

Elderly care: A quest on their wellbeing under institutionalized and family-based care

Swagatika Samal¹, Sasmita Patel²

¹ Department of Social Work, Sambalpur University, Sambalpur, Odisha, India

² Department of Social Work, Visva-Bharati Central University, Santiniketan, West Bengal, India

Abstract

The elderly in India until the unfolding of the 21st century were well respected and recognized by the society by virtue of their knowledge, expertise and life experiences. They were holding the key positions within the households and being resourceful they were consulted in almost all affairs of a family. During the sunset years of their lives, the elders were properly cared by other family members. But, with breakdown of joint family system and diminishing social values, concern and care for the elderly got affected to a larger extent and today, the elderly find themselves totally helpless and hopeless with neither the family nor the society taking responsibility for their care and support. On the other side, the share of the senior citizens to the Population in India is increasing in an alarming rate further increasing the dependency ratio, i.e., 10.9% in 1961 to 14.2% in 2011. This raises a quest for the wellbeing of the elderly and their care in the present scenario. Today, elderly are being marginalized, victimized in current society and often abused by their own family members. Against these backdrops, the paper aims to highlight issues and challenges of the elderly living in institutions (Old-age Homes) and the elderly staying in their family in Sambalpur City, Odisha. Further, the paper attempts to devise suggestive measures to address the elderly issues. Data for the study has been collected by using interview schedules, focus group discussions and case studies.

Keywords: elderly abuse, social isolation, victimization, marginalization, elderly care, wellbeing

Introduction

Elderly care in Indian societies in general, has been considered to be mostly the familial system of care and support for the senior members in a family. With the industrial revolution, urbanized and modernized living of the present age families have somewhere synchronized this concept paving the way for emergence of external care institutions for the aforesaid elderly care. The so called modern families are more of nuclear or single-parent Families where-in elderly care seems to be a difficult job to be performed by the women as care provider or care taker. The scenario is more observed in the families consisting of working women having dual responsibilities of home maker as well as bread-earner or job-holder. Moreover, cities are the centers of the modern families which have ignored the needs of elderly people and excluded them from the society leaving them to lead a miserable life. Wretchedness of elderly, loneliness, isolation, depression, elderly abuse are the certain concepts that we find commonly whenever there is instances of elderly situation in many of the countries in the world. The issues related to elderly are rather growing day by day with the growing share of the senior citizens to the total population in our country. With breakdown of joint family system and the social values, concern and care for the elderly got affected to a larger extent and thus, today the elderly find themselves totally helpless and hopeless with neither the family nor the society taking responsibility for their care and support. The traditional sense of filial-peity has been eroded and consequently respecting the elderly and paying importance to their bank of wisdom out of life experiences is being disappearing among the younger generation (Gormal, 2003) ^[4] with the expansion of artificial intelligence and over-busy unstructured life style of the

working mass. Today, the elders as 'bank of wisdom' are no more treated with respect but, often treated of being 'unwanted' and 'burdensome'. Life expectancy in our country with improved medical care and nutritional consciousness has improved a lot (Kanwor, 1999) ^[13]. Consequently, People are living longer and these groups of elders constitute a vastly experienced human resource with tremendous potential to contribute for development of the country. Thus, well-being of the elder population is essentially the concern of the present society. Globally, the phenomenon of population ageing has becoming a major concern for the social planners and the policy makers in both for developed as well as developing countries. India, as a fast growing economic country, is also not an exception to this demographic alteration. As a result the situation has put forth many new challenges before the government and productive population as well, and in almost all domains of the Indian society. They have minimal access or least access to adequate income to support themselves and their dependants if any. Again, they do not have assured income. There is absence of better and easy accessible healthcare and social security measures for the elderly (MoSPI, GoI, 2016) ^[15]. At this stage of life, least opportunities for creative and effective use of their free time also do put them in tragedy as they encounter with problems of loss of social role and responsibilities, feelings of insecurity, unwanted, isolation, loneliness, depression and so on. Majority of the elderly have become a relatively neglected demographic group who are living with depression, isolation, unhappiness and insecurity which can be prevented with timely support and due attention. Basically the process of victimization on the part of the senior citizens is well pronounced in terms of their financial,

physical, emotional and social problems. Being not happy and insecure in later age is not inevitable, even for the physically poor and disabled elderly. But, it is not yet fully visualized in our country. The situation of elderly thus, needs focused attention to their special needs while formulating and implementing holistic plans and programmes for dealing with complex issues of the elderly people. The trend depicts us about such a future where there would be more pressure on extending support, service, care and treatment to the aged persons, making it one of the severe societal challenges. For their comprehensive development, formulating and implementation of many welfare and development programmes and having an up-to-date database on them can hardly be over-emphasized.

Elderly Care Structure and Their Wellbeing

Wellbeing as a concept has been crept into development agenda in recent years, which moves beyond narrow economic notions to wider visions of participation and freedom to encompass human development (Gough, *et al.*, 2006) [5]. According to the Wellbeing in Developing Countries Research Group (WeD), there are three key dimensions to wellbeing: first, the subjective which encompasses people's own perception of their material and social positions within the context of existing cultural norms, values and beliefs; second, the material which comprises personal assets, welfare and standard of living; and third, the relational or social aspect that focuses on social and personal relationships (White, 2010) [21]. In the old age home context also, all these domains are highlighted as influencing a sense of home for the aged under institutionalized care (Rijnaard, *et al.*, 2016) [16].

The traditional Indian family structure provides overall comfort for the elderly members as contrary to the destitute, abandoned, marginalized and lonely elderly. But, the changing Indian society today provides with different types of living arrangements for the elderly. Some are fortunate to stay happily with their families, while others are forced for institutionalized-living, or isolation, or abandonment. In modern India, specifically in urban set-ups, institutionalized-living is becoming a fast growing trend amongst the elderly. Their entry into an old age home is either voluntary or involuntary. What is generally observed that, ambitious children are not staying with their parents rather they leave them at home in villages or small cities for better career opportunities. In such cases, having nobody in family, the elderly prefer to shift to old age homes to receive institutional support. Irudaya Rajan & Kumar (2003) [10] emphasized on living arrangement of elderly as "an important constituent of the overall wellbeing of the elderly". Living arrangements of the Indian elderly can be categorized into six mutually exclusive configurations such as – a) elderly living alone; b) elderly living with spouse only; c) elderly living with spouse and adult children; d) elderly living within an intergenerational setting i.e., with spouse, adult children and young grandchildren; e) elderly in multigenerational setting i.e., living with spouse, adult children, and others with no young grandchildren; and f) elderly living with others such as other relatives or with inmates of old-age homes. The India Human Development Survey (IHDS) 2004-2005 reports that an estimated 75 percent of the elderly in India live with their spouse and/or other family members, and approximately 22 percent are living with non-familial members, and only a three per cent

elderly are living alone (Samanta *et al.*, 2014) [17]. Whatever the living arrangements of the elderly, whether living in family set-up or in institutional set-up, their wellbeing largely depends on certain factors such as socio-economic status of the elderly, health situation, nature of care and support they receive, fulfillment of their basic needs, sense of freedom etc.

The social exchange theory as hypothesized into traditional Indian family structure, the elderly assume a symbiotic and reciprocal relationship in family "dispensing their acquired wisdom and prudence, distributing their wealth and belongings, and maintaining family harmony" (Siva Raju, 2002) [19]. Ironically, in a progressive modernized, materialistic Indian society, growth of self-centeredness and individualism, the knowledge of the senior members has become redundant. The quality of care the elderly receive very often depends on the economic condition of the family (Alam, 2006) [1], and their wellbeing depends on familial dynamics. As mentioned by Siva Raju (2011) [20], "many facets of the generation gap contribute to marginalization of older persons and their wisdom by the younger generation, leading to conflicts, lack of respect and decline of authority, neglect and sometimes even exploitation or abuse."

Literature Review

Numerous studies depict that in the present society, there are many obstacles for the elderly due to emergence of alternative family structures (from nuclear to childless families or single-parent families) and growing number of people living alone feeling isolated and depressed. Due to societal and economic insecurities, mostly the economically poor elderly, ill health, living alone or staying in a care home are becoming lonelier and are living with low levels of life satisfaction and wellbeing (Allen, 2008) [2].

In India, 22 million of the elderly live below the poverty line (ESRC, 2010). Around 40 percent of the elderly are working, with the percentage increasing to 61 percent for male elderly (Siva Raju, 2011) [20]. In urban setting in the country, where informal employment accounts for approximately 92 percent of informal workers as a whole (ILO Country Office for India, 2016), the elderly in informal employment are inevitably disadvantaged and "retire from their gainful employment without any financial security like pension and other post-retirement benefits" (Siva Raju, 2011) [20]. Regarding destitution and ageing, Kaushik (2014) [14] agrees on the notions that the biological aspects of ageing is a "universal phenomenon" but, the "social aspects of ageing differ considerably" between "the rich and poor, educated and illiterate, professionals and non-workers, men and women." Help Age India (2014) reports that there are different needs of different age groups of elderly i.e., the young and middle-aged elderly between 60-79 years are focused on satisfying their economic needs and desires to remain physically fit and independent, while the oldest-old people aged 80 years and above are "often sick, frail, physically weak, vulnerable to crime", with increased dependence upon others and often requiring urgent support measures. Siva Raju (2002) [19] also acknowledges that the needs and problems of the elderly may vary according to their age, health, living status and other background characteristics, or based on their locality as mentioned by him, "the heterogeneity among the elderly population cannot and should not be ignored while framing various models of care for the elderly in our society."

Kaushik (2014) ^[14] observes five dimensions of vulnerabilities of the Indian urban elderly, those are – “health, economic, housing, social and personal vulnerabilities”. Addition to it further, Help Age India (2014) describes “empty nest” phenomenon, where growth of individualism and migration of the young in search for better jobs, the employment of women into the workforce, moving them out of the household and traditional caregiver roles as some of the causal factors for the elderly’s various vulnerabilities and emphasizes increased need for their care and attention. On gender perspective, numerous studies have analyzed that compared to men more women experience negligence or abuses in India and the perpetrators are often the family members (Shah *et al.*, 1995) ^[18]; (Siva Raju, 2002) ^[19].

Irudaya Rajan and Kumar (2003) ^[10] in their study, differentiate between “support given to the elderly” and “taking care of the elderly” where the support to the elderly is just merely providing economic aid, but taking care of the elderly includes the “extension of emotional support and wellbeing” as normally provided by family members or others with whom the elderly co-resides. Studies undertaken on OAHs in Maharashtra (Dandekar, 1993) ^[3], Lucknow (Gupta, *et al.*, 2014) ^[6], and Kerala (Irudaya Rajan, 2000) ^[11] reflect negligence or lack of care in their own homes as one of the main reasons for the elderly’s voluntary shift into OAHs. Similarly, psychological abuse by the family members and intergenerational strife are found as the other reasons for their relocation into OAHs (Kalavar and Jamuna, 2008) ^[12].

Thus, despite the preference for the traditional extended family system in case of the elderly who would like to spend their life until death, the preference for living in OAHs and to receive institutionalized care is gradually becoming popular in India in general and urban India in particular. Regarding wellbeing of the elderly in Old Age Homes (OAHs), “encouraging a sense of independence and freedom, enabling productive ageing, allowing spiritual fulfillment, establishing routine, providing basic care and support, being sensitive to their financial and health concerns, as well as ensuring an elderly-friendly physical environment” are considered as some of the factors that influence their wellbeing in OAHs (Help Age India, 2018).

Research Objectives

The study included the following objectives:

- To study the issues of the elderly staying with their family members
- To understand the challenges of the elderly living in institutions (Old-age Homes)
- To assess elderly care and wellbeing in both family as well as institutional settings &
- To devise suggestive measures to address the elderly care issues.

Methodology

The study is a mixed method research which strives to understand and analyze the various issues of the elderly respondents living in two different settings, i.e., family setting and institutional setting. For the study 100 samples in family setting were interviewed whereas, 63 samples (as available) from OAHs in the study area were interviewed. Samples are drawn using purposive and simple random sampling from study areas such as Jagannath colony,

Bhutapara, Modipara and Sakhipara in Sambalpur city of Sambalpur district in Odisha along with three old-age homes in and around Sambalpur covering all inmates there. Data for the study collected both from primary and secondary sources where, the primary data was collected from the respondents by using interview schedules, focus group discussions and observation and the secondary data covered published articles and Census data etc.

Major Findings

The findings of the study mainly cover the data collected during the field-study concerning the research objectives. It indicates that all the elderly respondents living in families or living in OAHs consider family as the main social institution for care of the elderly. In the study it was observed that elderly (88.9%) in OAHs still miss their family a lot and wish to receive family care and rest are of either nobody in their families alive. However, many shared through group discussions that generation gap and the increased poverty and economic stress of the families have eroded the traditional family care and support for the elderly in general and the elderly women in particular.

Within the context of a traditional Indian family set-up and structure, institutionalized-living inevitably evokes a perception of abandonment and isolation, associated with the social stigma of abandonment and loneliness. Despite this, institutionalized-living is gradually becoming a growing trend amongst the older in the city. In some cases, elderly living alone in family setting are planning to shift to paid old age homes if available. This is so in case they become helpless to do even their daily activities. Empty nest syndrome, absence of care provider, negligence, deprivation etc. are associated with such decisions. However, in the city like Sambalpur, (a city on transition in terms of demographic as well as infrastructural, after recent declaration of it as a Municipal Corporation) the concept of paid OAH is yet to be introduced. There are only a few OAHs run by Indian-Red Cross Society with the meager amount of governmental support in the study area.

Family-Care Setting and the Elderly

In the family setting, there observed serious gender asymmetry in the elderly care. Female elderly lack access to and control over productive resources such as land and livestock or other means of earnings due to deep rooted social norms which does not allow them for ownership and gain income. This is evident that of the secondary status enjoyed by the women in the local society. This further compounds their difficulty in obtaining enough income for survival. It has been noted that more female (18 %) than male elderly (11%) are staying alone without direct support from their children (Fig. no. -1).

Wellbeing of the elderly in families are dependent upon many factors such as the socio-economic status of the elderly and thereby their independence, their health condition, as well as the availability of care and support. The more they enjoy independence and consulted in decision making of the family, receive well treatment from their family members, the more they are found to be happy and satisfied. Their living arrangements such as - living alone, living with dependants or unmarried daughters, living with spouse only, living with adult children but at the mercy of daughter-in-law also found to determine the different challenges of the elderly. Figure no. - 1 depicts the various

living arrangements of the elderly living in family settings where, a majority of women elderly found to live alone and this is because of death of their husbands, married children living far away from them etc. The figure also presents that there are elderly persons (14%) who still have the burden of family members (dependants) and are to provide care to them. These factors in turn decide for their wellbeing in family settings. However, elderly (33%) living with their spouses and living with children (24%) are found to be comparatively happy than other two categories of respondents. This shows how in Sambalpur (- a small but growing city), the living arrangements of the elderly are changing under the impact of urbanization and modernization.

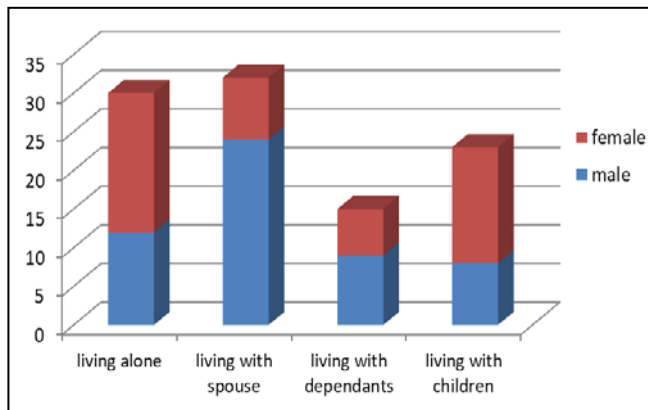


Fig 1: Living arrangement of the respondents in family setting

Cases of elderly abuse also traced during the study. There are elderly living in families found to be neglected and abused (19%) by their own adult children. To preserve the pride of their family name some of the respondents did not share the fact. But, the condition of the 'space' where they stay, in some of the economically sound families clearly depicted the neglected treatment the elderly are receiving in the families. It was too unhygienic, worst bedding facility, dirty environment, kept in isolated space of the household. In a case-study of a highly qualified and rich family, it was found that the elderly was left alone to stay and live on her own in an adjacent man-less quarters.

Elderly in Old-Age Homes

The admission of elderly people in OAHs in and around Sambalpur cities is mostly referred and involuntary in nature. They are either referred by the city branch of Indian Red Cross Society or by the neighbors or family members of the elderly. The study finds that all the elderly inmates are staying in the OAHs involuntarily which brings light into the depth of their vulnerability. The wellbeing of the elderly in institutions depends upon their health conditions, as well as the availability of care and support in OAHs. In the study, it was found that the OAHs cannot afford to provide a standard quality of living conditions to the inmates with the meager amount of financial support they receive from the Govt. only.

There are very limited space and facilities for the elderly to spend their time constructively. From infrastructure point of view, these old age homes are so poor that in instances, 3-4 elderly have to stay in a small room in a very congested way. The OAHs provide them a routine life, which the elderly since morning till evening follow that. In the

morning they get up early, get fresh, have their tea and then by 12.30 p.m. have lunch. After the lunch, they go for sleep and in the afternoon at 3.00 pm they have tea with puffed rice (*mudhi*). In the evening they have evening prayers and then have early dinner and go to sleep. This routine living style mainly includes the elderly's food and sleeping timings. As there is lack of recreational facilities, the inmates very often feel bored of their life. Almost all of them found to spend their time in sleeping. Those who can read (very few) they have only the access to a few reading materials.

A majority of inmates belong to poor economic background and/or there is no body to take care of them in their family. Thus, irrespective of having so many issues in OAHs, they responded for having a good living there. More or less they are satisfied, as they are able to get at least the food for their survival in the OAHs.

Although health check-ups are made regularly in the OAHs i.e., twice in a week and on medical emergency but, the understaffed OAHs cannot avail personal individual services such as counseling or emotional support etc. for all the inmates. These inmates are not fortunate enough to receive specialized need based services such as encouraging a sense of independence and freedom, enabling productive ageing, allowing spiritual fulfillment, providing basic care and support, being sensitive to their financial and health concerns, as well as ensuring an elderly-friendly physical environment other than a home for shelter and food for survival.

Despite all limitations in OAHs, it may be said that the elderly generally have a good perception of their stay in the homes, with many appreciating the basic care and support they get in these OAHs, the peace and quiet surroundings of the home, and the relationships they have with staff and fellow residents in the home. Besides the possibility that, the elderly interviewed were inclined to share only their positive experiences and communicate only the good news, it also cannot be ignored that since the OAHs provide for their basic needs and health care, the elderly under the study are genuinely satisfied with their current living arrangement by acknowledging that these are needs that could otherwise be unfulfilled in alternative living arrangements.

Suggestions

For the wellbeing of the elderly in our country, the first and foremost instrument to effect the change in their adverse situation is to have appropriate social and economic policies which will mitigate the ill effects of certain factors impacting elderly wellbeing. However, based on the study, the following are some suggestions to influence the wellbeing of elderly in both family and institutional setting:

- Providing basic care and support and being sensitive to their financial and health concerns, as well as ensuring an elderly-friendly physical environment;
- Helping the elderly to feel independent, having freedom of choice, consultation, having spiritual fulfillment, participating in work or activities that enable active ageing, fixed time for meals, and a stable routine for activities;
- Engagement of gerontological social workers to provide case-based services including counseling, referral etc.;
- Provisions of programmes to fulfill their need to feel needed, have purpose in life, keep their minds occupied and increase their wellbeing;

- The OAHs should emphasize on availing adequate staff to contribute to improved quality of care and life for the elderly, and help them to learn new life skills;
- Provision of the individual private space and common shared areas in OAHs would provide the elderly necessary break for privacy, as well as place for social interactions essential for the wellbeing of the elderly;
- Social interactions and relationships between the elderly and fellow beings needs to be enhanced which will inevitably play an important role in influencing their wellbeing; &
- Elderly should be helped to learn staying active, stay safe, find balance, eat healthy, sleep well, nurture high spirit, lower stress and find programmes for engagements.

Conclusion

Wellbeing is a dynamic concept and should be conceived both as an outcome and a process. There are five conceptual attributes of attachment, role, enjoyment, security and control as introduced in the ICECAP-O index for wellbeing. By analyzing the elderly care situation and their wellbeing in both the settings, it is apparent that a holistic consideration of the survival, economic, food and emotional securities and Quality of Life needs of the elderly is required. For the economically poor families, unless additional socio-economic support is given to them, they may not be able to continue to care the elderly properly. Besides these, while framing policies, there is a need to pay special attention to different needs of a heterogeneous elderly community including elderly men and women, elderly in poverty, elderly with disability, neglected elderly, abused elderly, emotionally insecure elderly, elderly having dementia issues so and so forth.

Older people often experience reduced mobility and debilitating disabilities and need other people to do things for them. This is crucial with the increasing trend of nuclear families in our society and with fewer children the care of older persons in the families gets more difficult. To avail care-needs of the elderly there should be appointment of more and more nursing professionals or gerontological social workers with appropriate skills. Moreover, there must be ground level enforcement of the existing laws and policies meant for the elderly. It is equally important that the state, civil society and community recognizes the rights and needs of the elderly and support them. Thus, specific state interventions are needed for the most vulnerable aged, and for the aged who are below the poverty line. It is also required to protect the human rights of the elderly and have laws and policies to ensure efficient economic and social protection during disability and old age, and vulnerability in lack of adequate family support.

The elderly citizens do not need our pity. It is our duty and responsibility to help the elderly not to spend the twilight years of their life in isolation, sufferings and misery. Elderly people are, therefore, in need of vital social support that will enhance their lifestyles well. The Indira Gandhi National Old Age Pension (IGNOAP) and the Maintenance and Welfare of Parents and Senior Citizens Act 2007, emphasize on the family as an institution to render and fulfill the necessary physical welfare, psychological wellbeing, as well as social and economic security of the elderly. So, wherever it is possible, the families need to be strengthened for elderly care with a comprehensive programme. There is also

requirement of family-based care programmes on case basis. The Old Age Homes, specifically in the study area and in the state in general need to be equipped with more manpower and quality of services with appointment of specialized elderly care professionals. Besides these, people before their retirement age or during their late adulthood stage should be made learn to plan for their old age/retirement age as well as encouraged to learn self-care. They should be made learn to adapt to the changing society through various mechanisms. At the same time their basic social, economic and physical needs are to be taken care of by various means.

References

1. Alam M. Ageing in India: Socio-Economic and Health Dimensions. New Delhi: Academic Foundation. 2006.
2. Allen J. Older People and Wellbeing. Institute for Public Policy Research. UK, 2008.
3. Dandekar K. The aged, their problems and social intervention in Maharashtra. Economic and Political Weekly, 1993, 2010; 28(23), 1188-1194.
4. Gormal K. Aged in India. Mumbai - TISS Publishers. 2003.
5. Gough I, McGregor JA, Cam field L. Wellbeing in developing countries: Conceptual foundations of the WeD programme, Bath: ESRC Research Group on Wellbeing in Developing Countries, 2006.
6. Gupta A. *et al.* Quality of Life of Elderly People and Assessment of Facilities Available in Old Age Homes of Lucknow, India. National Journal of Community Medicine. 2014; 5(1):21-24.
7. Help Age India, Overview of the Elderly in India. In: M. Khurana, J. K. Sarma, S. Sharma & A. Datta, eds. State of the Elderly in India. New Delhi: Help Age India, 2014, 5-12.
8. Help Age India. Elder Abuse in India - 2018: Changing Cultural Ethos & Impact of Technology. New Delhi: Help Age India, 2018.
9. ILO Country Office for India. India Labour Market Update, New Delhi: ILO, 2016.
10. Irudaya Rajan S, Kumar S. Living arrangements among Indian elderly: New evidence from National Family Health Survey. Economic and Political Weekly. 2003; 38(1):75-80.
11. Irudaya Rajan S. Home away from home: A survey of Old Age Homes and inmates in Kerala, Thiruvananthapuram: Centre for Development Studies, 2000.
12. Kalavar J, Jamuna D. Interpersonal relationships of elderly in selected old age homes in urban India. *Inter persona*. 2008; 2(2):193-215.
13. Kanwor P. Psychosocial determinants of institutionalized elderly. *Indian Journal of Gerontology*. 1999; 12(3):27-39.
14. Kaushik A. Destitution and Ageing. In: M. Khurana, J. K. Sarma, S. Sharma & A. Datta, eds. State of Elderly in India. New Delhi: Help Age India, 2014, 111-128.
15. MoSPI, GoI. Elderly in India-Profile and Programmes - 2016, Social Statistics Division, Ministry of statistics and programme implementation, Central statistics Office, Government of India, 2016.
16. Rijnaard M. The factors influencing the sense of home in nursing homes: A systematic review from the

- perspective of residents. *Journal of Ageing Research*, 2016, 1-16.
17. Samanta T, Chen F, Vanneman R. Living Arrangements and Health of Older Adults in India. *The Gerontological Society of America*. 2014; 70(6):937-947.
 18. Shah G, Veeton R, Vasi S. Elder Abuse in India. *Journal of Elder Abuse & Neglect*. 1995; 6(3-4):101-118.
 19. Siva Raju S. Meeting the needs of the older poor and excluded in India. *Situation and Voice: The Older People and Excluded in South Africa and India*. New York: UNFPA, 2002, 93-111.
 20. Siva Raju S. Studies on Ageing in India: A Review. In: *BKPAI Working Paper No. 2*. New Delhi: United Nations Population Fund (UNFPA), 2011, 1-28.
 21. White SC. Analysing wellbeing: a framework for development practice. *Development in Practice*. 2010; 20(2):158-172.