

Research Paper :

## Convenience of work places for housing senior citizens

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Accepted : January, 2010

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### ABSTRACT

Senior citizens face many problems and do not always adjust well to retirement. Hence, the study was conducted to evaluate the household furniture and work places used at residence and old age home, problems faced and suggestions given by the senior citizens to overcome the problems. Data were collected from three main areas of the Parbhani city. Total 50 senior citizens were randomly selected and information was collected through structured interview schedule. Measurement of standard furniture and standard working heights for elderly were calculated as per the standard methods. Results indicated that the furniture (cot, table and chair) used by the senior citizens was not comfortable to them nor it was as per the standards. Significant differences were observed between existing working heights and standard working heights. They faced many problems due to insufficient lighting, unsuitable staircases and inconvenient height of working counters, storage places and problems due to traditional toilet seats.

**Key words :** Senior citizens, Work places, Convenience

The principle enemies of the retired persons are loneliness, lack of socially useful occupation and physical inactivity resulting in harmful change in the rhythm of life.

Senior citizens do not always adjust well to retirement. Their vigour diminishes and long periods of inactivity develop into an ailment. Once these problems are solved the individual is able to enjoy active longevity (Menon, 1980).

Work place is a major part of the team that is needed to accomplish household tasks. The quality and design of work place in terms of the requirement of the task and of the worker has an important effect on the ease with which the action is accomplished.

Problems like unsuitable entrances, stair cases, slippery floor surfaces, lack of sufficient lighting and ventilation, non-availability of English seats, 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 furnishings 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). The senior citizen paradoxically faces these problems at times in his life when his capacity and adaptability have become minimum. He is called upon to adjust to these sweeping changes in his living conditions. As one of the goals for the senior citizens is to maintain maximum independence, it becomes important to know specific

needs of the senior citizens. The poorly planned interior may mean that such persons are unable to function successfully within their own homes and their surroundings.

Hence, it is necessary to study the present conditions of work places used by the senior citizens and problems faced by them. So, the present study was carried out with the following objectives to study the household furniture and work places used by the senior citizens at residence and old age home and comparing it with standards, to study the problems faced by the senior citizens while performing day-to-day activities while using existing furniture and to record the suggestions given by the senior citizens.

### METHODOLOGY

In order to meet the objectives of the study, three areas of the Parbhani city namely- Bhagya laxmi Nagar, Sharda Nagar and Old age home were selected for the data collection. A total sample of 50 senior citizens (above 60 years) was randomly selected.

The data were collected through survey method with the help of structured interview schedule. Measurements of standard furniture and standard working heights for elderly were calculated as per the method suggested by Robert (1960) and Grandjean (1988).

### FINDINGS AND DISCUSSION

Table 1 Depicts the comparison between existing

**Table 1 : Comparison between existing furniture dimension used at the residence and at old age home with standard dimensions of furniture**

Furniture and its dimensions	Existing furniture		Furniture used by the senior citizens at old age home(cm) average	Standard furniture (cm)	't' value
	Average (cm)	S.D.			
Chair					
Depth	40.72	1.85	43	52.0	6.31**
Breadth	41.35	3.16	43	44.7	5.31**
Height	41.49	1.33	42	33.50	4.70**
Table					
Length	107.18	2.03	106.5	120.0	31.50**
Breadth	72.98	3.13	75.5	60.0	20.10**
Height	77.20	6.98	78.5	72.0	7.90**
Cot					
Length	180.82	1.27	186	210.0	11.43**
Breadth	106.78	1.07	96	100.0	31.50**
Height	46.67	1.41	52	33.50	25.00**

\*\* indicates significance of value at P=0.01

furniture dimension used at the residence and at old age home with standard dimensions of furniture.

Regarding the chair dimensions, the depth of the existing chair at residence was 40.72 cm and depth of the chair used by the senior citizens at old age home was 43.0 cm which are comparatively lower than the standard dimensions *i.e.* 52.0 cm. The breadth of the chair used at residences was 41.35 cm and at old age home was 43 cm which are also lower than standard furniture *i.e.* 44.7 cm while the height of the chair used by the senior citizens at residence was 41.49 cm and used at old age home was 42.0 cm which are higher than standard furniture, 33.5 cm.

With reference to the table dimensions, significant difference was observed between existing furniture and standard furniture. The length of the table used by the senior citizens at residence was 107.18 cm and at old age home was 106.5 cm which are lower than the standard dimensions *i.e.* 120 cm. The breadth of the table used by the senior citizens at residence and at old age home were 72.98 cm and 75.5 cm, respectively, which are higher than standard dimensions *i.e.* 60 cm. The height of the table used by the senior citizens at residence and at old age home was also higher than standard dimensions 72.0 cm.

In case of cot dimensions, significant difference was observed between existing furniture dimensions and standard dimensions. It was noted that the length of the

cot used by the senior citizens at residence was 180.82 cm and length of cot at old age home was 186.0 cm which were lower than standard dimensions *i.e.* 210.0cm. The breadth of the cot used by the senior citizens at residence was noted to be 106.78 cm while at old age home, it was 96.0 cm, which were different than standard breadth dimension 100 cm. The mean heights of the cot used by the senior citizens at residence and at old age home were 46.67 cm and 52.0 cm, respectively. While standard height of cot was 33.50 cm which is lower than the existing cot height.

It is clear that there was significant difference observed between existing working heights and standard working heights. The 't' value was calculated for residential existing working height and standard working height (Table 2). The storage shelves height used at residence was noted to be 106.66 cm, which is comparatively lower than standard working height 151.0 cm, while storage shelves height used by the senior citizens at old age home is 90.0 cm, which is very low as compared to the standard storage shelves height. The wash basin height used by the senior citizens at their residence was found to be 80.47 cm, which was significantly lower than the standard wash basin height 83.85 cm, while wash basin height used by the senior citizens at old age home was 84.0 cm, which is comparatively higher than standard wash basin height.

Fixed mirror height used by the senior citizens at residence and at old age home was noted to be 127.05cm and 126.0 cm, respectively which were lower than standard fixed mirror height 130.5 cm. Light switches height used by senior citizens at residence 153.93 cm and at old age home 125.0 cm were significantly higher than

**Table 2 : Comparison between working heights used by the senior citizens at residence and old age home with standard heights**

Working height	Existing working height		Working height used by the senior citizens at old age home	Standard working height (cm)	't' value
	Average (cm)	S.D.			
Storage shelves	106.66	1.02	90	151.0	9.47**
Wash basin	80.47	4.08	84	83.85	4.14**
Fixed mirror	127.05	20.40	126	130.50	9.38**
Light switches	153.93	4.97	125	119.5	12.44**

\*\* indicates significance of value at P=0.01

standard light switch height 119.5 cm.

### Problems faced by senior citizens:

Problems faced by senior citizens were recorded separately for male and female members which are depicted in Table 3. The recorded problems were due to insufficient lighting (72% male and 60 % female, respectively), due to unsuitable stair cases (36 % male and 48% female, respectively), due to inconvenience height of working counter and storage space (28 % male and 68% female, respectively), problems due to Indian toilet seats (32 % male and 52% female, respectively) and unsuitable height, width of cot (16 % male and 28% female, respectively) and due to slippery floor finishes (52 % male and 64% female, respectively). Overall it was observed that male members faced more problems due to insufficient lighting whereas female members were having more problems due to unsuitable stair cases, height of working counters, storage space, unsuitable height of cot than the male respondents.

Sr. No.	Problems	Frequency	
		Male	Female
1.	Problem due to insufficient lighting	18 (72)	15(60)
2.	Problem due to unsuitable staircase	9 (36)	12(48)
3.	Problem due to height of working counter and storage space	7(28)	17(68)
4.	Problems with Indian toilet seat	8(32)	13(52)
5.	Problems with unsuitable height width of chair	13(52)	15(60)
6.	Problem due to unsuitable height of cot	4(16)	7(28)
7.	Slippery floor finishes	13(52)	16(64)

Figures in parentheses indicate percentages

### Suggestions given by the senior citizens regarding furniture and work places:

Suggestions given by the senior citizens were recorded and are exhibited in Table 4. It is evident from the table that 72 per cent male respondents and 60 per cent female respondents suggested that sufficient lighting should be provided in bath rooms and stair case where they feared of slipping and falling.

Thirty six per cent of male and 48 per cent of female respondents expressed that the stairs should be of more wide but height of the steps should be reduced. The height of the working counter and storage spaces should be designed according to their heights. It was suggested by 28 per cent male and 68 per cent female so that it can

Sr. No.	Problems	Frequency	
		Male	Female
1	Provision of lighting in various parts of house	18 (72)	15 (60)
2	Stairs of more width and less height	9 (36)	12 (48)
3	Working counter to be designed according to the height of the user	7 (28)	17 (68)
4	Provision of English toilet seat	8 (32)	13 (52)
5	Provision of suitable height of chair	13 (52)	15 (60)
6	Problem due to unsuitable height of cot	4 (16)	7 (28)
7	Problems due to slippery floor finishes	13 (52)	16 (64)

Figures in parentheses indicate percentages

provide more comfort and increase work efficiency.

English toilet seat was suggested by 32 per cent male and 52 per cent female respondents. Fifty two per cent males and 60 per cent females expressed that there should be comfort when they are seated on the chair. Only 16 per cent males and 28 per cent females suggested that the height of the cot should be according to their stature. Fifty two per cent males and 64 per cent females wanted non slippery floor finishes.

### Conclusion:

It can be concluded from the above study that the furniture (cot, table and chair) used by the senior citizens was not comfortable to the senior citizens nor as per the standard and their personal concepts. Significant differences were observed between existing working heights and standard working heights at residence and old age home. Senior citizens faced many problems due to insufficient lighting, unsuitable stair cases, and inconvenient height of working counter and storage places, problems due to Indian toilet seats. The inconveniences experienced while using furniture were unsuitable height, width of chair, cot and due to slippery floor finishes. They expressed few suggestions like sufficient lighting, the height of the working counter and storage spaces should be designed according to their heights, use of English toilet seat etc. to overcome these problems. It could be said that the furniture dimensional requirement and the working height requirement of the senior citizens used at home and available at old age home was different than the existing furniture.

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