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# Ageing population of urban Bihar : A case study of Patna Urban Agglomeration

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**Abstract :** *India's demographic contour suggests a steep rise in ageing population in the coming decades as a result of declining fertility, increasing expectancy of life at birth and consequent ageing of population. According to 2001 census, Bihar has about 6.9% of elderly population (60+) among the total population while their proportion is 6.2% in urban areas. Patna Urban Agglomeration has about 6.28% of population aged 60 and above. Since longevity of female population is more compared to their male counter part at*

*higher age, the proportion of female elderly population is slightly high (6.32%) compared to their male counter part (6.18%) in Patna. A fast rise in aged population adds to various socio-economic challenges in a country like India. In urban areas, many women work outside home and as a result, cease to be the traditional carers of old people. The function of a family as a social safety net for the elderly is eroding fast. Further, two-third of the elderly females are illiterate and a large number of them are single. Thus, the level of dependency is quite high among them. There are about 52.8% and 46.2% fully dependent elderly population in Bihar and India respectively (NSS survey 52<sup>nd</sup> round). Being economically unproductive, they are considered as burden in the family. Further, the problem is aggravated due to limited availability of social security offered by pension schemes. It is available only to 10% of population retiring from organized sector. Unlike industrialized country, where pension system covers the economic needs of all the aged population, 7.8% of Indian elderly and 8.6% of elderly population of Bihar could not meet their basic needs (NSS 52<sup>nd</sup> round). During the time of medical emergency, these hapless people depend on the meagre government medical services. Most of the illiterates and poor aged people are not aware of the government schemes for destitute population. Many of them are not able to fill the relevant forms or produce age certificates. The condition is even*

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more critical in states like Bihar where employment opportunities are limited, social security net is poor and old-age home is a rare phenomena. Finance will also be required to maintain dependent elderly population, the majority of whom probably do not have adequate saving or family assistance. Hence research on elderly, planning and utilization of human recourses and development of welfare packages is the need of the hour. In the above mentioned context, the present study has evaluated the socio-economic and health condition of elderly population of urban Bihar, welfare packages available and their utilization with particular reference to Patna Urban Agglomeration. The elderly member of the society should be considered as human resources and their rich experience and residual capacities should be put to maximum use for the benefit of development and Bihar. Their ability to lead healthy and fruitful lives should be ensured by the Government and Society.

**Key words:** Ageing Population, Health Status, Government Schemes.

### Introduction :

'Ageing is a universal and multidimensional phenomenon' (Easwaramoorthy & Chandha,1999). 'The sharp decline in mortality since 1950 and a steady recent decline in fertility has contributed to the process of population ageing in India' (Channa and Talwar,2000). The UN defines a country as 'ageing' where the proportion of people over 60 reaches 7%. India has already exceeded this and is likely to reach 12.6% by 2050. According to 2001 census, Bihar has about 6.9% of elderly population (60+) among the total population while their proportion is 6.2% in urban areas. Patna U.A. has about 6.28% of population aged 60 and above. At the fag end of their life, the level of economic dependency is high among them. There are about 52.8% and 46.2% fully dependent elderly population in Bihar and India respectively (NSS survey 52<sup>nd</sup> round). Majority of them do not have adequate savings and financial assistance. Further, they are

vulnerable to various diseases and physical disabilities. In the absence of family support, they need government aid and assistance which is extremely meagre in amount. Further, there are segment of ageing population who are healthy and whose rich experience and residual capacities should be put to optimum use for the benefit of national development. It has been estimated that about eighteen million elderly males and thirty five million elderly females would need jobs in near future. In the above mentioned background, the present study will try to evaluate the socio-economic and health status of elderly members of urban Bihar, welfare packages available and their utilization with particular reference to Patna Urban Agglomeration.

### Aims and Objectives :

The main objectives of the project are the following :

1. To analyse the socio-economic condition of elderly population in Patna U.A.
2. To study the living condition of the old people of Patna U.A.
3. To know the health status of ageing population of Patna U.A.
4. To investigate how far the government schemes are helpful to ameliorate the condition of elderly population of urban Bihar with particular reference to Patna U.A.

### Hypotheses :

The study will try to verify the following hypotheses.

1. Illiterate ageing population is dependent on the family members for economic security.
2. Majority of the ageing population above 75 years of age are suffering from various chronic diseases.
3. Illiteracy and absence of information deprive them from availing Government opportunities.

### **Data Base :**

The project is mainly based on primary survey. For this purpose one hundred sample survey with the help of questionnaires on elderly population have been done. However, to supplement the project, the relevant data and published literature have also been consulted. To get a clear picture of the socio-economic and health condition of ageing population, special care has been taken to choose people from different economic strata. Further, comparative studies have been done among three localities i.e. Kankarbagh, Danapur Cantonment and Patliputra Housing Colony wherever notable differences were observed. In these three localities fifty-two male and forty-eight female persons have been covered.

### **Methodology :**

The research work has been carried on with three distinct phases, which are as follows:-

- (i) **Pre-Field Survey:-** Under pre-field survey, the relevant literatures have been reviewed, published data have been collected and a base map has been prepared.
- (ii) **Field Survey:-** During this stage, questionnaire has been prepared and sample survey of one hundred elderly respondents of Patna Urban Agglomerations has been carried out.
- (iii) **Post-Field Survey:-** After the completion of field survey, the data have been compiled and relevant tables have been prepared to test the hypotheses. To enhance the study, suitable diagrams have been drawn and the project report has been prepared.

### **Study Area :**

Patna Urban Agglomeration is one of the most populous urban agglomeration of India and 168<sup>th</sup> most populous agglomeration in the world. According to 2001 census, its total population is 1,697,976, out of which the number of male population is 9,22,971 and the number of female population is 7,75,005. The sex ratio of Patna Urban

Agglomeration is 840. Its density is 1,132 persons per square km. The latitudinal extent of Patna Urban Agglomeration is 25°14'N to 25°36'N and longitudinal extent is 86°14'E to 85°7'E. It includes following areas:-

- I. Patna (M.C. & OG)
- II. Phulwari Sharif (NA)
- III. Danapur Nizamat (M)
- IV. Danapur Cantonment
- V. Khagaul (M+OG)

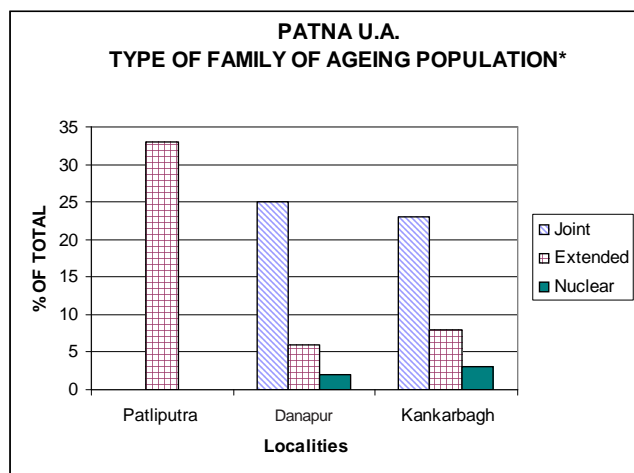
The study has covered one hundred elderly male and female population of Patna Municipal Corporation, Danapur Cantonment and Patliputra Housing Colony (OG) area.

### **Analysis :**

A significant number of ageing population is now a common sight in Urban Bihar. With the migration of considerable number of youths to different states in pursuit of education or jobs, the proportion of population over 60 years of age to total population is now quite high in the State. The study of ageing population in Urban Bihar has revealed certain interesting facts regarding their demographic composition, economic condition, social environment, health and nutritional status, educational level, satisfaction in life etc. A comprehensive study of all these aspects have been done in the next section.

**Demographic composition** or population composition refers to the characteristics of population in which distribution by age, sex, marital status, family size, caste, religion etc holds a very important place. In developing countries like India due to health and medical facilities, the life expectancy at birth has significantly gone up; more and more people are surviving till higher age brackets. Family is the basic social unit of life. At the fag end of their lives, majority of elderly population live either in joint families or in extended families. Variation exists in the type of family with the change in the localities. In Patliputra area, there

is a complete dominance of extended family whereas in Danapur and Kankarbagh joint family is dominant over extended and nuclear family type as is clear in fig. 1.



**Fig. 1**

\*Based on sample survey, 2010

The sample survey further indicates that the size of the family is highest in Danapur area i.e. 8.9.

The child sex-ratio is low indicating preference of the male child over females. There is a male domination in the society with a higher life expectancy than female. The higher age difference between spouses has led to a higher number of widow than widowers.

The multidimensional caste structure of Indian society also appeared in the survey, dominated by 50% general elderly population and 45% elderly population belonging to backward castes and other backward castes. The area is dominated by Hindu religious group.

**‘Economic Condition’** of the individual has a definite impact on the living standard and the status in the family. The study shows that most of them are leading a retired life. Pension (49%) and interest (23%) from the bank are their main source of income as is clear from the table 1. But 18% of them are still engaged in various jobs and are getting salaries. Apart from that, rental income also predominates among ageing population of Patna.

**Table – 1**

**Sources of Income of Ageing Population of Patna U.A.\***

Sources	% of Total
Salary	18
Rent	3
Pension	19
Interest from bank and Others	41
Dependent on husband or children	19
<b>Total</b>	<b>100</b>

\*Based on sample survey

Income level of the sample population varies between Rs. 5000-20,000. But inflation, devaluation of money, increasing medical expenses, and large size of the family does not leave much to save. Though the pension is available to a fraction of them, it is not always sufficient to meet their demand. Further, there are some BPL families (whose family income is below 5000) live in a precarious position in shanty settlement. Besides, 59% of the ageing population is still not under the coverage of social insurance schemes. Dependency ratio is more among females compared to their male counterpart. Since majority of the elderly females are illiterate and are not engaged in any job, they are dependent on their husband and children for their daily needs. Further, in the low income group families, illiterate dependent aged population is a common sight. Thus, it confirms the first hypothesis of the study.

**Income level and Status in the family :**

Most of the investigated ageing population either lives in joint or in extended families, income of the principal earning member also affects their status. But to investigate how far personal income affects the status of the elderly population, the following table has been prepared.

**Table – 2**

**Personal Income Level & Status in the Family among Ageing Population of Urban Bihar\***

Income	Neglected			Respected		
	M	F	Total	M	F	Total
<10,000	2	3	5	10	6	16
10,000-20,000	–	–	–	22	11	33
>20,000	–	–	–	18	28	46
Total			5	50	45	95

\*Based on sample survey

The table clearly depicts that in the traditional society of Bihar, individual income does not describe their status in most of the families. In majority of the families (95%), they still get respect from the youngsters while in some families differences of opinion and effects of the generation gap can be observed. The rest 5% of the families (2% male and 3% female) where they are neglected are mostly low income group families. In the increasing monetized society, it can be observed that with increasing income level the status in the family enhances. The independent ageing population is almost respected everywhere.

The perception of the old as responsible for collective wisdom is on the wane. Being economically unproductive, they do not have the same authority and prestige as before. The following table further clarifies the differential status of the elderly people in the family.

**Table – 3**

**Area-wise Status of Ageing Population in the family\***

Status of the Family	Kankarbagh	% of total	Danapur	% of total	Patliputra	% of total
Head of the Family	29	85	16	49	12	37
Asked Sometimes	03	09	11	33	13	39
No Interference	02	06	04	12	05	15
Neglected	–	–	02	06	03	09
Total	34	100	33	100	33	100

\*Based on sample survey

From the table, it is clear that the status of ageing population varies with the localities, In Kankarbagh localities, 85% elderly population behave as the head of the family, compared to 49% in Danapur and 37% in Patliputra localities. On the contrary in Patliputra locality 39% are consulted sometimes in decision making process.

**Domestic Violence** of various types both physical and mental is very common in many families where aged population is a neglected lot. Table 4 depicts domestic violence among ageing population in Patna U.A.

**Table – 4**

**Domestic Violence among Ageing Population in Patna U.A.\***

Domestic Violence	Male (%)	Female (%)	Total (%)
Abusive Language	13	19	16
Beating	2	4	3
Mental Torture	10	29	19
Nothing	75	48	62
Total	100	100	100

\*Based on sample survey

The table clearly depicts that the elderly population is not much vulnerable to domestic violence as 62% are free from any domestic violence. 16% of elderly population has to face abusive language which is almost equal among male and female. While in many lower income group families, mental torture is more among elderly female population.

89% senior citizens rely on their families for social security showing the failure of NGOs and social security schemes working rarely in Urban Bihar with respect to other urban centres. At this stage, friends become very close to the heart. Regular visit to the park is one of the favourite past time of them. Male elderly population is socially active but female generally confine themselves within four walls of the home. Even then, some of them visit satsang, park and meet friends depending on the status.

**Social Environment :**

Social Environment could be described as the immediate social surrounding of man like housing, infrastructural facilities, availability of civic services



etc. Majority (about 90%) of the surveyed population live in pucca houses but about 10% of hapless individuals live in semi-pucca houses. Electricity, drinking water and toilet facilities are available within the premises in most of the households.

### Health and Nutrition :

Elderly population is vulnerable to chronic diseases. Chronic cough and cold, high blood pressure and heart diseases are chronic ailment among them. Table 5 depicts the general health of the ageing population.

**Table – 5**

**General Health of Ageing Population of Patna U.A.\***

Age-Group	Good			Satisfactory			Poor		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
60-65	12	6	6	13	6	7	4	3	1
65-75	14	10	4	13	8	5	19	7	12
75-85	2	1	1	2	0	0	12	8	4
85+	1	1	0	1	0	1	7	6	1
	<b>29</b>	<b>18</b>	<b>11</b>	<b>29</b>	<b>16</b>	<b>13</b>	<b>42</b>	<b>24</b>	<b>18</b>

\*Source: Based on sample survey, 2010

The table clearly indicates that aged population of Patna till 75 years of age either enjoy good or satisfactory health, while their health deteriorates after 75 years of age. Thus the table affirms the second hypothesis regarding health status of the ageing population. The prevalent diseases of the ageing population according to their age group have been depicted in the following table.

**Table – 6**

**Diseases according to the Age Group among Ageing Population of Patna U.A.\***

Age Group	Tempo-rary Cough & Cold	Chronic cough	Cancer	Asthma	Heart Diseases	Blood Press-ure	Arth-ritis	Thy-roid
60-65	12	2	-	3	-	13	1	2
65-70	8	7	2	4	1	8	3	2
70-75	2	3	-	-	2	5	-	-
75-80	-	2	-	-	4	2	1	-
80+	3	3	-	-	2	-	3	1
<b>Total</b>	<b>22</b>	<b>17</b>	<b>2</b>	<b>7</b>	<b>9</b>	<b>28</b>	<b>8</b>	<b>5</b>

\*Based on sample survey

### Physical Disabilities :

The ageing process leads to certain disabilities such as blindness resulting from cataracts & glaucoma, deafness resulting from nerve impairment, loss of mobility from arthritis and general inability to care for one self. The current study reveals that 48% of them are visually disabled whereas 46% have hearing disability.

**Place of treatment** varies according to nearness and availability of better medical facilities. But, financial background is the prime reason towards a particular location i.e. government or private hospitals, doctor's clinic etc. 'Sophisticated treatments are available to those who can bear the expenses. Even the basic health facilities are not available to urban poor (Hazra, 2000). 60% of elderly population visit doctor's clinic with updated techniques, hygienic facilities etc. Generally Government Hospitals and health care centres are limited and with limited facilities. So families with lower income group visit hospitals or take medicines themselves asking shop-keepers of medicine shops.

**Food** is available to everyone but their quality, quantity and nutritional value varies with the economic condition of the family. At this stage of life, regular intake of fresh vegetables, fruit and milk is a must. But in a large family with meagre income, it is a rarity. Elderly population of higher income group though suffering from heart diseases or other diseases, can afford healthy diet, exercise, regular check up, unavailable to lower and lower middle income group families.

### Medical Insurance :

In modern society where good medical treatment is beyond the reach of elderly couple, medical insurance is a must for elderly couple. But, the survey indicates that only 39% of elderly population has medical insurance. Most of them are male elderly population. Only handful of female elderly population is under the coverage of medical insurance.

### Recreation and Health Care :

Most of the sample elderly population take good care of their health-both mental and physical. Through morning walk in the park or by visiting gymnasium or laughing club, they keep themselves busy as well as healthy. But the ageing population of the underprivileged classes are not much interested in health care or religious pursuit since they suffer from chronic diseases. Sources of recreation and leisure among the ageing population of Patna U.A. have been presented in the table below.

Table – 7

Sources of Recreation and Leisure among Ageing Population of Patna U.A. \*

Sources of	Male (Nc)	Male (%)	Female (No)	Female (%)	Total (No)	Total (%)
Satsang	7	14	15	31	22	22
Yoga & Gym	12	23	5	10	17	17
Park	11	21	10	21	21	21
Travel	06	12	6	13	12	12
Library	08	15	–	–	08	08
None	08	5	12	25	20	20
<b>Total</b>	<b>52</b>	<b>100</b>	<b>48</b>	<b>100</b>	<b>100</b>	<b>100</b>

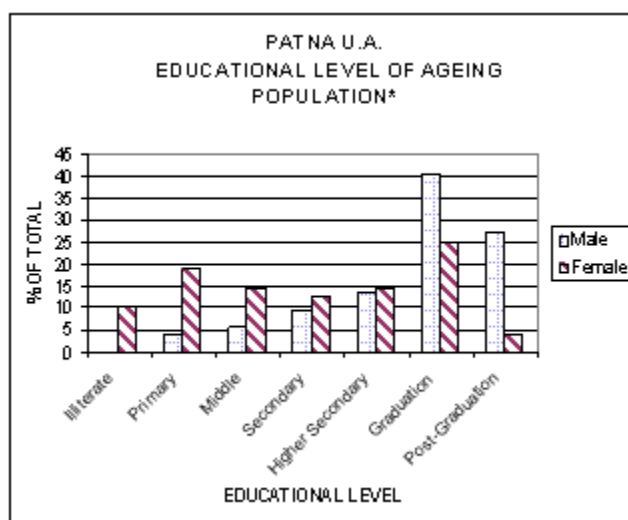
\*Based on sample survey

### Educational Level

Education has been and continues to be one of the major concerns of the modern as well as the traditional society. It enables one to understand the way in which one is related to the social world in which one is living. Although literacy is increasing among the older population, illiteracy is still prevalent among the ageing population. Only about 1/3<sup>rd</sup> of the elderly women and 3/4<sup>th</sup> of the elderly men could read and write at a basic level of competence in the developing countries. (UN 2000)

Varied scenario of educational level of ageing population of urban Bihar is clear in figure 2. Many elderly males are either graduates or post graduates while many elderly females are either illiterate or deprived of higher education.

More than 10% of elderly females are still illiterate while about 18.7% of them have educational level below primary level. Only 25% of the elderly females are graduates while 40% of elderly males are graduates. Similarly only 4.2% of elderly females have reached post graduation level compared to 27% of male post-graduates.



\*Based on sample survey

Fig. 2

The study further depicts that wide generation gap prevails among the educational level of the parents and the children. 78% children are graduates and post graduates compared to overall 33% graduates and 16% post graduates among females. There is a decrease in the proportion of illiterate or primary educated children; in contrast an increase can be seen among the enrollment of children from secondary to higher secondary level. Thus, the awareness of parents towards education even in the illiterate families is clear.

### Educational level and Government Schemes:

Education not only helps the people to get a better job, it also helps them to avail the opportunity provided by Government in a better manner which is clear from the following table.

**Table – 8**

**Educational Level and Availability of Government Schemes among Ageing Population of Patna\***

Educational level / Availability of Govt. Scheme	Availing Government Schemes (% of Total)			Unaware of Government Schemes (% of Total)		
	Danapur	Patliputra	Kankar-bagh	Danapur	Patliputra	Kankar bagh
Low	3	1	4	2	1	3
Medium	4	1	2	8	10	15
High	8	12	9	8	8	1
<b>Total</b>	15	14	15	18	19	19

\*Based on sample survey

The above table revealed that with the improvement of educational level, awareness level and access to the Government schemes improves. The trend is clear in all the three localities especially in Patliputra locality. Thus, it signifies the correctness of the third hypothesis.

**Life Satisfaction:**

Ageing means diseases, disabilities and dependence of any individual. The current project tried to find the satisfaction level at the end of their life. 28% are partially satisfied and 8% are dissatisfied individuals who have many grievances in life whereas 64% elderly are fully satisfied with their life. Expectations never ends as 62% elderly population expect change in the society. Most of the males are vocal about the change while the female elderly population, generally confined within four walls of their home, are less vocal about their expectations. In contrast, both elderly males and females have expectation from the government. 89% of ageing population is still waiting and expecting facilities and change in the society.

**Conclusion :**

The study of ageing population in urban Bihar reveals certain interesting facts. In Patna, like other urban centres, though nuclear families are becoming more common, most of the ageing population at this stage live either in joint families or extended families with their offspring. Extended

and joint families are common in Kankarbagh and Patliputra localities than Danapur areas. The survey further indicates that the number of widower is more than the number of widows. Most of them barring some BPL families enjoy Pucca houses, drinking water and electricity but they do not have much privacy at home. Very few of them enjoy the privilege of separate room. Economically most of them are self dependent or at least some source of income barring some illiterate ageing male-female population. Lots of them are engaged in income generating activities. Half of them who were engaged in income-generating activities receive pension of 5000 to 10,000. Most of them specially educated ones are respected in the family depending on their economic status and are still treated as the head of the household. Majority of the ageing population have denied facing any domestic violence but some elderly women do face domestic violence especially abusive languages. Beating of elderly parents is still prevalent among the lower income group families. Ageing populations of Patna below 65 years of age maintain a good health. Most of them take good care of their health. Lots of them go for regular physical exercise and morning walk. However, chronic diseases increase with age. Paucity of money is also responsible for poor nutrition and chronic diseases. Further, the lack of money put a hindrance for regular check up and bears the cost of expensive medical treatment. Only 39% of males are under the coverage of medical insurance. While rest of them are either not aware of medical insurance or cannot afford. The survey further indicates that educational level is more among male elderly population. Many ageing women especially among the lower income group are illiterate or their educational level is below the primary level. Lower educational level make them handicapped and they cannot take the advantage of Government schemes. Most of them are satisfied with their life but they have much expectation from the family and the society. Some of them have mentioned



Government negligence. Males are more vocal about it and they expect more facilities for ageing citizens and subsidies in commodities of daily use.

**Suggestion :**

The investigated ageing population in Patna still receives respect and care from the family. But, the the old and destitute ones with no proper family to take care of them need special attention. Night shelter for the houseless population, medical treatment for them, and old age home for ageing population with no proper families is the need of the hour. Apart from providing Rs. 250 per month to the destitute old, the Government should arrange for bonfire and rags for houseless destitute population during the winter season. The effort must be more regular. Human resource potential of the educated ageing population should be trapped and channelized. The rich experience of the ageing population will definitely help to improve the society in a positive manner.

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