhdada, K. (2011). Mechanisms by Which Social Support Networks Influence Healthy Aging Among Thai Community-Dwelling Elderly. *Journal of Aging and Health*, 23 (8), 1352–1378.
- Thoits, P.A. (2011). Mechanisms Linking Social Ties and Support to Physical and Mental Health. *Journal of Health and Social Behavior*, 52 (2), 145–161.
- Toepoel, V. (2013). Ageing, Leisure, and Social Connectedness: How could Leisure Help Reduce Social Isolation of Older People? *Social Indicators Research*, 113 (1), 355–372.
- Tracy, E.M., and Abell, N. (1994). Social network map: Some further refinements on administration. *Social Work Research*, 18 (1), 56–60.
- Wang, X. (2014). Subjective well-being associated with size of social network and social support of elderly. *Journal of Health Psychology*, 1–6.
- Wetherell, C. (1998). Historical Social Network Analysis. *International Review of Social History*, Vol. 43, Supplement 6: new methods for social history, 125–144.
- Xie, L. (2018). Age-Friendly Communities and Life Satisfaction Among the Elderly in Urban China. *Research on Aging*, 1–23.

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The Problems of Elderly Residing in Slums: A Case Study on Siliguri Municipality

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ABSTRACT

The purpose of this study was to study the variety of problems and the socio-economic background that related to the 200 elderly people (M=114 & F=86), age varying from 60 years and above, residing in the 10 slums of the Siliguri municipality. These subjects were individually interviewed with the help of an interview schedule. It is found that health-related major problems were faced by 40 per cent elderly, followed by 24.5 per cent had to suffer from financial trouble, 15.5 per cent elderly found social difficulty and about 1.5 per cent elderly faced other problems. Also, there was a close association between gender and types of problems as existing a significant ($p=0.01$) relation among them. Moreover, each problem is further analyzed and discussed in a detailed manner. Based on the present findings it may be recommended that some measures should be taken to fulfill the needs of such elderly people by the state and society.

Keywords: Elderly, Slums, Socio-economic status, Depression, Abuse, Disrespect, Health problems.

Ageing of the population is one of the vital trends and demographic issues of the 21st century, as it is the most inescapable

outcome of demographic transition faced by most countries. According to the UN standard, a country is considered as "Ageing society" or "greying nation" when its proportion of the 60+ population exceeds 7 per cent of the whole population. According to the 2011 census, India shares 8.6 per cent of the elderly population which predicted to increase by 12.6 per cent during 2025. So, within a decade ageing of the population must be a burning issue for policymakers. Furthermore, Vulnerabilities towards the elderly population were increasing with time due to economic dependency, health issues, illiteracy, poor support base, etc. So the main concern is that there needs special attention to the aspects of older people like socio-economic conditions, shelter, health care, safety, and security.

According to Indian ethos and culture, the elderly population always captures a prestigious and superior position in the family. But with increasing technology and modernization, the inter-generational gap was increasing among Indian families which consequences in the increasing distance among old peoples and their grown-up children's. Older people are always holding a prestigious and chief position in the family. But, presently they became feeble, dependent, and queasy in terms of health, economy, and mentally, which lead to many problems for the older people. As the concept of a joint family is changing more into a nuclear family that leads to an anxious situation for elderly people. So this paper tries to analyze the significant problems related to older people who are residing in the slums at the dusk of their life.

Objectives: Following were the major objectives of this study:

1. know about the major problems perceived by the elderly in association with its gender;
2. identify the major financial issue;
3. analysis of the health status and the major types of health issues during old age;
4. to observe is there any depression faced by elderly;
5. How is the attitude of family members towards the elderly;
6. their perception of elderly abuse.

Method

Sample

According to the data from the Urban Poverty Elevation cell (U.P.E cell) of the Siliguri municipality, there are about 187 total slums in the Siliguri municipality, out of which 154 are notified, and 33 are non-notified. So out of these 187 slums in total, ten slums (about 5% sample slum) were randomly selected for this study.

At first, ten slums were selected, and then a pilot survey was conducted to spot the household having at least one elderly person. A total of 200 elderly persons (114 male and 86 female) of age varying from 60 years to above and of both the sexes were selected by the 'Multi-stage random sampling' method from these slum areas for this study.

Selected slum for the study N=200

S. No	Selected Slums	Ward No.	Sample (N=200)		
			Male	Female	Total
1.	Srabannagar	20	16	10	26
2.	Prankrishna colony	28	8	11	19
3.	Purbachal / dhup colony	2	9	7	16
4.	Sahid nagar	43	11	9	20
5.	Pati colony	47	19	10	29
6.	Shitala para	31	10	7	17
7.	Surya sen colony b- block	34	14	9	23
8.	Udayan colony	23	8	8	16
9.	Sukantanagar colony	38	12	10	22
10.	Prakashnagar	42	7	5	12

Tools Used

A structured questionnaire or interview schedule was prepared to collect the various quantitative information related to the problems of elderly residing in slum areas, like socioeconomic background, major problems faced by the elderly, their health status and types of health problems, financial condition, etc. Most of the questions of the questionnaire were close-ended.

These elderly persons were interviewed individually and group interactions were also made. In this process, some information like their relationship with family members, did they face any depression and abuse.

Statistical Analysis

The collected data was prepared on MS-Excel 2007 as a Master table. For further analysis, 'Analystat' software and MS-Excel was used. Both descriptive and inferential statistics were adopted. In the descriptive statistics percentage method, the mean and standard deviation was used to explain the data. Furthermore, in inferential statistics, the Chi-square method (at 0.05 significance level) was utilized to check the association among multiple variables. Also, Pearson's correlation was used to check the relationship.

Results & discussion

Table 1: Socio-economic status of the elderly in association with gender.

Socio-economic background	Gender				Total n=200	Chi-squared value (X ²)	P-value (at Signifi- cance level 0.05)
	Male n1=114	Per- centage	Female n2=86	Per- centage			
Age Group							
60–69 (young old)	47	23.5	41	20.5	88	1.0036	0.6054
70–79 (old-old)	39	19.5	28	14.0	67		
above 80 (oldest-old)	28	14.0	17	8.5	45		
Marital Status							
Married	94	47.0	59	29.5	153	5.5021	0.1385
Unmarried	2	1.0	4	2.0	6		
Widow/widower	17	8.5	22	11.0	39		
Separated/divorced	1	0.5	1	0.5	2		

Cont'd...

Cont'd...

Religion Status							
Hindu	72	36.0	58	29.0	130	0.9	0.8278
Muslim	25	12.5	19	9.5	44		
Christian	13	6.5	7	3.5	20		
Others	4	2.0	2	1.0	6		
Literacy							
Illiterate	22	11.0	45	22.5	67	29.21	0.00
Primary (I-V)	32	16.0	23	11.5	55		
Middle school (V-VII)	29	14.5	9	4.5	38		
High school (VIII-IX)	17	8.5	5	2.5	22		
Secondary (X)	9	4.5	2	1.0	11		
High secondary (XI)	4	2.0	2	1.0	6		
Graduation	1	0.5	0	0.0	1		
Economic Dependency							
Dependent	31	15.5	46	23.0	77	31.88	0.00
Pension	29	14.5	31	15.5	60		
Rent	21	10.5	4	2.0	25		
Presently working	33	16.5	5	2.5	38		
Respondent income (monthly)							
No income	31	15.5	46	23.0	77	23.04	0.00
Below 5000	56	28.0	37	18.5	93		
5000–10000	18	9.0	3	1.5	21		
Above 10000	9	4.5	0	0.0	9		
Living Arrangement of Elderly							
Living alone	12	6.0	8	4.0	20	15.0512	0.01
With spouse only	18	9.0	13	6.5	31		
With spouse only and other members (children's & grand children's)	51	25.5	46	23.0	97		
Without spouse but with married son only	28	14.0	10	5.0	38		
Married daughter	0	0.0	7	3.5	7		

Source: Calculated and compiled by the authors after field survey

Table 2: Major problems reported by elderly in association with gender.

<i>Major Problems</i>	<i>Gender</i>				<i>Chi-square value</i>	<i>P value (at 0.05 sig. level)</i>
	<i>Male (n1=114)</i>	<i>%</i>	<i>Female (n2=86)</i>	<i>%</i>		
Financial problems	37	18.5	12	6.0	11.10	0.01
Health-related problems	51	25.5	29	14.5		
Social problems (including abuse)	12	6.0	19	9.5		
Other problems	2	1.0	1	0.5		
Total (%)	102	51.0	61	30.5		
Grand total (n1+n2%)	81.5					
No problem	12	6.0	25	12.5		
Total (%)		18.5				

Source: Calculated and compiled by the authors after the field survey.

The data from the above table-2 revealed that 18.5 per cent of the elderly of the sample have no problem with their life, and they live a sheltered and happy life with their family. Among this 18.5 per cent elderly (i.e. 6% male & 12.5% female), most of them were economically independent; also, they keep their health fit and live a respectful life. While poor health condition was more frequently responded by the elderly as one of the major concerns. The vulnerability to sickness increases with advancing age as we know that getting old means slow down in metabolism and our immunity system fails to deal with many diseases. So, about 40 per cent of respondents reported health-related issues, which make them incapable of doing anything and which makes them depressed. Among this 40 per cent elderly, 25.5 are male, and 14.5 per cent were female, so it is clear that male elderly are more susceptible to illness. While about 24.5 per cent of the elderly faced financial crises as with old age, their productivity and outcome at work were almost nil, which results in dependency, and it ultimately brings economic hardship. Among them, 18.5 per cent were male, and 6 per cent were female. Also, problems due to social causes are another

concern of old age. As old age results in worsen health conditions, which increases dependency, and this may affect social life. The above table reveals that about 15.5 per cent of the sample of face problems due to social issues, among them 6 per cent were male, and 9.5 per cent were female. So again, this indicates that female elderly are more victims of a social problem rather than males in slums of the Siliguri municipality. Also, 1.5 per cent of the elderly are those who face some other problems like psychological problems, a problem with accommodations.

Here, the chi-square method was adopted to check the association between various problems of the elderly and how close does it related to gender. Moreover, the result shows high significant (as $p=0.01$, which is <0.05 significance level) relation between various types of problems and gender. As male are more prone to health problems rather than female, also while the dependency among the female is high, so they face more social issues rather than male. In addition to that, as health condition deteriorates male elderly are incapable of earning, this results in more susceptible to the financial crisis in the family.

Table 3: Major Financial Issues Faced by the Elderly.

Table 3 <i>Major Financial Problems</i>					
<i>Major financial problems</i>	<i>Gender (N= 49)</i>				<i>Total (%)</i>
	<i>Male (n1 - 37)</i>	<i>%</i>	<i>Female (n2 - 12)</i>	<i>%</i>	
Demanding money by children's	5	10.2	3	6.1	16.3
Running out of money	11	22.4	4	8.2	30.6
Low wages/ Poor job	18	36.7	2	4.1	40.8
High cost of health care	1	2.0	3	6.1	8.2
Debt	2	4.1	0	0	4.1
Total		75.5		24.5	100.0

Source: Calculated and compiled by the authors after the field survey

In Table 3 above reveal that among 24.5 per cent elderly (i.e. $N=49$), which is considered as 100 per cent in terms of financial problems. Among this 100 per cent elderly who face financial crisis

only, 75.5 per cent are male, and 24.5 per cent are female as it is already discussed and proved above that male elderly are more vulnerable to financial problems compared to females. About 40.8 per cent of elderly faces problems due to low wages which are caused by poor job quality. Among this 40.8 per cent elderly, 36.7 per cent are male, and 4.1 per cent are female. Besides, about 30.6 per cent of the elderly face problem due to running out of money, which consists of 22.4 per cent male and 8.2 per cent female. Followed by these, 16.3 per cent elderly that they face a financial crisis because their children are forcefully demanding money to their parents which ultimately lead to a shortage of money. Also, 8.2 per cent elderly reported financial issue due to the high cost of health care, among them majority are female, which is about 6.1 per cent, followed by 2 per cent male. Also, 4.1 per cent of only male elderly are in debt.

Table 4: Health conditions of elderly.

Age	Health status (N=200)		
	Good (a)	Average (b)	Poor (c)
60-69	49	23	16
70-79	26	12	29
80 above	8	2	35
Total (N)	83	37	80
Total (%)	41.5	18.5	40
MEAN	27.67	12.3	26.7

Source: Calculated and compiled by the authors after the field survey.

Health is an- vital aspect of ageing. A most crucial matter of public concern is the health condition of the elderly. After newborns and children, older people are most susceptible to morbidity and mortality as health impairment is a function of the aging process. Healthy aged comprises a significant human resource for the growth of the country (Sahu, Chaturbhuj 1998). A healthy life has always been desired and dreamed by all. Being healthy is not just free from any diseases, as it is not just a biological or medical concern but also a significant social and psychological concern. As we discussed above,

that old age slows metabolism, and so older people are more prone to diseases.

According to the Table 4 above, depicts that the maximum mean score, which is 27.67 is towards good health, as the majority of elderly people repeatedly reports pleasant health condition in slums of Siliguri municipality. However, in contrast to that, the mean score of about 26.7, which represent poor health condition, hence it can be said that the vast majority of the elderly are also in dilapidated health condition. So the ratio among good and poor health conditions of the elderly in the slums of the Siliguri municipality is almost 50:50. However, a mean result of 12.3 is under average health, i.e., about that amount of elderly report average health condition.

Also if we look at age-wise health condition than, it reveals that 41.5 per cent of elderly have a good health condition, among them 24.5 per cent is at younger-old age which is in between 60–69 years, followed by 13 per cent at older-old age, i.e., between 70–79 years and only 4 per cent report good health at oldest-old age which is above 80 years. In the case of average health condition, out of 18.5 per cent elderly sample, 11.5 per cent age between 60–69 years, followed by 6 per cent in 70–79 years, and only 1 per cent sample above 80 years have average health. The number of elderly who reported poor health, is about 40 per cent, among them 8 per cent was between the age group of 60–69 years, followed by 14.5 per cent at 70–79 years age group and 17.5 per cent at the oldest age group of above 80 years. So two pictures, was clear from here, that in the younger-old age (60–69 years) elderly have good health condition compared to oldest-old age (above 80 years), and poor health condition mainly dominates at older-old age (70–79 years) and oldest-old age (above 80).

Table 5: Relation between increasing age and deteriorating health.

Table 5 <i>Relation between Poor Health and Increasing Age</i>			
Age group (x)	60–69	70–79	80+
Poor health (y)	16	29	35

Source: Calculated and compiled by the authors after the field survey.

The above table clearly shows the correlation between increasing age and poor health conditions. As we discussed earlier that most of the elderly face poor health conditions in the age group of 70–79 years and above 80 years. So to prove it, the figure–3 above clearly revealed that as age increases, susceptibility to health problems also intensified. As the '*r*' or *Pearson's value* which is 0.97, which is near to 1 indicated a highly positive linear relationship between increasing age and deteriorating health condition.

Table 6: Types of health problems among elderly.

Table 6					
<i>Types of Health Problems Faced by the Elderly</i>					
<i>Types of Diseases</i>	<i>Gender N= 117 (b + c)</i>				
<i>Physical problems</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>Total (%)</i>
Poor vision	6	5.1	4	3.4	8.5
Hearing	3	2.6	2	1.7	4.3
Weight loss	5	4.3	2	1.7	6.0
Obesity	3	2.6	5	4.3	6.8
Others*	2	1.7	1	0.9	2.6
Total	19	16.2	14	12.0	28.2
Medical problems					
Arthritis (include pain in joints, back, knee, etc)	11	9.4	5	4.3	13.7
Cardio (includes heart problem)	4	3.4	6	5.1	8.5
Respiratory diseases	9	7.7	4	3.4	11.1
Blood pressure	12	10.3	8	6.8	17.1
Diabetes	2	1.7	1	0.9	2.6
Total	38	32.5	24	20.5	53.0
Mental problems					
Anxiety (feelings of worry or fear)	5	4.3	8	6.8	11.1
Dementia (decline in memory, language, problem-solving and other thinking skills)	2	1.7	4	3.4	5.1

*Note: Other problems includes Thyroid, skin problems, and leg swelling.

Source: Calculated and compiled by the authors after the field survey.

According to Table 6 above, it categorizes different kinds of health-related issues faced by the elderly at their old age, and these

various health problems are broadly classified into three primary groups viz. physical, medical, and mental problems. Among these three major categories, many individuals have more than one problem, and also many have all three problems at the same time, so this table is done in a generalized way considering their major problem at the time of the survey. Besides, this table is prepared based on only those elderly who reported their health condition as average, and below average, i.e., about 58.5 per cent (N=117) elderly reported under poor and average health conditions are considered here. The remaining 41.5 per cent (N=83) under good health conditions are excluded.

Thus among physical problems, poor vision is the main issue as reported by 8.5 per cent elderly among which 5.1 per cent are male, and 3.4 per cent are female, followed by 6.8 per cent sample are obese where the female elderly is about 4.3 per cent and 2.6 per cent are male. So this indicates that elderly females face more obese issues than males, about 6.0 per cent face weight loss issues, 4.3 per cent reported a hearing problem, and 2.6 per cent face other problems. In the case of medical problems, blood pressure is a significant problem as reported by 17.1 per cent elderly, among which 10.3 per cent are male, and 6.8 per cent are female. As this high blood pressure is a common phenomenon in old age due to lack of proper diet and food, lack of physical activity, being obese, or weight loss problem. Besides the majority of the elderly of about 13.7 per cent face arthritis problems as because when people were getting old, their joint became weak due to abnormal metabolism or poor immunity system. Problem due to the cardio-related issue was faced by 8.5 per cent sample elderly among them 5.1 per cent are female, and 3.4 per cent are female. Also, 11.1 per cent of the elderly reported respiratory problems and 2.6 per cent face diabetes as a primary issue. While in the case of mental problems, anxiety is a significant concern as reported by 11.1 per cent elderly, among which 6.8 per cent are female, and 4.3 per cent are male. It can be noticed that female elderly are the primary victim of anxiety disorder as due to extreme tension which caused by several factors like poor health problems, the worry of being dependent, anxious about no income, the grief of losing someone, etc. Besides, 5.1 per cent of the elderly report about dementia which can lead to declining in thinking ability and weaken of memory. Also, confusion and poor judgment

capability can be noticed by 2.6 per cent elderly. So in the case of male arthritis, blood pressure, respiratory problem, poor vision, weight losses are some significant problems. While female sample shows cardio-issue, obesity and overall mental problem are some main concern for them.

Table 7: Association among age and health problems.

Table 7 Association between Age and Health Problems						
Types of Diseases	Age N=117 (b + c)			Total	Chi-square value (x2)	P value (at 0.05 sig. level)
	60-69	70-79	80+			
Physical problems						
Poor vision	2	3	5	10	16.4327	0.03
Hearing	1	2	2	5		
Weight loss	5	1	1	7		
Obesity	6	2	0	8		
Others	0	0	3	3		
Medical problems						
Arthritis (include pain in joints, back, knee etc	2	4	10	16	21.5929	0.00
Cardio (includes heart problem)	6	3	1	10		
Respiratory diseases	2	3	8	13		
Blood pressure	5	12	3	20		
Diabetes	0	2	1	3		
Mental problems						
Anxiety (feelings of worry or fear)	5	7	1	13	12.281	0.01
Dementia (decline in memory, language, problem-solving and other thinking skills)	1	1	4	6		
Confusion/Poor judgment	0	0	3	3		

Source: Calculated and compiled by the authors after the field survey.

To know about the relation between varieties of health problems with age, the Chi-square method is applied. Furthermore, the result proved that there is significant relation among age and types of health issues. In all cases of physical, medical, and mental problems the 'p-value' is below 0.05 significance level (i.e. $p=0.03$, $p=0.00$, $p=0.01$)

respectively which clears that with increasing age people are more susceptible to health issues.

Table 8: Depression among elderly

<i>Response</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>Total (N=200)</i>
Yes	52	26.0	31	15.5	83
No	62	31.0	55	27.5	117
Reason for depression					Total (N=83)
Loneliness/sadness/boredom	14	16.9	11	13.3	25
Loss of close one	5	6.0	8	9.7	13
Due to health issue	21	25.3	14	16.9	35
Socio-economic causes	7	8.4	3	3.6	10

Source: Calculated and compiled by the authors after the field survey.

Depression is one of the most common infirmities in the elderly population. Among elderly people, chronic diseases, restricted mobility, bereavement, elderly abuse, isolation, and loss of income are major risk factors for depression, in addition to common risk factors in all age groups (Fiske, & Gatz 2009). Depression in elderly persons may have a varied presentation and may be difficult to identify (Mehra, *et al.*, 2017). It has devastating consequences and contributes significantly to misery in this phase of life. The table above reveals that 41.5 per cent of an elderly sample report that they suffer from depression and the remaining 58.5 per cent do not face any depression as they live a happy life. Among these, 41.5 per cent elderly, 26 per cent are male & 15.5 per cent are female, so it is clear that male respondent faces depression more at old age than female. This 41.5 per cent of the elderly sample who report depressions with their life are further being assessed that why they are depressed? This 41.5 per cent elderly who are facing depression further considered as 100 per cent for assessment. Among them, 42.2 per cent of the elderly respondent (N=35), among which 25.3 per cent male and 16.9 per cent female report, depression due to health problems which increase their dependency. About 30.1 per cent sample (N=25), among which 16.9 per cent male and 13.3 per cent female report depression due to

loneliness as they feel alone due to lack of care and negligence. 15.7 per cent elder (N=13), among which 6 per cent male and 9.7 per cent female report depression due to loss of close one as they still miss them and fill low every time. Besides 12 per cent of the respondent (N=10) among which 8.4 per cent male and 3.6 per cent female report depressed due to socio-economic causes.

Table 9: Perception of the elderly regarding the attitude of family members towards them.

Table 9					
<i>Opinion of the elderly about the attitude of family members towards them</i>					
<i>The attitude of family members towards the elderly</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>Total (N=180)*</i>
Respectful	48	26.7	31	17.2	79
Normal	35	19.4	24	13.3	59
Not cordial	19	10.6	23	12.8	42
Recently change in the attitude of family members noticed by the respondent					
Yes	34	18.9	20	11.1	54
No	68	37.8	58	32.2	126
Reason for change in attitude			N = 54		
Financial cause	12	22.2	4	7.4	16
Due to health problem	19	35.2	8	14.8	27
Others	5	9.3	6	11.1	11

*Note: 20 elderly sample (12 male & 8 female) respond that they live alone, hence no association with family.

Source: Calculated and compiled by the authors after the field survey.

Family life is considered a significant social unit in our society, and this family life is a vital support for elderly peoples. The behavioural patterns of the elderly, their attitudes, and their family constitute a significant aspect of family life. Economic dependency, health problems, unhealthy lifestyles of parents may act as a demotion of their role as head of the family. As consequences, relation, and attitude may change between elderly peoples and their family members. For this analysis, 10 per cent of the elderly who live alone are excluded. So, the table above clearly represents that 43.9 per cent of

the elderly (N=79) have cordial and respectful relationships with their family, among which 26.7 per cent are male, and 17.2 per cent are female elderly. On the other hand, 32.8 per cent of elderly respondent reports that they have average relationships with their family, among which 19.4 per cent are male, and 13.3 per cent are the female respondent.

While 23.3 per cent elderly, among which 10.6 per cent male and 12.8 per cent are female respondents report not cordial or poor relationships with their family. These again show a different attitude of male and female in our society as male always holds a senior-most position in the family and dominates, while in the case of female they always limited in family life. Moreover, after being widow status of women get further demoted in our society, but in contrast, the position of a male after being widower did not mark significant changes.

The entire respondent than asked that whether did they noticed any recent change in attitude or not? About 30 per cent of respondents (N=54), among which 18.9 per cent male and 11.1 per cent female elderly noticed recent changes in attitude and notions of their family members towards them. Moreover, this 30 per cent is considered as 100 per cent in order to further analysis. Interestingly among these respondents who faced significant changes in the attitude of their family members, 29.6 per cent elderly (N=16) among which 22.2 per cent are male, and 7.4 per cent are female report that they noticed changes in inter-personal relation mainly due to financial dependency as they are unable to earn. Hence, they became burden day-by-day as their family members started taunting them. Also, a majority of the respondent of about, 50 per cent report changes in attitude mainly due to their poor health and inability to perform anything productive make their family members exasperate towards them. Among this 50 per cent elderly respondent (N=27), 35.5 per cent are male, and 14.8 per cent are female. Also, 20.4 per cent of the elderly (N=11) report changes in the attitude of family members due to other reasons include poor relationships with family members. So, financial instability and deteriorating health are a primary reason which affects inter-personal relation in old age.

Table 10: Perception about elderly abuse**Table 10**
Perception of Elderly Abuse

<i>Victim of Elderly Abuse</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>N(180)*</i>	<i>X² value</i>	<i>P value (at 0.05 sig. level)</i>
Yes	27	15.0	34	18.9	61	5.7817	0.01
No	75	41.7	44	24.4	119		

*Note: 20 elderly sample (12 male & 8 female) respond that they living alone did not face any abuse

<i>Types of Elderly Abuse</i>	<i>Male</i>	<i>%</i>	<i>Female</i>	<i>%</i>	<i>N (61)</i>
Economic Exploitation/ Financial abuse	10	16.4	5	8.2	15
Disrespect/ Verbal abuse/ Emotional torture					
Disrespect/Emotional torture by son	3	4.9	4	6.6	7
Disrespect/Emotional torture by daughter-in-law	2	3.3	7	11.5	9
Disrespect by other family members	0	0	4	6.6	4
Physical(Beating\Slapping)	1	1.6	2	3.3	3
Neglect					
Not giving proper food	3	4.9	3	4.9	6
Not giving proper medicine	4	6.6	4	6.6	8

Source: Calculated and compiled by the authors after the field survey

At the national level, 25 per cent of elders have confirmed they have been a victim of Elder Abuse ever. There was almost no distinction between male and female elders and the city tier-wise trend (Helpage India, 2018). Mistreatment of older people – referred to as “elder abuse” – was first described in British scientific journals in 1975 under the term “granny battering” (Burston GR, 1975). Elder abuse is defined as “a single or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person”. The definition implies that an abusive act towards an older person could be

either an act of commission or omission by any person in a position of trust such as a family member, friend, or neighbour. (NCEA; (2005) identified six categories of elder abuse: (1) Physical Abuse, (2) Emotional Abuse, (3) Neglect, (4) Abandonment, (5) Sexual Abuse and (6) Self-neglect. For broader use, international scholars have agreed upon five categories of elder abuse: (1) physical abuse, (2) psychological abuse, (3) financial abuse, (4) sexual abuse and (5) neglect (Habjanic and Lahe, 2012).

To know about the present status of elderly abuse in the slums of Siliguri municipality, it is asked to every respondent that did they face any abuse or not? Moreover, it is found that about 33.9 per cent elderly (N=61) face some abuse, among which 15 per cent are male, and 18.9 per cent are female. Many of them at earliest did not want to disclose, but after close interaction and later convincing them to keep their identity secret, they somehow broke their melancholy choirs. Here again, those who live alone are excluded.

Furthermore, the chi-square method is applied to check the association between gender and abuses, and it is proved that there exists a significant ($p=0.01$) relation between abuses and gender as a victim. Female elderly who are widows, illiterate, and have no source of income are more vulnerable to abuses rather than males.

Again those 33.9 per cent elderlies (N=61) who face abuse are considered as 100 per cent to assess further. Among them, Economic exploitation as abuse is faced by 27.9 per cent (N=17) among which 19.7 per cent are male, and 8.2 per cent are female. This economic exploitation is done by forcefully demanding the elderly to earn or anyhow give financial help to the family, despite the condition of the elderly that they are unable to work or perform anything as their physical health restricts them to do so. About 36.1 per cent (N=22) of elderly in total face disrespect or some verbal mistreatment which is another kind of abuse, among them 11.5 per cent (N=7) faces disrespect or emotional torment by their sons amongst which 4.9 per cent are male, and 6.6 per cent are female elderly. About 18 per cent (N=11) report disrespect by daughter-in-law among which about the majority of about 14.8 per cent are female and 3.3 per cent are male. Also, 6.6 per cent (N=4) of the female elderly only face disrespect or verbal violence by other family members. However, this shows the

fact that the concept of social status among males and females in our society where females face more disrespect or geek-speak than men. A survey of the National level also revealed, 51 per cent elderly, i.e., every second elder opined disrespect amounts most to the Elder Abuse (Helpage India, 2018). Beating and slapping as 4.9 per cent (N=3) respondent faced physical abuse, among which are 3.3 per cent are female, and 1.6 per cent are male. Besides this, data reveals that the elderly face negligence in terms of food and medicine as reported by 23 per cent (N=14) of the elderly in total. Also, about 8.2 per cent of the elderly (N=5) reported that total desertion by their children. So it clears the fact that women in our Indian society face lots of emotions as well as physical torture, negligence, and disrespect compared to men. While in case of economic exploitation, males are more victims. Elderly abuse is an act of demon in our Indian society and also many developing countries. Thus safety and security for the older persons are of utmost need today.

To know more about the opinion of the elderly who are facing abuse, some examples of their broken voices are given below as discussed by them and noted by us (the name was not disclosed to keep them secret, instead alphabetic was used).

Mrs. A “I am a widow and suffering from low blood pressure, my daughter-in-law told me to go back to my village, as she finds me as trouble-maker for the whole family.”

Mr. B “My son fights with me as I am not able to pay for household spending due to no income sometimes, as I am earning as a hawker daily and sometimes earning is almost nil.”

Mrs. C “I need to do all household work from cleaning clothes to cooking food like a servant to get food from my children.”

Mr. D “one day I have a high fever and did not able to go to work; my son beats me and told me as a lethargic and lazy. Moreover, he did not give me food for that whole day”.

Mrs. E “I am a heart patient and need monthly medicine which I buy from my own money that I get as an old-age pension. However, now my daughter-in-law is forcing me to stop those medicines and contribute that money to family expenses”.

Thus it shows that elderly abuses become a major concern for today's society as it revealed that when the elderly are getting old and senile, they became susceptible to health problems and could not earn. All these factors lead to abuse as their children judge them as a burden. So it can be said that elderly people are not protected at their residence as they are getting exploited economically, physically, and emotionally by their kith and kins.

Conclusion and Recommendation

Over recent years the problems related to old age are very attentive among policymakers and researchers. This paper also tries to investigate various issues related to them, especially those who reside in the slums. According to the study, many of them are illiterate, ignorant, and mostly depend on children. Many of them have not enough, substantial income, savings, or property due to which meets all their basics needs became difficult. Health-wise the elderly are suffering from many ailments, as poor health affects the routine life and is characterized by reduced mobility and increased dependency on spouse and children. The frail weak elderly often approach medical facilities and tried balance with family and community. The physical and economic dependence attributed to lesser space in the family. Depression and abuse is another main problem reported by the elderly. Many of the elderly tried to readjust perceptions and behaviours with changing situations. As the family is their world; thus, they rely very much on it for the fulfillment of their primary needs and aspire love, affection, and companion.

Ageing is a part, and its de-generational nature exposes several problems, so more awareness situation for elderly is needed. The government has continued its efforts to introduce various programs for the welfare of the elderly like; National policy on the older person (NPOP) of 1999, the maintenance and protection of parents & senior citizens act of 2007, National council of senior citizens (NCSrC) of 2012, etc. Also, NGOs have played a significant role in highlighting many problems related to old age and also gave many solutions to it. Except for efforts from government and NGOs, economic security for the elderly is the most appropriate tool to deal with many problems as it makes them independent. Proper health care facilities like a free

health checkup, rehabilitation centres, community or home-based disability efforts must be provided. To, protect from abuse awareness generation programs must be adopted, and strict law should be implemented. Also, positive and cheerful thought in old life was necessary to fight against depression. Except for all these adequate policy initiatives & its implementation, welfares and developmental programmes for aged would help them free from many fear and negativity of getting old, and provide them with a meaningful, active healthy and happy old age.

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References

- Burston, G.R. (1975):Letter: Granny-battering; *Br Med J.* Sep 6; 3(5983): 592.
- Fiske, Amy and Gatz, Margaret (2009): Depression in Older Adults; *Annual Review of Clinical Psychology* 5(1): 363–89.
- Habjanic A, and Lahe D. (2012). Are frail older people less exposed to abuse in nursing homes as compared to community-based settings? Statistical analysis of Slovenian data. *Archives of Gerontology and Geriatrics*. Vol. 54, No. 3, pp. 261–270.
- Help-Age India (2018). *Elder Abuse in India: Changing Cultural Ethos & Impact of Technology* . New Delhi.
- Mehra, Aseem', Sandeep Grover, Subho Chakrabarti, and Ajit Avasthi (2017) Symptom profile of depression in elderly: Is assessment with geriatric depression rating scale enough? *Jr. of Geriatric Mental Health*, Vol. 4, No. 1, pp. 18–25.
- Sahu, Chaturbhuj (1998): *Problems of Ageing Among Indian Tribes*; Sarup & sons, New Delhi.

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Ageism among Undergraduate Students: Do Grandparents make a Difference?

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ABSTRACT

In an era of greying population, the idea of discriminating against people based on their chronological age is nothing less than absurd. The psychological insecurity sprouting from the anxiety about ageing paired with multiple factors often paves the way to ageism. The current research aims at investigating if the experience of living with grandparents has any significant influence on reducing ageism among undergraduate students. A self-reported questionnaire was employed among 194 students in the age group 17–22 from three colleges of Kasaragod district, Kerala to collect demographic data and The Fraboni Scale of Ageism was employed to measure ageism among the respondents and the mean score of those who were living with/had lived with their grandparents was compared with those who had never lived with their grandparents. The results of the study show that those respondents who live with their grandparents or have lived with their grandparents in the past had significantly lower ageism scores than those who had never resided with their grandparents. Further, the study could find that the awareness programmes on ageing and old age are not adequately available to young people and the awareness programmes that are provided are not efficient enough to eliminate ageism, as the data suggests. The study points to the importance of

inter-generational living in eliminating ageist notions and the need for effective awareness programmes.

Keywords: Ageism, Ageing, Intergenerational Contact, Youth and Older Adults.

Ageism had been a deep-rooted practice in the human civilisation which people or other entities commit consciously or through culturally transformed stereotypes. The idea and practice of discriminating older adults solely due to their chronological age had been existent from time immemorial. It was not until 1969, that the idea was brought forth to the academic circles by Butler. The practices that were often held as practical jokes or common notions were gradually deciphered to be grounded on a set of psycho-social elements. "Age-ism reflects a deep-seated uneasiness on the part of the young and middle-aged – a personal revulsion to and distaste for growing old, disease, disability; and fear of powerlessness, "uselessness," and death." (Butler, 1969, p. 243). The concept and practice of ageism, henceforth, became a topic of academic interest among sociologists, psychologists, and gerontologists.

Broadly speaking, "Ageism is defined as stereotypes, prejudice, or discrimination against (but also in favour of) people because of their chronological age." (Ayalon & Tesch-Rome, 2017, p. 1). Ageism could either be implicit or explicit and could take place at micro, meso or macrolevel (Iversen, *et al.*, 2009). Ageism could be seen in unintentional day to day events of life to policy level deliberations, which is no less than intentional. An international policy level scenario could be seen in the case of the United Nations policy that ensures the rights of individuals devoid of their race, colour, sex or any other distinction through the United Nations (1948) but the document has not taken into account the discrimination based on age; at least in the official document (Megret, 2011). A broader picture of the discrimination of older adults in terms of national spending could be figured out through the resource allocation of the nations. India which is home to 10 per cent of the global senior population is spending less than one per cent of its GDP on schemes benefiting the older people (Helpage India, 2014). But the scenario is different in some of the developed

nations like Germany where 3.8 per cent of the GDP had been spent on the health care benefits of the elderly in 2003 and the spending is expected to rise to 8.4 per cent by 2040 (Jackson, 2003).

Origins and Transmission of Ageism

Ageism reflects a human person's inner fear of becoming old and the consequent reality of death, which is socially constructed and transmitted. (Butler, 1969; Popham, *et al.*, 2011 and Teater & Chonody, 2015). From a societal perspective, often ageist ideas are transferred through generations at a very young age, as low as fourth grade (Seefeldt, 1984). The idea and practice of ageism are prevalent in most of the societies and the concept is transferred and established through messages that influence people of all age groups (Teater & Chonody, 2015). The fact that the concept of ageism is psychologically constructed and socially transmitted and socially reinforced points to the fact the young people should need to identify the problem of ageism and avoid such practices deliberately.

The cultural nature of ageism raises the question of the difference in the trends of ageism in the context of cultural differences across societies. Often gerontocratic culture and piety do not necessarily vouch for the prevention of ageism. (Sharps, *et al.*, 1998). However, intergenerational contact is considered an effective strategy in reducing ageism among young people; ranging from children to middle-aged people (Peacock & Talley, 1984; Smith, *et al.*, 2016). Intergenerational contact is hence considered as one of the effective means of eliminating ageism among young people.

The Cultural Milieu and the Possibilities of Intergenerational Contacts

The nature of the interactions between young people and older adults are shaped by many factors; culture is one of the most important. It is found that "grandparents still maintain a respected authority role, especially in many Asian, African, and Latin American societies" (Hossain, *et al.*, 2018). However, this does not necessarily warrant a positive attitude toward older adults. Young people, among all age groups, are often found to be ageist than other people as found through researches among college students (Kimuna, *et al.* 2005). This

trend is found to be associated with a lack of ample interaction with older adults (Knapp, & Stubblefield, 2000; Kimuna, *et al.*, 2005). On the contrary, it is found that interactions with older adults, particularly grandparents, have a positive impact on the attitudes of young people towards older adults. (Flamion, *et al.*, 2017).

The traditional Indian culture is often termed gerontocratic or one marked by filial piety. In the traditional cultural milieu of India, it is believed that the children are obliged to provide for the aged parents. (Sarah, 2000). This culture is changing fast and the social role and importance that the older adults used to enjoy in the family system are gradually declining in the Indian context. This trend is reflected through the mushrooming of old age homes across India. The trend is alarming, particularly in the state of Kerala where 613 old age homes (Social Justice Department, 2017) function in the private sector and 11 in the public sector (Social Justice Department, n.d.) sheltering around twenty thousand older adults. A finding that shall be read along comes from a 2002 study in Kerala which had found that 48 per cent of the inmates of old age homes had a living son and 41 per cent had a living daughter (Rajan, 2002). The cultural scenario is drastically changing in the Indian context, particularly in the state of Kerala when it comes to the lives of older adults. Older adults no longer enjoy the benefits of social acceptance as they used to enjoy during the times of intergenerational living. It is against this background that the study was carried out among undergraduate students of three colleges from Kasargod district. The study aimed at investigating if the undergraduate students who live with/had lived with their grandparents had significantly lower ageism than their colleagues who had never lived with their grandparents.

Method

The current research has been carried as a cross-sectional descriptive study among the students of three colleges in Kasaragod district offering undergraduate courses. Three Arts and Science and colleges in the district were randomly selected and voluntary participants from the undergraduate departments of these colleges were sampled. The convenience sample consisted of 194 students (64, 65 and

65 respectively) from three colleges of Kasaragod district in the age group 17–22. Participation in the study was voluntary and anonymity was assured to the participants. Informed consent was obtained from the participants before the study and it was made sure that the study followed the IFSW Code of Ethics. The data about significant variables were collected using a self-reported questionnaire containing questions related to relevant demographic details and the Fraboni Scale of Ageism (Fraboni, Saltstone, & Hughes, 1990). A higher score in the Fraboni Scale of Ageism indicates higher levels of ageism. The internal consistency reliability of the Fraboni Scale of Ageism in this study was found to be 0.707 (Cronbach's α) implying a desirable level of internal consistency. The data obtained were analysed using descriptive and inferential statistics with the aid of SPSS 25.

Results and Discussion

Table 1
Socio-Demographic Details of the Respondents

<i>Age Group of the Respondents</i>		
<i>Age</i>	<i>Frequency</i>	<i>Percentage</i>
17–18	100	51.5
19–20	24	12.4
21–22	70	36.1
Total	194	100
Distribution of the Respondents based on Sex		
Sex	Frequency	Percentage
Male	76	39.2
Female	118	60.8
Total	194	100
Academic Course of the Respondents		
Nature of Course	Frequency	Percentage
Science and Allied Courses	122	62.886
Social Sciences and Humanities	72	37.113

Table 2
Distribution of Respondents based on Exposure to live with Grandparents and Corresponding Ageism Score

<i>Exposure to Life with Grandparents (Present or Past)</i>					
<i>Life with Grandparents</i>	<i>n</i>	<i>Percentage</i>	<i>Mean Score</i>	<i>SD</i>	<i>Mean Difference</i>
Yes	41	21.1	51.2927	5.144	-11.94261
No	153	78.9	63.2353	6.43	
Total	194	100			

Among the 194 respondents, 21.1 percentage (41 samples) had either lived or were living with their grandparents and the rest 78.9 percentage (153 samples) had never lived with their grandparents in the same home; those who were/are making casual visits to the grandparents and not living with/was not living with grandparents were excluded from the category. Considering the current trend of nuclear families, the number of respondents with exposure to life with grandparents was reasonable. Further, it was evident that the respondents who had either lived or were living with their grandparents had lower ageism scores on the Fraboni Scale of Ageism (Mean Score = 51.29) when compared to that of those with no exposure to a life with grandparents (Mean Score = 63.23), accounting for a mean difference of 11.94 in the scores.

Table 3
Significance of the Difference in the Ageism Scores based on Exposure to live with Grandparents

<i>Levene's Test for Equality of Variances (Equal Variances Assumed)</i>		<i>T-Test for Equality of Means</i>		
<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
3.286	0.071	-10.97	192	0.000

An independent samples t-test was done to determine the significance in the difference of ageism score between the respondents with exposure to life with grandparents and those without such exposure. Outliers were not present as shown by a boxplot. The condition of normality of distribution was satisfied as per the Shapiro Wilks test (at

$p = 0.05$). Homogeneity of variance was also satisfied as per Levene's Test for Equality of variance, $p = 0.071$ (at 0.05). The result suggests that the participants who had exposure to live with their grandparents had significantly lower ageism score (51.29 ± 5.14) than those who had no such exposure (63.23 ± 6.43), $p = 0.000$.

The result suggests that intergenerational living or living with grandparents can significantly influence the attitudes of young people towards older adults. However, it cannot be practically suggested as a solution to eliminating ageism, but as a practical alternative spending more time with grandparents could be suggested so that young people be exposed to interactions with older adults. As the duration and quality of interaction are more, less likely is the ageism among young people.

Table 4
Distribution of Respondents Based on Exposure to Awareness Programmes on Old Age

<i>Distribution of Respondents Based on Exposure to Awareness Programmes on Old Age</i>					
<i>Awareness Programmes Received on Old Age</i>	<i>n</i>	<i>Percentage</i>	<i>Mean Score</i>	<i>SD</i>	<i>Mean Difference</i>
Yes	78	40.2	59.5513	8.21884	-1.9401
No	116	59.8	61.4914	7.57168	
Total	194	100			

Among the 194 respondents, 78 (40.2%) had received some form of awareness programmes on old age and ageing and had a mean ageism score of 59.55 ± 8.21 . On the other hand, 116 respondents (59.8%) had received no awareness programmes whatsoever on old age and ageing and had a mean ageism score of 61.4914 ± 7.57 . The difference in the mean scores of the two categories was found not to be significantly different as suggested by an independent samples t-test.

The finding points to the inadequacy of awareness creation through academic means or educational institutions towards the cause of elimination of ageism. Though education or awareness programmes are effective in eliminating or decreasing ageism among young people (Cottle, & Glover, 2007; Sum, *et al.*, 2016), education or awareness creation programmes received by the respondents of this study were

found to be making no marked difference. This points to the need for some form of efficient interventions among the student community to provide insights on ageing, ageism, and the need for positive attitudes towards older adults.

Conclusion

Ageism, despite this era being one of greying of the population, it is still rampant in the society at large. This discrimination of people based on their age is to be taken into consideration seriously. The explicit forms of age-based discrimination at macro and meso levels starts right from the cultural context of one's childhood and progresses through adulthood. Intergenerational exposure through quality time with grandparents could be a feasible solution to avoid this. Intervention strategies focusing on this aspect could help in eliminating ageist trends. Despite older adults being a considerable proportion of the global population, the educational system does not give adequate attention to the need for eliminating discriminatory beliefs and practices against older adults. This shall be addressed as well with proper education programs and awareness creation through educational institutions. In the upcoming years of the greying population, older adults should be treated as equals to their younger counterparts.

References

- Ayalon, L., & Tesch-Römer, C. (2017). Taking a closer look at ageism: self- and other-directed ageist attitudes and discrimination. *European Journal of Ageing*, 14(1), 1–4. doi:10.1007/s10433-016-0409-9.
- Butler, R.N. (1969). Age-Isms: Another Form of Bigotry. *The Gerontologist*, 9(4 Part 1), 243–246. doi:10.1093/geront/9.4_part_1.243.
- Cottle, N.R., & Glover, R. J. (2007). Combating Ageism: Change in Student Knowledge and Attitudes Regarding Aging. *Educational Gerontology*, 33(6), 501–512. doi:10.1080/03601270701328318.
- Flamion, A., Missotten, P., Marquet, M., & Adam, S. (2017). Impact of Contact With Grandparents on Children's and Adolescents' Views on the Elderly. *Child Development*. doi:10.1111/cdev.12992.

- Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni Scale of Ageism (FSA): An Attempt at a More Precise Measure of Ageism. *Canadian Journal on Aging*, 9(01), 56–66. doi:10.1017/s0714980800016093.
- Helpage India. (2014). *State of Elderly in India*. Retrieved from <https://www.helpageindia.org/wp-content/themes/helpageindia/pdf/state-elderly-india-2014.pdf>.
- Hossain, Z., Eisberg, G., & Shwalb, D.W. (2018). Grandparents' social identities in cultural context. *Contemporary Social Science*, 13(2), 275–287. doi:10.1080/21582041.2018.1433315.
- Iversen, T.N., Larsen, L., & Solem, P. E. (2009). A conceptual analysis of Ageism. *Nordic Psychology*, 61(3), 4–22. doi:10.1027/1901–2276.61.3.4).
- Jackson, R. (2003): *Germany and the Challenge of Global Aging*, Centre for Strategic and International Studies, Washinton D.C. (US).
- Kimuna, S. R., Knox, D., & Zusman, M. (2005). College Students' Perceptions About Older People and Aging. *Educational Gerontology*, 31(7), 563–572. doi:10.1080/03601270590962514.
- Knapp, J.L., & Stubblefield, P. (2000). Changing students' perceptions of aging: the impact of an intergenerational service-learning course. *Educational Gerontology*, 26(7), 611–621. doi:10.1080/03601270050200617.
- Megret, F. (2011). The Human Rights of Older Persons: A Growing Challenge. *Human Rights Law Review*, 11(1), 37–66. doi:10.1093/hrlr/ngq050.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York: McGraw-Hill.
- Peacock, E.W., & Talley, W.M. (1984). Intergenerational Contact: A Way to Counteract Ageism. *Educational Gerontology*, 10(1), 13–24. doi:10.1080/0380127840100102.
- Popham, L.E., Kennison, S.M., & Bradley, K.I. (2011). Ageism, Sensation-Seeking, and Risk-Taking Behavior in Young Adults. *Current Psychology*, 30(2), 184–193. doi:10.1007/s12144–011–9107–0.
- Rajan, S.I. (2002). Home Away from Home. *Journal of Housing for the Elderly*, 16(1–2), 125–150. doi:10.1300/j081v16n01_09.

- Sarah, L. (2000). *White Saris and Sweet Mangoes: Aging, Gender, and Body in North India*, California: University of California Press.
- Seefeldt, C. (1984). Children's Attitudes toward the Elderly: A Cross-Cultural Comparison. *The International Journal of Aging and Human Development*, 19(4), 319–328. doi:10.2190/dftb-2hcv-ahjw-6lfj.
- Sharps, M.J., Price-Sharps, – J.L., & Hanson, J. (1998). Attitudes of Young Adults toward Older Adults: Evidence from the United States and Thailand. *Educational Gerontology*, 24(7), 655–660. doi:10.1080/0360127980240703.
- Smith, M.L., Bergeron, C.D., Cowart, C., Ahn, S., Towne, S.D., Ory, M.G., Menn, M.A., Chaney, J. (2016). Factors associated with ageist attitudes among college students. *Geriatrics & Gerontology International*. doi:10.1111/ggi.12894.
- Social Justice Department, (2018). Retrieved from <http://sjd.kerala.gov.in/DOCUMENTS/Downloadables/OTHERS/25590.pdf>.
- Social Justice Department, (n.d.) Old Age Home. Retrieved from http://swd.kerala.gov.in/institutions.php?inst_id=MTg=.
- Sum, S., Emamian, S., Sefidchian, A. (2016). Aging Educational Program to Reduce Ageism: Intergenerational Approach. *Elderly Health Journal*. 2 (1), 33–38.
- Teater, B., & Chonody, J.M. (2015). Stereotypes and attitudes toward older people among children transitioning from middle childhood into adolescence: Time matters. *Gerontology & Geriatrics Education*, 38(2), 204–218. doi:10.1080/02701960.2015.1079708.
- United Nations (1948): *Universal Declaration of Human Rights*, 10th December, Paris.

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The Study of Resilience and Hope among Elderly People

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ABSTRACT

This study was intended to investigate the relationship between Resilience and hope in elderly people. The study sample comprised of 151 elderly people, age varying from 60 to 80 years, were selected using purposive sampling technique from different old age homes and families in Kanpur and Lucknow (U.P.). All the participants were measured individually with the Connor-Davidson Resilience Scale and Adult Hope Scale. T-test and Anova and Pearson correlation coefficient were used to analyse the data. The finding revealed that resilience and hope were significantly positively correlated among the elderly. Age, Education, Marital status, Elderly living status, numbers of a family member, spouse living status, occupation, and income were found associated with resilience and hope. Gender and duration in old age homes were not found a significant relationship with resilience and hope.

Keywords: Demography of elderly, Resilience, Hope

Ageing, progressive physiological and psychological changes in an organism that lead to senescence. This is very interesting that where old age is a stage of many difficulties and challenges for some, on another side it is an opportunity to live in their terms for those who have the family and social support. In the age of globalization, the

family system becomes different from our traditional Indian family system. Nowadays everyone wants to attest themselves in front of others. In the present time, nobody is living only for basic needs, i.e. food, clothes, and house while everyone tries to get higher to achieve needs like handsome earning, career achievement, social affiliation. Many of the studies found that elderly persons are not getting many basic facilities whatever they expected or deserve within the family system and many institutions. India is having many institutions and NGOs that are providing many basic facilities for elderly people. But very few are providing psychological help to elderly people. According to the Indian population census 2011, there are nearly 104 million elderly persons in India and it is expected to grow 173 million by 2026. The population Census 2011 data tell that the percentage of currently married women markedly lowered the percentage of currently married elderly men. After the age of 70 years, more than 60 per cent of women become widows. These facts showing that successful ageing in India is a big challenge.

The demography of elderly people is a very noteworthy component in successful ageing. This study is pointedly to see the impact of demography on the elderly ability to face adverse situation i.e. resilience and optimistic attitude to move forward i.e. hope.

Resilience

American Psychological Association (APA, 2015) explain resilience as “the method of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress – such as family and relationship problems, serious health problems or workplace and financial stressors. It means “bouncing back” from difficult experiences.” Stephanie, *et al.*, (2016) identified the common mental, social, and physical characteristics associated with resilience. High resilience has also been significantly associated with positive outcomes, including successful ageing, lower depression, and longevity.

Hope

Snyder *et al.* (1991) define hope as “a positive cognitive state based on a sense of successful goal-directed determination and planning to meet these goals.” Hope is one’s existing goal-directed thinking,

emphasizing the motivated pursuit of goals and the anticipation that those goals can be accomplished. Forbes *et al.*, (1994) insist on the importance of hope in healthy ageing and explain how Hope is essential for the adaptation to illness and to transcend the limitations of ageing. Hutcheon, *et al.*, (2000) explained that with hope elderly people can cope up rapidly with cardiovascular disease. Luthans, *et al.*, (2010) illuminated individuals perceive obstacles as challenges to overcome and can utilize their optimism to plan alternatives to achieve their end goal.

Objectives

1. To explore the relationship between Resilience and Hope.
2. To investigate the significance of Demography in the Resilience and Hope among elderly People.

Hypotheses

H01: Resilience and Hope are not correlated among Elderly people.

H02: Demography of elderly people does not create a significant difference in Resilience.

H03: Demography of elderly people does not create a significant difference in Hope.

Method

Sample

The sample covered 151 elderly in the age reaching from 60 to 80 years (mean age 70.83). 100 elderly for this study were randomly selected from two old age homes of Kanpur city, i.e. 'Vridhaashram', Kidwai Nagar, Kanpur, and Mahila Vridhaaashram, Shyam Nagar, Kanpur and 51 elderly, who were living with their families were also randomly selected.

Measures

1. *The Connor-Davidson Resilience Scale*: CD-RISC was developed by Connor & Davidson in 2003. It is one of the most common instruments to assess resilience amongst adults. Each item is rated

on a five-point scale (0 = not at all true to 4 = true nearly all the time). The total score ranges from 0 to 100, with higher scores corresponding to higher levels of resilience. Good psychometric properties (Cronbach's $\alpha = .89$; test-retest reliability: intraclass correlation coefficient = .87)

2. *Adult Hope Scale*: It was developed by Snyder, *et al.*, (1991). It is a 12-item measure of a respondent's level of hope. Each item is answered using an 8-point Likert type scale ranging from Definitely False to Definitely True and reliability of the scale is .80.

Statistical Analysis

The sample was collected through purposive sampling with parametric assumptions. T-test was used to find out the significant differences between two groups; Analysis of variance was used to find out the significant differences for more than two groups; Pearson correlation coefficient was used to measure the correlation between resilience and hope.

Results & Discussion

H01: Resilience and Hope are not correlated among Elderly people.

Table 1
Correlation between Resilience and Hope among elderly people

<i>Variables</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>R</i>
Resilience	151	62.83	12.73	0.741**
Hope	151	48.78	6.90	

** $p < 0.01$

Table 1 showing that moderate positive correlation ($r = 0.741$) found between resilience and hope among elderly people. The result indicates that resilience and hope are strongly correlated with each other. Duggal, *et al.*, (2016) explained Hope and resilience are closely aligned constructs, as they both include a tendency towards maintaining an optimistic outlook in the face of adversity. Hence the hypothesis is rejected.

H02: Demography of elderly people does not create a significant difference in Resilience.

Table 2
Status of Demography of Elderly People and Resilience

S.No.	Demographic variables	Subgroup	N	Mean	t/f
1	Gender	Male	84	63.08	0.267
		Female	67	62.52	
2	Age (Years)	60 – 64	20	63.6	0.271
		65–69	52	63.9	
		70–74	47	61.95	
		≥ 75 +	32	61.9	
3	Education	Till 10th	57	54.52	18.986**
		Intermediate	29	66.06	
		Graduation	41	66.82	
		≥ Post-graduation	24	71.83	
4	Marital status	Single	25	63.12	8.263**
		Married	56	67.71	
		widower	70	58.82	
5	Elderly living status	Old age home	100	57.7	8.352**
		Family setting	51	72.9	
6	Duration in old age home	6–12 months	54	57.68	0.335
		13–24 months	31	58.7	
		24+ months	15	55.66	
7	Family member	Nil	31	59	5.784**
		1–2	29	58.62	
		3–5	65	67.55	
		≥5	26	60.3	
8	Spouse	Live	61	67.81	9.780**
		Death	70	58.45	
		Unmarried	20	62.95	
9	Occupation	Pensioner	28	68.5	5.060**
		Working	20	65.95	
		Depended	103	60.68	
10	Income	Nil	109	60.77	9.281**

** p < 0.01

Table 2 specifies that Age, gender and residing duration in old age homes were not found any significant difference in the resilience of elderly people. On another side Education, Marital status, Elderly Living status, Number of Family members, Spouse, Occupation, and Income have made a significant difference in the resilience of elderly people at the level of 0.01. Data shows that the elderly with high education (71.83) showed better resilience than those who have only matric (54.52) or intermediate (66.06) education. The elderly without a life partner and single elderly people showed low resilience. The study showed that loneliness is significantly and positively correlated with anxiety and depression and negatively associated with resilience, self-efficacy, and psychological and physical health (Gerino *et al.*, 2017). Elderly people residing in old age homes showed lower resilience (57.7) than the elderly residing from family settings (72.9). It indicates that institutionalized elderly people comparative failed to bounce-back in difficult life conditions as elderly from family settings. The study exposed that non-institutionalized elderly scored high on state-trait resilience, whereas, institutionalized elderly were having more death anxiety and depressive symptoms (Azeem *et al.*, 2015). Result disclosed that economically independent elderly people are more able to face adversities effectively than dependent elderly. Elderly got pension has scored higher resilience than working elderly people. Outcomes direct that the income of the elderly has made a significant role in developing resilience. As per the results and discussion, it can be observed that eight out of ten demographic variables have made a significant difference in resilience among elderly people.

H03: Demography of elderly people does not create a significant difference in Hope.

Table 3
Status of Demography of elderly people and Hope

S.No.	Demographic variables	Subgroup	N	Mean	t/f
1	Gender	Male	84	48.71	0.133
		Female	67	48.87	

Cont'd...

Cont'd...

2	Age (Years)	60–64	20	50.55	3.665*
		65–69	52	50.67	
		70–74	47	46.61	
		≥75 +	32	47.78	
3	Education	Till 10th	57	44.7	15.648**
		Intermediate	29	50.1	
		Graduation	41	50.56	
		≥ Post-graduation	24	53.83	
4	Marital status	Single	25	48.96	5.58**
		Married	56	50.98	
		widowed	70	46.95	
5	Elderly living status	Old age home	100	46.5	6.372**
		Family setting	51	53.25	
6	Duration in old age home	6–12 months	54	46.75	1.767
		13–24 months	31	47.45	
		24+ months	15	43.6	
7	Family member	Nil	31	47.61	3.653*
		1–2	29	48.44	
		3–5	65	50.66	
		> 5	26	45.84	
8	Spouse	Live	61	51.11	6.869**
		Death	70	46.78	
		Unmarried	20	48.65	

** p < 0.01, *p < 0.05

Table 3 focused on the fact that the demography of elderly people has made a significant impact on their optimistic thought process. Same as resilience there was no significant difference found in hope between males and females. Demographic variables age, family members showed a significant difference in hope among life groups at the level of 0.05. Highest hope (50.67) was measured at the age group of 65–69 years, which became a decrease in older age groups. Education, marital status, elderly residing status, spouse, occupation, income have made a significant difference in hope of elderly at the level of 0.01. The elderly with high education showed higher hope than others. Education makes elderly people energetic that enables

them to cope with several problems and losses, overcome obstacles in life. Single and windowed elderly people disclosed lesser hope than married elderly. Elderly people are capable to continue functioning during chronic illness with their life partners. Elderly belongs from old age homes was scored 46.5 in hope where the elderly from family settings were secured mean score of 53.25. It showed that the elderly with family had a great optimistic sense about their future life whereas another elderly residing in old age homes were more apprehensive about their remaining life. Support of family is a very important pillar to develop a positive approach. This study found that the elderly residing with their family members were more hopeful about the future than those living alone. Old people develop hope when they feel the presence of their relatives around them (Gupta *et al.*, 2019). The elderly spend life with their life partner scored 51.11 in adult hope scale. It is higher than those pass their life single. Hope thrives in the context of a caring relationship.

It denotes that support of life partner makes significant count in devolving optimistic perspective about the present and future life. Many of the elderly are living life alone without the physical presence of their children and relatives when husband and wife care for each other. The study showed that low perceived spouse/partner support, as opposed to unavailability of the support, was associated with higher depression among women only, while high spouse/partner support was associated with lower depression for both genders (Choi *et al.*, 2017). Employment and income are very noticeable variable for recent life. This study indicates that occupied elderly people have positive perspectives about life which can be built the confidence to move forward in challenging old age. Much evidence has shown that financial strain influences the psychological health and well-being of the elderly (Chi & Chou, 2000). The work by Cheng and colleagues (Cheng *et al.*, 2002) specified that perceived economic sufficiency is the strongest predictor of elderly mental health. As per the results of this table, it can be specified that most of the demographic variables have made their significant difference in hope of elderly people and with hope elderly people were able to accomplish their desired goals and perceived ability to produce these routes.

Conclusion

After all the calculation and discussion it can be found that the relationship between resilience and hope was very strong and the correlation between them was positive. The study revealed that the demography of the elderly made a significant impression on the resilience and hope of the elderly. In Gender, there were not found significant differences in resilience and hope among the elderly. The study encouraged that education is a powerful tool to make any life more efficient and dynamic. The elderly with high education scored higher resilience and hope than other elderly. It is challenging for the elderly to living alone. Studies disclosed that elderly from old age homes and lonely old were unable to handle unpleasant feelings such as anger, pain or sadness. They established helplessness and get discouraged in the face of failure. On the other side, the elderly with family members have developed a better sense of dealing in an adverse state and they were capable to stay focused and think clearly. In India, where our cultural values are very strong and worship parents as God, many of the elderly are compel to living their life in old age homes or alone. We should make extra efforts for the betterment of the elderly.

References

- Azeem, F., & Naz, M.A. (2015). Resilience, death anxiety, and depression among institutionalized and noninstitutionalized elderly. *Pakistan Journal of Psychological Research*, 30(1).
- Cheng, Y.H., Chi, I., Boey, K.W., Ko, L.S. F., & Chou, K.L. (2002). Self-rated economic condition and the health of elderly persons in Hong Kong. *Social science & medicine*, 55(8), 1415–1424.
- Chi, I., & Chou, K.L. (2000). Financial strain and depressive symptoms among Hong Kong Chinese elderly: A longitudinal study. *Journal of Gerontological Social Work*, 32(4), 41–60.
- Choi, N.G., & Ha, J.H. (2011). Relationship between spouse/partner support and depressive symptoms in older adults: gender difference. *Aging & mental health*, 15(3), 307–317.

- Connor, K.M., & Davidson, J.R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76–82.
- Duggal, D., Sacks-Zimmerman, A., & Liberta, T. (2016). The impact of hope and resilience on multiple factors in neurosurgical patients. *Cureus*, 8(10).
- Forbes, S.B. (1994). Hope: An essential human need in the elderly. *Journal of Gerontological Nursing*, 20(6), 5–9.
- Gerino, E., Rollè, L., Sechi, C., & Brustia, P. (2017). Loneliness, resilience, mental health, and quality of life in old age: A structural equation model. *Frontiers in psychology*, 8, 2003.
- Gupta, S., & Singh, A. (2019). The Study of Subjective Well-Being and Hope among Elderly People. *Indian Journal of Gerontology*, 33(3).
- Hutcheon, S.D., Gillespie, N.D., McMurdo, M.E.T., & Struthers, A. D. (2000). HOPE and elderly patients attending geriatric day hospital. *The Lancet*, 356(9228), 511–512.
- INDIA, P. (2011). Census of India 2011 Provisional Population Totals.
- Luthans, F., Avey, J.B., Avolio, B.J., & Peterson, S.J. (2010). The development and resulting performance impact of positive psychological capital. *Human resource development quarterly*, 21(1), 41–67.
- Snyder, C.R., & Forsyth, D.R. (1991). *Handbook of social and clinical psychology: The health perspective*. Pergamon Press.
- Stephanie, N., Shirley, M., Kevin, H, Kathleen, A., Ellen, R.W., (2016): The Impact of Resilience Among Older Adults, *Geriatr Nurs*, (4) 266–72.
- Snyder, C.R, Harris, C., Anderson, J.R., Holleran, S.A., Irving, L.M., Sigmon, S.T., et al., (1991). The will and the ways, Development and Validation of an individual differences measure of hope, *Journal of Personality Social Psychology*, 60, 570–585.

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Perceived Health Status and Nutrition Status among Slum-dwelling Elderly in Pune City

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ABSTRACT

The effect of the demographic and epidemiological transition has influenced the health and nutritional well-being of the elderly. The nutrition and health status among the slum-dwelling elderly is compromised as compared to that of elderly living in a rural and urban setting. A cross-sectional descriptive study with a total of 427 elderly participants was carried out in the selected slums in Pune city. The tools used to assess the nutrition status included anthropometric measurements and to understand the health status; Perceived Health Status (PHS) was used.

Keywords: Elderly, Community-dwelling, Perceived health status, Nutrition status.

The elderly experience an array of problems that can be categorized as social, economic, health and psychological. Some serious issues that have to be addressed include poverty, social insecurity, food insecurity and health problems including malnutrition which is seen at an alarming rate. Other problems faced by the elderly are lack of income, irregularity in facilities providing any allowances causing an absence of finances, causing illness, health deterioration causing an inability to work and also loneliness (caused due to the abandonment of the family members (Singh, 2013; Kalia, *et al.*, 2014).

The Global Health and Ageing Report published in 2011 stated that epidemiological transition has led to a rise in diseases which include non-communicable diseases like heart diseases, cancer, diabetes, and other degenerative diseases. The burden of these diseases is around 86 per cent, 65 per cent, and 36 per cent high, middle and low-income countries. By 2030 the projection accounts for more than half of the disease burden in low-income countries and more than three fourth in middle-income countries. The ageing population is prone to NCDs having further implications on health and functionality for instance disability (WHO 2011).

World Health Organization (WHO, 2011) states the mechanisms linking age to health status as complex. Studies suggest 'age' as a powerful predictor of the state of an individual's health and a key factor associated risks of mortality and morbidity. Along with age, other factors include diversity in terms of health status/health trajectories, life course, environment (pollution/accessible infrastructure) and behaviors patterns. With those factors various predictors like inter alia, genetic factors, individual factors like occupation, income status, education cause variability in health status. The elderly are susceptible to infectious diseases due to the progressive deterioration of immune function with age (immunosenescence). Owing to sensory impairments an altered sense of taste or smell reduces the appetite of the elderly. Co-morbid risk factors also have delirious health consequences among this population. Dental issues like edentulous and periodontitis (inflammation of gums) lead to difficulty in chewing lead to reduced intake of food. Other physiological changes with ageing negatively affect nutritional status. Many elderly with health issues and existing morbidities have a monotonous diet which leads to poor intake adding to the nutritional risk. Metabolic disorders cause poor digestion and absorption of vital nutrients like iron and Vitamin B12. Limited mobility further causes the inability to access food and prepare meals thus reduce their food intake. Profound psychosocial and environmental changes like isolation, loneliness, depression, and care-dependence do affect food intake. With an increase in age, multimorbidity is witnessed among this population. The risk of malnutrition increases with respect to the above-mentioned underlying factors (WHO, 2015).

One of the major issues, the elderly suffer is malnutrition. Malnutrition is one of the core determinants of the health of the elderly. Malnutrition amongst the elderly can be due to varied reasons. It is often caused due to reduced sensory impairment like loss of taste and smell hampering the appetite. This phenomenon among the elderly is often under-diagnosed (Wells & Dumbrell, 2006). With increasing age, there are physical and physiological changes among the elderly affecting the dietary intake among them. There is a high prevalence of risky behavior among the elderly like the consumption of tobacco and alcohol (ibid). Some of the negative outcomes of malnutrition include muscle wasting, injuries and fractures, early institutionalization, increased health care costs and mortality due to NCDs. The elderly are unable to access food, due to the deteriorated health condition leading to lower consumption of food than the recommended dietary allowance. Studies suggest that impairment in terms of Activities of Daily Living (ADL) or Instrumental Activities of Daily Living (IADL) affects nutritional status (Roberts, *et al.*, 2007). Gastrointestinal issues leading to lesser absorption of nutrients, medication side effects impacting nutrient metabolism

Poverty and related complexities like food security and nutrition transition (change in the pattern of dietary intake) have led to a nutritional burden among the population causing compromised health and nutrition status leading to diet-sensitive chronic diseases. While understanding chronic health disease burdens understanding health status is important. Studies suggest Self-reported health (SRH) as one of the effective and reliable methods for assessment of health status (Clark & Ryan, 2006; Kuhn, *et al.*, 2006). Another study suggests the unreliability of this measure for health status assessment (Dowd & Todd, 2011). SRH is influenced by psycho-social and cultural context affecting the perception (pain and sensation), functional ability (signs and symptoms of diseases, health problems) and health expectation (preventive and risk behavior) of a person. The social environment in terms of residence setting is one of the important factors which need to be taken into consideration as with different income groups the kind of living arrangement the elderly have is varied and has a potential effect on their health and nutrition status. This study was carried out in the slum dwelling. There are very few studies that have explored the

nutrition and health status of the elderly in the slum-dwelling setting and thus throws light for further exploration.

Method

Objective and Research Questions

The broad objective of the study was to assess the health and nutrition status among the urban slum-dwelling elderly population.

What is the level of nutrition status among the elderly?

What is the level of perceived health status (PHS) among the elderly?

Research Design and Sampling

A cross-sectional descriptive study design using a survey method was carried out for data collection as this survey was carried out at one point in time. The cross-sectional survey method primarily captures a 'snapshot' of a population; it measures the exposure and health outcome of a given population at a given geographical area at a given time. The Survey was conducted using a structured questionnaire to explore the health and nutrition status by understanding the trends, attitudes, and scores of the respondent in the study. The data (scores or categorical) gives a meaningful and valid interpretation.

Health and Nutrition Assessment tools

To understand the health status a self-reported health status scale which was initially 4 point scale (excellent, good, average and bad) was changed to perceived health status as a 3 point scale (Good, average and bad). The current symptoms/complaints in the last 15 days and illness profile (to understand prevalence) were enquired by understanding the disease was in the past/present. Nutrition plays a crucial role in the ageing process, assessment of anthropometry was used as a measure. In this study height and weight were measured. Height was measured using a wall-mount and regular measuring tape. The wall mount tape was affixed on the wall; the participant was made to stand barefoot with heels and toes together. The back of the head, shoulders, and buttocks was supposed to touch the wall. A metallic scale was lowered from the height compressing the hair and finding the top of the head and the reading was measured with was closest to 0.1cm and height

was recorded. Weight was measured using a calibrated electronic weighing scale. The participant had to stand straight with barefoot on the weighing scale. Before each weight measurement, it was made sure that the scale was set to zero reading to avoid errors. This was followed by calculating the Body Mass Index (BMI). BMI is used as an indicator to measure nutritional status which is also suggested by the World Health Organisation (WHO). BMI proves to be a certain parameter for indicating malnutrition status among the elderly.

Analysis and Results

The data were collected and entered into SPSS in the pre-designed coded variables. It was entered into SPSS version 20.0; BMI was calculated and coded further according to the WHO classification. The data were analysed using statistical techniques like percentages and chi-square. Analysis of the continuous variables was done by calculating the mean and standard deviation. Statistical significance was set at 95 per cent ($p < 0.05$).

Demographic

The table below describes the demographic profile of the study population.

Table 1.1
Demographic Factors among the Slum-dwelling Elderly

<i>Variables</i>	<i>Male</i>		<i>Female</i>		<i>Total</i>	
	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>	<i>%</i>	<i>No</i>
Gender	42.1	185	57.9	246	100	431
Age group						
60–69 yrs	23.2	100	36.9	159	60.1	259
70–79 yrs	16	69	13.9	60	29.9	129
80+ yrs	3.7	16	6.3	27	10	43
Education status						
Primary	9	39	5.3	23	14.4	62
Secondary	13.5	58	6	26	19.5	84
High school and above	8.4	36	3	13	11.4	49

A total of 185 males and 246 females were interviewed for the study. The mean age of the respondent was 68.5 years ($SD=7.4$) In this study age has been classified into three categories 60–69 years, 70–79 years and 80 and above as there were fewer participants and thus they are clubbed in one category. The minimum and maximum age among the elderly studied ranged from 60 to 104 years. In the first category which was about 60 per cent of the sample, it was there were more females (36.7%) than males (23.3%) whereas in the second category males (16%) outnumbered the females (14%). An interesting observation was that elderly from the age of 80+ year's age group had more females 6.3 per cent than males which were 3.7 per cent. The finding supports the phenomenon of 'feminisation of ageing' wherein there is a higher number of females as compared to that of males.

Education Status

In this study, more than half of the elderly were illiterate accounting to 54.8 per cent among which females were higher in number (42.7%) than males (12.1%). About 19.5 and 14.4 per cent of them had acquired secondary and primary education respectively with a higher proportion of males as compared to that of females. A total of 11.4 per cent of the elderly had completed the education of high school and above which included graduation and diploma. The role of gender on education status has always been significant with women to expect to be handling domestic and care giving chores thus they require lesser education qualification. In the slum/community setting poverty and access to education for women have been another factor contributing to a higher number of illiterate women to that of men. Gender and education status had a highly significant relationship. ($\chi^2(3, N=431) = 94.19, p= 0.000$)

Anthropometry

In the study, anthropometric measurements were made using standard anthropometric techniques. The height and weight were measured to the nearest 0.1 cm and 0.1 kg respectively. The table below describes the mean and range of height, weight, and BMI among the sample population.

Table 1.2
Mean and Range in the Anthropometric Measurements among the Slum-dwelling Elderly

	<i>Men (mean)</i>	<i>Women (mean)</i>	<i>Total Mean</i>
Weight	60.94 ± 13.31 Range: 18.6–106.2	55.19 ± 13.28 Range: 25.3–115	57.65 ± 13.28 Range: 18.6–115
Height	160.83 ± 11.85 Range: 142.7–178.8	146.75 ± 11.83 Range: 119.3–165.3	156.43 ± 11.82 Range: 119.3–178.8
BMI	24.89 ± 5.6 Range: 14.2–54.16	26.84 ± 5.58 Range: 13.82–44.92	26.0 ± 5.59 Range: 13.82–54.16

The weight ranged from 18.6 kilograms to 115 kilograms with the lowest weight seen among men. The average weight of the elderly men in this study was almost 61 kilograms with an *SD* of 13.3 kgs and 55.19 kgs with an *SD* of 13.2 kgs in the case of women. The average height of the elderly man in this study was almost 160.8 meters with an *SD* of 11.85 meters and 146.7 meters with an *SD* of 11.8 meters. Considering the BMI it was computed as weight in kg divided by height in m². The average BMI was 26 kg/m² with an *SD* of 5.5kg/m². The BMI for men and women was 24.89kg/m²*SD* 5.6kg/m² and 26.84kg/m²*SD* 5.5kg/m² respectively. The lowest and highest BMI was 13.82kg/m² and 54.16 kg/m² respectively.¹

Nutrition Status

In this study, the nutrition status described based on thecalculated Body Mass Index (BMI) and comparing with WHO classification. The following table describes the BMI among the elderly population.

Table 1.3
Nutrition Status among the Slum-dwelling Elderly

<i>BMI Classification</i>	<i>Reference value (ICMR)</i>	<i>Male</i>		<i>Female</i>		<i>Total</i>	
		%	No	%	No	%	No
Underweight	< 18.49	4	17	2.6	11	6.6	28
Normal	18.50–24.99	17.3	74	20.4	87	37.7	161
Overweight	25.00–29.99	15.9	68	16.9	72	32.8	140
Class I obesity	30.00–34.99	4.4	19	12.9	55	17.3	74
Class II obesity	35.00–39.99	0.7	3	3.3	14	4	17
Class III obesity	> 40.00	0.5	2	1.2	5	1.6	7

χ^2 (5, N=427) = 20.062, p= 0.00

Out of the entire sample, about 6.6 per cent elderly, 32.8 per cent, 17.3 per cent, 4 per cent, and 1.6 per cent were underweight, overweight, Class I obese, Class II obese and Class III obese respectively, thus had a compromised nutritional status. Only 37.7 elderly belonged to the normal range. Out of those belonging to the normal BMI category, 20.4 per cent were females and 17.3 per cent were males. Out of the 6.6 per cent elderly were undernourished/underweight category, 4 per cent were males and 2.6 per cent were females. From the above table, it can be observed that in all the over nutrition categories there are a greater number of females as compared to that of males. Nutrition status had a statistically significant relationship with gender.

Perceived Health Status (PHS)

In this study, the elderly were asked about their understanding and perception of their current health status. The underlying table describes the PHS among the elderly concerning gender.

Table 1.4
Perceived Health Status among the Slum-dwelling Elderly

Variable	Codes	Males		Females		Total	
		%	No	%	No	%	No
Perceived health status	Good	15.8	68	13	56	28.8	124
	Average	15.1	65	25.8	111	40.8	176
	Bad	12.1	52	18.3	79	30.4	131
$\chi^2 (2, N=431) = 10.322, p = 0.00$							

A total of 28.8 per cent reported having good health status with a higher number of males (15.8%) as compared to that of females (13%) on the contrary about 30.4 per cent had a 'bad' health status with a higher number of females (18.3%) to that of males (12.1%). About 41 per cent reported having an average health status. There is a statistically significant relationship between PHS and gender.

Table 1.5
Relationship between Nutrition Status and Perceived Health Status among the elderly

Nutrition status	Gender	Perceived health status			Total
		Good	Average	Bad	
Underweight	Male	0.9 (4)	1.8 (8)	1.1 (5)	3.9 (17)
	Female	0.6 (3)	1.1 (5)	0.6 (3)	2.5 (11)
Total		1.5 (7)	2.9 (13)	1.7 (8)	6.4 (28)
Normal	Male	5.7 (25)	6.4 (28)	4.8 (21)	17.0 (74)
	Female	4.3 (19)	9.8 (43)	5.7 (25)	20.0 (87)
Total		10 (44)	16.2 (71)	10.5 (46)	37 (161)
Overweight	Male	6.9 (30)	5.5 (24)	3.3 (14)	15.6 (68)
	Female	3.9 (17)	7.8 (34)	4.8 (21)	16.5 (72)
Total		10.8 (47)	13.3 (58)	8.1 (35)	22.1 (140)
Class I obesity	Male	2.0 (9)	1.1 (5)	1.1 (5)	4.3 (19)
	Female	2.7 (12)	5.7 (25)	4.1 (18)	12.6 (55)
Total		4.7 (21)	6.8 (30)	5.2 (23)	16.9 (74)
Class II obesity	Male	0	0	0.6 (3)	0.6 (3)
	Female	1.1 (5)	0.6 (3)	1.3 (6)	3.2 (14)
Total		1.1 (5)	0.6 (3)	1.9 (9)	3.8 (17)
Class III obesity	Male	0	0	0.4 (2)	0.4 (2)
	Female	0	0.2 (1)	0.9 (4)	1.1 (5)
Total	0		0.2 (1)	1.3 (6)	1.5 (7)

(*The above table has slight differences in percentages and numbers²)

It is observed that in the underweight category which constituted about 6.4 per cent; out of the 1.5 per cent and 2.9 per cent reported being of 'good' and 'average' PHS. In the normal category of BMI classification, which was about 37 per cent, it was observed that 10.5 per cent elderly reported a 'bad' PHS. In the overweight category which was about 22 per cent 10.8 per cent and 8, .1 per cent reported 'good' and 'bad' PHS respectively. Similar trends were observed in the Class I and Class II obesity category. Understanding the effect of nutrition status on health status is an important part of this study. However, PHS did not vary significantly with nutrition status.

Diseases

The disease profile was assessed by asking the elderly if they were suffering from a particular disease in the last 6 months to a year. With the ageing population, there is a co-existence of more than one disease at times which has a compromised effect on the health and nutrition status. The following table describes the disease pattern and its effect on PHS and nutrition status (NS).

Table 1.6
Diseases and Effect on PHS and NS

<i>Disease</i>	<i>Prevalence (%)</i>			<i>Significance (p-value)</i>	
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>PHS</i>	<i>NS</i>
BP	16.9	30.8	47.5	0.00	0.00
Irregular heartbeat	6.1	12.1	18.2		0.00
Stroke	3.7	4.0	7.7	0.00	
Chronic bronchitis	1.9	1.2	3.1		
Asthma	5.6	10.0	15.6	0.00	
Arthritis/rheumatism	6.0	11.4	17.4	0.01	
Osteoporosis	20.2	33.9	54.0	0.01	
DM	9.3	9.2	18.5		
Depression	1.6	3.1	4.6	0.01	
Glaucoma	13.7	28.5	42.3	0.00	
Weight loss	6.8	9.2	16	0.00	
Weight gain	2.4	3.3	5.7	0.00	0.00
Infectious diseases	4.1	5.6	9.7	0.00	

From the above table, it can be observed that most of the diseases (BP, Stroke, Asthma, Arthritis, Osteoporosis, Depression, Glaucoma, Weight loss, weight gain, and infectious diseases) had a statistically significant relationship with the PHS. Diseases that had a statistically significant relationship with nutrition status included BP, irregular heartbeat and weight gain.

Discussion

A similar study was carried out among the elderly living in rural areas of West Bengal using Mini Nutrition Assessment (MNA) and it

showed that about 29.4 per cent elderly were malnourished and 60.4 per cent were at risk of malnutrition (Lahiri, *et al.*, 2015). The nutritional status of the elderly in Mysore confirmed 15.6 per cent were malnourished, 52.5 per cent at risk of malnutrition and 31.9 per cent to be adequately nourished (Kshetrimayum, *et al.*, 2012). In comparison to this study, the present study confirmed to have 62.3 per cent elderly to be malnourished one reason for the higher prevalence of malnutrition is the slum-dwelling setting where almost all the elderly belonged to lower socioeconomic status. Similar results were observed by a large scale study ($n = 1,968$, male = 1,098 and women = 87) carried out in Mexico among the elderly benefiting from social security scheme showed about 62.3 per cent elderly belonged to the overweight category (Sanchez-Garcia, *et al.*, 2007). In another study conducted in a community setting in Dehradun, Uttarakhand among the elderly ($n = 122$) the BMI showed about 48.5 per cent having a normal BMI range and 35.5 per cent elderly were in the underweight category, in the same study it was observed that 33 per cent elderly had blood pressure and 8 per cent had diabetes whereas in this study about 47.5 per cent elderly had blood pressure and 18.5 per cent had diabetes (Saxena, *et al.*, 2012).

The previous study assessed the relationship among self-reported health status and BMI among poor elderly ($n = 147$) from suburb town in Andhra Pradesh concluded lower BMI was associated to 'poorer' health status and elderly having 'good/fair' health status had normal range of BMI (Reddy & Reddy, 2004). In contrast to this study in the present study about 6.6 per cent elderly have BMI lower than 19 kg/m² (underweight category) yet 1.5 per cent and 2.9 per cent reported 'good' and 'average' PHS, 37.7 per cent elderly reported BMI of normal range yet 10.5 per cent reported 'bad' PHS and 55.7 per cent elderly belonged to the over nutrition category (overweight, Class I, Class II and Class III obesity) yet 16.7 per cent reported 'good' PHS. It thus rejected the alternative hypothesis of good nutrition status (normal BMI) having better PHS. A study in Japan concluded about 12.6 per cent elderly at risk of malnutrition and associated factors to nutrition status included depression and lower attitude to health score (Iizaka, *et al.*, 2008). In this study, a statistically significant association

was observed among nutrition status and blood pressure, irregular heartbeat and weight gain.

Considering the role of gender in the nutrition status it can be seen that both the genders are equally susceptible to malnutrition. An interesting finding in this study is more males were underweight and females were obese. Previous research suggests nutrition and health have a cause and effect relationship, but in this study, there was no statistically significant relationship between them and thus it is very important to carry out similar studies with inclusion of biochemical parameters and life history of elderly and its effect on health and nutrition status. On the contrary, a similar study was carried out in Pune using the SAGE questionnaire among 321 elderly, the factors associated with SRH include age, SES, functional ability and smoking or consumption of tobacco. Other factors like social economic health inequality, comorbidities, frailty, disability, functional decline, malnutrition, and social isolation lead to major health problems leading to the progression of diseases among the elderly population. Thus examining health from a multidimensional perspective is essential (Hirve, *et al.*, 2014).

Conclusion

Ageing is a process that begins right from the time of birth and the process cannot be altered, but it can be regulated and monitored for a better health outcome. In this study, more than half of the sample were malnourished in terms of undernutrition and overnutrition. The nutrition status has been very poor.

Considering the role of gender in the nutrition status it can be seen that both the genders are equally susceptible to malnutrition. An interesting finding in this study is more males were underweight and females were obese. Previous research suggests nutrition and health have a cause and effect relationship, but in this study, there was no statistically significant relationship between them and thus it is very important to carry out similar studies with inclusion of biochemical parameters and life history of elderly and its effect on health and nutrition status. As this study was carried out in the community, more such empirical research needs to be done to assess nutrition status among the elderly living in different pockets of the city to understand

the overall picture. Geriatric Nutrition Assessment should be included and monitored from time to time and thus calls for further research in the field of geriatric nutrition. Regular monitoring and intervention can improve the health outcomes of the elderly. There is a dire need for funds for the same. This also calls for a revision of policies and schemes concentrating on the geriatric population. As this study was carried out in the community, more such empirical research needs to be done to assess nutrition status among the elderly living in different pockets of the city to understand the overall picture. Geriatric Nutrition Assessment should be included and monitored from time to time and thus calls for further research in the field of geriatric nutrition. Regular monitoring and intervention can improve the health outcomes of the elderly. There is a dire need of funds for the same. This also calls for a revision of policies and schemes concentrating on the geriatric population.

References

- Clarke, P. M., & Ryan, C. (2006) Self-reported health: reliability and consequences for health inequality measurement. *Health Economics*, 15 (6), 645.
- Dowd, J. B., & Todd, M. (2011). Does Self-reported Health Bias the Measurement of Health Inequalities in US Adults? Evidence Using Anchoring Vignettes From the Health and Retirement Study. (M. Silverstein, Ed.) *The Journal of Gerontology Series B: Psychological Sciences and Social Sciences*, 66 (4), 478–490.
- Hirve, S., Oud, J. H., Sambhudas, S., Juvekar, S., Blomstedt, Y., Tollman, S., et al. (2014) Unpacking Self-Rated Health and Quality of Life in Older Adults and Elderly in India: A Structural Equation Modelling Approach. *Social Indicators Research*, 117 (1), 105–119.
- Iizaka, S., Tadaka, E., & Sanada, H. (2008). Comprehensive assessment of nutritional status and associated factors in the healthy, community-dwelling elderly. *Geriatric Gerontological International, Epidemiology, Clinical Practice and Health*, 8, 24–31.

- Kalia, M., Virk, A., Guota, B. P., & Singh, J. (2014) Assessment of Malnourishment In Elderly Of Rural Punjab. *Healthline*, 5 (2), 24–28.
- Kshetrimayum, N., Reddy, C. V., Siddhana, S., Manjunath, M., Rudraswamy, S., & Sulavai, S. (2012). Oral health-related quality of life and nutritional status of institutionalized elderly population aged 60 years and above in Mysore City, India. *Gerontology*, 30, 119–126.
- Kuhn, R., Rahman, O., & Menken, J. (2006) Survey Measure of Health: How Well do Self-Reported and Observed Indicators Measure Health and Predict Mortality. In R. Kuhn, O. Rahman, & J. Menken, *Aging in Sub-Saharan Africa: Recommendation for Furthering Research*. National Academies Press (US).
- Lahiri, S., Biswas, A., Santra, S., & Lahiri, S. K. (2015). Assessment of nutritional status among elderly population in a rural area of West Bengal, India. *Indian Journal of Medical Science and Public Health*, 4 (4), 569–572.
- Reddy, K. K., & Reddy, B. K. (2004). Interaction among body composition, self-rated health and functional status of the elderly in an Indian population. *Asia Pacific Journal of Clinical Nutrition*, 13 (1), 78–85.
- Roberts, K. C., Wolfson, C., & Payette, H. (2007) Predictors of Nutritional Risk in Community-dwelling Seniors. *Canadian Journal of Public Health*, 331–336
- Sanchez-Garcia, S., Garcia-Pena, C., Duque-Lopez, M. X., Juarez-Cedillo, T., Cortes-Nunez, A. R., & Reyes-Beaman, S. (2007). Anthropometric measures and nutritional status in a healthy elderly population. *BMC Public Health*, 7 (2), 1–9.
- Saxena, V., Kandpal, S. D., & Bansal, S. (2012). Health Status of Elderly – A Community Based Study. *Indian Journal of Community Health*, 24 (4), 269–275.
- Singh, C. (2013, December) Ageing Population in India: Select Economic Issues (Working Paper No:442). Bangalore, India: Indian Institute of Management-Bangalore.

- Wells, J. L., & Dumbrell, A. C. (2006) Nutrition and aging: assessment and treatment of compromised nutritional status in frail elderly patients. *Clinical Interventions in Aging*, 1 (1), 67–79.
- World Health Organisation (2011): *Global Health and Aging*. National Institute of Aging, National Institutes of Health, US Department of Health and Human Services.
- World Health Organization, (2015) *World report on ageing and health*. Geneva: World Health Organisation (WHO) Press.

Notes

1. The weight of the respondent was 106.2 kilograms and height was 143.4 centimeters.
2. About 4 participants were unable to stand thus BMI was not calculated (n = 427).

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Cognitive Functioning among Elderly People Living in Old-age Homes and Family Setup

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ABSTRACT

The present study was planned to study the level of cognitive functioning among 240 elderly people, (120 elderly residing in old age homes and 120 elderly residing with family setup) an equal number of male and female respondents from Jaipur and Udaipur cities of Rajasthan. The Mini-Mental Status Examination Scale (MMSE) was used to assess the level of cognitive functioning. The test was administered individually. It was found that Living Status (Old age homes and Family Setup) has a significant effect on cognitive functioning. Sex (Male and Female) difference also has a significant effect on cognitive functioning. The interaction between Sex and Living Status has a significant effect on cognitive functioning. The obtained results were discussed in the light of various problems faced by elderly people in society.

Key words: Elderly, Dementia, Cognitive Functioning, MMSE.

Dementia is a syndrome characterized by deterioration in cognitive functions. The important cognitions which are affected not only include memory and the ability to think but the persons also lose track of the orientation of time and space, the person is not able to understand messages clearly, the ability of speech, basic mathematical abilities, decision making are also affected. The person remains

conscious but the functional ability is affected due to cognitive functions' deterioration. Sometimes, the social behaviour of the person changes, the ability to regulate one's emotion is also hampered. WHO (2017) has recognized dementia as a public health priority and has endorsed the *Global action plan on the public health response to dementia 2017–2025*.

Dementia is one of the major causes of disability and dependency among older people worldwide. It not only affects the elderly people but also influences the families of the elderly who are the main caregivers of dementia patients. The early symptoms of dementia include losing track of time, forgetfulness which is progressive in nature and symptoms such as becoming forgetful of events and peoples' names, inability to take personal care, not understanding things, and repeated questioning are noted. At the later stage, the person has difficulty recognizing family and friends, becomes unaware of time and place, and becomes more dependent on family or caregivers for their day-to-day needs.

Status of Dementia

According to a report by the World Health Organization, approximately 10 million new dementia cases are reported every year. According to Das, *et al.*, (2012), the elderly population is increasing in developing nations and these nations would have to see more cases of dementia in the next few decades. The infrastructure to handle such cases needs to be strengthened in low and middle-income countries. The risk factors of dementia need to be identified and appropriate steps need to be taken to prevent dementia from further spreading. The public also needs to be made aware of the appropriate lifestyle and other changes to prevent declines in cognitive functions in the form of dementia.

According to Ferri, *et al.*, (2005), every 20 years, the number of people suffering from dementia will double. According to a report, this number would reach 42.3 million in 2020 and would further increase to 81.1 million in 2040. The countries which suffer the most from dementia are India, China, and the countries in South Asia. Developed reasons will also suffer but it would be the least among all the nations. Based on World population data for the year 2001, almost

24.3 million are facing problems related to dementia and every year new 4.6 million cases are reported

Mild Cognitive Impairment

Mild cognitive impairment (MCI) and dementia have some differences in degree. MCI can be understood as the mid-stage of normal ageing and dementia. Das, *et al.*, (2007) stated that if the cases of MCI are taken care of through appropriate interventions, people can get back to their normal cognitive functional capabilities. If not done so, these MCI cases will convert into dementia cases.

Peterson, *et al.*, (2010) stated that the community prevalence of MCI in India is about 14.89 per cent. An India study studies the conversion of MCI to dementia and found that the rate of conversion is the same as it is in western nations. Banerjee, *et al.*, (2008) had mentioned that this rate of conversion of MCI to dementia is between 8 to 14 per cent. According to Jorm & Jolley (1998), the number of dementia cases doubles every 5 years. It increases more in the age of 65 to 90 years.

ADI, (2015) stated in the World Alzheimer Report 2015 that there are currently around 46.8 million peoples in all over the world that are living with dementia, and a projection of double the numbers in every 20 years, that may increase up to 74.7 million by the year 2030 and approximately 131.5 million by end of 2050. Countries such as China, the United States of America, India, Japan, Russia, France, and Germany have more than 1 million people suffering from dementia. In China, this number is 9.5 million, whereas, in the US and India, this number is approximately 4 million. According to global trends in a report by the World Health Organization (2017), it is implied that every 3.2 seconds, one new dementia case is reported.

Method

Research Objectives:

- A. To assess the level of cognitive functioning among the elderly people.
- B. To study the effect of Sex (Male and Female) on cognitive functioning.

- C. To study the effect of living status (Old age homes and Family Setup) on cognitive functioning.

Hypotheses

1. There is no effect of Sex on the level of cognitive functioning.
2. The cognitive functioning of elderly living in a family setup would be better than those living in old age homes.

Participants

The locale of the present study was confined to the Jaipur & Udaipur districts of Rajasthan (India). Purposive random sampling technique was used for sample selection. The sample consisted of 240 elderly people selected as per the factorial design, in which 120 elderly were living in the old age home and 120 elderly were living in the family setup. Both old age homes and the family group consisted of an equal number of male and female elderly people. The age of the elderly people was kept between 60 to 70 years. For selecting the elderly sample from the old age homes, initially, four old age homes were selected from the selected districts. The permission was obtained from the old age homes for data collection. Out of 330 elderly persons living in the four old age homes, 120 elderly inmates of old age homes were selected. Among the selected sample 8 men and 10 women were not able to answer due to illness. Similarly, 7 men and 15 women were not available for giving their responses. Hence, a sampling plan with replacement was incorporated.

Table 1
2×2 Factorial Design

		<i>Living Status</i>	
		<i>Old Age Homes</i>	<i>Family Setup</i>
Sex	Male	N=60	N=60
	Female	N=60	N=60

Measures

The present research attempts to study the effect of sex and living status on cognitive functioning and depression. The level of cognitive

functioning was assessed with the help of Mini Mental State Examination (MMSE) developed by Folstein, 1975, the details of which are given below.

MMSE (Mini Mental State Examination)

The original MMSE (Folstein, *et al.*, 1975) was intended as an aid to the clinical cognitive mental state examination. It is one of the most widely used brief screening instruments for cognitive impairment.

Registration: this task assesses the examinees' ability to attend to and repeat three words. (EGG, CONFIDENT and AFTER)

The orientation of time: what day is today, year, season, the month of the year, day of the week, date.

Orientation to place: It includes items seeking information about the place where the person is, name of city, building etc.

Recall ask the examinee, here, the respondent is asked words that were earlier communicated to remember. *Attention and Calculation:* This focuses on the basic mathematical ability such as asking to subtract a number from 100 and so on.

Naming: Point to your eye (on the red form, your mouth) and ask "What is this?"

Repetition: this single-n item task tests the examinee's ability to repeat a sentence. Say "Now I am going to ask you to repeat what I say. Ready? It Is A Lovely, Sunday But Too Warm."

Comprehension: Show examinee the geometric figures stimulus page. "Look at these pictures and point to the circle, then point to the square, and then point to the triangle."

Reading: Here, the respondent is asked to read some instruct and follow instructions such as the instruction of opening the mouth.

Writing: The respondent asked to write a sentence where he/she lives.

Drawing: The respondent is given design and asked to copy the design. This tests the motor skills of the respondent.

Data Analysis: After data collection, scoring and data entry was done. Then the data were analyzed with the help of SPSS. Mean,

Standard deviation (S.D.), and F-value were calculated. Two-way Factorial ANOVA was used for calculating F-values.

Results

Cognitive Functioning

A two-way ANOVA was conducted to examine the effect of Sex and Living Status on Cognitive functioning among elderly people. There was a statistically interaction between the effect of Sex and living status on cognitive functioning, $F(1, 236) = 14.04$; $p = .000$

Table 1.2
Mean and SD of Cognitive Functioning

<i>Sex</i>	<i>Living Status</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
Male	Family Setup	24.15	5.59	60
	Old Age homes	18.43	6.58	60
	Total	21.29	6.72	120
Female	Family Setup	25.28	8.21	60
	Old Age homes	13.25	5.31	60
	Total	19.26	9.16	120
Total	Family Setup	24.71	7.02	120
	Old Age homes	15.84	6.50	120
	Total	20.27	8.08	240

The results indicate that effect of Sex (Male and Female) on cognitive functioning is statistically significant at .05 level whereas the effect of Living Status (Old age homes and family setup) is significant at .01 level.. The cognitive functioning scores of male elderly are better in comparison to female elderly. Similarly the cognitive functioning of elderly living in family setup is better in comparison to the elderly living in old age homes. The interaction effect of Sex and Living Status is also significant at .01 levels. These results tell that elderly male living in family setup have better cognitive functioning among the four groups in the 2 x 2 factorial design.

Table 1.3
ANOVA Table: Cognitive Functioning

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model	5570.479a	3	1856.826	43.569	.000
Intercept	98698.704	1	98698.704	2.316E3	.000
Sex	246.037	1	246.037	5.773	.017**
Living	4725.938	1	4725.938	110.891	.000*
Sex * living	598.504	1	598.504	14.044	.000*
Error	10057.817	236	42.618		
Total	114327.000	240			
Corrected Total	15628.296	239			

* significant at .01 level ** significant at .05 level.

Hypotheses 1 is rejected as there is significant difference between the level of cognitive functioning among male and female elderly people. Hypothesis 2 is accepted as the cognitive functioning of elderly living in a family setup and those living in old age homes significantly differs..

Discussion

The elderly people are facing various problems. As the old age approaches, the person's ability to function for fulfilling economic, social and physical needs declines. In many countries, the non-feasibility of pension funds is a big issue. The elderly have to face physical and emotional abuse when they are not able to afford their expenses on daily maintenance needs. It has been reported that many people between 15–64 years of age are either unemployed and do not contribute to social pensions schemes/funds. This leads to a paucity of funds in the pension fund and becomes a cause of concern for the elderly people. Migration for employment is another factor that contributes to elderly problems. As the adult members of the family need to migrate to other cities/states hence the elderly have no other option but to live alone in their native places. It results in various challenges among elderly people on various fronts of life. The increase in the number of nuclear families has worsened the scenario.

In such cases, where elderly opt or are forced to opt for an option of residing in an old-age home, it has been noted that there is a lack of a

sufficient number of old age homes at the global level. Leave aside the growing elderly population, the number of old age home is not enough to take care of the existing elderly people who need old-age home shelter. The number of people seeking old-age homes is also on the rise hence there is an emergent need of establishing quality old-home homes that provide shelter, food and care for these elderly. If we look at the old-age homes statistics, a study conducted in the year 2018 by Samarth, a non-profit organization, stated that there are 97000 beds at old age homes in India. This demand is going to reach 0.9 million in the next 10 years.

The attitude of the younger generation towards their elderly members of the family is another issue. Due to the rise in inflation, competitive job prospects, changes in priorities, or for various other reasons, the younger people are abstaining from the responsibility of taking care of their elderly loved ones. While facing emotional and social neglect, lack of money for personal care, lack of caretakers, if the elderly face problems such as dementia, the situation becomes gruesome for them. All these factors also lead to depression among elderly people.

Although an interesting notion of 'old age' is related to the attitude and activity level of the elderly. People's attitude makes them feel they are of which age. People can become old in their 40s and there are people whom we cannot consider old even in their 80s and 90s. A society framework must exist in which every elderly can remain active and can have a positive attitude towards their lives.

Global Response to Dementia: Need of the Hour

According to the World Health Organization (2017) report, about 9.9 million people develop dementia each year and the majority of them are from low and middle-income countries. Dementia is the second leading cause of death and disability among the elderly. The social and economic impact of dementia is such that the estimated economic cost imposed is approximately US \$ 818 billion per year globally which is 1.1 per cent of the global GDP. Looking at the alarming rate of increase in dementia cases and the economic burden, World Health Organization has also adopted the global action plan on the public health response to dementia. Looking at the increasing cases of elderly and the cases of dementia among the elderly, a combined action plan has to be

implemented among all parts of the world so that the coming generations of elderly people can prevent the menace of dementia.

References

- Banerjee T.K., Mukherjee C.S., Dutta A., Shekhar A. & Hazra A. (2008) Cognitive dysfunction in an urban Indian population- some observations. *Neuroepidemiology*;31:109–14.
- Das, S.K., Pal S. & Ghosal M.K. (2012). Dementia: Indian scenario. *Neurol India* (serial online) (cited 2020 Jan 22); 60:618–24. Available from <http://www.neurologyindia.com/text.asp?2012/60/6/618/105197>
- Das S.K., Bose P., Biswas A., Dutt A., Banerjee T.K., & Hazra A. (2007) An epidemiologic study of mild cognitive impairment in Kolkata, India. *Neurology* 2007;68:2019–26.
- Folstein, M.F., Folstein, S.E., McHugh, P.R. (1975): Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res.* Nov;12(3):189–98
- Ferri C.P., Prince M., Brayne C., Brodaty C., Fratiglioni L. & Ganguli M. (2005) Global prevalence of dementia: A Delphi consensus study. *Lancet* 2005; 366:2112–7.
- Jorm A.F., Jolley D. (1998) The incidence of dementia: a meta-analysis. *Neurology*; 51:728–733.
- Peterson R.C., Roberts R.O., Knopman D.S., Geda Y.E., Cha R.H. & Pankratz V.S. (2010) Prevalence of mild cognitive impairment is higher in men: The Mayo Clinic Study of Aging. *Neurology* 2010;75:889–97.
- Alzheimer's Disease International (2005). *World Alzheimer's Report 2015, The Global Impact of Dementia: An analysis of prevalence, incidence, cost and trends*. London.
- World Health Organization (2017) Dementia fact sheet December 2017 retrieved from <https://www.dementiastatistics.org/statistics/global-prevalence/>
- World Health Organization (2017) Depression and other common mental disorders: Global health estimates. World Health Organization. Geneva; 2017.

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Strengths Perspective in Working with Elderly

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ABSTRACT

The paper presents the meaning of strengths-based perspective its scope and inclination in various therapeutic techniques in geriatric services. It considers the factors contributing to the resilience of the elderly especially after a life-altering event. There are some principles that the professionals follow as a matter of strengths-based approach in their practice realm. The wellbeing of the elderly is closely netted with the resilience they identify and enjoy and many practice professions, predominantly social work, rely on the strengths of the elderly in the professional intervention. There are several intervention techniques like Cognitive Behavioral Therapy, Solution-Focused Therapy, and Hope therapy that work effectively based on the resilience of the elderly. Spirituality is presented here as one of the sources of strengths for the elderly and the paper explains its applicability in the helping process with the support of succinct reviews of literature.

Keywords: Strengths-based perspective, Work with elderly, Solution-focused, Spirituality in geriatric care, Social Work.

Social Work as a practicing profession applies many approaches, strategies, and perspectives in the helping process and one of the

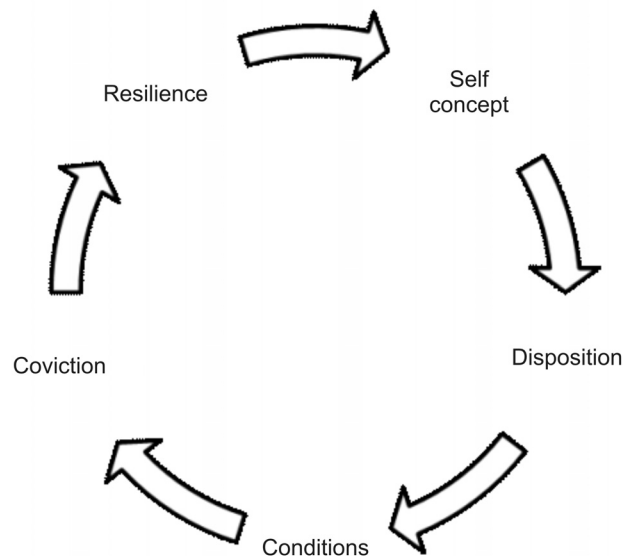
contemporary perspectives relies on the strengths of the service users in the helping process. The strengths-based perspective focuses on the resilience rather than the deficits of the client and the systems (Saleeby, 2002; Becvar, 2013; as cited in Chapin, *et al.*, 2016). The inherent strengths or capacities of individuals and their families are relied on to develop the intervention plans to function effectively or to cope up with adversities. Considering the resilience of individuals and their families rather than the pathologies is especially found effective in working with the elderly, because it is participatory and outcome-based (Chapin, *et al.*, 2016). The research proves that the strengths-based approach in working with the elderly and their families is beyond any paradox (Guzman, 2012; Walsh, 2013 & Chapin *et al.*, 2016). 'Gray is the New Gold' is the positive and resilient perspective as well as a professional attitude towards the elderly (KLRI, n.d). This perspective makes the elderly more resilient and resilience builds a positive approach to professional help including geriatric treatment processes (Wells, 2010). This perspective also enables Social Work professionals to be client-centric and positive towards the goals of intervention. Wells (2010) emphasizes the significance of social support systems along with internal protective factors to overcome disruptions. Wells (2010) explains that when people experience disruption and stressors, they rely on self-reliance, health and support systems and networks to bounce back to normalcy. The family is one of the sources of power and it is inevitable to have inclusive strategies to work with the elderly. This conceptual paper includes succinct reviews of the concept, philosophical assumptions, and views in discussing the background of this paper. The application of strengths perspectives in geriatric Social Work with individuals and families of the elderly is also discussed in this paper.

Presenting Resilience

Dyer & McGuinness, (1996) (as cited in Guzman, 2012) define resilience, as the ability to bounce back from adversity and move forward. Resilience can be understood from two broad contexts: conviction and condition. The resilience that a person achieved through past experiences and fixed belief that he or she can 'bounce back' is the resilience on conviction. Whereas, when the person bounces back after a life-altering events it can be conceptualized as

resilience on conditions. Resilience is a phenomenon or process that displays positive adaptation to life events/adversities/trauma and it is influenced by environmental factors and empowerment (Rutter, 1999 & Masten, 2001 as cited in Tomas, *et al.*, 2012). According to Guzman (2012), resilience can be viewed as either stem from conviction or condition. Therefore the resilience can be either a condition or a conviction with which a person cope with or bounce back from all the adversities or respond effectively to the life-altering events. Guzman (2012) identified some of the intra and interpersonal components relate to the resilience of the elderly after the life-altering events and they are; self-concept, disposition, conditions/conditions, and convictions. Self-concept is the dynamic collection of self-representations formed through personal experiences and interpretation of the environment. As individuals experience a differing relationship with their bodies, their families, and society, their self-concept is expected to change' (Guzman, 2012. p. 430). This also denotes the significant factors of a person's 'self-concept' such as families, relationships,

Diagram 1
What is Strength-based Approach?



societal conditions. The self-concept differs from person to person as the significant factors change (Ibid.). Dispositions of individuals are the mood or temperament they display against the events or incidents in life. The key events in life are significant as they contribute to certain fixed beliefs (convictions) and thereby to the overall resilience of people. Guzman (2012) identified the contributory factors to the resilience and the self-concept of the elderly in their post-stroke life. These factors are mutually contributory (Diagram. 1) and the level differs from individual to individual.

Kaplan & Berkman, (2016) specified that in the beginning the strengths-based approach was developed for applying with adults served in mental health centers or agencies. The perspective has also found extending to social policy and direct practice with older adult populations (Nelson-Becker *et al.*, 2013; Tice & Perkins, 1996 as cited in Kaplan & Berkman, 2016). The concept was developed with the works of Saleebey and others. According to Saleebey (2013, as cited in Chapin, *et al.*, 2016) the general strengths perspective is built on certain key principles such as each individual possess strengths; every experience contains opportunities for change and growth; traditional pathological diagnosis often makes conclusions that limit the capacities of individuals or units to expand; collaborations can create better results than confusions; resources are omnipresent in all the environments and community and civil society have a role in and they engage in the care of its members. These guiding principles are present and applicable in individuals, units or systems like families and communities. Analyzing and understanding the strengths or resilience of the elderly helps in maximizing their the independence, improving outcomes, and fostering effective community support (Dyer & McGuinness, 1996, as cited in Guzman, 2012).

Philosophical Views of Ageing and Strengths

In various philosophies of life, even the most pessimistic view of Schopenhauer, the transitional thinker, agrees to the fact that the desire and satisfaction follow each other in intervals and they can reduce the suffering and sustains a happy life (as cited in Hannan, 2009). One of the most beautiful positive expressions of the old age in the most pessimistic view of life by Schopenhauer is present in the

following exert: “from the point of view we have been taking up until now, life may be compared to a piece of embroidery, of which, during the first half of his time, a man gets a sight of the right side, and during the second half, of the wrong. The wrong side is not so pretty as the right, *but it is more instructive; it shows the way* in which the threads have been worked together” (p. 123).

Many other life philosophies depict old age as a challenge, problem, reflection and the resilience approach, which considers healthy ageing as a resilient process. In strengths-based practice, the strengths or the capacities rather than the pathologies of the elderly are considered to find solutions. The vignettes of solution-focused therapy, hope therapy and the appropriateness of spirituality in Social Work Practice with the elderly are included in this paper as they lead the strengths-based intervention in Social Work Practice.

The elderly are in the possession of strengths and there is nothing inherent in the ageing process and an impediment to the resilience of the elderly (Foster, 1997, as referenced by Zimmerman, *et al.*, 1999). Strengths perspective is a philosophical view of how professionals can interact with clients and their environment to bring in positive results to clients' life (Cowger, 1994; Saleebey, 1997, & 2013, as cited in Chapin, *et al.*, 2016). Further to that, Chapin *et al.*, (2016) explain the strengths perspective as an operational stance or philosophical position, that assesses and recognize the inherent power of the service users to achieve their potentials, the experiences that can contribute to the future journey of the service users and promoting meaningful and mindful life of the client. The strong philosophical contribution of this perspective to Social Work response to elderly the is that the aged people possess strengths, they have worth and instead of holding a problem or deficit viewpoint, ‘the professional assumes a potentials and possibilities focus that affirms individual hopes and aspirations within the constraints of the current situation’ (Ibid. p. 64). Certain assumptions are fundamental in strengths-based perspective and strengths-based practice with the elderly. The major key assumptions of perspective and practice (Table I) highlight the ideology and practice principles in working with the elderly.

Table 1
Strengths-based Perspectives and Practice with the Elderly

<i>General principles of Strengths Perspective</i>	<i>Practice with older adults</i>
All individuals possess strengths	Discover, recognize and build on the strengths of the elderly
All experiences provide an opportunity for growth	Acknowledge the older adult's capacity to learn, grow, and change
Collaboration and not coercion leads to client engagement	Developing rapport with older adults
Not limiting but expanding capacity is the aim of the intervention	Facilitating the participation of the elderly in making choices, decisions and determining the helping process
Environment has resources	Acquiring resources for the elderly

Source: Chapin *et al.*, (2016)

Resilience and wellbeing of Elderly

Considering the hedonic and the eudemonic perspective of wellbeing, it can be perceived as the optimum happiness and functioning for existence and self-realization (Tomas, *et al.*, 2012). The psychosocial well-being is specifically significant in elderly as, the lack of personal independence, the decline in cognitive functions, and the amplified probability to cope with the death of significant others are much witnessed and discussed (Ryff, Singer, Love, & Essex, 1998, as cited in Tomas, *et al.*, 2012). Tomas *et al.*, (2012), endorse resilience as one of the strongest predictors of psychosocial wellbeing. Therefore, the wellbeing of the elderly, especially amidst the geriatric psychosocial issues, resilience has a major stake in wellbeing. The relationship between resilience and wellbeing has been identified and validated as the key indicator of successful ageing (Rowe and Kahn, 2000; Wagnild, 2003; Nygren, 2011; as referred by Tomas *et al.*, 2012).

Strengths-based Social Work and Ageing

The strengths perspective as a philosophical viewpoint focuses on the inherent resilience merged in a human nature that paves the foundation of social work practice (Chapin, *et al.*, 2016). It may seem a paradox to follow the resilient approach in working with the elderly too many, but there will no intervention possible unless the elderly

have the hope in the intervention and having 'hope' is the reflection of the strengths of the person. Feeling contented and being relaxed amidst the physical decline is an indicator of resilience in the elderly. The resilience is defined as adapting, coping and bouncing back during adversities. The resilience can be found in three basic aspects such as the ability to recover, sustain the purpose, and emerging stronger.

In Social Work practice, a strengths approach is a philosophical standpoint and an effective strategy that fits with all service users, across all age groups. Many Social Workers in contemporary practice choose to engage with the strengths perspective to work with the elderly. The following excerpt from the latest literature is one of the most significant examples of the effectiveness of strengths perspective in Social Work practice:

"Practitioners searching for more effective methods in working with older adults are combining strengths-based and solution-focused approaches in new ways to improve outcomes' (Chapin, *et al.*, 2016. p. 63).

According to Edwards *et al.*, (2015) resilience thinking makes older adults strong enough to accept and cope with the degenerations during old age and dealing with adversities like losing a spouse and acquiring disabilities. In this context, the failures also lead to growth as people try hard to bounce back to normalcy. In the resilience approach, the strengths of the elderly are assessed to identify and predict behaviors that can be positive in dealing with stressors and adversities and also require promoting the strengths if those behavior patterns (which can produce positive results) are absent. The strengths of the elderly can appear in many forms: as an outcome of physical or psychological recovery from a traumatic episode; as a characteristic that describes an individual's enduring ability to cope; or as a process of recovering from a stressful incident and moving forward. All the resources that lead to resilience or build in resilience can produce positive outcomes.

Social Workers while adopting the strengths-based approach need to identify the resilience and the factors that adversely affect resilience so that the intervention can be targeted. Understanding the factors contributing to resilience ensures improved functional ability of the

elderly and identifying the factors that affect resilience can be targeted on common risk factors and to lower the risk of further deterioration (Roberts, Kaplan, Shema, & Strawbridge, 1997, as cited in Zimmerman, *et al.*, 1999). In casework practice (working with the individual), a structured search for the client's strengths and bringing the hidden strengths into the client's awareness through client-worker dialogue is crucial to build and strengthen the personal resilience of the client (Padesky & Mooney, 2012). The strengths-based cognitive – behavioral therapy aims at improving the positive qualities by involving the client in the process of analyzing and becoming aware of the positive qualities the client possess, that can prevent further amelioration and bring in sustainable changes in the client's behavior (Ibid.). Social Work Practice with the elderly based on the resilience perspective depends on the coping capacity, emotional awareness and clarity, sense of purpose, social connection and affiliations and a supportive social network of the elderly to strengthen and create positive ageing (Edwards, *et al.*, 2015).

Working with Family Resilience and the Elderly

Family, according to Pardeck & Yuen (as in McClennen, 2010), is system composed of people, who are associated with marriage, birth, adoption or personal decision and committed to each other for promoting or enhancing the biological, psychological, emotional, sociocultural, financial and spiritual growth and development of each interdependent unit/member. Families are comprised of people who have shared past and implied shared future. '*They encompass the entire emotional system of at least three and frequently four or even five, generations held together by blood, legal, and/or historical ties*' (Monica, *et al.*, 2011. p. 1).

Walsh (2013), explains family resilience as empowerment for the families and the resilience-based practice framework is considered suitable in community-based interventions with families facing severe life challenges. How families respond to the challenges can foster positive adaptation with possibilities of growth for all the members in the family. Most resilience-based therapies are found to be individual focused and most of the initial literature was on that direction, but in the light of the contemporary researches, the resilience is viewed in

terms of the 'interplay of multiple risk and protective processes over time, involving individual, family, community, and larger socio-cultural influences' (Ibid., p. 66). In the context of family stress, coping and adaptation family resilience is considered to be nurturing a positive adjustment of the family as a unit and between its members. For Walsh, family resilience is the capacity of families to endure and bounce back from disruptive life challenges, be firm and strengthened and being resourceful. Family resilience is defined as 'the capacity and/or the demonstrated ability not only to bounce back from adversity but also to do so in a manner that indicates an increase in strength and resourcefulness' (Ibid., 52). The resourcefulness of families contributes to each member of the family as the member's strengths contribute to the total unit strength. The resilience of family and its resourcefulness contribute to new convictions of the elderly as discussed in the diagram (1) and the role of the family is key in building up resilience to the elderly post-life-altering events and understanding the resilience after the life-altering events can foster independence and family support (Guzman, 2012). This is emphasized especially as post-traumatic support to regain and build up resilience in the elderly (Hill & Horn, 1999, as cited in Guzman, 2012). The capacity of the family to extend its resourcefulness to the elderly is key in interventions and the Social Worker facilitates resource utilization by the clients (Walsh, 2013; Chapin *et al.*, 2016).

Strengths-based Therapies and Interventions for Elderly

Before moving into the ways of promoting resilience certain questions are to be addressed: What are the resources of the resilience of the elderly? Is there a definite source of resilience in the elderly? The answers to both these questions are available in various researchers. The major resources of resilience are; coping capacity, emotional awareness and clarity, sense of purpose, social connection and affiliations and supportive social network (Edwards, Hall & Zautra, 2015). The professionals working with older adults should consult with them, prepare action plans and implement strategies that build resilience. The elderly need to be encouraged to joining a social group, rising a family communication plan, initiating stress prevention and management activities, exercising, developing new hobbies or practicing regular activities. Along with this, the general

characteristics that can promote resilience in the elderly include optimism and general coping styles, personal connections, sense of purpose, self-efficacy and healthy diet and active lifestyle. The process of building resilience must contribute to building individual strengths and capacities. The personal connections, interactions with other people, social relations and a schedule for everything can contribute to increased self-efficacy of the elderly (Edwards, Hall & Zautra, 2015). The social networks, family relationships, positive engagements, and an order of life contribute resources for the resilient life to the elderly. This enables the elderly to be positive, forward-looking and creative in their environment (Walsh, 2013; Edwards, *et al.*, 2015; Chapin *et al.*, 2016). The elements that promote the resilience-based practice with the elderly and the families include; discovering and building on strengths of older adults and their families rather than problems, encouraging hope, self-reliance, and personal satisfaction. It is vital to acknowledge that older adults have the power to learn, grow, and change. In geriatric Social Work, the older adult-their families – social worker relationship is essential for assisting effectively the older adults. Ensuring participation of elderly in decisions, making choices, and determining the direction of the helping process, obtaining resources based on active outreach and facilitating participation in the community initiatives are the key roles for the social workers (Chapin, *et al.*, 2016).

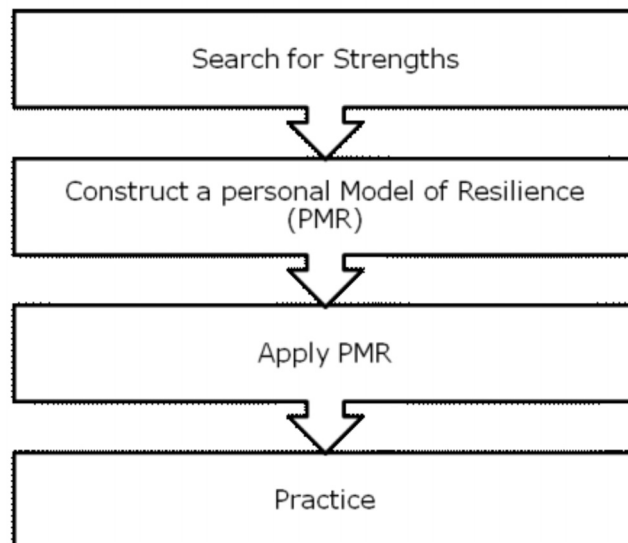
There are many Social work modalities and intervention plans developed by academicians and practitioners within the framework of the strengths perspective. One of the widely used therapeutic interventions is Solution Focused therapy. Hope therapy is also used in line with setting hope to the service users to fight back the hopelessness. The spiritual needs and power of people are considered in the resilience perspective widely. These three modalities are discussed here in the context of resilient Social Work practice.

Cognitive Behavioral Therapy in a Strengths-based Perspective

The works of Chambless & Ollendick, (2001); Butler, *et al.*, (2006), identify that Cognitive Behavioural Therapy (CBT), has a high level of success against varieties of difficulties like depression, anxiety, chronic pain, and sleep disorders (as cited in Padesky & Mooney,

2012). A cross-comparison of the resilience of elderly as mentioned by Hall & Zautra (2015) such as coping, emotional awareness and clarity, sense of purpose, social connection and affiliations and the geriatric psychological distress affirms the effective application of strengths-based Cognitive Behavioural Therapy (Padesky & Mooney, 2012) in working with the elderly. Padesky and Mooney (2012) tested a four-step model of strengths-based CBT (Diagram II) and it includes: search for the strengths of the individual, constructing Personal Model of Resilience (PMR), Apply the PMR and Practice. In the initial stage of the therapy, the therapist enables the client to search the strengths and the process always consider the obstacles and all types of strengths. In the second stage, the client is supported to convert the strengths into general strategies to deal with own distresses. During this process, the client's own words and images are used to make the process simple and to involve the client. In the following stage, the client is facilitated to identify the areas where the resilience is to be applied and which personal model of resilience (which is created by the client with the help of a therapist). During this stage, the intervention focus is on

Diagram II



Source: Padesky & Mooney, (2012)

resilience and not on the outcome. In the final step, behavioural experiments are conducted to practice resilience. 'This is done to test the quality and utility of Personal Model of Resilience' (Ibid. 287)

The Solution Focused Approaches

Solution-focused therapy has its roots with a strengths perspective. The works of de Shazer and his colleagues are credited to the development of SFT in practice. When using a solution-focused approach, determining cause and effect is not a central goal (Chapin, *et al.*, 2016). Looking for a cause and effect maintains the focus of intervention on the problem or complaint. Solution-focused approaches are used in clinical practices with older adults and their families and many authors (Chapin, *et al.*, 2016) found it effectively applied in clinical practices. In Social Work intervention, Strengths-based and solution-focused approaches practice on similar assumptions on working with older people (Chapin, *et al.*, 2016). Just as the name implies, the solution-focused intervention revolves around constructing or identifying solutions. The approach suggests that the solution to the complaint is found in exceptions to the complaint, or those times when the complaint is absent (Ibid. 2016. p. 66). SFT focuses on the solution rather than looking at the problem itself during the therapeutic process. The proponents identified that clients make a lot of progress or the positive changes by following conversation about their preferred future, irrespective of the attention given on the nature of the problem. It was identified that more the problems are discussed more and more the problems they discover and discussing solutions give them more options for the solution to the problems. Harvey *et al.*, 2012 list out several basic assumptions of Solution-focused therapy. The assumptions are; the objective truth about a client's life cannot be discovered and there are many different truths, the clients may feel to analyse the causes of their problems but it is not always helpful and it may delay the positive changes, exploring problems and constructing solutions are separate processes, clients are rich in skills and qualities, which they may not be aware of, the clients may be already using those skills and qualities, the clients have a clear idea about how they would like their future to be, focusing on the future would be more helpful than on the past which was a source of problem for the client, in the past the client might have

had times when the problem was not present or was not severe and this provides the client strengths to distinguish both experiences. According to Chapin, *et al.*, (2016) in the Solution Focused Approach, the strengths of the client and the experiences are very key and they are assessed. The major components suggested by Chapin *et al.*, (2016) in strengths assessment are; current status (what do I have going for me?); individuals' desires and aspirations (what do I want?); Personal and Social resources (What I have used in the past?). The three components reveal the needs, strengths and targets along with the possible solutions inclined in the personal and environmental resources.

Hope as a means and result of resilience: Having something to achieve and feel satisfaction is one of the means of making people resilient (Snyder, 2000). The elderly need hope and that hope can be instilled through a planned process and filtering. The experience and expertise of the aged can be the resource for hope therapy. Hope therapy works as a resilient approach in Social Work to ensure healthy ageing. According to Snyder, (2000), hope is "a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)" (P. 8). In other definitions also he defines hope as a cognitive state where a sense of successful goal-directed determination and planning to meet those goals are present. Goal-directed thinking and plans to achieve those are the key to hope and it is futuristic. Hope is a state where people have a goal and those goals must be sufficiently strong enough to engage our conscious mind. The goals with 100 per cent probability will not be able to make the person creative and such goals cannot necessitate hope. The same way the goals with 0 per cent probability are counterproductive and not able to instill hope in people.

Snyder (2000) authenticates that hope sustains people with goals in life and activities, instills the creative ways of achieving those goals in people and the strong determination and commitment to be on the chosen path. Hope therapy includes various principles and the steps of achieving the result. They are: a) goal clarification and attainment; b) emotional and behavioural change; c) educating process to lead to the goal-directed thinking. It is identified that hope is learned and that process happens in the context of other people. People's relationships

and life experiences have an effective role in learning hopeful and goal-directed thinking.

Spirituality and Resilience in Working with the Elderly

In gerontological practices and studies, spirituality occupies a prominent place as a source of power, resource and hopefulness (Nelson-Becker, 2016). Spirituality as a source of wellbeing, happiness, and life satisfaction has been authenticated in the empirical analysis. Therefore, Social Work collaborates with spirituality, and churches especially in dying and hospice programs. Spirituality is one of the sources of strength and people attribute things beyond their control to the supernatural and it provides resilience to cope with many adversities (Mathews, 2009).

‘Spirituality is the search for meaning, purpose, and morality. It develops through relationships with self, others, the universe, and ultimate reality or the ground of being, however, a person or group understands this (Nelson-Becker, *et al.*, p. 74). Spirituality is used as a string of relationships in Social Work between the people and between the systems. Though spirituality is at the heart of religion, it is separate from spirituality. According to Mathews, (2009), ‘spirituality is the expression of a person’s humanity, whatever it is that helps to shape that person, and the well of inner strength from which that person draws support at the time of crisis’ (Ibid. p. 05). Social Work many times attempt to help service seekers to have an insight into the ‘meaning and purpose of life’ and spirituality is found the best means in Social Work to work with people who are devoid of meaning and purpose of life (Ibid., 2009). Spirituality works effectively when all other sources run out of power to instill hope and purpose in individuals. It may make our day engaging, motivating and desire for a change. When working with the elderly, Social Work professionals have to consider the spiritual needs of the people, because it works as the strongest string in their relationships, emotions and coping Ibid., 2009. The need for a strengths-based approach in a spiritually sensitive practice is emphasized in the works of Nelson-Becker, *et al.*, (2016), as it promotes listening to the profound and different questions of clients. The spiritual need is very important in clinical Social Work practice, as it is the search of meaning and purpose of life (Mathews,

2009 & Nelson-Becker, *et al.*, 2016) and therefore the Social Workers incorporate some questions on spirituality and religion during the assessment developed protocols to do a spiritual assessment and devised spiritual assessment tools to design professional practice with spiritual sensitiveness (Nelson-Becker, *et al.*, 2016). Social Worker may have to foster the spirituality based helping process either by networking or collaborating with religious/spiritual organizations (Ibid.). These practices can increase mindfulness and thereby the elderly can engage relaxation, reflection and focused mental awareness. Social Workers practicing with the elderly can make use of the explicit spiritual services, through collaborating with religious or spiritual organizations to improve the resilience of the aged people to reflect and respond to the realities with mindfulness.

Conclusion

The strengths-based perspective in geriatric Social Work focuses on the strengths, capacities, and resources of the elderly and their environment, which includes families. Strengths-based perspective has a distinct and positive framework that promotes the self-determination of the client, respecting the worth and dignity of individuals and the perspective also demotes the traits of oppressive practices. There are various strategies and techniques, clinically tested and researched by Social Workers that appreciate and encourage a resilient based practice to enable the elderly to lead a positive and resilient life. Strengths-based geriatric Social Work respects the varied experiences of the elderly, their relationships and their capacity to be mindful of their own strengths to cope and find solutions.

References

- Becvar, S. (2013). Facilitating Family Resilience in Clinical Practice. In Becvar S. (ed). *Handbook of Family Resilience* (pp. 51–64). New York: Springer.
- Chapin, R., Nelson-Becker, H., Macmillan K., & Sellon, A. (2016). Strengths-Based and Solution-Focused Practice with Older Adults: New Applications. In Kaplan, D. & Berkman, B. (eds). *The Oxford*

- handbook of social work in health and aging* (2nd ed., pp. 63–71). Oxford, New York: Oxford University Press.
- Edwards, S. E., Hall, J., & Zautra A. (2015). Resilience in ageing. *Elder Care: A Resource for Inter-professional Providers*. Retrieved from www.aging.arizona.edu
- Guzman Allan. (2012). Self-Concept, Disposition, and Resilience of Poststroke Filipino Elderly with Residual Paralysis. *Educational Gerontology*, 38: 429–442
- Hannan, B. (2009). *The riddle of the world: a reconsideration of Schopenhauer's philosophy*. Oxford: Oxford University Press.
- Harvey, R., Evan, G., and Charis, L. (2012): *Solution Focussed Brief Therapy*, Routledge, London.
- Kaplan, D. & Berkman, B. (2016). *The Oxford handbook of social work in health and aging*. Oxford New York: Oxford University Press.
- KLRI. (n.d). Gray is the New Gold. Retrieved from https://ieet.org/archive/Kronos_aging_science.pdf
- Mathews, I. (2009). *Social work and spirituality*. Exeter: Learning Matters.
- McClennen, J. (2010). *Social work and family violence: theories, assessment, and intervention*. New York, NY: Springer.
- Monica M., Betty C., Nydia G. (2011), Individual, Family and Social Perspectives – The expanded Family life Cycle (4th Ed), Boston, Allyn & Bacon
- Nelson-Becker, Canda, E., Nakashima, M. (2016). Spirituality in Professional Practice with Older Adults. In Kaplan, D. & Berkman, B. (eds). *The Oxford handbook of social work in health and aging* (2nd ed., pp. 73–84). Oxford, New York: Oxford University Press.
- Padesky, A.C., & Mooney, A.K. (2012). Strengths-Based Cognitive-Behavioural Therapy: A Four-Step Model to Build Resilience. *Clinical Psychology and Psychotherapy*. 19, 283–290.
- Snyder, C. R., (2000). *Handbook of hope: theory, measures & applications*. San Diego, Calif: Academic Press.
- Tomas M. Jose, Sanchoa P., Melendez C. J., Mayordomo. (2012). *Aging & Mental Health*. Vol. 16, No. 3, 317–326.

- Walsh F. (2013). Community-Based Practice Applications of a Family Resilience Framework. Becvar S. Dorothy (ed). *Handbook of Family Resilience*. New York: Springer. 65-84
- Wells M. (2010). Resilience in older adults living in rural, suburban, and urban areas. *Journal of Rural Nursing and Health Care*, vol. 10, no.2. 45-54
- Zimmerman I. S., Smith D., Baldini A., Fox M. K., Hebel Richardson, Kenzora J., Felsenthal G & Magaziner J., (1999). Short-term persistent depression following hip fracture: A risk factor and target to increase resilience in elderly people. *Social Work Research*. 23(3), 1-16.

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Role of Assistive Devices in Wellbeing of Elderly: A Review

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ABSTRACT

In the rapidly ageing population, the elderly called upon to adapt to new technology and the demands of modern society. Assistive devices and technologies are those whose primary purpose is to maintain or improve an individual's functioning and independence to facilitate participation and to enhance overall well-being. Examples of assistive devices and technologies include wheelchairs, prostheses, hearing aids, visual aids, and specialized computer software and hardware that increase mobility, hearing, vision, or communication capacities. Technology is considered assistive when it is used to assist in the functional performance of activities, reducing disabilities to perform activities of daily living and everyday life in the various areas of daily life. The use of assistive technology involves the expansion of the functional abilities of the individual, providing the restoration of deficient functions or carrying out activities that are prevented as a result of congenital or acquired deficiencies during the ageing process.

Keywords: Aged population, Assistive devices, Wellbeing, Quality of life.

Assistive devices are tools, products or types of equipment that facilitate performing tasks and activities. They may help to move around, see, communicate, eat, or get dressed. (<https://medlineplus.gov/assistivedevices.html>). Assistive Technology refers to practical tools that enhance independence for people with disabilities and older people. It is “any item, piece of equipment or product system whether acquired commercially, modified or customized that is used to increase, maintain or improve functional capabilities of individuals with disabilities” (World Health Organization & World Bank 2011). Access to assistive devices is essential for many people with disabilities and is an important part of any development strategy. In many low-income and middle-income countries, only 5–15 per cent of people who require assistive devices and technologies have access to them. In these countries, production is down and oftentimes of limited quality, there are very few trained personnel and costs may be interdicted. (<https://www.enableireland.ie/sites/default/files/publication/AT%20Paper%20final%20version.pdf>). Although they might find it difficult at first, older people are beginning to use modern technology. In fact, according to the Once for National Statistics, 41 per cent of adults aged 75 years and over were recent internet users in this year’s study. In the findings, recent internet use among women aged 75 and over had almost trebled from 2011. (<https://www.lifeline24.co.uk/technology-for-older-people/>). Recent Advance Technology and online social networking can have large implications for the health and well-being of older adults. Technology makes it easier for older adults to connect with their loved ones and has made life more convenient on the whole. (Chopik W. J., 2016) Mobility devices (e.g., wheelchairs tricycles crutches walking sticks/canes walkingframes/walkers) use to walk or move for the elderly. Mobility devices may have specialized features to accommodate the needs of the user. Prosthetics (artificial legs or hands), orthotics (spinal braces, hand/leg splints or calipers) and orthopedic shoes are usually custom-made devices that replace, support or correct body parts. Daily living devices these devices enable people with disabilities to complete the activities of daily living (e.g. eating, bathing, dressing, toileting, home maintenance). Vision And Hearing Devices (The prevalence of visual impairment among elderly persons in India ranges from 22 per cent to 35 per cent. Cataract and

uncorrected refractive errors are the most common causes of both visual impairment and blindness in India. (Vignesh D. *et al.*, 2019) Low vision or blindness has a great impact on a person's ability to carry out important life activities. E.g., (large print books Magnifiers eyeglasses/spectacles white canes Braille systems for reading and writing.) Hearing loss affects a person's ability to communicate and interact with others; it can impact on many areas of development. (Hearing aids headphones for listening to the television amplified telephones TTY/TTD (Telecommunication devices) Cognitive devices (lists diaries calendars schedules electronic devices, e.g. mobile phones, pagers, personal organizers.) Cognition is the ability to understand and process information. It refers to the mental functions of the brain such as memory, planning and problem-solving.

Ageing Population

Ageing involves physical, cognitive, social and familial losses and brings with it an increased incidence of disability and the need for assistance with activities of daily living (Joan O' Donnell, *et al.*, 2020). While there is a lot of emphasis on the physical well-being of older people, the same emphasis or importance has not been placed on their mental health and wellbeing. Ageing is defined in terms of chronological age with a cut off age of 60 or 65 years. It is also called the retirement age. Globally, the 60-plus population constitutes 11.5 per cent of the total population of 7 billion. By 2050, this proportion is projected to extend to concerning 22 per cent. In developed countries, the proportion of the elderly will increase from 22.4 per cent in 2012 to 31.9 per cent in 2050. This proportion is estimated to more than double in less developed countries with an increase from 9.9 per cent in 2012 to 20.2 per cent in 2050. In the least developed countries, the proportion of the elderly in 2050 is projected to be below 11 per cent. (UNFPA, 2017). The National Population Commission in India has estimated that the population of the elderly (age group 60 years and above) is expected to grow from 71 million in 2001 to 173 million by 2026. There are three different categories of old age: Young-old (55–75), Old-old (75–85) and Oldest-old (85+), but WHO in 2008 recognized that 60 years is the age of entering old age. The 'Young-old' represent the majority of older individuals who are relatively healthy, competent and satisfied with their life, and remain engaged in a variety

of activities in the society. The 'Old-old' are those individuals who are frail, suffer from poor health, and are in need of medical attention, special care and other forms of support. (Kumar P., *et al.*, 2019)

Well-being

Well-being usually includes international judgments of life satisfaction and feelings starting from depression to joy. In other words, well-being can be described as judging life positively and feeling good. Well-being includes the presence of positive emotions and moods (e.g., contentment, happiness), the absence of negative emotions (e.g., depression, anxiety), satisfaction with life, fulfillment and positive functioning. (<https://www.cdc.gov/hrqol/wellbeing.htm> 3/) Well-being is outlined as hedonistic, or subjective when it is identified and measured as the global perception of life satisfaction, combined with the predominance of positive over negative affect in daily life (Fave D.A., *et al.*, 2018). From the theoretical perspective of eudemonia, instead, wellbeing is conceptualized and measured as a dynamic process including multiple indicators, that have been variably combined in different models. Notwithstanding the substantial physical and social changes occurring with ageing, the subjective perspective toward these changes plays a central role in predicting well-being and physical health in old age. Emotional, psychological and social components of well-being, as well as of satisfaction with life were also included, highlighting the positive impact of physical activity on the well-being of ageing individuals.

Assistive Device

The assistive device or assistive technology can assign to any device that assists a person with hearing loss or a voice, speech, or language disorder to communicate. These terms usually talk over with devices that facilitate someone to listen to and perceive what's being aforementioned a lot of clarity or to specific thoughts a lot of simply. With the event of digital and wireless technologies, more and more devices are becoming available to help people with hearing, voice, speech, and language disorders communicate more meaningfully and participate more fully in their daily lives. (<https://www.nidcd.nih.gov/health/assistive-devices-people-hearing-voice-speech-or-language-disorders>) Recent internet uses in the 65–74

age group has increased from 52 per cent in 2011 to 78 per cent in 2017, which means older people are closing the usage gap in younger age groups. Older people aren't just utilizing their computers either; they're branching out into mobile phones and tablets. (<https://www.lifeline24.co.uk/technology-for-older-people/>) Around 32 per cent of seniors own a tablet and 19 per cent own an e-reader. At present, 34 per cent of 65 to 74-year-olds use social networks, such as Facebook, as against 12 per cent five years ago. In the oldest age bracket (75 years and over), the share of active social network users went up from 2 per cent in 2012 to 17.3 per cent in 2017. (<https://www.cbs.nl/en-gb/news/2017/52/social-media-on-the-rise-among-seniors>) The first time that an oversized proportion of the older adult population uses more than one mobility device. In fact, over 9 per cent currently place confidence in multiple devices. Overall individual device use in America shows that 16.4 per cent of seniors use a cane; 11.6 per cent use walkers; 6.1 per cent use wheelchairs; and 2.3 per cent rely on scooters the leading cause of death resulting from injury among adults 65 and older. National Health and Aging Trends (NHAT) study shows that person using mobility devices are not falling compare to those who do not (Nancy M.Gell, *et al.*, 2015).

Impact of Assistive Devices on Their's Wellbeing

Assistive technology can include devies and solutions facilitate to beat useful limitations and prolongate freelance living. Assistive technology and home modifications could provide caregivers immediate relief, reduce stress and help them provide care more easily and safely. (Gitlin L.N., *et al.*, 2001). 24 per cent of the participants had home modifications and 50 per cent used one or more assistive technologies. The most frequent assistive technologies were eyeglasses, hearing aids, blood glucose meters, crutches, and wheelchairs, nursing beds, shower seats, toilet seats and incontinence aids. 50 per cent respondents reported using assistive technology, which should be viewed in the light of their health problems. In agreement with the most frequent diagnosis being a visual impairment, used eyeglasses. Similarly, many participants have a hearing impairment and therefore used a hearing aid. Assistive technology can make life easier for persons of all ages who may need help carrying out their daily activities through home modification and adaptation. (Ocepek, *et al.*, 2012)

The use of assistive devices, canes, crutches and walkers used to increase the base of support of elderly patients. The contributions of these studies warn that the professional should observe the physical strength of the patient, endurance, balance, cognitive function and environmental requirements in order to make the correct choice of mobility aid equipment. For the purpose of such devices, it is to enhance the balance, increase the activity and functional independence. The elderly functionality that are keeping their freedom to live alone and develop activities that give them pleasure; it can also be understood as the ability of any individual to adapt to everyday problems, despite having physical, mental, or social limitations (Leite S.D.E., *et al.*, 2016).

Khosravi & Ghapanchi, (2016); investigated the role of assistive technology to assist mobility, provide social connection, decrease depression and reduce hospitalization for elderly people living at home. It identified that the use of assistive technology such as ICT, robotics, telemedicine, sensor technology, medication management applications and video games are effectively assisted elderly people to live independently safely and actively.

Accordingly Agree & Freedman (2011); Assistive technology supports psychological well-being as it provides elders with the ability to choose the type of activity, time to do the activity and ways to carry out. For aged people, being able to live in their own houses rather than long term care facility, is the core component of quality of life.

In an other study, Paul & McDaniel, (2016); investigated Telemedicine and telehealth services are the exchange of health information between a client and health care provider using ICT technology to monitor health and wellbeing of people living at home. This technology is convenient for each care supplier and consumer. It supports the health care service providers to manage their time more effectively by reducing the need for actual home visits to distant locations. At the same time, it minimizes inconvenience from frequent trips to health care centers for the elderly. (Sisay M., 2017) Without using assistive devices or personal help, an increase in such limitations was associated with decreasing positive effect, self-realization, and self-efficacy, suggesting that merely having activity limitations is detrimental to older adults' well-being. Their study further found that

number of limitations a positively related to the uses of assistive devices and personal help. Controlling for a number of limitations, the use of assistive devices was positively related to most dimensions of well-being, whereas the use of personal help was negatively related to every dimension of well-being, indicating that the use of coping strategies is not necessarily associated with an improvement in older adults' well-being (Lin, I.-F., & Wu, H.-S. 2014).

Conclusion

The current study determined that the use of assistive devices by the elderly notably devote to a better quality of life, improving parameters of daily living such as transportation assistance, communication and participation in social life. There is a need for knowledge on analysis and implementation methods and types of assistive technology devices that are effective and useful for the users, as well as knowledge on proper organization of the procurement of assistive devices within the field of mental illness.

References

- Agree & Freedman (2011) *A Quality-of-Life Scale for Assistive Technology: Results of a Pilot Study of Aging and Technology*, Physical therapy journal, (91), p. 1780–1788.
- Chopik W. J. (2016). The Benefits of Social Technology Use Among Older Adults are Mediated by Reduced Loneliness. *Cyber psychology, behavior and social networking*, 19(9), 551–556. doi:10.1089/cyber.2016.0151
- Fave D.A, Bassi M, Boccaletti S.E, Roncaglion C, Bernardelli G., and Mar D., (2018). Promoting Well-Being in Old Age: The Psychological Benefits of Two Training
- Gitlin LN, Mann WC, Tomit M, Marcus SM: Factors associated with home environmental problems among community-living older people. *DisabilRehabi*2001; 23(17): 777–787.)
- Joan O' Donnell, Siobhanlang, & Pierce Richardson. Assistive technology for older with disabilities and older people: A discussion paper.

- Khasnabis C, Heinicke Motsch K, Achu K, *et al.*, (2010), editors. Community-Based Rehabilitation: CBR Guidelines. Geneva: World Health Organization.
- Khosravi & Ghapanchi (2016) *Investigating the effectiveness of technologies applied to assist seniors*, *International Journal of medical informatics*, (85) p. 17–26)
- Kumar P, Dixit U., and Goyal V.C. (2009) assistive and Enabling Technology Needs of Elderly People in India: Issues and Initial Results Retrieved on <https://www.researchgate.net/publication/236838233>
- Leite S.D.E., Rodrigues P. T., Farias D. D. A.C.D.M., Moreira P.S.A.M., Bittencourt D.G.K., Oliveira D.B.F., Simpson A.C., Silva O.A., (2016) Influence of Assistive Technology for the Maintenance of the Functionality of Elderly People: an Integrative Review. *International Archives of Medicine*. Vol. 9 No. 21 doi: 10.3823/1892
- Lin, I-F., & Wu, H-S. (2014). Activity limitations, use of assistive devices or personal help, and well-being: variation by education. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 69(7), S16–S25, doi:10.1093/geronb/gbu115
- Medline Plus. Assistive devices (cited 29–4–2019) Available from: <https://medlineplus.gov/assistivedevices.html>
- Nancy M. Gell, Robert B. Wallace, Andrea Z. LaCroix, Tracy M. Mroz, Kushang V. Patel. Mobility Device Use in Older Adults and Incidence of Falls and Worry About Falling: Findings from the 2011–2012 National Health and Aging Trends Study. *Journal of the American Geriatrics Society*, 2015; DOI: 10.1111/jgs.13393
- Ocepek J., Prosic z., Gajvidmar (2012) Assistive technology and its role among elderly: A survey *Informatika Medica Slovenica.*, 17(2): 9–15.
- Paul and McDaniel (2016) *Facilitating telemedicine project sustainability in medi-cally underserved areas: a healthcare provider participant perspective*, *BMC Health Services Research* 16:148.
- Sisay M., (2017), The use of assistive technology to support self-care of elderly people at home. Available from. <https://www.theseus.fi/>

bitstream/handle/10024/127841/Thesis%20Final%20version.pdf?sequence=1&isAllowed=y

- United Nations Population Fund 2017. 'Caring for Our Elders: Early Responses' – India Ageing Report – 2017. UNFPA, New Delhi, India. Available from. <https://india.unfpa.org/sites/default/files/pub-pdf/India%20Ageing%20Report%20-%202017%20%28Final%20Version%29.pdf>
- Vignesh D, Gupta N, Kalaivani M, Goswami AK, Nongkynrih B, Gupta SK. Prevalence of visual impairments and its association with vision-related quality of life among elderly persons in a resettlement colony of Delhi. *J Family Med Prim care* 2019 . 8: 1432–9
- World Health Organisation & World Bank (2011) *World Report on Disability*. Geneva, CH; WHO

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Assessment of Nutritional Status and Mental Health of Elderly People Living in Rural Area in Lalsot Block Dausa, (Rajasthan)

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ABSTRACT

The present cross-sectional study was carried out to Assess Nutritional Status and the Mental health of 200 elderly persons, age varying from 60 years and above, residing in Talagau village, Lalsot block from Dausa district of Rajasthan (India). The nutritional status assessment was conducted using 18 items (30 points) Mini nutritional assessment (MNA) scale and depression assessment was done by using GDS (Geriatric depression scale). It was found that 92 per cent elderly persons were malnourished whereas 8 per cent were at risk of malnutrition and none were found to be well-nourished. Among the subjects, 7 per cent elderly persons had severe depression and 50 per cent had mild depression. Based on the present findings it may be said that the nutritional status and mental health of elderly subjects were very poor. Considering the high prevalence of poor nutritional status among the elderly, more focus on diet and possible nutritional interventions are required in rural India. There is a need to look after their mental health too.

Keywords: Depression, Elderly, Geriatric Depression scale, Malnutrition, Mini Nutritional Assessment, Nutritional status.

“Ageing is a natural process that begins at birth, or to be more precise, at conception, a process, that progresses throughout one’s life and end at death”. The proportion of elderly people is increasing in almost every country in the world but, by 2050, most will live in developing nations. (NIA 2011). In India, the proportion of elderly people was 8.1 per cent of the total population in 2011 and is expected to reach 12.6 per cent in 2025. (Census of India, 2011). According to NSSO Surveys, the proportion of the elderly population in rural areas was 7.6 per cent in 2007–08. While on the other hand in urban areas the proportion of the elderly population was 7.2 per cent in 2007–08. It shows that the percentage share of elderly to total population is higher in rural areas than in urban areas. The growth of the elderly population will create significant additional demands on healthcare and support services. (Anigarh, 2009)

Elderly people are vulnerable to malnutrition due to age, lack of financial support, inadequate access to food and functional status (ability to carry out day-to-day activities including preparation of food and intake of food) of the elderly. In India, the problem of the health of the elderly is compounded by poor nutrition together with medical issues, including both communicable and non-communicable diseases. (Purty, 2006)

The nutrition and health of the elderly are often neglected. Most nutritional intervention programs are related to infants, young children, adolescents, and pregnant and lactating mothers. Nutritional interventions could play a part in the prevention of degenerative conditions of the elderly and lead to an enhancement of their quality of life. Evaluation of nutritional status is important for the creation of a database to assist with the implementation of important programs and formulation of policies.

Depression is a common problem in the elderly and the symptoms of elderly depression can affect every aspect of their life, impacting their energy, appetite, sleep, and interest in work, hobbies and relationships. On assessing depression prevalence in elderly people it was found that 14 per cent had severe depression and 28 per cent had mild depression in Tabriz, Northwest Iran. The majority of the depressive disorder remains undiagnosed and untreated because of the wrong belief that it is a part of aging and associated social stigma. (Barua, 2011)

Considering the above-mentioned factors and the vulnerability of the elderly population along with a lack of studies. The present study was planned out to assess the nutritional status and mental health of elderly people living in rural areas of Lalsot block in Dausa district of Rajasthan.

Method

Sample

A cross-sectional study was conducted in Telawugau village in Lalsot Block, District Dausa, (Rajasthan). This study was conducted from February 2018 to April 2018. A total of 200 elderly subjects, 60 years and above were selected by purposive sampling method for this study. Those who were suffering from any diagnosed malignancy or disability were excluded from the study. The Ethics Committee, Home Science Department University of Rajasthan approved this study. Informed verbal consent from all the participants was obtained before the interview.

Data Collection

A health camp was organized in the government school in the village. They were interviewed in the local language using a semi-structured, validated questionnaire for the data collection.

Tools Used in the Study

For assessing nutritional status, Mini Nutritional Assessment (MNA) was used. It is a reliable, feasible and validated tool with 95.4 per cent sensitivity and 93.9 per cent specificity.

The MNA (Vellas B., *et al.*, 1999) tool comprised of 18 questions based on the four sections: anthropometric assessment, general assessment, diet assessment, and subjective assessment. Those with score > 23.5 had normal nutrition, 17–23.3 were at risk of malnutrition and < 17 were malnourished.

The Geriatric Depression Scale (Yesavage JA *et al.*, 1982–83): The tool was used to identify depression of the subjects. The tool composed of thirty close-ended questions.

The scoring range comprised of 0–9 as “normal”, 10–19 “mild depression” and 20–30 as “severely depressed”.

Statistical Analysis

Data entry was done in MS Excel. SPSS for windows version 10 was used for statistical analysis of data. Chi square test was used for comparing data. P value of < 0.05 was considered significant.

Result

Table 1 shows the socio-economic status of the subjects. Out of the total subjects, 51.5 per cent belonged to the general profile age group of 60-years and only 13 per cent of subjects belonged to the age group of above 80. Among the study subjects, 84.5 per cent were literate and 2 per cent of subjects could only read and write. None of the subjects was graduate

Table 1
Socio Economic Status of the Subjects

<i>Variable</i>	<i>Male (%)</i>	<i>Female (%)</i>	<i>Total (%)</i>
Age			
60–64	49(24.05)	54(27.0)	103(51.5)
65–69	23(11.5)	12(6.0)	35(17.5)
70–74	25(12.5)	12(6.0)	37(18.5)
75–79	5(2.5)	7(3.5)	12(6.0)
80 & above	8(4.0)	5(2.5)	13(6.5)
Caste			
SC	14(7.0)	8(4.0)	22(11.0)
ST	80(40.0)	63(31.5)	143(71.5)
OBC	0(0.0)	1(.5)	1(.5)
GENRAL	16(8.0)	18(9.0)	34(17.0)
Education			
Illiterate	87(43.5)	82(41.0)	169(84.5)
Can read only	5(2.5)	4(2.0)	9(4.5)
Can read and write	1(.5)	1(.5)	2(1.0)
Primary school	8(4.0)	3(1.5)	11(5.5)
Middle school	6(3.0)	0(0.0)	6(3.0)
High school	3(1.5)	0(0.0)	3(1.5)
Graduate	0(0.0)	0(0.0)	0(0.0)

Table 2 reveals that out of the 200 subjects 52.5 per cent of males and 39.5 per cent of females were malnourished and 2.5 per cent of males and 5.5 per cent of females were at risk of malnourishment. None of the subjects (both male and female) were found to be well-nourished. The relation of gender and nutritional status of the elderly was found to be statistically significant ($P=0.046$)

Table 2
Prevalence of Nutritional Status in Relation to Gender

<i>Variable</i>	<i>Male (%)</i>	<i>Female (%)</i>
Well nourished	0%	0%
At risk of malnourished	5(2.5)	11(5.5)
Malnourished	105(52.5)	79(39.5)
Total	110 (55.0)	90(45.0)

$\chi^2=3.964$; $df=1$; $p=0.04$

Table 3 shows that 50 per cent and 7 per cent of subjects had mild and severe depression respectively. There was no correlation between nutritional status and depression level.

Table 3
Prevalence of Nutritional Status in Relation to Depression

<i>Variable</i>		<i>Depression level</i>			
		<i>Normal</i>	<i>Mild depression</i>	<i>Severe depression</i>	<i>Total</i>
Nutritional Status	Well-nourished	0	0	0	0
	At risk of Malnourished	6(3%)	9(4.5%)	1(0.5)	16(8.0)
	Malnourished	80(40%)	91(45.5%)	13(6.5%)	184(92%)
	Total	86(43%)	100(50%)	14(7%)	200

$\chi^2_{2.272}$; $df=2$; $p=.827$

Discussion

The elderly population needs special care services due to the change of body composition with a progressive increase in fat and decline in lean body mass with advancing age and to maintain a high level of quality of life.

Malnutrition and depression have emerged as important problems among the elderly. In the study, the nutritional and mental health status of rural elderly was assayed and it was found that 184 (92%) subjects were suffering from malnutrition and none of the subjects were well nourished. A similar study conducted by Meena (2014) in western Rajasthan showed that malnutrition and risk of malnutrition in rural Rajasthan were 47 (25.40) & 104 (56.21). Another study conducted in Bangladesh showed 61.7 per cent were at risk of malnutrition, 25.8 per cent were suffering from malnutrition, and only 12.5 per cent were well nourished. (Tamama *et al.*, 2009) in another study found that high percentage of subjects were at risk of malnutrition.

Malnutrition is dependent on several factors in the elderly population. It can be a detrimental consequence to physical and mental factors, or a combination of any. It may result from poor dentition, difficulty in chewing and swallowing, diminished taste and smell, loss of appetite, difficult mobility and loss of caregivers, loneliness and lack of companionship, dietary deficiencies, a side effect of medications, gastrointestinal disturbance, chronic diseases, endocrinal disorders, alcoholism, mental and cognitive changes, malignancies, and depression (ulger, *et al.*, 2010)

Depression is associated with significant morbidity and mortality. Gebretsadik, *et al.*, (2006) reported that 13 (6.4%) were in severe depression and 91 (45.5%) subjects belonged to mild depression. Whereas in another study 26 (14.1%) had severe depression. Depression in the elderly was found to be more prevalent in females than males. In some studies, the prevalence of depression among the elderly was as high as 35 per cent (Beekman, *et al.*, 1999). The risk of depression in the elderly population is due to low income, lack of social support and companionship, retirement and chronic medical illness.

In this study, no correlation of nutritional status and depression status was found, but some studies show a strong relation to nutritional and depression status. This result was $r=0.416; p>0.001$. Nutrition can be one of the factors affecting the health of the elderly. Adequate nutrition, especially in older age, aids in the maintenance of health and in decreasing the onset of chronic diseases, contributes to

vitality in everyday activity, to energy and mood and helps in maintaining functional independence. (Ruiz *et al.*, 2003).

In conclusion, the present study shows that the nutritional status and mental health of elderly subjects were very poor. Considering the high prevalence of poor nutritional status and depression among elderly, more focus on diet and possible nutritional interventions and community support and availability of health care services are much needed for the elderly in rural India. There is also an urgent need for greater awareness of depression among family members and community at large. The promotion and implementation of low cost, prevention-based initiatives such as health, nutrition, and physical education, could significantly enhance the possibility of maintaining good nutritional status for the elderly.

References

- Anigrahi AK. (2009): Determinants of Living Arrangements of Elderly in Orissa: An Analysis: Working Paper, Bangalore: The Institute for Social and Economic Change.
- Barua A, Ghosh MK, Kar N, Basilio MA. (2011): Prevalence of depressive disorders in the elderly. *Ann Saudi Med.*; 31(6): 620–4.
- Beekman AT, Copeland JR, Prince MJ. (1999): Review of community prevalence of depression in later life. *Br J Psychiatry.*; 174(4):307–31?
- Gebretsadik M, Jayaprabhu S, Grossberg GT. (2006): Mood Disorders in the Elderly. *Medical Clinics North America.*; 90(5): 789–805.
- Census of India (2011): Registrar General and Census Commissioner India, Ministry of Home Affairs, Government of India, New Delhi.
- Purty AJ, Bazroy J, Kar M, Vasudevan K, Veliath APP. (2006): Morbidity Pattern among the Elderly population in the Rural Area of Tamilnadu, India. *Turk Jr Med Sci.* 36:45–50.
- Ruiz-Lopez MD, Artacho R, Oliva P, Moreno-Torres R, Bolanos J, de Teresa C, Lopez MC. Nutritional risk in institutionalized older

women determined by the Mini Nutritional Assessment test: What are the main factors? *Nutrition* 2003; 19 (9): 767–771.

Meena Shivraj, Singh V.B, Meena B.L, Singh Kusum, Meena Neelam, Sharma Dayal, Beniwal Sanjay, (2014): Study of Nutritional Status in Elderly in Indian Population. *Int J current research*; 6 (11): 10253–10257.

Tamanna Ferdous, Zarina Nahar Kabir, Ake Wahlin. Kim S, Tommy C. (2009): The multidimensional background of malnutrition among rural older individuals in Bangladesh – a challenge for the Millennium Development Goal. *Public Health Nutr.* Mar 4; 1–9.

Ülger Z, Halil M, Kalan I, Yavuz BB, Cankurtaran M, Güngör E, (2010): Comprehensive assessment of malnutrition risk and related factors in a large group of community-dwelling older adults. *Clin Nutr*; 29(4): 507–11.

National Institute on Aging, (2011): *Global Health and Ageing*, National Institutes of Health US Department of Health and Human Services.

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