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# Rethinking family care: How changing family dynamics are reshaping support for older adults in india?

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#### ABSTRACT

India experienced considerable changes in social structure and family institutions, which have tremendous implications on the caregiving structure for older adults, especially for those who, due to physical disability, are unable to care for themselves. As India navigates the complexities of an aging population, rethinking family care is crucial to ensuring the well-being and dignity of older adults. Using data from the Longitudinal Ageing Study in India (LASI), this study examined the pattern of family care provisions, with specific to the role of living arrangements, the impact of spousal presence, and children's proximity on caregiving choices using logistic regression. Findings highlighted only one-fourth of older adults receive care from families. Spouses continued to play a major role in caregiving, even if they were co-residing with children. The presence of extended family members & proximity to children reduces the complete dependence on children for care. Family dynamics in care provision are shaped by various interconnected factors. These factors influence the type, intensity, and emotional appearance of caregiving. Understanding these dynamics is crucial for families and policymakers in addressing the challenges and ensuring that older adults receive the care and support they need.

## 1. Introduction

In India, the family has been a core institution providing care and support for their older members, especially during their sunset years, and this tradition has been followed down the ages. Even the religious and sociocultural milieu also dictates that it is the *dharma*, or moral duty of adult children (primarily sons), to provide care for their older parents and in-laws (Gupta, 2009). The mythological stories dictated that elders in ancient India were accorded high status as decision-makers both in family and society. The mythological stories of dedicated son 'Shravana' who carried his frail older parents on his shoulders, and Lord Rama's unquestioning devotion to his father, who spent 14 years in the forest abiding by his instruction, remind us the nature of the relationship between age groups and between generations within the family that persists in our culture since long back (Prasad & Rani, 2007; Ugargol, Hutter, James & Bailey, 2016).

Over the years, India has been experiencing considerable change in its social structure and institutions as a result of modernization, industrialization, urbanization, changing family structure, migration of children, and the rising cost of living. One of the major significant changes over the past few years is the weakening of the family institution, which has played a significant role in the care of older adults, especially for those who, due to physical disability, are unable to care for themselves

(Okumagba, 2011) and such changes can be seen in the family structure and living arrangements for both rural and urban (Raju, 2002). But still, family has been the core (especially in rural areas where a majority of Indian older adults reside) providing care and support (Kaushik, 2020; Kumari, 2019). The social compulsion that tradition prescribes with regard to the care for older adults is an obligation to filial piety and a general expectation among the older adults that their children should care for them in their old age. However, the changing structure of societies, patterns of family independence, family and kin structure, demographic, social, and economic trends have affected intergenerational relations, which have tremendous implications for future societies (Anil Chandran, 2020).

During the past few years, the familial role in sustaining the older adults has been well documented in gerontological literature. Broadly, two streams of studies emerged from the literature on care for older adults: first, the study of normal interaction between family members, friends, and neighbours in the provision of social support. Secondly, investigations involving care for the older adults suffering from any functional disability or cognitive impairment. *The Social Care Model* proposed by Cantor in 1979 is a systemwide approach to care for older adults, including both formal and informal care in a broad ecological approach. The model envisions the elderly at the centre of a series of concentric circles, each containing a different kind of support, ranging

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from informal (i.e., primary kin, secondary), followed by neighbours to formal care at the periphery. Older people interact with each of these circles at varying times depending upon the types of assistance needed, and sometimes, each of these separate networks interact with each other and even overlap (Cantor, 1991).

Literature concerning care for older adults in India is still limited to the contexts of family caregiving roles and their impacts, especially on large-scale, nationally representative datasets. Although various dimensions of living arrangements and care needs have been explored, a broad spectrum to understand the caregiving dynamics within families, especially among the functionally impaired older adults, has not been explored through the lens of children's proximity and spousal role. The following section will cover the previous literary work in this domain with respect to living arrangements, spousal loss, and children's proximity in the context of care for older adults.

Living arrangements have been an important indicator in identifying the status of older persons in a society. The changes in living arrangements have a profound implication for the care and support, especially for a country like India, with more than 153 million older population, which is projected to rise to 347 million by 2050 (Wojnar, 2023). The causes and consequences of living arrangements have been a topic of debate among academicians, and there is ample evidence cited that modernization, industrialization, urbanization, changing family structure, shifting of the traditional agricultural economy, migration of children, and the rising cost of living are some important factors (Gupta, 2009; Chattopadhyay & Marsh, 1999; Knodel & Chayovan, 2008; Leung, 1997; Mason, 1992; Ogawa & Retherford, 1993; Rajan, Shajan & Sunitha, 2020). However, changes in living arrangements do not necessarily reflect a weakening of intergenerational family bonds. Several studies found that declining co-residence has paralleled increasing older persons living independently in close proximity. This arrangement has been cited as a 'networked family' or 'intimacy at a distance' (Gruijters, 2017; Knodel & Offstedal, 2002; Thang, 2010). Elders residing in networked families have several benefits: they enjoy the assistance of care and support from their near ones, while on the other hand, they avoid the downside of co-residence, like the feeling of being burdened, potential intergenerational conflict, privacy, and independence.

Spousal loss is one of the most stressful experiences in old age. So, the older persons who are either widowed and residing alone or do not have any children residing nearby are the worst sufferers in terms of care. Therefore, the presence of alternative caregivers in the form of extended family members is extremely crucial in a country like India, where social support is very limited. Previous studies in the Indian context highlighted the care needs and caregiving in terms of health, functional status, and living arrangements mostly from the children's perspectives (Gupta, 2009; Ugargol, Hutter, James & Bailey, 2016; Rajan, Shajan & Sunitha, 2020; Bansod, 2017; Rajan & Kumar, 2003). The role of spouse in informal caregiving for the older adults has always been neglected in previous studies.

Therefore, the present paper explores the family dynamics in the caregiving pattern of older adults in India with specific to living arrangements, presence of spouse, and children's proximity based on their functional needs. In particular, we seek to answer the following research questions (1) How does the provision of care for older adults vary by living arrangements? (2) How does the presence of spouse affect caregiving choices? (3) How does the proximity of children affect caregiving choices?

## 2. Materials and methods

#### 2.1. Data source

The data for the current study were drawn from the first rounds of the Longitudinal Ageing Study in India (LASI) conducted during 2017–18 (International Institute for Population Sciences (IIPS), NPHCE, MoHFW, Harvard T. H. Chan School of Public Health (HSPH) and The

University of Southern California (USC) 2020). LASI is a nationally representative survey of older adults aged 45 and above across all the states and union territories in India. The survey provides a comprehensive scientific evidence base of demographic, health, economic, social, and biomarker-based information on older adults in India. LASI adopted a multistage stratified area probability cluster sampling design with a three-stage sampling design in rural areas and a four-stage sampling design in urban areas. The goal was to select a representative sample in each stage of sample selection. Further, individual survey schedule was administered to each consenting respondent aged 45 and over and their spouses in the sampled households. In addition, the LASI included an individual module on biomarkers and direct health examination. The detailed methodology, with complete information on the survey design and data collection, was published in the survey report (International Institute for Population Sciences (IIPS), NPHCE, MoHFW, Harvard T. H. Chan School of Public Health (HSPH) and The University of Southern California (USC) 2020).

LASI covered a sample size of 73,396 individuals aged 45 and above across all states and union territories of India. However, our study focused on care provisions for older adults aged 60 years and above having any functional limitations and need someone to assist them in their activities or instrumental activities of daily living (ADL/IADL). Therefore, the sample size for the present study is 14,320 older adults across all India's states and union territories. The sample selection procedure is summarized in Fig. 1.

#### 2.2. Measurements

#### 2.2.1. Outcome variables

Based on Ulhenberg's definition, caregiving is defined as "assistance provided to persons who can't perform the basic activities or instrumental activities of daily living for themselves for whatever reasons" (Uhlenberg, 1996). The caregivers are the family members who assist the older adults with activities of daily living (ADL) and instrumental activities of daily living (IADL). ADL/IADL are standard measures of functional ability and have been incorporated in most health-related studies (Uhlenberg, 1996; Mandi & Bansod, 2023).

For our study, we considered 13-item functional limitation scales combining items from both ADL and IADL. These items include dressing (putting on chappals and shoes), walking across a room, bathing, eating, getting in or out of bed, using the toilet (including getting up and down), preparing a hot meal (cooking and serving), shopping for groceries, making telephone calls, taking medications, doing work around the house or garden, managing money (paying bills and keeping track of expenses), mobility (getting around or finding an address in unfamiliar places). Primary caregivers are the family members who assist older adults with any of these ADL/IADL limitations. We have categorized the primary caregivers into four categories: (i) No one, (ii) Spouse, (iii) Son/daughter (includes son-in-law and daughter-in-law), and (iv) Other family members (father, mother, brother, sister, grandchildren, in-laws, other relatives). The detailed classification is given in Fig. 2.

## 2.2.2. Explanatory variables

2.2.2.1. Living arrangement. The primary variable of interest for this study is the living arrangement, and is constructed based on the information about the living arrangements of older adults. Living arrangement was categorized into: 'living alone,' 'living with spouse,' 'living with spouse and children,' and 'living with children and other family members.' 'Living alone; meant the older adults living without a spouse and other kin. 'Living with spouse' meant the older adults living exclusively with spouse only. 'Living with spouse and children' meant older adults co-residing with spouse and children (if available). 'Living with children and others' meant the older adults living with children and other extended family members, including father, mother, brother,

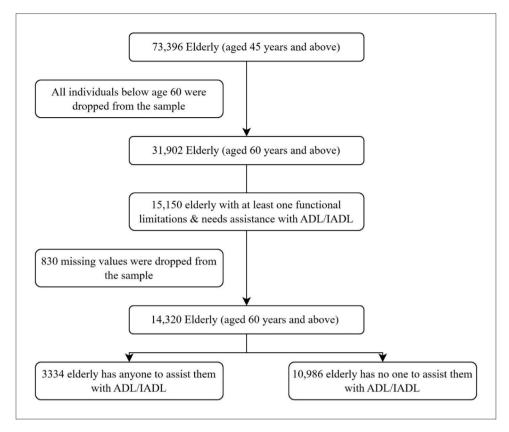


Fig. 1. Sample selection criteria.

sister, grandchildren, in-laws, and other relatives in the same household.

*2.2.2.2. Proximity of children.* Based on the previous literature, it was found that close proximity to children can be the functional equivalent to co-residence, while some studies see any kind of non-coresidence as a sign of weekend intergenerational ties.

In order to test this, we considered the proximity of children's residences into three categories: (i) coresident with the older adults, (ii) networked (no coresident, but at least one child residing in the same village/city, and (iii) isolated (not coresident, all children living outside the village or city). We also include all the older adults who either don't have any children, or their children died within the third category, i.e., isolated. The detailed classification is given in Fig. 3.

#### 2.2.3. Health related factors

2.2.3.1. Perceived health. Self-reported health has been widely used in studies, especially among the geriatric population, to know their current health conditions. Respondents were asked to rate their current health status on a scale of very good, good, fair, poor, and very poor. Very good and good were clubbed to make 'good.' 'very poor' and 'poor' were clubbed as 'poor.' 'Fair' was retained as 'average.'

2.2.3.2. Functional limitations. Respondents were asked to self-report whether they had any difficulties with the aforementioned activities of daily living (ADL) or instrumental activities of daily living (IADL). The sum scores were coded into 'one functional limitation,' 'two limitations,' and 'three & more limitations.'

#### 2.2.4. Socio-demographic factors

The following socio-demographic variables were included in the analysis. Age was categorized into three groups 60–69 years, 70–79 years, and 80 and above years. Sex was coded as male and female. Place

of residence as rural and urban. Marital status was coded as currently married and single (including widow, divorced, separated, deserted, never married, and live-in-relationships). Years of education were coded as no education, less than 5 years, 5–9 years, and 10 & more years. Working status was coded as currently working and currently not working. The monthly per-capita consumption expenditure (MPCE) was assessed using household consumption data and was coded into 5 quintiles: poorest, poorer, middle, richer, and richest. Caste was coded as Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and others.

#### 2.3. Analytical strategy

Descriptive statistics were used to present the weighted percentage distribution of the socio-demographic and health profiles of the older adults in India (Table 1). Logistic regression analysis was used to assess how living arrangements affect the likelihood of not having a caregiver (model-1), receiving care from spouse (model-2), and receiving care from children (model-3), controlling for the covariates. To assess how the presence of spouse affects the relationship, these analyses were done separately for married and single older adults and then calculated the average predicted probability of receiving care from family members by living arrangements. Here, single refer to older adults belonging to any of these categories, including the widow, divorced, separated, deserted, and never married,. Since LASI adopted a multistage stratified area probability cluster sampling design, sampling weights are applied to all descriptive tables and figures. Regression diagnostics, such as multicollinearity and normality tests, were run to ensure the fundamental regression assumptions were followed. STATA 17.0 has been used to perform all the statistical analysis.

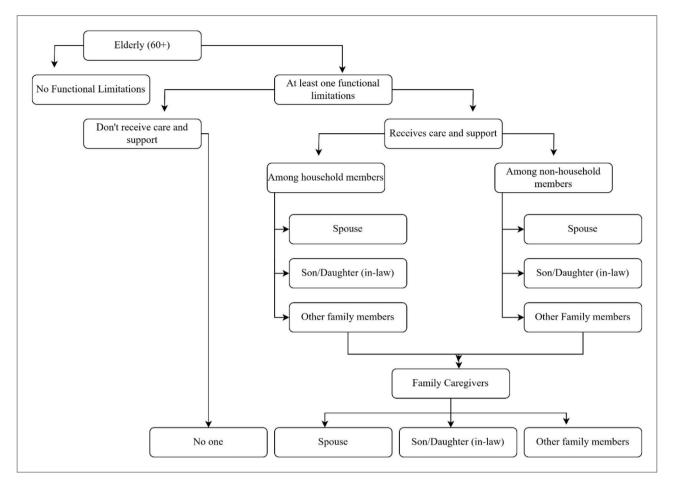


Fig. 2. Primary caregivers for the older adults.

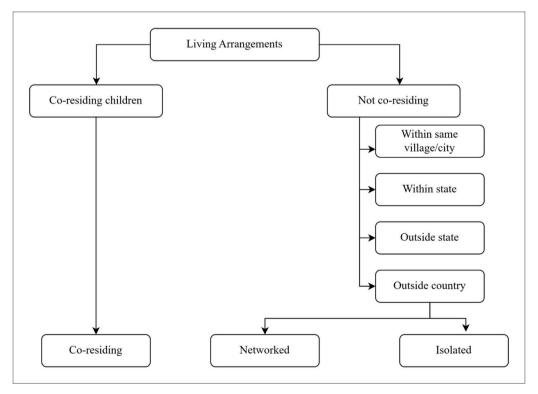


Fig. 3. Children's proximity of living.

 Table 1

 Sociodemographic and health profile of the respondents.

Sociodemographic & Health Characteristics	Frequency	Percentage
Age		
60–69	7441	50.78
70–79	4732	33.93
80+	2147	15.29
Sex		
Male	5591	39.49
Female	8729	60.51
Place of residence		
Rural	10,089	76.20
Urban	4231	23.80
Living arrangements		
Living alone	883	7.13
With spouse only	2503	18.21
Spouse and children	5336	35.98
Children & others	5598	38.67
Current marital Status		
Currently married	7940	54.80
Single*	6380	45.20
Years of education		
No education	9132	65.48
Less than 5 years	1721	12.40
5–9 years	2163	13.57
10 and more	1304	8.55
Work Status		
Currently working	3185	24.39
Currently not working	11,135	75.61
Wealth Quintile		
Poorest	3031	22.57
Poorer	2981	22.38
Middle	2908	20.28
Richer	2825	18.90
Richest	2575	15.88
Social Groups		
SC	2496	20.26
ST	2090	7.79
OBC	5718	46.32
Others	4016	25.63
Number of children		
No children**	545	3.62
1	1101	8.32
2	2191	13.87
3 & more	10,483	74.19
Children's proximity		
Coresident	10,041	68.16
Networked***	2763	21.98
Isolated****	1516	9.86
Perceived Health		
Poor	4618	32.28
Average	6336	45.68
Good	3366	22.05
Functional Limitations		
One limitation	3303	21.17
Two limitations	2388	15.54
3 & more limitations	8629	63.29
Primary Caregivers		
No one	10,986	77.71
Spouse caregiver	1295	8.74
Son/Daughter (In-law)	1332	8.51
Other family members	707	5.05
TOTAL	14,320	100

#### Notes:

- \* Single include widows, divorced, separated, deserted, and never married.
- \*\* No children refers to no alive children.
- \*\*\* Networks means living nearby either within the same village or city.
- \*\*\*\* Isolated refers to those older adults who either don't have any children or their children are not co-residing with them or not within closed network.

#### 3. Results

#### 3.1. Descriptive statistics

Table 1 presents the sociodemographic and health profile of the older adults in India. The present analysis was carried out using 14,320

respondents who had responded to all the variables of interest for this study. Most of the study participants were females (61 %) belonging to the young age group (60-69) and rural residents (76 %). More than half of them were currently married (55 %), and around two-thirds of them had no education (66 %). Regarding living arrangements, nearly one in every four older adults were currently staying alone or exclusively with their spouse (25 %) and are still engaged in the workforce (24 %). All the categories in the MPCE quintile represented approximately equally, except for the richest quintile (16 %). Considering children's characteristics, nearly four percent of the older adults had no children, while around three-fourths had three or more children (74 %). In terms of the children's proximity of residence, a majority of older adults had at least one coresident child irrespective of sex (68 %), followed by networked (22 %) and isolated (10 %). Taking into account their health status, a significant proportion of the older adults had three or more functional limitations (63 %) and needed assistance in their activities of daily living (ADL/IADL), while only 22 % received any form of care and assistance from their family members.

#### 3.2. Provision of care by living arrangements

Table 2 highlights the living arrangement patterns of older adults aged 60 and above classified by socio-demographic and health characteristics. Age plays a crucial role, with younger old (60-69) more likely to live with a spouse and children, while older individuals (80+) largely depend on living with children and others. This suggests that older individuals rely more on children and extended family as they age. Males predominantly live with their spouse and children (51.78 %), while females are more likely to live with children or others (50.81 %). The proportion of females living alone was nearly four times that of the male, reflecting the feminization of ageing in later ages. A higher proportion of older adults live with 'Children & Others' in urban areas, while rural residents show a more even distribution in living arrangement patterns. Almost all the currently married older adults live with their 'spouse' or spouse & others. Higher education and wealth are linked with living independently or with a spouse, while less education and lower wealth are associated with living with children and other extended family. Older adults, those currently working tend to stay with their spouse only. Considering their health status, older adults with poor health or multiple functional limitations, the majority of them live with 'children & others', while those with good health tend to live with their spouse and children. The chi-square (Chi<sup>2</sup>) test and p-values indicate a significant association between the sociodemographic and health characteristics of older adults and their living arrangements. A lower p-value suggests a stronger association between sociodemographic factors and living arrangements.

The proportion of primary caregivers as extended family members is highest, followed by children, when older adults stay with 'children and others'. When staying with 'spouse & children', there is a minimal gap between the spouse and the children. When the older adults live only with their spouse, it is the spouse and extended family members who take care of them (Fig. 4). The presence of children as caretakers is minimal when the older adults stay alone or with their spouse.

#### 3.3. Effect of living arrangement on caregiving choices

Table 3. presents logistic regression showing the likelihood of not having any caregiver (model-1), receiving care from spouse (model-2), and receiving care from children or children-in-law (model-3). The regression analysis shows that living arrangements, age, sex, marital status, current work status, health, and functionality are strongly associated with the caregiving dynamics among the older adults.

Older adults living with 'children and others' have higher odds of receiving care from a spouse (OR=3.87, p < 0.00) than those residing with 'Spouse and children' (OR=0.77, p < 0.00). Those living with 'Spouse and children' have higher odds of having a child as a caregiver

**Table 2**Percent distribution of living arrangement by socio-demographic characteristics.

Sociodemographic & Health Characteristics	Living Alone	Spouse Only	Spouse & Children	Children & others	Chi 2 (P- value)
Gharacteristics					varue)
Age					
60–69	6.01	20.49	45.07	28.44	0.003
70–79	8.76	18.78	28.58	43.87	(0.00)
80+	7.26	9.36	22.24	61.14	
Sex					
Male	2.85	25.29	51.78	20.08	0.002
Female	9.93	13.59	25.67	50.81	(0.00)
Place of residence					
Rural	7.66	19.68	36.22	36.44	86.08
Urban	5.45	13.50	35.23	45.82	(0.00)
Current marital Status					
Currently married	0.17	33.23	65.67	0.94	0.001
Single	15.58	0.00	0.00	84.42	(0.00)
Years of education					
No education	8.58	17.12	30.89	43.40	509.6
Less than 5 years	5.98	18.02	42.36	33.65	(0.00)
5-9 years	4.32	21.81	47.59	26.28	
10 and more	2.15	21.08	47.32	29.44	
Work Status					
Currently working	7.71	25.02	43.99	23.28	483.8
Currently not	6.95	16.01	33.40	43.64	(0.00)
working					
Wealth Quintile					
Poorest	7.66	13.11	38.17	41.06	230.6
Poorer	4.42	13.48	39.47	42.63	(0.00)
Middle	7.02	18.95	36.90	37.13	
Richer	9.45	20.49	33.82	36.24	
Richest	7.59	28.47	29.38	34.56	
Social Groups					
SC	6.74	18.62	35.01	39.63	50.30
ST	6.03	19.45	36.88	37.64	(0.00)
OBC	8.39	19.10	34.65	37.85	
Others	5.5	15.89	38.89	39.72	
Number of children					
No children	28.37	21.59	0.00	50.03	638.15
1	8.79	16.70	26.84	47.68	(0.00)
2	7.76	19.63	32.20	40.41	
3 & more	5.79	17.95	39.47	36.79	
Perceived Health					
Poor	9.44	18.49	32.16	39.91	74.87
Average	6.25	16.95	37.44	39.36	(0.00)
Good	5.58	20.41	38.57	35.44	
Functional					
Limitations					
One limitation	5.73	21.05	44.10	29.12	312.1
Two limitations	7.47	22.59	37.17	32.77	(0.00)
3 & more limitations	7.52	16.18	32.98	43.32	
TOTAL	7.13	18.21	35.98	38.67	

(OR=4.75, p<0.00) than those residing with 'children and others' (OR=2.37, p<0.00). This indicates that the likelihood of care from spouses and children may vary among co-residing older adults. As expected, the odds of having no caregiver are lower among the older adults residing with 'spouse and children' (OR=0.70, p<0.00) and 'children and others' (OR=0.37, p<0.00).

With increasing age, the odds of not having a caregiver decrease at age 80+ (OR=0.54, p<0.00), but more likely to have a spouse as the primary caregiver (OR=1.67, p<0.00). Suggesting the role of the spouse in caregiving at later ages. Females are less likely to receive care from their spouse (OR=0.75, p<0.00) and more likely to receive care from their children (OR=1.37, p<0.00), indicating higher widowhood in later years and more dependent on children for care and support. Currently, married older adults have significantly higher odds of having spousal care than their counterparts (OR=5.89, p<0.00). The role of marital status and spousal caregiving will be explored further in the next section.

Similarly, perceived health status and the intensity of functional needs also play an important role in determining family caregiving

patterns. The older adults with multiple functional limitations are more likely to receive care from their spouse (OR=2.92, p<0.00) and children (OR=1.56, p<0.00) in comparison to their counterparts. However, the older adults with good health are more likely to have no caregivers compared to those in poor health (OR=2.11, p<0.00).

#### 3.4. Provision of caregiving by proximity of children's residence

The proximity of children's residences largely determines the types of solidarity, intergenerational relationships, and the patterns of family exchanges. Many studies found that closed proximity can be the functional equivalent to co-residence, while others see any kind of nonresidence, whether it is in closed proximity or distance, as a sign of weakening intergenerational ties (Gruijters, 2017). In our study, we have classified the proximity of children's residence as coresident, networked, and isolated. The proximity of children's residence largely determines the pattern of caregiving. Children (including son, daughter, son-in-law, and daughter-in-law) are the primary caregivers for the co-residing older adults. While other family members (including father, mother, brother, sister, grandchildren, in-laws, and other relatives) became the primary caregivers for the older adults residing in the closed network or residing in isolation (outside the village, district, or state) (Table 4). Therefore, it can be said that the proximity of children is not the only factor that determines the care needs of the older adults. The presence of extended family members plays an equally important role in caregiving and may reduce the complete dependence on children for care. In fact, the role of the spouse has also been neglected while studying the care and support for the older adults because of the predominance of children as the primary caregivers. But, Table 4 suggests even in co-residence, there is a significant proportion of spouses providing care for the older adults.

## 3.5. The role of marital status and alternative caregivers

In order to better understand the role of marital status in defining the provision of care, Table 5 & Table 6 present a separate analysis for the married and single older adults. The predicted probability for each model is plotted in Fig. 5.

Fig. 5 shows that spousal caregiving was predominant among the married older adults when residing with a spouse. Even though the older adults reside with their spouses and children, the probability of spousal caregiving was almost equal to that of the children.

Similarly, single older adults, most of whom were widowed, largely depend on children for care and support when residing with their children and other family members. However, the probability of other extended family members stepping in as primary caregivers when neither spouse nor children are available to provide care.

#### 4. Discussion

The purpose of this paper was to identify the family dynamics in the provision of care and support for the older adults in India, which has been undergoing substantial changes in the last couple of decades with an unprecedented decline in multigenerational co-residence. Importantly, this study highlights the care provisions for the older adults with functional limitations and how living arrangements, presence of spouse, and proximity of children's residence affect their caregiving choices.

Our findings show that the dynamics of care for older adults are influenced by a complex interplay of factors, and family structure and living arrangements play a crucial role in shaping caregiving decisions. With spousal loss accompanied by increasing age, older adults become widowed, and a larger proportion of them stay with their families only. However, in India, still around one-fourth of the older adults are staying alone or exclusively with their spouse, and the majority, around two-thirds of them, are females. In addition, nearly half of the older adults have at least one functional limitation (48 %), while only 23 % of them

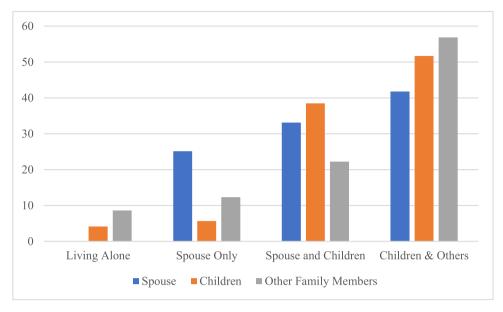


Fig. 4. Primary caregivers across different living arrangements among older adults in India.

receive care or assistance in their activities of daily living (ADL) or instrumental activities of daily living (IADL). That means only one in every four individuals has caregivers to assist them in ADL/IADL activities. These statistics highlight the unmet care needs, especially among those staying alone.

We didn't find any hierarchy model of caregiving like that of the West, where children step into the role of caregiver when the spouse is no longer able to fulfil this role. Indian scenario is different in the context that when older individuals live with their children or close relatives, caregiving responsibilities often fall on those household members. Co-residence facilitates constant care, and family members can more easily provide emotional and physical support. Older adults who live alone are often more reliant on formal care systems or external caregivers. However, children or relatives may still play a role in arranging care, checking in frequently, or providing part-time assistance.

Spousal presence can positively contribute to the caregiving dynamics within the family and provide crucial emotional stability, reducing the reliance on children for day-to-day care and support. When older individuals have a spouse, the spouse often becomes the primary caregiver, especially in the initial stages of ageing. Spousal caregiving is marked by strong emotional commitment, though it can lead to burnout, especially if both partners are older or if one spouse has significant health issues. However, the situation might be different among the single older adults (widowed, divorced, or separated), where the caregiving burden typically shifts to children or other extended family members. In such cases, siblings or other family members may negotiate caregiving roles, leading to complexities in caregiving responsibilities.

Proximity to children's residence is another major factor in deciding caregiving choices. When children live nearby, they often take on regular caregiving responsibilities, whether through visits, errands, or direct care. This proximity enables informal care, reducing the need for formal care services. Children living far away often face challenges in providing consistent care. They may contribute financially, manage medical decisions, or organize professional care. The emotional toll of being a distant caregiver can create additional stress. When multiple children are involved, then not only co-residence but the proximity to children can influence the primary caregiving role. Siblings may decide the caregiving role, and those living closer often provide more day-to-day support.

Family caregiving dynamics are shaped by various other factors like the health of the older adults, spousal health, and various socio-cultural factors. For example, in some cultures, co-residence and caregiving by children are considered normative duties, whereas, in others, the older adults may prefer or expect more independence.

The current findings should be considered in light of a number of limitations. Since the paper is based on the cross-sectional nature of the data we cannot infer causality from our associational estimates. There is evidence that parents move in with their children (or vice versa), and rotational living arrangements can be found in different parts in order to receive care and support, but this information is not available in LASI. In fact, living arrangement is a broad spectrum, which includes various patterns of living arrangements apart from the aforementioned (i.e., living alone, with spouse only, spouse and children and children and others), and different living arrangements possess various scope and challenges in caregiving dynamics within family towards the older adults. Studies on family caregiving reveal two main streams of investigation-first, studies on normal interaction and general patterns of care and support, and second, investigation involves care towards the older adults suffering from any chronic health issues and bedridden or suffering from functional disability or cognitive impairment. Therefore, the current health status and healthcare needs of the older adults may affect the living arrangement patterns; sometimes, in order to avoid the caregiving burden, families tend to migrate or shift to other households.

Additionally, we highlighted the role of spouse without considering their health. Because of the possibility of having similar kinds of unmet care needs among the spousal caregivers that might affect their health and well-being. However, the limited information on these important domains restricts further analysis. Therefore, future research is needed to understand the intensity of care in different living arrangement settings through life course perspectives.

#### 5. Conclusion

The study presents a new perspective on caregiving structure for the older adults in India and highlights various care gaps that exist, especially for those living alone. Family dynamics in care for the older adults are shaped by various interconnected factors, including living arrangements, spousal presence, and the proximity of children. These factors influence the type, intensity, and emotional appearance of caregiving. Understanding these dynamics is critical for both families and policymakers in addressing the challenges of elder care and ensuring that older individuals receive the care and support they need.

**Table 3**Logistic Regression showing the likelihood of not having any caregiver (model-1), receiving care from spouse (model-2), and receiving care from children or children-in-law (model-3).

Variable and	Model-1		Model-2 Spouse Caregiver		Model-3 Children Caregiver	
Categories	No Careg	iver				
	OR (SE)	p- value	OR (SE)	P- value	OR (SE)	P- value
Living						
Arrangements						
Living alone®	0.70	0.00	0.77	0.00	4.75	0.00
Spouse and children	0.70 (0.05)	0.00	0.77 (0.06)	0.00	4.75 (0.64)	0.00
Children & others	0.37	0.00	3.87	0.00	2.37	0.00
	(0.04)		(0.67)		(0.30)	
Age group						
60–69®						
70–79	0.81	0.00	1.12	0.11	1.14	0.05
00.	(0.04)	0.00	(0.08)	0.00	(0.08)	0.01
80+	0.54 (0.03)	0.00	1.67 (0.14)	0.00	1.26 (0.11)	0.01
Sex	(0.03)		(0.14)		(0.11)	
Male®						
Female	1.00	0.96	0.75	0.00	1.37	0.00
	(0.05)		(0.05)		(0.10)	
Place of residence						
Rural®						
Urban	1.03	0.53	1.05	0.43	0.94	0.33
O	(0.05)		(0.07)		(0.06)	
Currently marital						
status Single®						
currently married	0.56	0.00	5.89	0.00	0.48	0.00
currently married	(0.06)	0.00	(1.02)	0.00	(0.22)	0.00
Number of	, ,		, ,		, ,	
children						
No children®						
1 child	1.29	0.05	0.64	0.01	1.57	0.05
0 1 11 1	(0.17)	0.06	(0.11)	0.06	(0.36)	0.00
2 child	1.24	0.06	0.73	0.06	1.64	0.02
3 & more child	(0.15) 1.26	0.03	(0.12) 0.71	0.02	(0.35) 1.73	0.01
3 & more ciniu	(0.14)	0.03	(0.10)	0.02	(0.36)	0.01
Education (in			( )		()	
years)						
No schooling®						
Less than 5 years	0.91	0.02	1.13	0.19	1.07	0.49
	(0.06)		(0.11)		(0.10)	
5–9 years	0.93	0.26	1.21	0.03	0.98	0.87
10 and more	(0.06) 0.85	0.48	(0.11) 1.38	0.01	(0.09) 1.18	0.17
10 and more	(0.07)	0.40	(0.15)	0.01	(0.14)	0.17
Work Status	(0.07)		(0.10)		(011 1)	
Currently not						
working®						
Currently	1.70	0.00	0.59	0.00	0.72	0.00
working	(0.11)		(0.06)		(0.07)	
MPCE Quintile						
Poorest® Poorer	0.92	0.19	1.17	0.01	1.04	0.63
rootei	(0.06)	0.19	(0.11)	0.01	(0.10)	0.03
Middle	0.85	0.01	1.21	0.05	1.08	0.43
	(0.06)		(0.12)		(0.10)	
Richer	0.87	0.03	1.22	0.04	1.08	0.42
	(0.06)		(0.12)		(0.10)	
Richest	0.72	0.00	1.65	0.00	1.25	0.02
Casial C	(0.05)		(0.16)		(0.12)	
Social Groups						
Others® SC	1.00	0.99	1.18	0.83	0.85	0.09
	(0.07)	0.77	(0.11)	0.00	(0.08)	0.09
ST	0.93	0.31	0.98	0.88	1.23	0.02
	(0.07)		(0.10)		(0.12)	
OBC	0.99	0.94	1.17	0.03	0.92	0.23

Table 3 (continued)

Variable and	Model-1		Model-2		Model-3	
Categories	No Caregi	No Caregiver		Spouse Caregiver		
	OR (SE)	p- value	OR (SE)	P- value	OR (SE)	P- value
Perceived health						
Poor®						
Fair	1.95	0.00	0.52	0.00	0.66	0.00
	(0.09)		(0.03)		(0.04)	
Good	2.11	0.00	0.46	0.00	0.60	0.00
	(0.12)		(0.04)		(0.05)	
Functional limitations						
One limitation®						
Two limitations	1.03 (0.09)	0.71	1.19 (0.16)	0.17	0.91 (0.10)	0.36
3 & more	0.42	0.00	2.92	0.00	1.56	0.00
limitations	(0.03)		(0.29)		(0.13)	

Notes: ® Reference category; SE: Standard Error.

**Table 4**Primary caregivers for the older adults in India by children proximity.

Primary Caregivers	Coresidence	Networked	Isolated	N
Spouse	69.58	20.79	9.62	1295
Children	83.21	11.99	4.8	1332
Other family Members	63.16	23.32	13.52	707
Total	73.33	18.01	8.67	3334

**Table 5**Predicted probability of receiving care from family members by living arrangements among the married older adults.

Living Arrangements	Model 1	Model 1		Model 2		Model 2	
	No one		Spouse		Son/Daughter (in- law)		
	OR (std. err)	P.P	OR (std. err)	P.P	OR (std. err)	P.P	
Spouse only	1.20 (0.33)	0.82	2.92 (1.51)	0.12	0.39 (0.18)	0.02	
Spouse & children	0.95 (0.25)	0.78	1.94 (1.00)	0.09	1.83 (0.84)	0.10	

Note: P. P (Predicted Probability).

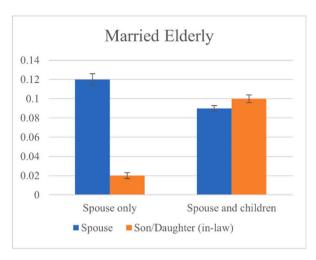
**Table 6**Predicted probability of receiving care from family members by living arrangements among the single older adults.

Living	Model 1		Model 2		Model 2	
Arrangements	No one	Son/Daughter (in-law)		nter	Other family members	
	OR (std. err)	P.P	OR (std. err)	P.P	OR (std. err)	P.P
Living Alone Children & others	Ref. 0.33 (0.035)	0.88 0.71	Ref. 2.51 (0.39)	0.05 0.12	Ref. 1.13 (0.16)	0.06 0.07

Note: P. P (Predicted Probability).

## **Policy recommendations**

As the country is undergoing a demographic transition, the number
of older adults is growing rapidly, leading to rise in basic care needs.
However there remains a limited provision of institutional support in
terms of specialized geriatric hospitals, old age homes, or other senior care facilities. Therefore, the burden of care and support



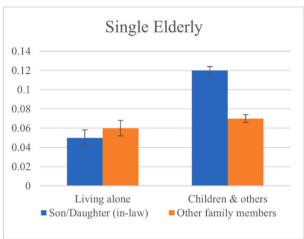


Fig. 5. Predicted probability of receiving care from family members by living arrangement and presence of spouse.

predominantly falls on families. Therefore, it is important to identify the older population who actually needs care the most and how much we are able to provide them with unmet care needs is most vital at this point.

- The government of India has implemented various legal provisions for the older adults in terms of protection of life and property, medical support, and transfer of property of the senior citizens through "The Maintenance and Welfare of Parents and Senior Citizens Act, 2007". However, awareness about these acts and their proper implementation at the household level is limited. Therefore, focused campaigns and proper monitoring are needed.
- Elder care should not be viewed solely as a burden, but rather a responsibility not only by the children but the role of extended family members is equally important, especially among the destitute older adults and those living alone. Social messaging must be promoted regarding intergenerational responsibility for the care of older adults.
- During old age, emotional support, particularly from spouses, plays a
  vital role in the well-being of older adults. Therefore, as traditional
  multigenerational families are shifting towards nuclear living arrangements, there is a need to promote community-level awareness
  to promote co-residence.
- Celebration of occasions like Parent's Day and Grandparents' Day in school and college to promote value, wisdom, and social solidarity across age groups towards the senior citizens.

#### CRediT authorship contribution statement

**Raghunath Mandi:** Writing – review & editing, Writing – original draft, Visualization, Software, Methodology, Formal analysis, Data curation, Conceptualization. **Dhananjay W Bansod:** Writing – review & editing, Validation, Supervision, Conceptualization. **Amit Kumar Goyal:** Visualization, Software, Formal analysis, Data curation.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Data availability

Data will be made available on request.

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