



Review Paper

A Review of Socio-Economic and Demographic Ageing Literature with special thrust on North-East Indian Studies

Baruwa Anita

Department of Economics, D.H.S.K. Commerce College, Dibrugarh, Assam, INDIA

Available online at: www.isca.in

Received 2nd February 2015, revised 5th March 2015, accepted 17th April 2015

Abstract

Demographic research has developed as an important area of interdisciplinary study within the ambit of social gerontology in the context of an ever graying world population. Literature review was conducted to find out the areas of concern within the emerging issues in the process of ageing, know the various sources of data and methodologies applied in the various studies and identify the research gaps and areas for future research. There has been a vast growth of literature on ageing trends, patterns, socio-economic and demographic profiles of the elderly. Cross-sectional studies on specific aspects of the elderly have been done based on sample studies. However, longitudinal cohort studies with in-depth analysis of the different strata within the elderly need to receive specific attention on a multidisciplinary level by adopting a holistic approach to population ageing.

Keywords: Ageing, demography, elderly, gerontology, population studies.

Introduction

Population ageing is the process by which the older population grows faster than the total population. It is the most significant emerging demographic phenomenon in the world today. In 1950, the world population aged 60 years and above was 205 million (8.2 per cent of the population) which increased to 606 million (10 per cent of the population) in 2000. By 2050, the proportion of older persons 60 years and above is projected to rise to 21.1 per cent, which will be two billion in number. Asia has the largest number of world's elderly (53 per cent), followed by Europe (25 per cent).

In the context of an ever graying world population, ageing has emerged as an important area of study. Gerontology, the study of ageing, is a multidisciplinary subject with three core components: the biological, the psychological and the social. Social gerontology, which marked its beginning in the late 1940s, incorporates three distinct aspects: ageing as an individual experience; ageing in the social context to understand the position of the older persons within the society; and the social consequences of ageing. Clark Tibbits used the term 'social gerontology' for the first time in 1954.

The socio-economic and demographic context: Within the ambit of social gerontology, the phenomenon of ageing became an area of demographic research in the initial years of gerontological research¹. According to Martin and Preston², an increasing number of demographers and other social scientists have begun to examine the implications of population ageing for a variety of social and economic processes, leading to the

emergence of a field loosely called "*the demography of aging*". The term has become a rather capacious umbrella for a variety of studies addressed to the causes and consequences of population aging. These studies have in common an empirical emphasis, typically using survey or vital statistics data. They also exhibit one or more of the following features: an orientation towards intergenerational relations and exchanges, especially within the family; a concern with cohorts and the process by which cohorts may forward their histories into new age categories and replace cohorts with different histories and, a focus on the characteristics and behaviour of older people themselves, especially in the critical areas of economics and health.

The Indian context: India is a young country at present. However, India ranks second among the countries of the world in terms of the absolute number of the ageing, next only to China. The proportion of persons aged 60 and above in India rose from 5.5 per cent in 1951 to about 8.3 per cent in 2011³, translating into roughly 93 million people. According to Union Health Ministry, as reported in *Times of India* dated 22.4.2011, the graying population will increase to 12 per cent of the total population by 2025 — 10 per cent of which would be bedridden, requiring utmost care. It is estimated that the 60-plus population will increase to 100 million in 2013, and to 198 million by 2030.

But India, like many developing nations including China lag behind in universal health care provisions due to deficiencies in the institutional, infrastructural and insurance arrangements of health care services.

Among the states, Kerala (11.8), Himachal Pradesh (10.1) and Tamil Nadu (10) have the highest percentage of elderly in the country, followed by Maharashtra (9.2), Punjab (8.9) and Odisha (8.7). Jharkhand (5.7), Assam (5.5) and Delhi (5.7) record the lowest percentage of geriatrics. The percentage of women in the age group of 60 years and above is higher in 17 out of the 20 large states. It is as high as nearly 12.6 percent in Kerala, Maharashtra (10), Himachal Pradesh and Tamil Nadu (10.3). Assam is one of the three states to have more elderly men than women, the other two being Bihar and Jammu & Kashmir (*Times of India* dated 2.4.12).

Objectives of the review: In this backdrop, within the broad objective of carrying out a review of literature on the socio-economic and demographic studies on elderly population, the present paper aims to: i. Find out the areas of concern within the emerging issues in the process of ageing, ii. Know the various sources of data and methodologies applied in the various studies, iii. Identify the research gaps and areas for future research.

Methodology

Out of the three core components of Gerontology, viz. biological, psychological and social, the present review has been restricted to socio-economic and demographic studies of the elderly population. However, being inter- and multi-disciplinary in nature, a few studies pertaining to clinical health and psychological well-being (life satisfaction) of the elderly have been incorporated in the review. Effort has been made to include as much relevant literature as possible and to incorporate current literature in the review. But the list is not an exhaustive one. Literature has been searched for both in libraries and the internet.

The review is thematically classified into three broad sections – i. Socio-Economic and Demographic Perspective, ii. Quality of Life and Health Aspects of Ageing and iii. Social Security Issues. These themes are further sub-categorised according to the area of the study, i.e. global, national and regional. The publications are then arranged chronologically in each of the sub heads. The area of the regional studies has been confined to the North Eastern region of India.

Socio-economic and demographic perspective: Literature on different aspects related to the demographic and socio-economic perspective of ageing population is increasing by leaps and bounds. Nonetheless, this forms an integral part of study on the concerned subject by virtue of its nature.

Global studies: In his paper Dlugosz⁴ presents the level of demographic ageing in European countries to show the pace of this process in 1989-2001 as well as attempts an assessment of hazard of demographic ageing. The study found quick ageing of

population in the Mediterranean Basin but a reduction in the ageing of Scandinavian societies.

Gavrilov and Heuveline⁵ cite the insufficiency of various indicators of ageing and suggest the population pyramids to be the most adequate approach. They found that most rapid growth occurs in the oldest age groups (80+ or 85+ and 100+ years) and a marked “feminization” of population ageing has taken place all over the world. Also, ageing is found to be associated with poverty particularly in developing nations. They have cited forecasts of growth of ageing populations across different regions and nations of the world. According to them, of the demographic determinants of ageing, viz. fertility rate and mortality rates have different influences on the age structure of a population as time passes. As for migration rate, they reason that migrants have higher relative weight on smaller populations. Contrariwise, Gavrilov and Heuveline cite Preston, Himes and Eggers to suggest declining mortality to be the dominant factor in current ageing.

However, Weil⁶ cites himself to suggest that it is declining fertility that is the dominant contributor to population aging in the world today. More specifically, it is the large decline in the total fertility rate over the last half century that is primarily responsible for the population aging that is taking place in the world’s most developed countries. Because many developing countries are going through faster fertility transitions, they will experience even faster population aging than the currently developed countries in the future. He draws an interesting conclusion that population ageing itself could lead to lower fertility and, down the road, even more ageing.

Menon and Nakamura⁷ analyse the impact that aging is having in Asia, examine the policy options for dealing with the problems it is causing, and outline how different sub-regions may require different responses. Through a review of various Asian literatures they find that population aging can change age-specific behaviour, for instance, lower fertility rates can lead to higher female participation in the labour force, or longer life spans can lead to longer working lives. Moreover they found that funded pensions increase savings and preserve intergeneration equity and that aging can have a significant negative impact on household and private savings rates.

Similarly, Horioka⁸ finds that the retired aged dissave and that even the working aged dissave, at least at advanced ages. Moreover, there has been a sharp increase in the dissaving of the retired aged since 2000, with the increase being due primarily to reductions in social security benefits, increases in consumption expenditures, and increases in taxes and social insurance premiums. These findings are consistent with the life-cycle model and suggest that this model is highly applicable (and becoming increasingly applicable over time) in the case of Japan.

Chan Yin Fah⁹ focuses on the economic well-being of older persons in Canada through the concepts of living standard and living level. He compares the criterion for measurement of these concepts using an objective approach (income, consumption, net flow, net worth) with that of a subjective approach (self-rated income adequacy, perceived financial satisfaction) and finds demerits in both approaches.

National studies: Visaria¹⁰ elaborates on the statistics of the aged in India and their limitations, selected demographic characteristics of the aged in India, viz. rural-urban distribution, young old and old old, literacy, marital status, headship of households, work status and type of work. He studies NSS survey data to come to broad conclusions of the aged regarding their living arrangements, dependency, economic condition, health conditions etc. He also points out that the determinants of ageing in India conform to Coale-Demeny model of life tables with higher expectancy among females than among males. The main factor contributing to the rise in the number and proportion of the aged is not so much the mortality decline but the drop in fertility. Mortality decline without accompanying fertility decline will lead to a younger age distribution according to him.

Prakash¹¹ details out the demographic transition in India, while defining the current and future scenario of ageing in India. She has profiled the aged population's health, morbidity, mental health, economic condition, social security, living arrangements, social status, gender, urban and rural differences, migrants and refugees, slum dwellers, HIV and AIDS. She looks up the existing programmes for elderly and the future responses to population ageing. She concludes that providing necessary care and support to elderly people within the community setting is recommended instead of opening more old age homes.

In their vast study Rajan et al.¹² give a comprehensive account of the different aspects of elderly life in India. Moreover, based on projections of the elderly in 25 states and 7 union territories, demographic assessment is made upto 2021, using data from 1961-1991 censuses, NSS etc. Individual case studies and group discussions with the elderly are made to assess their views and a historical detail is given of the Indian social security system.

Das and Shah¹³ in their comprehensive study, focus on the socio-economic and health conditions of the aged population, and the emerging policy issues for elderly care in India. While doing so, they have thrown light on the demography of ageing, that is, the changing age structure of the population and the emerging demographic characteristics of the aged population in India and the different states. They point out the limited scope of the census data to examine various aspects of the elderly population in detail as these do not provide data on standard of living, housing condition, social status, family support and most importantly of their health condition. They have analysed disaggregated data of the various states on the above variables from NSS and NFHS data, focusing in depth on the elderly health and morbidity status, ailments, life style patterns. Further,

they point out the need to implement broad based interventions targeting the family and community with the aim of improving the quality of life of the elderly, as provided in the National Policy for Older Persons as well as the need for suitable institutional and other economic support in view of the break up of the traditional familial with industrialization and urbanization.

Arokiasamy et al.¹⁴ focus on the methodology, framework and preliminary findings of the longitudinal study of ageing in India (LASI). The LASI reflects significant regional and social variations within the country in even the most basic demographic indicators like education, marital status, self-rated health by gender and social status. Anchoring vignettes technique was employed with limitations to test health issues in the longitudinal study.

Regional studies: In her paper, Saha¹⁵ found that the sex ratio among the elderly sharply declined for the country as a whole during 1981-1991, whereas in Tripura, it recorded a substantial rise. However, the rural sex ratio was lower than the urban sex ratio in conformity with the national trend during 1981-1991. During this period, percentage of illiterate elderly declined, though illiteracy among elderly female was high. She further found that many of the elderly people continue to work much beyond the working age. She focussed on the gender difference in marital status, with majority of female elderly widowed in contrast to only a few widowers.

Sarmah¹⁶ views ageing as a social problem from two perspectives, viz. individual and social. She carries out an exploratory study of the elderly in Guwahati selecting from four different categories, employing both quantitative and qualitative methods of data collection. She finds no significant difference among the elderly from the different categories. Declining health, loneliness, financial insecurity and security of life and property have been found to be the respective problems of the elderly.

Thangchungnunga¹⁷ studies the role of elderly persons in social and economic aspects. He finds a peculiar feature of the aged persons in Mizoram in that the longevity of male and female are almost equal, whereas the earlier author, citing the same 1991 Census figures, found a growing number of aged females. This might be because the earlier author derived the sex ratios whereas the present author has compared the absolute numbers. He has borrowed the results found by employing the method of random survey of records of tombstones in one of the oldest Mizo villages to infer the average life time of the Mizo in the third quarter of the 20th century. The author finds that social activity among the aged is high among persons with good health and higher socio-economic background.

But he has not probed the reasons for low activity among the aged persons from the lower socio-economic strata. He states that quite often older persons prove to be better workers. This

statement requires statistical analysis. According to him, unlike in the developed nations where the low status of the older persons is indexed by their comparatively low participation rates in the labour force and by their low average income, the lack of such data makes it difficult to size up the economic status of the older persons in Mizoram. In Mizoram, the most urbanised state of India, most of the younger persons move to cities and as such the village elderly are bound to continue work. Despite the family support mechanism, the traditional practice of nuclear families among the Mizos has made most parents live with only each other for company and support in old age.

Thanseia¹⁸, while elaborating the role of the Mizoram Upa Pawl (Mizoram Senior Citizens' Association) an NGO for older persons in Mizo society, has found that Mizo elderly women are deprived of their rights to some extent which might be termed as their being victims of triple neglect and discrimination on account of gender, widowhood and age. He suggests that more care to this group in the form of special provisions in the state budget, annual action plan, updating their knowledge, transmitting socio-cultural heritage to grandchildren etc. could be provided.

Vanlalchhawna¹⁹ found an increasingly larger share of elderly population in the total population, a faster growth of elderly population compared to total population and an increasing dependency ratio in Mizoram during the period from 1981 to 2001. He found that the number of elderly woman per elderly man is also rising and so is the number of centenarians. His paper highlights some of the socio-economic characteristics of elderly persons in Mizoram like work status, literacy, education level, marital status etc. based on 1991 census. A significant finding of his paper is that elderly persons continued to remain economically active even after retiring from regular employment. He cites improvement of health conditions of the aged as the reason for the same. He found the elderly female work participation rate much lower than that of the male counterparts, the rural elderly work participation rate higher than the urban rate and about 75 per cent of the economically active elderly population to be cultivators.

Chakraborty²⁰ explores the physical, psychological and socio-economic problems faced by the elderly persons of Tripura in two contrast groups with different socio-economic and educational backgrounds and finds that all the retired persons, including the oldest old in Group I are economically, physically and psychologically self-sufficient, whereas, the widows of Group II of the same age groups are dependent in all respects. Her study also reveals that psychological factors are to be more deeply analysed than socio-economic factors in case of older people.

Debbarna²¹ attempts to identify how the forces of urbanisation, modernisation and globalisation have affected the status and situation of the elderly persons in the Kokborok speaking tribal society. He focuses on the negative stereotyping of ageing in

media and observes that in Tripura's traditional Kokborok tribal society, the old age people are considered an asset since time immemorial. But he found a few cases of empty-nest syndrome even among the Kokborok speaking people.

Deka and Nath²² studied the factors related to the increase in survival of elderly population. Among the various factors responsible for the human longevity, a few socio-demographic factors namely sex, place of residence, education, personal income, health, marital status, occupation status, caste, and leisure time activity have been identified by them. By applying hazard model, they estimated the relative risk of survivability. This study uses the data collected in a survey conducted in 1998 to study the socio-demographic profiles of elderly population in Assam. Among the respondents female elderly, elderly having personal income, married elderly, re-employed or still active elderly were found to be highly significant for living longer.

In a cross sectional study, Sarmah and Choudhury²³ looks into the elderly people's living arrangements, their self-reported problems and their activity status and also tries to assess the availability of care provider and fulfilment of expectations by their children. The sample consists of 280 male and female elderly in the age group of sixty years and above in Assam. The elderly have been further classified into three groups, that is, young old (60-69), middle old (70-79) and old old (80 and above). The snow-balling technique was applied to locate the elderly sample. It is found that though children provide care to their ageing parents but the satisfaction level is found to be lower than expected.

Quality of life and health aspects of ageing: Studies on physical and mental health status, morbidity, disability, well-being and quality of life including life satisfaction of the aged population cover the most critical facet of ageing studies in order to respond effectively to the diverse requirements of aged people.

Global studies: Bearden et al.²⁴ interviewed a random sample of 110 elderly consumers to depict a theoretical chain between individual health situation, financial situation, alienation, living level satisfaction, consumer satisfaction and overall satisfaction with life by path analysis. Scaling technique was used to elicit responses for the different measures. One of the findings of their study was that financial situation might not directly impact the elderly life satisfaction but financial concerns do affect the elderly persons through shifts in expenditure decisions on different heads.

Again, Gwozdz and Sousa-Poza²⁵, while assessing the effect of ageing and health on the life satisfaction of the oldest old, compare this age group with the younger age groups and observes a U-shaped relationship between age and satisfaction levels for age group 16-65 years and rapidly decline thereafter.

Bonsang and Soest²⁶ analyse two economic aspects of subjective well-being of older Europeans: household income satisfaction and job satisfaction, using data from 11 European nations. Both are found to have contributed substantially to overall satisfaction or happiness. They used anchoring vignettes to correct for potential differences in response scales across countries.

National studies: Rao²⁷ found that the suicide rate among the elderly is higher than the national rate. From the data derived from the Government of India Statistics, from suicide prevention centers, suicide autopsies, geropsychiatric clinics, and survey studies, he concluded that suicide in the elderly was increasing. Depressive disease was found to be the leading cause for suicide, followed by physical diseases and poverty.

Reddy²⁸ employs data drawn from the 42nd NSS round and for his analysis, subdivides the aged population of India into three age groups 60-64, 65-69 and 70+ according to the age-groupings of the NSSO. He has tabulated the findings by age, sex and rural-urban residence to highlight differentials in physical immobility, chronically ill, disease prevalence rate and proportions hospitalised. His findings show the differences among sexes in regard to behavioural related diseases, rural-urban patterns and the low status of women in society even at advanced ages.

Pinto and Prakash²⁹ found that life review plays a therapeutic role in enhancing the quality of life of elderly. They administered a fully structured Life Review and Experiencing Form (Haight and Bahr) to their experimental group. They also found that home-based elderly people had greater positive effect than the institutionalised subjects.

Chadha et al.³⁰ in their study (conducted on 109 married and widow/widower older subjects) have tried to assess the psychological health of the aged. The three psychological variables namely hopelessness, alienation and life satisfaction were measured with the help of objective psychological tests. They found that females scored more on helplessness. Married aged were found to be low on helplessness and high on life satisfaction as compared to widows/widowers. Married females were high on alienation as compared to married males. The differences found on the basis of gender were quite prominent and could be explained by socio-cultural differences and separate roles fixed for males and females in India. Women's narrower circles in comparison to men led to social alienation and hopelessness and in turn to low life satisfaction among elderly women.

Srivastava³¹ carries out a comprehensive study of urban older women of Girwa tehsil of Udaipur district using an exploratory-cum-descriptive research design comprising of purposive and quota samples. She applied scaling technique to measure the operational indicators in her study in association with the satisfaction level of the elderly women, employing chi-square

test. She found that a moderate level of activity, social interaction and financial stability among the elderly women keep them more satisfied in old age.

Jose and Sekher³² studies the subjective wellbeing of people aged 50 years and over in India by measuring their self-rated health, functional disability based on WHO Disability Assessment Schedule (WHODAS), and quality of life (WHOQoL). Their analysis indicates that higher years of education and better economic status of the households are positively related with better health condition, lower disability, and higher quality of life. Social security measures, including pensions and health insurance are crucial to ensure quality of life and wellbeing of older population in India.

In their paper, Devi and Roopa³³ studied the quality of life (QoL) of the elderly men and women living in institutions and non-institutional settings in urban Bangalore District. The study was conducted on a purposive random sample of 800 elderly in the age ranging from 65-76 years. WHO-QoL (100) 1996 field version was used to measure the QoL. They found that there is a significant difference between the institutional and noninstitutional elderly men and women in the area of physical, psychological, level of independence, social relationship and environment domains of QoL.

Regional studies: Hazarika et al.³⁴ interviewed 888 elderly participants 60 years and above (males 500, females 388) from three randomly selected areas of Assam to collect information on dietary habit and socio-demographic variables and clinically examined for blood pressure and anthropometric parameters using standardized technique. Statistical analysis was performed using the Epi Info and SPSS software. They found that overall prevalence of hypertension was 63.63% in males and 62.89% in females. 26.90% of the hypertensives were aware of their increase in blood pressure. Determinants of hypertension derived by multiple logistic regression analysis were age, intake of extra salt, alcohol and body mass index (BMI). They concluded that high prevalence with inadequate awareness and control of hypertension in the elderly group of population called for an immediate implementation of active public health programme in the state of Assam.

Nath et al.³⁵ applied logistic regression analysis to estimate the correlates of good health of elderly population in Assam. Their main findings were that health conditions of rural area are poorer than urban area, significant gender difference in mobility outside the state, joint pain, cough, eye and health compared to health at age 50, longevity of women to men, education and spousal intimacy were important factors for good health,

Ralte³⁶, while highlighting the health conditions of the elderly in Mizoram, found that the health care delivery structure needs to gear up for specific health needs of the elderly persons, entailing provisions of "geriatric friendly" hospitals and technologies, fee

reduction, health insurance schemes, active involvement of private sector and NGOs.

Ghosh³⁷ found that 93 per cent of the elderly persons do not have any psychological distress and 70 per cent have moderate disability. However the study could not observe the nutritional status among the elderly people. The commonest health problems of elderly were found to be visual impairment (73 per cent), hearing declination (63 per cent) and hypertension (53 per cent).

Chakrabarti³⁸ assessed and compared the subjective well being and satisfaction level of two sets of elderly living in old age homes and family settings in Tripura. She adopted a comparative survey design to find out the relationship and association between subjective well being and satisfaction level with selected background variables like age, sex, education, occupation, marital status, family type, monthly income and number of children using Cronbach's Alpha to test internal reliability of the variables and scaling techniques to score the responses. Her findings reveal a greater well being among the elderly in family settings.

Sarmah³⁹ studied the nutritional status in relation to ageing among three communities living under similar ecological conditions of Lakhimpur district of Assam. Nutritional status was assessed from Body Mass Index calculated from weight and stature of individuals. Females were found to be more prone to malnourishment than males. Prevalence of malnutrition was also found to increase with increase in age.

Social security issues: Social security and economic assistance in the form of pensions, health insurance etc are important for improving the overall wellbeing and quality of life of older population.

Global studies: According to Hossain⁴⁰, the traditional support systems prevailing in Bangladesh are Islamic teachings on Zakat and Fitra and traditional practices of alms. The Holy Quran proclaimed various principles in support of the elderly which have had a far reaching impact on traditional values and practices. But due to mismanagement and undesirable practices these welfare systems have been embittered and tempered by evil expectations. He suggests that action relating to the elderly should not be taken at the expense of younger people.

Misra⁴¹ focuses primarily on the features of social security system in India and Japan and makes a critical review of the lessons to be learnt from Japan's experiences. Japan developed a universal insurance system at an early stage of development with proper synergy between public and private agencies. With India's specific features of widespread poverty, irregular and self-employment etc. the informal family support system should not be substituted but complemented by government. At present, according to him, India's policy should be in the form of social

assistance with a few but focused social security schemes which are humane and sustainable.

National studies: Tripathi⁴² highlights the socio-economic and demographic trends of ageing population in India over the years since 1961 as well as future projection of growth of the aged population in India. The article also critically describes in details the National Old Age Pension Scheme and suggests targeted pension schemes as well as institutionalised arrangements. He stresses that the traditional support base of elderly people even in rural areas is being shaken by rising inflation and increasing pauperisation. The situation is worse in urban areas as a consequence of modernisation, population pressure, poverty, media and mass communication. As such there is further tendency of declining support to the aged which makes it necessary to think of support systems which are less expensive and innovative.

The book by Alam⁴³ is an in-depth empirical analysis on ageing in India, including critical dimensions like socio-economic, health and public policy aspects. He has used both primary and secondary data sources to argue that the bulk of the aged may not be able to withstand the new economic realities. They are socially at a loss, economically weak due to poverty and physically frail. The younger adults are yet to realise the need for planned ageing. Hence Alam includes this section of the society in his study as well. The conclusions of this study include the need for creating publicly funded multi-pillared health and income security fund for the aged through appropriate fiscal measures.

Rajan and Mishra⁴⁴ raises six key issues in implementation as experienced during the last 10 years of the NPOP. These are the need for: i. coordination among multi-sectoral partners with clearer accountability and measurable and time bound results; ii. financial outlays by different stakeholders within their respective mandates, but harmonised to produce policy outcomes; iii. a stronger role for the National Council for Older Persons with greater political and administrative power necessary to bring multiple stakeholders contribute to a common cause; iv. enhanced income security, including social pensions for the poor vulnerable senior citizens; v. increased protection for older women who face socio-economic, cultural and legal barriers; and finally, vi. the need for sharpening the policy focus as it addresses multiple issues with limited resources. The paper also makes suggestions for mainstreaming ageing as a strategy for integrating ageing issues into all sectoral policies and at all levels. The need for improving the overall awareness and empathy for older persons and strengthening resources and national capacity for integration have been underlined in the paper.

By using a descriptive research design, Udhayakumar and Ponnuswamy⁴⁵ have assessed the quality of informal care received by the elderly residing in slums with a total of 50 respondents from slums in Tiruchirappalli district, Tamil Nadu

through simple random sampling procedure. They conclude that in order to cope with the growing number of elderly in the current scenario, it is necessary that the caregivers be made aware of the physical and mental conditions and problems of the elderly people so as to meet their needs as far as possible in the home setting itself.

The paper by Ota⁴⁶ investigates the ageing situation in India and the development of the government initiatives for the welfare of the aged citizens since independence to the present times. The findings of the survey conducted in North Delhi reveal feminisation, ruralisation, and pauperisation of the elderly population, differences between the male and female elderly and greater vulnerability among the female elderly. Moreover, social security measures are found to be of limited coverage among the respondents.

Regional studies: Lalbiakimi⁴⁷ gives a broad overview of the welfare measures for elderly taken by the Mizoram State Government. Besides old age pension, Mizoram Government also aids the Mizoram Upa Pawl and other NGOs for elderly. She outlines the salient features of the State Policy for Older Persons (SPOP) and suggests innovative welfare programmes for the aged.

Choudhury⁴⁸ addresses the issues of social security of the elderly persons. He elaborates on the concept of social security and mentions the legal and institutional provisions available for the elderly in India, emphasizing on the need for proper implementation of the schemes. On the basis of a field study he concludes that implementation of National Old Age Pension Scheme has been satisfactory in Tripura.

The paper by Bhattacharjee and Pant⁴⁹ finds that National Old Age Pension is better utilised in Arunachal Pradesh as compared to the State Old Age Pension Scheme. Arunachal Pradesh is languishing at the welfare front for the aged as there is nothing more than pension provision and that too is not free from corruption charges as the modes of disbursing pension is not defined scientifically.

Discussion

In this section, discussion on the outcome of the review is presented keeping in view the objectives of the paper.

Emerging issues: The broad issue of ageing of population involves a multitude of sub topics such as the trend of growth, magnitude and sex composition of elderly population, socio-economic implications of a rising graying population, physical and subjective health issues of the elderly etc.

Some of the global studies have dealt with the level of demographic ageing across nations and attempted to assess the hazards of demographic ageing. Among the determinants of ageing process, viz. fertility, mortality and migration, a conflict

in view is apparent in the global studies as to whether fertility or mortality is the decisive factor at present. From the survey of the national studies on the socio-economic and demographic perspective, declining health, increase in the number of the oldest-old (above 80 years), growing pauperisation, feminisation and ruralisation emerge as the major features of the ageing population of India. Such trends have been portrayed globally too. The longitudinal study of ageing in India (LASI) reflects significant regional and social variations within the country.

Unlike the national trend, the elderly sex ratio of most of the North Eastern states seems to have increased over time. The elderly of the urban areas of these states in general suffer from the empty-nest syndrome. Much of the elderly people of the region are found to be economically and socially active. Due focus on female elderly has been given in the studies of this region. Declining health, loneliness, financial insecurity and security of life and property have been found to be the respective problems of the elderly. Rapid modernisation, industrialisation and urbanisation have shattered the traditional familial and intergenerational relations. This has put the elderly population at a loss, especially in urban areas.

Studies on physical and mental health status, morbidity, disability, well-being and quality of life including life satisfaction of the aged population have been carried out on a large scale abroad. The Indian and regional studies focus on the need for family-based care instead of institutionalized care for the elderly. Rise in elderly suicide rates is a cause of concern. Depressive disease was found to be the leading cause for suicide, followed by physical diseases and poverty.

A wide range of formal and informal practices prevail across the world regarding provision of support to the elderly. The universal support system of developed nations like Japan is not feasible for nations like India. So, such social assistance in these nations should come as top-ups to informal family support systems. The status of the pension schemes in different North Eastern states does not appear to be uniform.

Data sources and methodologies adopted: In the various studies, ageing has been viewed from both individual and social perspectives and both quantitative and qualitative methods of data collection have been applied. Apart from government statistics, information has been collected from clinics, institutions and survey studies. Scope of census data has been found to be limited in nature to examine various aspects of the elderly. Disaggregated data from National Sample Survey (NSS) and National Family Health Survey (NFHS) provide in depth information on the elderly health and morbidity status, ailments, life style patterns etc.

Individual case studies and group discussions with the elderly have been carried out. One researcher in particular found psychological factors to be more relevant and hence to be deeply analysed than socio-economic factors in case of older

people. Various methods ranging from hazard model, snowballing technique, path analysis technique, scaling technique, anchoring vignettes, Cronbach's Alpha to logistic regression analysis have been applied in the various studies. Most of the studies are exploratory and descriptive in nature. Comparative survey designs and life review method have been applied scarcely.

Research gaps and future areas of research: The foregoing literature review brings out that considerable attention has been paid to the elderly and their problems over the years. There has been a vast growth of literature on ageing trends and patterns. Issues pertaining to socio-economic and demographic profiles, living arrangements, problems and services to the elderly have received focus. Cross-sectional studies on different specific aspects of the elderly have been carried out in a localized manner based on sample studies.

However, longitudinal cohort studies on ageing across different regions are essential due to the vast heterogeneity among the elderly. The problems of the vulnerable elderly like widowed females, poor and middle class urban elderly, disabled, fragile older persons and those from the unorganised sector need to receive specific attention.

The studies have also explored health issues of the elderly. Many studies on the quality of life, well-being and life satisfaction of the elderly have been conducted all over the world and a few have been done at the micro level in India. However, it is necessary to devote further research on the mental health of the elderly to ensure a quality life for them.

Many of the studies have viewed the elderly to be on the receiving end. However, some studies have recognized their active role either in the social or economic setting. There is a need to develop further studies taking them as resources and include them in the development process.

Most of the studies under review are exploratory and descriptive. There is a need for in-depth analysis of the different issues by focussing on ageing as a policy in various sectors at all levels. Hence both qualitative and quantitative approaches are required in the study of ageing issues.

Conclusion

The development of social gerontology reveals that various disciplines focus on various ageing issues. Thus, population ageing studies need to be pursued on a multi- and inter-disciplinary plane with a holistic understanding of the social, economic and cultural changes revolving round it.

References

1. Rajan S.I., Mishra U.S. and Sarma P.S., *India's elderly: Burden or challenge?* New Delhi: Sage Publications (1999)
2. Martin L. and Preston S., Demography of aging, National Academy of Sciences, U.S.A., 3 (1994)
3. Rath, S.P., Das, B., Puthan, P., Sharma, A.K. and Nair, L., Demography of India: The Dynamics and Differences – A Reflective Study of Census 2011, *International Journal of Research in Commerce, Economics and Management*, Vol. No. 1, Issue No. 6, October (2011)
4. Dlugosz Z., The level and dynamics of population ageing process on the example of demographic situation in Europe, *Bulletin of Geography, Socio-Economic Series No.2*, Pedagogical University in Cracow (2003)
5. Gavrilov L.A. and Heuveline P., Aging of population, in Paul Demeny and Geoffrey McNicoll (Eds.), *The Encyclopedia of Population*, New York: Macmillan Reference USA (2003)
6. Weil D.N., Population aging, National Bureau of Economic Research Working Paper No. 12147, retrieved from <http://www.nber.org/papers/w12147.pdf> on 05.10.14 (2006)
7. Menon J. and A.M. Nakamura, A.M., Aging in Asia: Trends, impacts and responses, *ADB Working Paper Series on Regional Economic Integration*, 25, (2009)
8. Horioka, C.Y., The (dis)saving behavior of the aged in Japan, *Working Paper 15601*, National Bureau of Economic Research. Cambridge, December (2009)
9. Chan Yin Fah B., Living standard, living level and economic wellbeing of older persons: Similarity and differences in measuring these concepts. *Canadian Social Science*, 6(5), 145-150 (2010)
10. Visaria P., Demographics of aging in India: An abstract. *Invest India Foundation paper*, accessed at <http://www.iief.com/paper/pravinvisaria.pdf> on 23.5.11 and <http://kapz77.tripod.com/paper.htm> on 05.10.14 (1998)
11. Prakash I.J., *Ageing in India* prepared for World Health Organisation (1999)
12. Rajan S.I., Mishra U.S. and Sarma P.S., *India's elderly: Burden or challenge?* New Delhi: Sage Publications (1999)
13. Das N.P. and Shah U., The social and health status of the elderly in India: Evidence from recent national level data, *Special Report*, Centre for the Ministry of Health and Family Welfare, Government of India, New Delhi, December (2001)
14. Arokiasamy P., Bloom D., Lee J., Feeney K. and Ozolins M., Longitudinal aging study in India: Vision, design, implementation and preliminary findings, in James P. Smith and Malay Majmundar (Eds.), *Aging in Asia: Findings from new and emerging data initiatives*, The National Academies Press, 36-74 (2012)

15. Saha P., Elderly Population of Tripura, in B. Datta Ray (Ed.), Agenda for North East India, New Delhi: Concept Publishing Co., 165-171 (2002)
16. Sarmah C., Social and psychological aspects of problems of the elderly: A case study in Guwahati, Assam, *Working Paper 02*, Omeo Kumar Das Institute of Social Change and Development, Guwahati, Assam (2004)
17. Thangchungnunga, Social and economic status of elderly persons in Mizo society, in Lianzela Vanlalchhawna (Eds.), Ageing in North East India Vol.1, New Delhi: Akansha Publishing House, 39-47 (2007)
18. Thanseia, Ageing gracefully: Role and activities of Mizoram Upa Pawl, in Lianzela Vanlalchhawna (Eds.), Ageing in North East India Vol.1, New Delhi: Akansha Publishing House, 48-59 (2007)
19. Vanlalchhawna, Magnitude and growth of elderly population in Mizoram, in Lianzela Vanlalchhawna (Eds.), Ageing in North East India Vol.1, New Delhi: Akansha Publishing House, 19-38 (2007)
20. Chakraborty, A. Elderly persons of Tripura: An empirical study, in Chandrika Basu Majumder and Paramita Saha (Eds.), Ageing in North East India Vol.4, New Delhi: Akansha Publishing House, 47-57 (2008)
21. Debbarma S., Elderly or old age people in the tribal society of Tripura – A case study of the Kokborok speaking people, in Chandrika Basu Majumder and Paramita Saha (Eds.), Ageing in North East India Vol.4, New Delhi: Akansha Publishing House, 39-46 (2008)
22. Deka A.K. and Nath D.C., Socio-demographic correlates explaining the longevity of graying population in a traditional society, *Int. J. Pure Appl. Sci. Technol.*, **6(1)**, 21-34 (2011)
23. Sarmah C. and Choudhury B., Problems of elderly and their care, *J. Hum. Ecol.*, **36(2)**, 145-151 (2011)
24. Bearden W.O., Gustafson W.A. and J.B. Mason, A path-analytic investigation of life satisfaction among elderly consumers, in William L. Wilkie & Ann Abor (Eds.), *Advances in Consumer Research*, Vol. **06**, Association of Consumer Research, 386-391 (1979)
25. Gwozdz W. and Sousa-Poza A., Ageing, health and life satisfaction of the oldest old: An analysis for Germany, Institute for the Study of Labor, Bonn. *Discussion Paper No. 4053*, (2009)
26. Bonsang E. and Soest A., Satisfaction with job and income among older individuals across European Countries, *Meteor*, Maastricht University School of Business and Economics (2010)
27. Rao A.V., Suicide in the elderly: A report from India, Centre for Advanced Research on Health and Behaviour, Madurai Medical College, Tamil Nadu, [Online] accessed on 20.2.11 at <http://www.ncbi.nlm.nih.gov/pubmed/1935195> (1991)
28. Reddy P.H., The Health of the aged in India, *Health Transition Review, Supplement to Volume 6*, Bangalore, 233-244 (1996)
29. Pinto A. and Prakash I.J., Role of life review in enhancing the quality of life of the elderly, in K.L. Sharma (Ed.), *Dimensions of Ageing*, Jaipur: Rawat Publications, 7-12 (2009)
30. Chadha N.K., Aggarwal V. and Mangla A.P., Hopelessness, alienation and life-satisfaction among the aged, in K.L. Sharma (Ed.), *Dimensions of Ageing*, Jaipur: Rawat Publications, 48-61 (2009)
31. Srivastava V., Women ageing: Social work intervention, Jaipur: Rawat Publications (2010)
32. Jose J. and Sekher T.V., Health status, functional disability and quality of life: An assessment of wellbeing of India's older population. XXVII IUSSP International Population Conference Paper, International Union for the Scientific Study of Population, accessed on 15.5.13 at www.iussp.org/sites/default/files/event_call_for.../Joemet%20Jose.pdf (2013)
33. Lakshmi Devi and Roopa K.S., Quality of Life of Elderly Men and Women in Institutional and Noninstitutional Settings in Urban Bangalore District, *Res. J. Family, Community and Consumer Sci.*, **1(3)**, 7-13, (2013)
34. Hazarika N.C., Biswas D. and Mahanta H., Hypertension in the elderly population of Assam, *J. Assoc. Phys. of India*, **51**, 567-573, (2003)
35. Nath D.C., Deka A.K. and Leonetti D.L., Health problems of elderly population in Assam and their correlates, *Demog. Ind.*, **36(1)**, 99-120 (2007)
36. Ralte J.R., Health conditions and access to health care services by elderly in Mizoram, in Lianzela and Vanlalchhawna (Eds.), Ageing in North East India Vol.1, New Delhi: Akansha Publishing House, 60-73 (2007)
37. Ghosh A., Study of the health aspect of elderly at Sandhyanir-Bridhya Ashram at Gandhi Gram, Tripura West, in Chandrika Basu Majumder and Paramita Saha (Eds.), Ageing in North East India Vol.4, New Delhi: Akansha Publishing House, 70-77 (2008)
38. Chakrabarti D., Well-being of the elderly residing in old age home vs. those in family setting in Tripura, *The Nurs. J. Ind.*, **C.10**, (2009)
39. Sarmah C., Ageing and nutritional status among three communities of Lakhimpur District, Assam, *Ind. J. Geron.* **28(1)**, 51-69 (2014)
40. Hossain R., The aged population in Bangladesh, 1911-2050, *Ind. J. Geron.*, **18(2)**, 159-172 (2004)

41. Misra S.R., Ageing and social security measures in India and Japan: Challenges and responses in Anil Bhuiwali (Ed.), Ageing Population and Social Security System, New Delhi: Serials Publications, 43-53 (2011)
42. Tripathi R., Ageing population and old age pension in India, *Yojana*, **43(11)**, 31-34, (1999)
43. Alam M., Ageing in India: Socio-economic and health dimensions, New Delhi: Academic Foundation (2006)
44. Rajan S.I. and Mishra U.S., The National Policy for Older Persons: Critical issues in implementation. *BKPAI Working Paper No. 5*, United Nations Population Fund (UNFPA), New Delhi (2011)
45. Udhayakumar P. and Ponnuswamy I., Informal care received by elderly residing in Slums of Tiruchipally district, Tamil Nadu, India, *I. Res. J. Social Sci.*, **1(1)**, 15-18, (2012)
46. Ota H., India's senior citizens policy and an examination of the life of senior citizens in North Delhi, Discussion Paper No. 402, Institute of Developing Economics, (2013)
47. Lalbiakimi, Social and economic security programme for elderly persons in Mizoram: Role of state government in Lianzela and Vanlalchhawna (Eds.), Ageing in North East India Vol.1, New Delhi: Akansha Publishing House, 75-83 (2007)
48. Choudhury J., Social security of old age persons in rural areas: An empirical study in Chandrika Basu Majumder and Paramita Saha (Eds.), Ageing in North East India Vol.4, New Delhi: Akansha Publishing House, 102-120 (2008)
49. Bhattacharjee R.P. and Pant R.M., Welfare schemes for the aged: Scenario in Arunachal Pradesh. In R.M. Pant (Ed.), Ageing in North East India Vol.3, New Delhi: Akansha Publishing House, 89-93 (2008)