



P-ISSN: 2349-8528  
 E-ISSN: 2321-4902  
 IJCS 2019; 7(2): 1140-1143  
 © 2019 IJCS  
 Received: 13-01-2019  
 Accepted: 16-02-2019

**Preeti Singh**  
 Department of Family Resource  
 Management, College of Home  
 Science U.A.S. Dharwad,  
 Karnataka, India

**PR Sumangala**  
 Department of Family Resource  
 Management, College of Home  
 Science U.A.S. Dharwad,  
 Karnataka, India

**Abha Singh**  
 N.D.U.A. & T., Kumarganj,  
 Ayodhya Uttar Pradesh, India

**Correspondence**  
**Preeti Singh**  
 Department of Family Resource  
 Management, College of Home  
 Science U.A.S. Dharwad,  
 Karnataka, India

## International Journal of Chemical Studies

### Residential interiors related problems of elderly in Dharwad

Preeti Singh, PR Sumangala and Abha Singh

#### Abstract

Hundred elderly were surveyed to highlight their residential interiors related problems. Findings of study showed that the problems faced and its extent with respect to various major aspects of house design viz., problems related to house design in general entrance and stairs, bedroom, bathroom and water closet and kitchen were recorded. When the selected respondents asked to indicate their response with respect to above variable less than 25.00 per cent have considered them as a problem causing variables and majority of the selected respondents (more than 75.00%) have considered them as not problematic. For problems related to house in general and bedroom male and female revealed more or less similar mean percentage i.e. 25.83, 24.00 and 20.17, 20.56 respectively. Problems with respect to entrance and stairs bathroom and water closet and kitchen mean percentage of male respondents found to be more than female viz., 32.75 vs 17.13, 25.69 vs 18.24 and 29.60 vs 21.38 respectively. However, irrespective of gender problems related to kitchen was found to be the highest with the mean per cent of 22.85. However t-value for gender difference for various problems faced was not significant. Thus statistically male and female do not differ for problems faced with respect to various aspects of house design.

**Keywords:** House design, general entrance, stairs, bedroom, water closet

#### 1. Introduction

Ageing is the accumulation of changes that occur in a life time. It takes place at different rates in various stages. Ageing is not a disease, but is a biological process affecting all physiological and structural system of the body associated with functional decline (Bagchi, 2000). The elderly constitutes a rapidly growing proportion of our population. During the last few decades, there has been a tremendous increase in the population of elderly persons in the world and it becomes very essential to gain familiarity in understanding of the ageing related needs of the elderly population (Bhandari, 1999 and Gupta, 2000) [2, 3] Problems of elderly are confined not only to the changes in the living style, social, psychological and physical health conditions but also related to the space requirement, fitting and fixture suitable for aged people, These problems are rapidly increasing (Dhandekar, 1996) [4]. In the modern society a phenomenal transformation due to technological revolution and urbanization is taking place and this change is having its impact on elderly population. According to National Sample Survey Organization reported by, 36.70 per cent of 7 million elderly people want to shift to old age homes because they cannot manage alone. Old age has started emerging as social problem in the Indian society due to the social cultural changes brought about by industrial revolution (Saraswati, 1976) [5]

The problems faced by the aged elderly females with regard to design of the house were absence of attached bathroom, 'bathroom away from the room, the lack of storage space'. Special facilities like lever type door handles, bath taps with hot and cold markings and non-slippery flooring etc. were available only to few respondents (Rajneesh, 1996) [6]. Problems like unsuitable entrance, slippery floor surfaces, lack of sufficient lighting and ventilation, non-availability of western water closet, grab rails and non-slip mats in bath rooms unsuitable heights, depths and widths of working counters and storage cases in kitchens particularly for female respondents, improper furnishing etc. lead to bodily problems like joint pains, tiredness, breathlessness, difficulty in working in the house, reading, writing and working in the kitchen (Kaur, 1996). Postural strain caused by unsuitable dimensions of work surfaces was reported by the elderly spent maximum time in cooking meals, dish washing, dusting and ironing but their participation in other household activities was less (Bhalla, 1997) [8].

The objective of the present research was to study the problems related to the residential interiors faced by the elderly in Dharwad.

## 2. Material and Methods

A sample of fifty male and female elderly population each aged 60 years and above residing in Dharwad city (Mahant nagar, Nirmal nagar, Malamaddi, Narayanpur, Tejaswinagar, Vinayak nagar, Sadhannkeri, Malapur, Kalyan nagar and State bank colony) were selected randomly. Thus, 100 households were visited to select the total sample of 100 respondents, to collect the data on problems of elderly with regard to their residential interiors condition viz., internal house design, entrance and stairs, bedroom, bathroom & water closet and kitchen were analyzed by using percentages and 'Z' test. Personal interview method was carried out to record the required information.

## 3. Results and Discussion

Problems and its extent with respect to various aspects of internal house design faced by the elderly people was recorded and presented in the table 1 & 2.

### 3.1 Problems related to house in general

The percentage distribution of male and female for problems related to house in general indicated that, 34.00 per cent and 32.00 per cent of male found of their flooring as slippery and

furniture arrangement in their house was restricting their movement, while their counterpart have reported the problem of too much noise from outside the house (36.00%) and poor ventilation (28.00%) when average percentage of male and female was worked out average of male was found to be high i.e. 25.83 per cent than female 24.00 per cent. However, difference between the gender was not found to be significant ( $Z=0.09853$  table-2). With irrespective of gender when extent of problem was studied many of these problems were not highly problematic as majority of them (more than 60.00%) expressed it as just problematic.

### 3.2 Problems related to entrance and stairs

Steep stairs (75.00%), use of door handles or locks (83.33%), great force to open the door (72.00%), extremely narrow door opening (81.81%) were found to be problematic. While different to move within the house because of presence of steps was found to be highly problematic (64.28%). Between male and female more percentage of male i.e. 42.00, 34.00 and 26.00 per cent have reported door handles and lock, difficult to move within the house because of presence of steps, not enough space to move in front of doors, need of great force to open doors as problematic respectively and for female percentage was low. The average percentage was also for male (32.75%) to that of female (17.13%), but difference was not found to be significant ( $Z= 0.68716$ , table-2)

**Table 1:** Problems with respect to internal house design N=100

Problems	Respondents		Total frequency and percentage	Extent of problem faced	
	Male (n=50)	Female (n=50)		Highly problematic	Problematic
<b>Problem related to house in general</b>					
Too much noise from outside the house	13 (26.00)	18 (36.00)	31	15 (48.38)	16 (51.61)
Slippery floors	17 (34.00)	06 (12.00)	23	01 (04.34)	22 (95.65)
Not enough natural lighting	10 (20.00)	11 (22.00)	21	04 (19.04)	17 (80.95)
Not enough artificial lighting	06 (12.00)	07 (14.00)	13	01 (07.69)	12 (92.30)
Windows that are difficult to open or lock	10 (20.00)	09 (18.00)	19	08 (42.10)	11 (57.89)
Poor ventilation	13 (26.00)	14 (28.00)	27	07 (25.92)	20 (74.07)
Furniture arrangements that restrict movement	16 (32.00)	12 (24.00)	28	07 (25.00)	21 (75.00)
Floor rugs that cause tripping	11 (22.00)	03 (06.00)	14	05 (35.71)	09 (64.28)
Total	96	80	176		
Mean	25.83	24.00	22.00		
<b>Problem related to entrance and stairs</b>					
Stairs are steep at entrance	03 (06.00)	05 (10.00)	8	02 (25.00)	06 (75.00)
Door handles or door locks difficult to use	21 (42.00)	09 (18.00)	30	05 (16.66)	25 (83.33)
Doors need a great force to open	13 (26.00)	12 (24.00)	25	07 (28.00)	18 (72.00)
No railings or handrail on both the top and bottom	10 (20.00)	10 (20.00)	20	07 (35.00)	13 (65.00)
Extremely narrow door openings	05 (10.00)	06 (12.00)	11	02 (18.18)	09 (81.81)
Not enough space to move in front of doors	17 (34.00)	06 (12.00)	23	13 (56.52)	10 (43.47)
Difficult to move within the house to another because of the presence of steps	21 (42.00)	07 (14.00)	28	18 (64.28)	10 (35.71)
Total	90	55	145		
Mean	32.75	17.13	20.71		

contd...

Problems	Respondents		Total frequency and percentage	Extent of problem faced	
	Male (n=50)	Female (n=50)		Highly problematic	Problematic
<b>Problem related to bedroom</b>					
No telephone near your bed	10 (20.00)	09 (18.00)	19	04 (21.05)	15 (78.94)
No lamp near your bed	12 (24.00)	10 (20.00)	22	03 (13.63)	19 (86.36)
Not enough natural lighting	09 (18.00)	10 (20.00)	19	07 (36.84)	12 (63.15)
Not enough artificial lighting	07 (14.00)	06 (12.00)	13	06 (46.15)	07 (53.84)
Too high or too low bed	08 (16.00)	07 (14.00)	15	05 (33.33)	10 (66.66)
Too hard or too soft mattress	06 (12.00)	06 (12.00)	12	06 (50.00)	06 (50.00)

Too much noise affecting sleep patterns	09 (18.00)	17 (34.00)	26	10 (38.46)	16 (61.53)
Difficulty in stay in bedroom day time because too much day light	09 (18.00)	08 (16.00)	17	07 (41.17)	10 (58.82)
Insufficient storage provisions	13 (26.00)	12 (24.00)	25	07 (28.00)	18 (72.00)
Room away from the middle of the house	11 (22.00)	03 (06.00)	14	05 (35.71)	09 (64.28)
Room remains very warm in summers	10 (20.00)	11 (22.00)	21	04 (19.04)	17 (80.95)
Room too cold in winters	12 (24.00)	09 (18.00)	21	10 (47.61)	11 (52.38)
<b>Total</b>	<b>116</b>	<b>108</b>	<b>224</b>		
<b>Mean</b>	<b>20.17</b>	<b>20.56</b>	<b>18.66</b>		
<b>Problem related to bathroom and water closet</b>					
Slippery floor	21 (42.00)	06 (12.00)	27	16 (59.25)	11 (40.74)
Not enough natural lighting	10 (20.00)	10 (20.00)	20	05 (25.00)	15 (75.00)
Not enough artificial lighting	06 (12.00)	06 (12.00)	12	01 (08.33)	11 (91.66)
Difficulty in operating taps	11 (22.00)	08 (16.00)	19	03 (15.78)	16 (84.21)
Difficulty in getting on or off the toilet	11 (22.00)	05 (10.00)	16	03 (18.75)	13 (81.25)
Lack of grab bars, support rails	08 (16.00)	09 (18.00)	17	05 (29.41)	12 (70.58)
Bathroom for away from bedroom	08 (16.00)	14 (28.00)	22	05 (22.72)	17 (77.27)
Difficulty in using toilet (Indian style)	14 (28.00)	08 (16.00)	22	04 (18.18)	18 (81.81)
Total	89	66	155		
Mean	25.69	18.24	19.37		

Contd...

Problems	Respondents		Total frequency and percentage	Extent of problem faced	
	Male (n=50)	Female (n=50)		Highly problematic	Problematic
<b>Problem related to kitchen</b>					
Slippery flooring	15 (30.00)	07 (14.00)	22	13 (59.09)	09 (40.90)
Not enough natural lighting	09 (18.00)	12 (24.00)	21	04 (19.04)	17 (80.95)
Not enough artificial lighting	09 (18.00)	08 (16.00)	17	04 (23.52)	13 (76.47)
Shelves and storage units out of reach	07 (14.00)	13 (26.00)	20	02 (10.00)	18 (90.00)
Kitchen work counter space is not enough	20 (40.00)	10 (20.00)	30	13 (43.33)	17 (56.66)
Difficulty to use kitchen cooking counter because of high/low height	20 (40.00)	13 (26.00)	33	16 (48.48)	17 (51.51)
Needs sitting area for food preparation	09 (18.00)	08 (16.00)	17	01 (05.88)	16 (94.11)
Total	89	71	160		
Mean	29.60	21.38	22.85		

Note: Figures in the parentheses indicate percentage.

### 3.3 Problems related to bedroom

Among problems related to bedroom too much noise affecting sleep (26.00%), insufficient storage in the bedroom (25.00%) no additional lamp near the bed (22.00%) very warm in summer and cool in winter (21.00% each) were the major problematic (50.00-80.00 %). These problems were reported by more or less equal number male and female respondent with the average percentage of 20.17 (male) 20.56 (female) and not found to be significant statistically ( $Z=0.02704$ , table-2)

### 3.4 Problems related to bathroom and water closet

Slippery flooring,(27.00%) bathroom being away from bedroom and difficult in using Indian style water closet (22.00%) each) and not enough natural light (20.00%). These were except slippery floor found to problematic for more than 75.00 to 81.00 per cent of respondents where as slippery floor was highly problematic for 59.00 per cent of respondents. These problems have been reported by more number of male (average percentage is of 25.69%) than female (18.24 per cent). However, this difference was not found to be significant ( $Z= 0.41459$ , table-2).

### 3.5 Problems related to kitchen

Difficulty to use kitchen cooking counter (33.00%), insufficient kitchen work counter space (30.00%), slippery flooring (22.00%), natural light (21.00%), out of reach

shelves and storage units (20.00%) were as problematic (51.00 to 76.00%) aspects. Although average percentage for male (29.00%) was more, but male and female do not differ in statistics ( $Z=0.3845$ , table-2).

From table-1, average of total percentage of elderly problems with respect to house design indicate that, problems related to kitchen (22.85%), related to house (22.00), entrance and stairs (20.71%),bathroom and water closet (19.37%) and bedroom (18.66%) were reported by less than 25.00 per cent of the total sample. Kaur (1996) also discloses that Problems like unsuitable entrance, slippery floor surfaces, lack of sufficient lighting and ventilation, non-availability of western water closet, grab rails and non-slip mats in bath rooms unsuitable heights, depths and widths of working counters and storage cases in kitchens particularly for female respondents, improper furnishing etc. lead to bodily problems like joint pains, tiredness, breathlessness, difficulty in working in the house, reading, writing and working in the kitchen.

Although many elderly populations both male and female have expressed many problems related to the house and to their bedrooms for their comfortable living. However these are not being solved by providing additional facilities which are suitable for old age for comfortable living. In present days many gadgets such as reacher, secured chopping and cutting board, big button remote control, telephone, big handles etc are available in the market specially for comfortable life of older people to solve old age related problems. However,

many old age people are not aware of them. Hence, awareness creation on this additional facility needs attention.

#### 4. References

1. Bagchi K. Malnutrition in elderly, *Frontiers in geriatric medicine* (first ed.), 2000, 43-46.
2. Bhandari A. Helping the aged. *The Tribune*. 1999; 119(154):10.
3. Gupta S. Management of Psychotic Disorder In The Elderly, *Frontiers In Geriatric Medicine* (First Ed.), 2000, 204-223.
4. Dhandekar K. *The Elderly In India*. Saga Publications, New Delhi, 1996.
5. Saraswati H. The changing relationships between the young and the old. *J Soc. Welfare* 1976; 24:29-32.
6. Rajneesh K. Comparative Study On The Problems Faced By The Aged Living With Families And Senior Citizen Homes Unpublished *M. Sc. Thesis*, Punjab Agric. Univ., Ludhiana, 1996.
7. Kaur J. Housing problems of elderly persons in Ludhiana City. *M. Sc. Thesis*, Punjab Agric. Univ., Ludhiana, 1996.
8. Bhalla M. Anthropometric Measurements of the elderly for designing household equipment, furniture and work places. Unpublished *M. Sc. Thesis*, Punjab Agric. Univ., Ludhiana, India, 1997.