Living Arrangement of Elderly and Perceptions on old age support in India: Evidences from a large scale survey

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Abstract: Population ageing is an unavoidable and irreversible change which comes through demographic transition in all societies. India is in the third stage of its demographic transition. The age structure of the country reveals that it has been ageing rapidly. In this context paper broadly review the living arrangement pattern and perception about old age support in India by using IHDS data. Bivariat and multivariate analysis has been used.Around 13 percent of elderly lived with their spouse only. Very small proportion of elderly only 2 percent lived single. And rest of 85 percent elderly in India living in co-residence. An overwhelming majority of women respondents expect their sons to live with them to take care and provide financial and emotional support in their old age. It indicates that the family will continue to be a significant social institution for the care and support for elderly in India.

Key words: Living arrangement, Perception, Old age support.

Introduction:

Population ageing is a common phenomenon in most of the countries throughout the world. Industrialised and developed societies have already experienced this situation, and many developing countries are now facing the same. Population ageing is an unavoidable and irreversible change which comes through demographic transition in all societies. The timing, pace and scale of population ageing vary considerably across the nations. The tempo of increase in the elderly population depends upon the pace of demographic transition.

The population of aged 60 and above at the global level were 600 million in 2000 which is expected to increase up to 1.2 billion by 2025 and 1.96 billion by 2050. The proportion of the elderly in the total population is expected to increase from 10 percent of total population in 2000 to 15 percent by 2025 and 21 percent by 2050 (United Nations, 2002).

The developing world has witnessed much rapid increase in the elderly persons on the second half of the 20th century, and also expected to increase in coming decades from 375 million in 2000 to 1.6 billion by 2050. There was a dramatic decline in the world total fertility rates from average of five children per women in 1950 to three children per women in 2000. There was a continuous decline thereafter to two children per women (United Nations, 2003).

Similarly, there was decline in mortality rate which leads to improved life expectancy. All these demographic changes have contributed a lot to the rapid population ageing in the world.

The pace of increase in the number of older population at an alarming rate in developing countries is the matter of concern for policy makers (Rajan and Mathew, 2008; Bordia and Bhardwaj, 2003; Kinsella and Velkoff, 2001; World Bank, 2001).

Some studies show that there is a large difference in living arrangements of elderly persons between developed and developing countries. The proportion of elderly aged 65 and above live either alone or with the spouse is more than 60 percent in western countries (Palloni, 2001), whereas in developing world that proportion is much smaller. The proportion of elderly living alone or with the spouse is only around 13 percent in India, out of which 15 percent are living in urban area compared to 12.5 in rural, (52nd round NSSO).

In many Asian countries, co-residence with adult generation has been a common phenomenon. Still three generation family continue to be an important family type in china, around half of the persons aged 60 years and above lived in three generation household (Yi, 1991). In mid 1980's, half of the elderly in Japan lived with their married children. Though this proportion is declining, but the process seems to be very slow (Kojima, 1989; Zenkoku Shakai Fukushi Kyogikai, 1982)

Some studies also argues that the number of elderly persons living alone or with the spouse is gradually increasing in developing world also, though the magnitude is slow.

Recent demographic statistics indicates that many developing countries experiencing population ageing are also experiencing socio-economic changes, modernisation and urbanisation which are the threats for the traditional parent-offspring co-residence and family ties. This will result in the reduced interaction between family members and will reduce expected financial, social and physical support for elderly.

Yet, ageing and issues concerned to care, support and security of the elderly person in India have not been considered by the policy makers as an area of priority concern.

The traditional extended family system is a principal social institution in India. The people in India are bounded by cultural values which emphasizes that the elderly should be taken care by offspring and treated with honour and respect. The elderly population are highly respected by the traditional family system due to their age, experience and wisdom. But researchers

argued that the changes in the socio-economic and demographic dimensions, modernisation and urbanisation have its impact on the traditional Indian family system and cultural values. Due to these changes the traditional family system in India is gradually moving towards modernized nuclear families. The values and perception regarding the role of the elderly is changing fast.

Issues related to ageing are a low priority area throughout the developing countries in general and India in particular. Since their primary focus is on fertility regulation and population stabilization. But very soon these countries are going to experience the issues related to population ageing. Many countries in developing world like India (77 million) and china (150 million) have a large chunk of aged population (above the age 60 years). That's why ageing and related issues have attracted considerable attention of researchers and policy makers.

Elderly Profile of India:

India is in the third stage of its demographic transition. The age structure of the country reveals that it has been ageing rapidly. India is one of the fastest growing elderly population in the world (Alam and Mukherji, 2005; Irudaya Rajan *et al*. 2000; NSSO, 1998). Aged population in India is currently the second largest in the world; China is at the top with 150 million elderly persons (United Nations, 2002). It is estimated elsewhere that India will be having the largest aged in the world by 2025.

The 60 and above population in India increased from 25 million in 1961 to 43 million in 1981 and 77 million in 2001 (Table1). The proportion of elderly in India has risen from 5.6 per cent in 1961 to 6.5 per cent in 1981 and 7.5 percent in 2001.

Table 1: Number and proportion of elderly by age group, India, 1961-2001.

Age	Number (in thousands)					Percent of elderly to the total Population				
	1961	1971	1981	1991	2001	1961	1971	1981	1991	2001
60+	24,712	32,699	43,167	56,682	76,896	5.63	5.97	6.49	6.76	7.47
70+	8,620	11,324	15,485	21,074	29,572	1.96	2.07	2.33	2.51	2.87
80+	2,484	3,200	4,127	6,375	8,312	0.57	0.58	0.62	0.76	0.80
90+	528	688	735	1,221	1,811	0.12	0.13	0.11	0.15	0.17
100+	99	130	132	138	138	0.02	0.02	0.02	0.02	0.01

Source: Census of India, 1961-2001.

The number of centenarians in the 1961 census was 99 thousand which went up to 138 thousand in 2001.The growth rate for elderly population during 1991-2001 was around 3 percent which is much higher than that of general population growth rate of 2 percent per annum (Irudaya Rajan *et al*. 2006)

Projections based on 2001 census data (Irudaya Rajan, 2004, Irudaya Rajan and Mathew,2008) indicates that aged 60 and above will increase from 77 million to 301 million by 2050. And striking feature of these projections is that the proportion of elderly will be increased from 7.5 percent to 17 percent during the same period.

Table1.2: Number, proportion and sex ratio of the elderly, India, 2001-2051

Age group	2001	2011	2021	2031	2041	2051
60 and above						
Numbers (in millions)	77	96	133	179	236	301
Percentage of the total population	7.5	8.2	9.9	11.9	14.5	17.3
Sex ratio (males per 1000 females)	1028	1034	1004	964	1008	1007
70 and above						
Numbers (in millions)	29	36	51	73	98	132
Percentage of the total population	2.9	3.1	3.8	4.8	6	7.6
Sex ratio (males per 1000 females)	991	966	970	930	891	954
80 and above						
Numbers (in millions)	8	9	11	16	23	32
Percentage of the total population	0.5	0.7	0.8	1	1.4	1.8
Sex ratio (males per 1000 females)	1051	884	866	843	774	732

Source: Irudaya Rajan and Mathew, 2008.

The number of elderly aged 70 years and above is expected to rise from 29 million to 132 million and similarly elderly population aged 80 years and above will increase from 8 million to 32 million by 2051.

 Review of Literature:

Till recent past, living arrangements for elderly in India, like other developing countries, was not an issue, as India was predominated by traditional agrarian society. Around 70 percent of its population lived in rural areas and depends upon agricultural and allied works for their livelihood. Filial roles and responsibilities are strong in Indian society. Extended family is

prevalent, particularly in rural India, which is viewed as the only social institution which provides care and support to its members including elderly persons.

In India very little attention, compared to western industrialized countries, has been paid to develop social security, pension and public health systems to provide care and support for elderly population. In the absence of such social security schemes, elderly are dependent on their children and other family members.

About 80 percent of India's working population is in informal and private sector, who are not covered under any superannuation pension scheme. People in their old age require social, economic and physical assistance, for that they tend to rely heavily on their family and persons living in their close proximity for their wellbeing and survival (Bongaarts, 2001).

Studies show that (Thortton *et al*. 1984; Becker, 1991; Kuznets, 1978) the households throughout the developing world represent as a principal institution responsible for exchanging and distributing of goods and services between generation, and they are the venues where the cultural norms, roles and responsibilities of age and kinship are expressed.

Living arrangement is viewed as a best indicator to understand the status and the wellbeing of the elderly in the society. The study conducted by Palloni (2001) indicates that the living arrangement refers to the familial system.The concept of the living arrangement is usually explained in terms of the type of family in which the elderly live, the headship they enjoy, the place they stay in and the people they stay with, the kind of relationship they maintain with their kith and kin, and on the whole, the extent to which they adjust to the changing environment (Irudaya Rajan *et al*. 1995).

To know the determinants of the living arrangement many studies have been conducted which indicate that living arrangements are influenced by financial status, family size and structure, kinship pattern of the society, location of household, availability of services and the physical and mental wellbeing of the elderly (Van Solinge, 1994; Vekoff, 2001; Kan *et al*., 2000; Schafer, 1999). In another study done by Chen (1998) indicates that attitudes towards and perceptions about the living place are other important criteria that decide where they should live. The understanding and commitment between parents and children is one of the factors appears to have remained unchanged, particularly in rural India (Sekher, 2005).

It is observed that in many cases the likelihood of co-residence of elderly mainly depends on the number of surviving children. It particularly suggest that elderly persons with large

number of surviving children are more likely to co-reside and less likely to live alone (Kramarow 1995; Wolf 1990; Yount 2005).

Many researchers further made efforts to look into the gender preferences to co-reside which may affect the living arrangements of older persons. Differences in preferences to co-reside vary from country to country. In some countries where patrilinial system prevails, elderly prefers to co-reside with son, and are taken care by the daughter-in-laws (Ahn *et al.*, 1997; Ofstedal *et al.*, 1999; Aykan and Wolf, 2000; Ogawa and Retherford, 1997; Mason, 1992; Yount 2005; Shah *et al.*, 2002). In other countries like Indonesia, co-residence with daughter is more widespread (Cameron, 2000).

Another important factor which influences the choice of living arrangement among elderly is socio-economic conditions. A study conducted by Da Vanzo and Chan (1994) reveals that income is positively related to the concept of living alone in most of the developed countries. In contrast most of the countries in the developing world by cultural norms regarding family roles and filial responsibilities co-residence are prevalent. The elderly who have income from various sources such as personal savings, rent from property, government pensions etc. are more likely to co-reside with the adult children. It is observed that co-residence of elderly with offspring is prevalent in the least developed countries. In a study by Asis et al. (1995) found that co-residence and socio-economic developments are inversely related.

Other studies shows that parents and children are bounded to co-reside due to higher housing costs in urban areas , by residing together they share these cost (Da Vanzo and Chan, 1994; Yount, 2005). Often there is an assumption that the parent-offspring co-residence is basically to provide care and support to the elderly parents. The economic productivity and physical strength of aged persons decline with advancing years, hence they require to depend on other family members. But experiences shows that, co-residence is typically mutually beneficial to both the generations. The support does not always flow in the same direction which is mostly from younger to older generation. Co-residence may also be benefited by the contributions rendered by older person such as the provision of child-care, household chores by the elderly (Da Vanzo and Chan,1994; Chan,1997; Irudaya Rajan et al. 1999; Hashimoto 1991).

Family is viewed as the main source of care and support for elderly wellbeing. Though the care and support are two different dimensions Support broadly can be defined as financial assistance, whereas care is defined as emotional support. The financial support could be

provided by the state and other private institutions, but the emotional support can only be provided by the family members, relatives and cohabitant of the elderly.

Family is often a significant source of care and support for older persons in courtiers where social security and social services are absent or negligible. Elderly in this situations are largely rely on the family members as their economic productivity and physical strength decline with advancing years. Thus, living arrangement becomes an important constituent of the overall well-being of the elderly and provides some indication of the level of actual support available to them (Irudaya Rajan, 2003).

Need for the Study:

In India though there a number of excellent studies on the various dimensions of the elderly phenomenon. Yet, the studies which deals with living arrangement pattern of elderly in India are scanty. The present study focuses on living arrangement pattern and as well as the perceptions of present young generation about the old age support. This is the unique and first study of this kind, which provides some insight about expectation of present young generation about the old age. Understanding the perception of present generation about their preferred expectation for old age support is useful to formulate the future policy and programmes.

Hence, there is a need to focus on the living arrangement of the elderly as well as on the perception of the present generation about their preferred expectations for living arrangement and financial support in old age. The recent data (IHDS, 2004-05) provided by National Council for Applied Economic Research (NCAER) and University of Maryland provides the opportunity for examine about above research issues.

Objectives

The specific objectives of the present study are:

1) To examine the levels and trends of elderly in India.
2) To explore and highlight the living arrangement pattern of the elderly in India.
3) To assess the women's perception about their preferred living arrangement and financial support in old age.

Data Sources and Methodology:

The present study is based on the India human development survey (IHDS) jointly conducted by The National Council of Applied Economic Research (NCAER), New Delhi and University of Maryland throughout the India in 2004-05. IHDS is a nationally representative multi-topic survey of 41,554 households in 1503 villages and 971 urban neighbourhoods across India. Of the total, 26,734 households are from rural areas and 14,820 are from urban areas. It covers the population in 33 states and union territories of India with the exception of Andaman and Nicobar and Lakshadweep. The total sample size is 215,754 out of which 56249 are women in age group 15-49, and 17904 are old persons (with 8963 men and 8941 women).

The present study is restricted only to the population 60 years and above and women respondents in the age group 15-49. For second objective we have used the elderly population (60+) and for third objective eligible women in age group 15-49 have been considered. In the IHDS, though the direct questions were not asked to elderly, the information available from the details collected for each individual member in the household provides some insight about the various factors related to elderly including their education, living arrangement, their work participation and government sponsored pension programmes. By using these information a variable was computed about the living arrangements. It is grouped into three categories namely 'living alone', 'with spouse only', and 'with spouse, children and others'. In addition to various information questions were also asked to eligible women to know their perception about the future old age support expectations. The questions asked regarding women's perception on ageing are,

A) 'Who do you expect to live with when you get old?' similarly

B) 'Who do you expect will help you financially when you get old?'

Bivariate and multivariate analyses were used to find out the association between different socio-economic and demographic factors and living arrangement of elderly in India. Further to establish the strong association between dependent and independent variables logistic regression analysis was performed. For fitting the binary regression analysis the dependent variable was dichotomous (Others "0" and Sons"1").

Results and Discussions:

According to the census 2001 conducted by Registrar general of India, the proportion of population that is elderly (60 years and above) is 7.4 per cent. The 61st round of NSSO reported that the elderly constitute 7.2 per cent of the total population, and the IHDS data, collected in 2005, found a slightly higher percentage (8 per cent) of elderly persons. Table 3 represents the percentage of elderly. Among the elderly surveyed, 62 per cent fall under young-old (60-69) age group, 28 and 10 percent belongs to old-old (70-79) and oldest-old (80+) age group respectively. Not much difference is noticed between male and female. Around 76 per cent of elderly persons are living in rural areas, which is not an unexpected thing as India is predominately an agrarian society. According to IHDS, 42 per cent of aged population belongs to other backward castes (OBC). In case of religious group, around 83 per cent of the elderly are Hindus, Muslims also constitute considerable (10 per cent) older population. Almost one-half (46 per cent) of the elderly males and four-fifths (78 per cent) of the elderly females are illiterates. This is because of, who are at the aged 60 and above at the time of survey, they were at school going age in late 50's and early 60's when school enrolment rate in India was very low. Most elderly men (more than 80 per cent) are married and widowhood is more likely (56 per cent) among the elderly women. The tendency that men marry a much younger women and women experience longer life expectancy are factors responsible for making widowhood more likely for women than men (Desai *et al*. 2010).

Table 4 represents current status of the living arrangement pattern of elderly by background characteristics. Majority of older population are living in extended families. But interestingly considerable (17 per cent) elderly surveyed in age group 60-69 (young-old) are living with the spouse only, and around 96 per cent who are reported as 80 years and above (oldest-old) are living in extended families. It may be due to the increased dependency in terms of economic and physical dimensions which normally accompanies old age. More elderly women (3.8 per cent) are living alone compared to men (1.1 per cent). There is not much urban rural differentials in living arrangement of elderly.

According to IHDS data, Muslims are more likely to live in extended families followed by Hindus and other religious minorities. Here, an effort has been made to look into the association between marital status and living arrangement pattern among elderly person in India. Three categories have been made namely, currently married, widowed and others (never married/divorced/separated). One-fourth of the elderly who are currently married are

living with the spouse only. However, majority of widowed (94 per cent) lived in extended family. Traditionally, joint family system was widely practised in India and parents and widowed are taken care by their children (Kumari and Sekher, 2010). Co-residence with children and others is slightly less likely in poorest households.

Table 5 represents the women's perception about their preferred expectation about the living arrangement support and financial support when they get old. As expected, in Indian context, it is observed that an overwhelming majority (four-fifth) of respondent expect to be supported by sons. In Indian tradition, sons are expected to take care of family and old parents, as daughter leave parent's house and live with her husband when they get marry. Given this background, the results shown in table 5 and 6 reveals that, gender is an important factor in assuming certain roles and responsibilities of a member in Indian traditional familial system.

Table 5 also shows that there was very little variation in expectation of living preferences in old age among women respondent (age group 15-49) by their socio economic characteristics. As age increases, the expectation of women to get support from sons increases. It is due to insecurity with the increasing age. Women respondents residing in rural areas and women belonging to OBC class are more willing to live with the sons. It is also seen that those who are illiterate these women expect more support from sons than the educated ones. As educational level increases that expectation of the women decreases. Currently married women have more expectation on sons for old age support compared to other categories. Women respondents who are living in extended families their expectation concentrated is also more on sons compared to their counterparts.

Table 6 represents the women's perception about their preferred expectation for financial support in old age. The shows that the expectation of women's for financial support are more or less same to living preferences which are presented in table 5. In both the cases the proportion of women who do not expect or are unwilling to accept any support from daughters is negligible. This striking result indicates that the tradition and customs dictate that 'parents give to a daughter and not take from her (Desai et al. 2010).

Variation in perceptions of women regarding their preferred living Arrangements and financial support in old age: Logistic Regression:

The results extracted by performing simple statistical analysis and presented in tables 5 and 6 indicates that, there are differentials in women's expectation about old age support based on

different socio-economic and demographic factors. In order to know the relative contribution of these factors one should go through further statistical analysis. Binary logistic regression was carried out. For fitting the binary regression analysis the dependent variable was dichotomous (Others "0" and Sons"1").

Table 7 gives the odds ratios of binary logistic regression analysis for living arrangement preferences among women in the age group 15-49 by background characteristics. Results shows that women in higher age groups are more likely to expect to live with their sons compared to women in age group 15-24. Those Women in urban areas are less likely to expect their sons to live with them in old age in comparison to rural areas. Women belonging to OBC group are more willing to expect to live with sons than SC and ST Categories. Women respondent who are literate are less likely to expect their sons to provide support in old age compared to illiterate. Similarly, women who are living in extended families their expectation is more for living with sons in comparison to women living in nuclear families. Women who are not currently married are less likely to express their interest to live with sons when they get old.

Similarly, table 8 present odds ratios of binary logistic regression analysis for women's preferred financial support in old age. As similar to living with in old age, in case of financial support also the expectations of women are highly concentrated on sons. Women in higher age group are more willing to expect sons to support financially when they get old compared to younger age group. Women residing in urban areas are less likely to expect to get financial support by sons in comparison to women residing in rural areas. Respondents who are belonging to OBC are 14 per cent more willing to get financial support by sons in their old age compared to women belonging to SCST. Women who have higher level of education are less likely to expect to their sons to financially support them in old age in comparison to women with no education. Again women who are staying in extended families are more likely to get financial support by sons compared to women who are staying in small families. And respondent who are not presently married are less likely to accept financial support from their sons when they grow old in comparison to women who are currently married.

Summary and Conclusion:

The findings presented in this paper clearly document that though the socio-economic and demographic changes are taking place. Modernization and urbanization have hit the Indian masses which are believed to be the main eroding source for traditional extended families and

weakening of family ties. But data shows that in India family is the prominent source for old age care, support and security even now. Study also found that the majority of elderly adults tend to live in extended families. For Indians, one of the significant traditional values has been filial responsibility, which is embodied in extended family and living arrangement for the elderly. Adult children are expected to live with elderly parents regardless of elderly person's marital status, gender, economic position and other socio-economic characteristics.

Accordingly, it is also evident from the perceptions of women in the age group 15-49, that their expectation about old age support are heavily concentrated on sons. An overwhelming majority of women respondents expect their sons to live with them to take care and provide financial and emotional support in their old age. These results indicate that the family will continue to be a significant social institution for the care and support for elderly in India.

References

Ahn, T. S., Cuong, B. T., Goodkind, D., and Knodel, J (1997): '*Living Arrangement, Patrilinearity and sources of support among elderly Vietnamese*'. Asia-Pacific Population Journal, Vol 12, pp 69-88.

Alam, Moneer and M Mukherjee (2005): '*Ageing, Activities of Daily Living Disabilities and the need for Public Health Initiatives: Some Evidence from a Household Survey in India*'. Asia-Pacific Population Journal, Vol 20, No 2, pp 47-76.

Asis, M M, Domingo, B D, knodel, J,and Mehta, K (1995): '*Living Arrangement in four Asian countries:A comparative perspective*'. Journal of cross-Cultural Gerontology, Vol 13, pp 241-264.

Aykan, H and Wolf, D A (2000): '*Traditionality, modernity and household composition: Parent-child co-residence in contemporary Turkey*'. Research on Ageing , Vol 22,No 4, pp 395-422.

Becker, G. S. (1991): '*A Treatise on the Family*'. England Edition. Cambridge, MA: Harvard University Press.

Bongaarts, john and Zachary Zimmer (2001): '*Living Arrangement of Older Adults in the Developing World: An Analysis of DHS Household Survey*'. Working Paper, No. 148. Population Research Division, Population Council.

Bordia, Anand and Goutam Bhardwaj (eds) (2003), '*Rethinking Pension Provision for India*'.Tata Mcgraw Hill Publishing company, New Delhi.

Cameron, M A (2000): '*The residency decision of elderly Indonesians: A nested logit analysis*'. Demography, Vol 37, pp 17-27.

Chan, A (1997): '*An Overview of the Living Arrangements and Social support Exchanges of Older Singaporeans*'. Asia Pacific Population Journal, Vol 12, No 4.

Chen, Martha Alter (1998): '*Widows in India*'. (New Delhi: Sage Publications).

Da Vanzo, J, and Chan, A (1994): '*Living Arrangement of Older Malasians: Who co-resides with their adult children*?*'. Demography, Vol 31, pp 95-113.

Desai, S B, Dubey, A, Joshi, B L, Sharif, A, Venneman, R (2010): '*Human Development in India: Challenges for a Society in transition*'. OXFORD UNIVERSITY PRESS.

Hashimoto, A (1991): '*Living arrangement of the aged in seven developing countries: a preliminary analysis*'. Journal of cross-Cultural Gerontology, Vol 6, pp 395-504.

Irudaya Rajan, S, Mathew, ET (2008): '*India*' Chapter 2, pp 39-106 in S, Irudaya Rajan (ed), Social Security for the Elderly: Experiences from South Asia, Routledge Publication, New Delhi.

Irudaya, Rajan, S (2004): '*Chronic Poverty among Indian Elderly*'. Working Paper 17. New Delhi: Chronic Poverty Research Centre and Indian Institute of Public Administration.

Irudaya, Rajan, S and Sanjay, Kumar (2003): '*Living Arrangement among Indian Elderly: Evidences from National Family Health Survey*'. Economic and Political Weekly, Vol 38, No 1, pp 75-80.

Irudaya, Rajan, S, Carla, Risseuw, and Myrtle, perera (2006): '*Care of the Aged: Gender, institutional Provisions and Social Security in India, Netherlands and Sri Lanka*', mimeograph, Centre for Development Studies, Thiruvananthapuram.

Irudaya, Rajan, S, U S Mishra and P S Sarma (1995): '*living Arrangement among the Indian Elderly*', Honkong Journal of Gerontology, Vol. 9, No 2, pp 20-28.

Irudaya, Rajan, S, U S Mishra and P S Sarma (1999): '*India's Elderly: Burden or Challenge*?'. Sage Publications, New Delhi.

Irudaya, Rajan, S, U S Mishra and P S Sarma (2000): '*Ageing in India*'. Indian Social Seince Review, Vol 2, No 1, pp 1-48.

Kan, K., A. Park and M. Chang (2000): '*A Dynamic Modleof Elderly Living Arrangement in Taiwan*'. Paper presented at an Annual Meeting of the Population Association of America, Los Angeles, CA.

Kinsella, Kevin and Victoria A. Velkoff, (2001): '*An Ageing World*'. U.S. Census Bureau Series, pp 95-01, Washington D.C,

Kojima, H (1989): '*Intergenerational household extension in Japan*' in F. K. Goldscheider and C. Goldscheider (eds), Ethenicity and the new family economy: Living arrangement and intergenerational financial flows, pp163-184. Boulder, CO: Westview.

Kramarow, E A (1995): '*The elderly who live alone in the United States: Historical perspective on household change*'. Demography, Vol 32, pp 335-352.

Kumari, Sangeeta and Sekher, T V (2010): '*Elderly in Punjab: Economic Dependency, Health Conditions and Living Arrangements*'. Man and Development, Vol 32, No 1, pp 77-88.

Kuznets, S. (1978): '*Size and age structure of family households: Exploratory comparisons*'. Population and development Review 4: pp 187-223.

Mason, K O (1992): '*Family change and support of the elderly in Asia: What do we know*?', Asia-Pacific Population Journal, Vol 7, pp 13-32.

National Sample Survey Organization (1998): '*Socio-Economic Profile of the Aged Persons*'. NSS 52nd round (July'1995-June'1996) Report No. 446, Government of India, New Delhi.

National Sample Survey Organization (2004): '*Morbidity, Health Care and the Condition of the Aged*', NSS 61st round (January - June 2004) Report No 507. Government of India, New Delhi.

NCAER (2004): '*India Human Development Survey*'. The National Council of Applied Economic Research, New Delhi and University of Maryland, 2004-2005.

Ofstedal, M B, Knodal, J and Chayovan, N (1999): '*Intergenerational support and gender: A comparision of four Asian countries*'. Southeast Asian Journal of Social Sceinces, Vol 27, pp 21-42.

Ogawa, N and Retherford, R D (1997): '*Shifting costs for caring for the elderly back to families in Japan: Will it work*?' Population and Development Review, Vol 23, No 1, pp 59-94.

Palloni, A (2001): '*Living Arrangement of Older Persons'*. United Nations Population Bulletin, Special Issue Nos 42/43, Department of Economic and Social Affairs, Population Division, New York.

Phoebe, Liebig and Irudaya, Rajan (eds.), (2003): '*An Ageing India: Perspectives, Prospects and Policies*, The Haworth Press, New York.

Schafer, R (1999): '*Determinants of Living Arrangements of the Elderly*', W99-6, Joint Centre for Housing Studies, Harvard University, Cambridge.

Sekher, T V (2005): '*Socio-economic Dimensions of old age security in India: With special reference to Karnataka*', Journal of Social and Economic Development, Vol 7, No 1, pp 12-28.

Shah, N, Yount, K M, Ahah, M A, and Meno, I (2002): '*Living arrangements of older women and men in Kuwait*'. Journal of Cross-Cultural Gerontology, Vol 17, pp 37-55.

Thornton, A., M. C. Chang and T. H. Sun (1984): '*Social and economic change, intergenerational relationship, and family formation in Taiwan*', Demography vol 21 pp 475-499.

United Nations (2002): '*World Population Ageing 1950-2050*' (New York: Department of Economic and Social Affairs, Population Division, United Nations).

United Nations (2003): '*World Population prospects: The 2002 Revision'*, vol. I New York Department of Economics and social Affairs population Division. ST/ESR/222

Van Solige, Hanna (1994): '*Living Arrangement of non-married elderly people in the Netherland in 1990*'. Ageing and Society, Vol 14, pp 219-236.

Velkoff, Victoria A (2001): '*Living Arrangement and Well being of Older Population: Future Research Direction*'. Population Bulletin of the United Nations, Vol 42, No 43, pp 376-385.

Wolf, D A (1990): '*Household patterns of older women: some international comparisons*'. Research on aging, Vol 12, pp 463-487.

Wolf, D A (1994): '*The elderly and their kin: patterns of availability and access*'. In L G Martin, and S H Preston (eds) Demography of Aging, pp 146-194. Washigton: National Academy Press.

World Bank (2001): '*India: The Challenge of Old Age Income Security'*. Finance and Private Sector Development: South Asia Region'. Report No. 22034-In, Washington.

Yi, Z. (1991): '*Family dynamics in China: A life table analysis'*. Madison: University of Wisconsin Press.

Yount, K M (2005): '*The Patriarchal Bargain and Intergenerational Co-residence in Egypt*'. The Sociological Quarterly, Vol 46, pp 139-166.

Zenkoku Shakai Fukushi Kyogikai (Japan National Council of Social Welfare). (1982). Koreisha mandai sogo tyosa hokoku [*Comprensive research findings on the issue of ageing*]. Tokyo: Author.

Table 3: Percent distribution of older population by background characteristics. IHDS, India, 2004-05.

Background characteristics	Percent of older population			Total persons
	Male	Female	Total	
Age				
Young-old(60-69)	61.6	62.6	62.1	10917
Old-old(70-79)	27.8	27.8	27.8	5200
Oldest-old(80+)	10.6	9.6	10.1	1787
Residence				
Rural	76.8	75.8	76.3	12647
Urban	23.2	24.2	23.7	5257
Caste[1]				
SC/ST	24.5	25.4	25.0	4293
OBC	42.1	41.5	41.8	7191
Others	33.4	33.1	33.2	6420
Religion[2]				
Hindu	83.1	83.9	83.5	14641
Muslim	10.3	9.3	9.8	1758
Others	6.6	6.7	6.7	1505
Education				
No schooling	46.0	77.6	61.6	10672
1-4 Years	14.8	7.0	11.0	2007
5-9 Years	22.3	9.1	15.8	2915
10 and Above	16.9	6.2	11.7	2310
Wealth Quintile				
Lowest Quintile	19.3	20.5	19.9	3220
2nd Quintile	15.4	16.9	16.2	2529
3rd Quintile	17.8	19.0	18.4	2889
4th Quintile	22.2	19.8	21.0	3751
Highest Quintile	25.2	23.7	24.5	5002
Marital Status[3]				
Currently married	80.8	43.0	62.1	11254
Widowed	17.7	55.8	36.5	6416
Others	1.5	1.2	1.4	234
Total	50.6	49.4	100	17904

Note: 1. For caste variable, others category includes Brahmin and others.

2. For religion variable, others category includes Christian, Sikh, Buddhist, Jain, Tribal, Others and None.

3. For marital status variable, others category includes single, sep/div, sp. absent, no gauna.

4. All percentage are taken of valid cases after excluding missing cases.

Source: IHDS, 2004-05

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Table 4: Percent distribution of older by living arrangements and background characteristics, IHDS, India, 2004-05.

| Background characteristics | Living Arrangement of Elderly[1] | | | Total persons |
	Single	With Spouse only	With Spouse, Children and Others	
Age				
Young-old (60-69)	2.29	16.74	80.97	10917
Old-old (70-79)	2.86	7.66	89.48	5200
Oldest-old (80+)	1.94	2.01	96.05	1787
Sex				
Male	1.09	12.0	86.91	8963
Female	3.77	7.0	89.23	8941
Residence				
Rural	2.66	12.78	84.55	12647
Urban	1.62	12.53	85.85	5257
Caste[2]				
SC/ST	2.95	10.28	86.77	4293
OBC	2.78	12.45	84.77	7191
Others	1.56	14.90	83.54	6420
Religion[3]				
Hindu	2.52	12.41	85.07	14641
Muslim	1.65	12.76	85.59	1758
Others	2.19	16.63	81.18	1505
Education				
No schooling	3.06	14.63	82.31	10672
1-4 Years	1.64	10.12	88.24	2007
5-9 Years	1.74	11.28	86.97	2915
10 & Above	0.65	7.05	92.30	2310
Wealth Quintile				
Lowest Quintile	9.04	16.19	74.77	3220
2nd Quintile	1.04	12.11	86.85	2529
3rd Quintile	0.84	11.17	87.98	2889
4th Quintile	0.48	10.58	88.95	3751
Highest Quintile	0.06	12.94	87.00	5002
Marital Status[4]				
Currently married	0.16	20.48	79.36	11254
Widowed	5.98	-	94.02	6416
Others	9.63	-	90.37	234
Total	2.42	12.72	84.86	17904

Note: 1. Living arrangements variable is constructed by using individual and household information such as, no of persons, no of children, no of teens, no of adults, no of married males, no of married females and relationship to head of the family.
2. For caste variable, others category includes Brahmin and others.
3. For religion variable, others category includes Christian, Sikh, Buddhist, Jain, Tribal, Others and None.
4. For marital status variable, others category includes single, sep/div, sp. absent, no gauna.
5. All percentage are taken of valid cases after excluding missing cases.
Source: IHDS, 2004-05

Table 5: Percent distribution of women's expectation of old age support about their preferred living arrangements by background characteristics. IHDS, India, 2004-05.

Background Characteristics		Living preferences[4]			Background Characteristics		Living preferences		
		Live with	Percent women	N[1]			Live with	Percent women	N
Age	15-24	Son	78.45	14182	**Education**	No education	Son	86.03	16419
		Daughter	6.22	1011			Daughter	3.96	667
		Both	4.63	793			Both	3.00	518
		Other	10.70	1814			Other	7.01	1249
	25-34	Son	82.06	12133		1-4 Years	Son	79.80	2849
		Daughter	5.69	885			Daughter	5.50	218
		Both	4.01	613			Both	5.23	152
		Other	8.24	1274			Other	9.47	305
	35-44	Son	83.49	10790		5-9 Years	Son	79.79	12588
		Daughter	5.45	634			Daughter	6.27	884
		Both	3.85	487			Both	4.26	653
		Other	7.21	928			Other	9.68	1431
	45-49	Son	82.77	3891		10 & Above	Son	74.32	9140
		Daughter	5.10	261			Daughter	8.62	1022
		Both	3.63	176			Both	5.87	746
		Others	8.50	408			Other	11.19	1439
Residence	Rural	Son	83.29	27331	**Wealth Status**	Poor	Son	81.42	13112
		Daughter	4.97	1491			Daughter	6.35	909
		Both	3.99	1219			Both	3.87	539
		Other	7.75	2433			Other	8.36	1222
	Urban	Son	75.96	13665		Middle	Son	83.01	7715
		Daughter	7.75	1300			Daughter	4.92	463
		Both	4.57	850			Both	3.49	343
		Other	11.72	1991			Other	8.59	837
Caste	SC/ST	Son	78.88	11310		Rich	Son	80.22	20169
		Daughter	7.01	777			Daughter	5.65	1419
		Both	4.47	551			Both	4.68	1187
		Other	9.64	1305			Other	9.44	2365
	OBC	Son	83.89	16629	**Marital Status**	Married	Son	82.01	30273
		Daughter	5.19	1175			Daughter	4.92	1805
		Both	3.59	740			Both	4.03	1455
		Other	7.34	1445			Other	9.04	3312
	Others	Son	79.72	13057		Single	Son	79.83	8444
		Daughter	5.34	839			Daughter	8.14	725
		Both	4.64	778			Both	4.71	491
		Other	10.29	1674			Other	7.31	779
Religion	Hindu	Son	81.34	32967		Others	Son	76.27	2279
		Daughter	5.78	2187			Daughter	7.94	261
		Both	3.97	1563			Both	3.86	123
		Other	8.92	3645			Other	11.93	333
	Muslim	Son	83.04	5200	**Family type**	Nuclear family	Son	79.90	13608
		Daughter	4.15	281			Daughter	5.90	1029
		Both	4.64	316			Both	3.96	667
		Other	8.17	453			Other	10.24	1730
	Others	Son	75.39	2829		Joint family	Son	81.86	27388
		Daughter	8.95	323			Daughter	5.69	1762
		Both	5.72	190			Both	4.25	1402
		Other	9.94	326			Other	8.19	2694

Note: 1. N refers Un-weighted sample size of Women respondent.

2. All percentage are taken of valid cases after excluding missing cases.

3. Total number of women (age group 15-49) 56249.

4. Women's proffered expectation for living with in old age

Source: IHDS, 2004-05.

Table 6: Percentage distribution of women's expectation of preferred financial support in old age by background characteristics, IHDS, India, 2004-05.

Background Characteristics		Financial support preferences[4]			Background Characteristics		Financial support preferences		
		Support by	Percent women	N[1]			Support by	Percent women	N
Age	15-24	Son	77.51	13733	**Education**	No schooling	Son	84.89	16030
		Daughter	5.99	1081			Daughter	4.11	718
		Both	6.12	1122			Both	4.26	847
		Other	10.38	1779			Other	6.74	1217
	25-34	Son	80.69	11803		1-4 Years	Son	79.11	2747
		Daughter	5.92	896			Daughter	5.94	214
		Both	5.47	893			Both	6.20	247
		Other	7.92	1230			Other	8.75	289
	35-44	Son	81.65	10385		5-9 Years	Son	78.64	12145
		Daughter	5.46	665			Daughter	5.77	915
		Both	5.80	802			Both	6.35	1013
		Other	7.08	929			Other	9.24	1375
	45-49	Son	80.45	3729		10 and Above	Son	71.64	8728
		Daughter	5.46	283			Daughter	9.03	1078
		Both	6.02	300			Both	8.07	1010
		Others	8.08	405			Other	11.27	1462
Residence	Rural	Son	81.77	26368	**Wealth status**	Poor	Son	80.89	12661
		Daughter	5.01	1605			Daughter	5.80	950
		Both	5.89	2065			Both	5.21	919
		Other	7.34	2322			Other	8.09	1193
	Urban	Son	74.74	13282		Middle	Son	81.26	7499
		Daughter	7.74	1320			Daughter	5.24	488
		Both	5.72	1052			Both	5.48	544
		Other	11.80	2021			Other	8.02	790
Caste	SC/ST	Son	79.32	10975		Rich	Son	78.20	19490
		Daughter	5.92	777			Daughter	6.01	1487
		Both	5.29	844			Both	6.51	1654
		Other	9.47	1259			Other	9.28	2360
	OBC	Son	81.57	16042	**Marital Status**	Married	Son	80.41	29293
		Daughter	5.49	1232			Daughter	5.20	1906
		Both	5.67	1197			Both	5.71	2218
		Other	7.28	1455			Other	8.68	3241
	Others	Son	77.71	12633		Single	Son	78.81	8129
		Daughter	6.06	916			Daughter	7.24	758
		Both	6.61	1076			Both	6.64	729
		Other	9.62	1629			Other	7.31	780
Religion	Hindu	Son	80.00	31858		Others	Son	75.57	2228
		Daughter	5.78	2365			Daughter	7.86	261
		Both	5.65	2410			Both	4.84	170
		Other	8.57	3543			Other	11.72	322
	Muslim	Son	81.53	5040	**Family type**	Nuclear family	Son	77.91	13153
		Daughter	4.64	292			Daughter	6.38	1068
		Both	5.89	428			Both	5.76	1035
		Other	7.93	465			Other	9.95	1695
	Others	Son	72.90	2752		Joint family	Son	80.72	26497
		Daughter	8.31	268			Daughter	5.48	1857
		Both	8.35	279			Both	5.88	2082
		Other	10.43	335			Other	7.91	2648

Note: 1. N refers Un-weighted sample size of Women respondent.

2. All percentage are taken of valid cases after excluding missing cases.

3. Total number of women (age group 15-49) 56249.

4. Women's proffered expectation for financial support in old age

Source: IHDS, 2004-05.

Table 7: Odd ratios of binary logistic regression analysis for women's preferred living Arrangements in old age by background characteristics: IHDS, India, 2004-05.

Background characteristics	preferred living Arrangements
Age Group	
15-24®	1
25-34	1.081**
35-44	1.418***
45-49	1.207***
Residence	
Rural®	1
Urban	0.757***
Caste	
SC/ST®	1
OBC	1.174***
Others	1.120***
Religion	
Hindu®	1
Muslim	0.986
Others	0.775***
Education	
No schooling®	1
1-4 Years	0.746***
5-9 Years	0.781***
10 & Above	0.547***
Economic status	
Poor®	1
Middle	1.041
Rich	1.077**
Marital Status	
Currently married®	1
Single	0.635***
Others	0.603***
Family type	
Nuclear family®	1
Joint family	1.107***

Note: ®- first reference category of different characteristics.
***P<0.01; **P<0.05

Table4.2: Odd ratios of binary logistic regression analysis for women's preferred financial support in old age by background characteristics: IHDS, India, 2004-05.

Background characteristics	preferred financial support
Age Group	
15-24®	1
25-34	1.064**
35-44	1.278***
45-49	1.084**
Residence	
Rural®	1
Urban	0.814***
Caste	
SC/ST®	1
OBC	1.148***
Others	1.123***
Religion	
Hindu®	1
Muslim	0.977
Others	0.814***
Education	
No schooling®	1
1-4 Years	0.722***
5-9 Years	0.745***
10 and Above	0.513***
Economic status	
Poor®	1
Middle	1.063**
Rich	1.087***
Marital Status	
Currently married®	1
Single	0.642***
Others	0.656***
Family type	
Nuclear family®	1
Joint family	1.101***

Note: ®- first reference category of different characteristics.
***P<0.01; **P<0.05