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BARRIER FREE HOUSE INTERIOR DESIGN FOR WHEEL CHAIR USERS: ISSUES AND PERSPECTIVE IN INDIA

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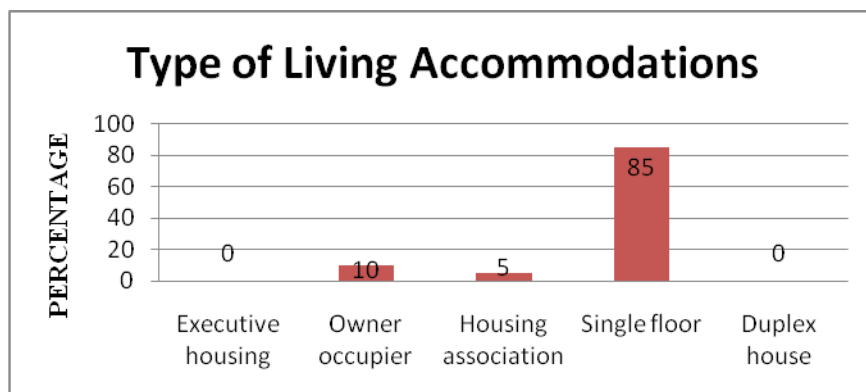
According to the Americans with Disabilities Act (ADA), “the term ‘disability’ means an individual has a physical or mental impairment that substantially limits one or more of his/her major life activities or there is a record of such an impairment or an individual is regarded as having such an impairment.”

Why should we design for handicapped?

- Mobility-impaired persons have the right to lead a life of dignity and self-respect. They have the right to access all facilities just like any valid person.
- It is the moral duty of all valid persons to ensure a fair and equitable opportunity to mobility impaired persons.
- Handicapped-accessible structures can be used by valid persons also. They do not pose any inconvenience to valid persons. If properly designed, they do not affect the aesthetics or functionality of structures.
- The incremental cost involved in making the structure handicapped-accessible is just a fraction of the cost of the structure itself.

While designing the technical considerations and design provisions or measures are taken into account in the planning of the built-up environment. This includes issues related to the design of several complementary domains: open spaces and recreational areas, local roads and pathways, the immediate vicinity of buildings, building entrances and the interiors of buildings. The interiors of the building are discussed in this assignment. The factors which are to be considered while designing for the physically handicapped wheel-chair user. The analysis of the data has been presented

TYPE OF LIVING ACCOMODATIONS



From the above graph it can be stated that 85% of the respondents were living in a single floor accommodation. 10% of the respondents living in an owner-occupied independent accommodation, whereas 5% of the respondents were living in a housing association. Most of the respondents were living in ground single floor accommodations. When further asked the reason, the respondents stated that as disability designed houses are not accessible so the only options for the family is to buy a floor and design according to their needs.

HOUSE ADAPTED ACCORDING TO THE NEEDS

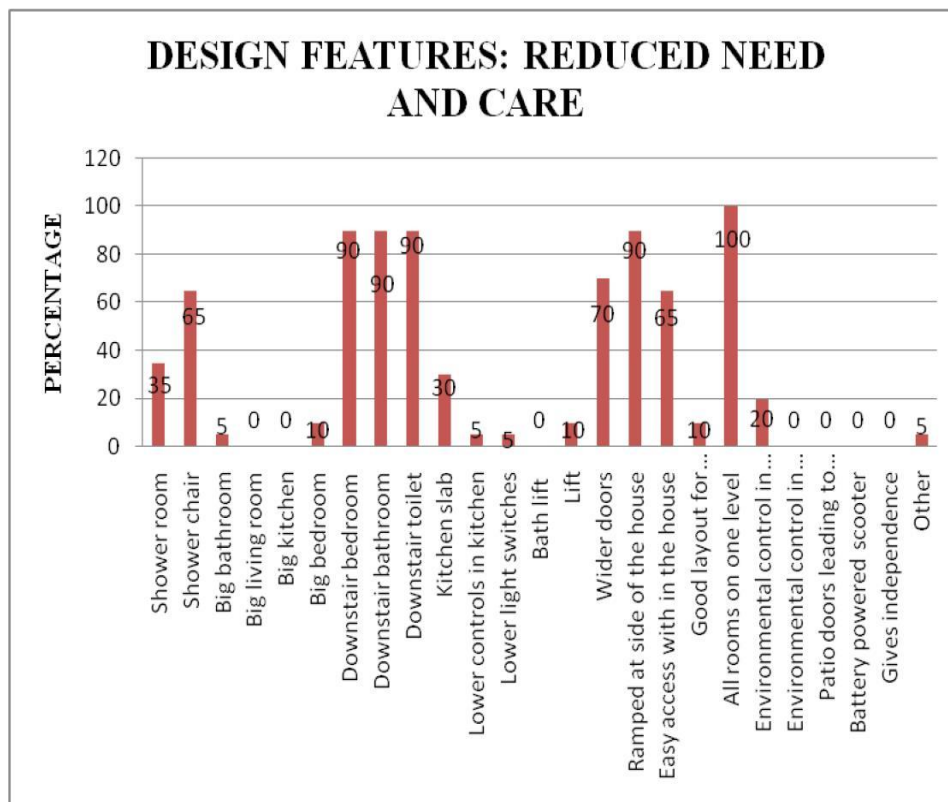
From the above graph it can be stated that 75% of the respondents were adapted their houses according with their needs and care and 25% of the respondents were in process to make their houses according with their needs and care.

When further enquired from the respondents what are the adaptations done in their houses or in the process being done all of them stated modifications in the bathroom and the height of the bed. As it was observed by the investigator during their visits to their homes that the majority of the house hold work of the kitchen and others was not the responsibilities of the wheel-chair users hence the wheel-chair users did not even speak of any modifications there as they do not feel the need for it.

Visits To Family, Friends And Other Places: Issues Of Design

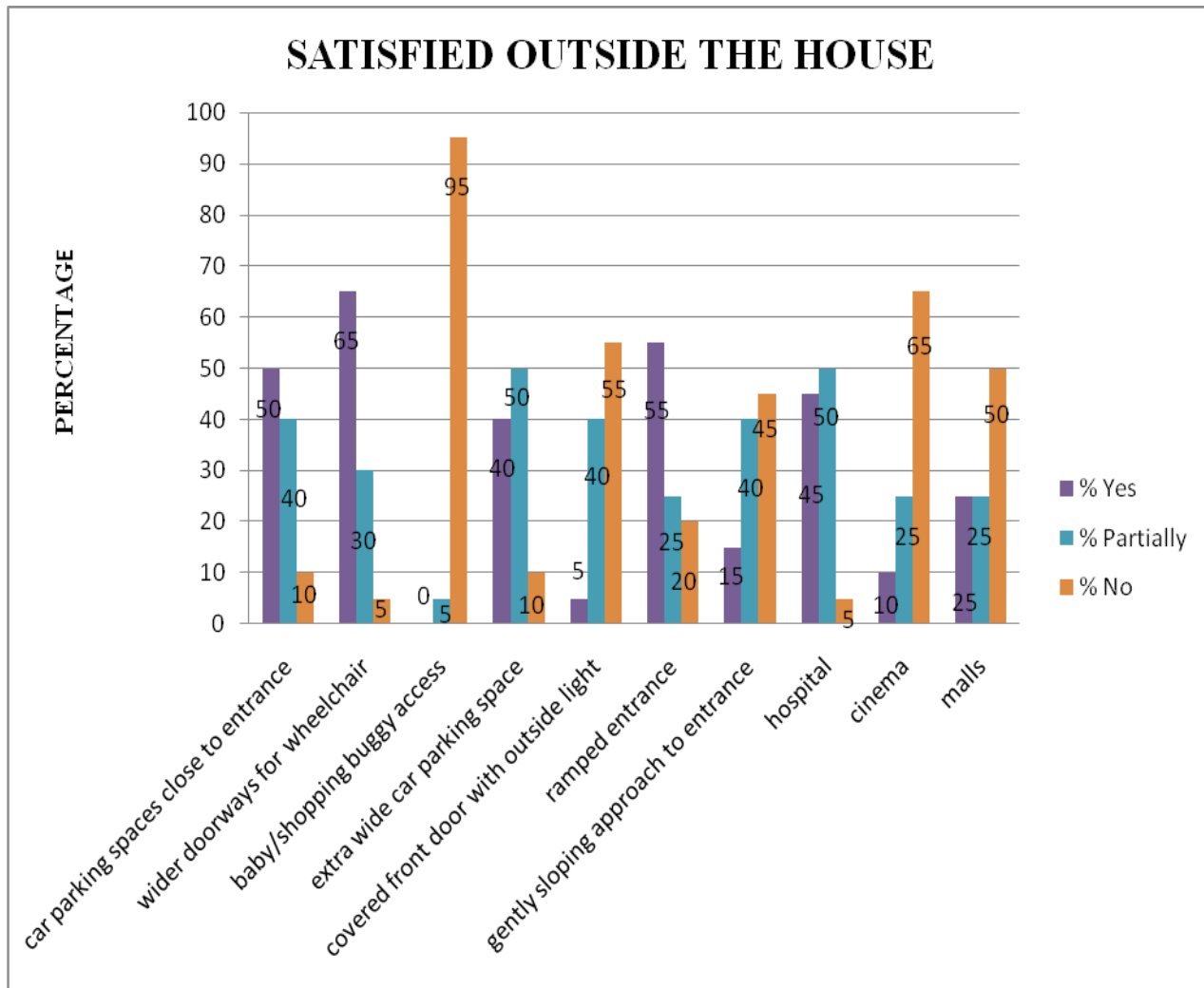
S.no	Information	Never Percentage (n=20)	Sometime Percentage (n=20)	Often Percentage (n=20)
1	Family members	25	60	15
2	Friends	35	45	20
3	Neighbors	50	35	15
4	Shopping malls	10	65	25
5	Cinemas	50	30	10
6	Hospital	5	65	30
7	Picnic spot	50	35	15

DESIGN FEATURES: REDUCED NEED AND CARE



From the above graph it can be stated that all of the respondents 100% design the feature to provide in their houses to reduce the need for care that all rooms were on one level. 90% of the respondents were said that the rooms were placed downstairs and ramped should be provided. 70% of the respondents said that doors should be wider. 65% of the respondents said that shower chair and easy access in the house reduced the need for care. Rest of them focused on ventilation and modification in the kitchen.

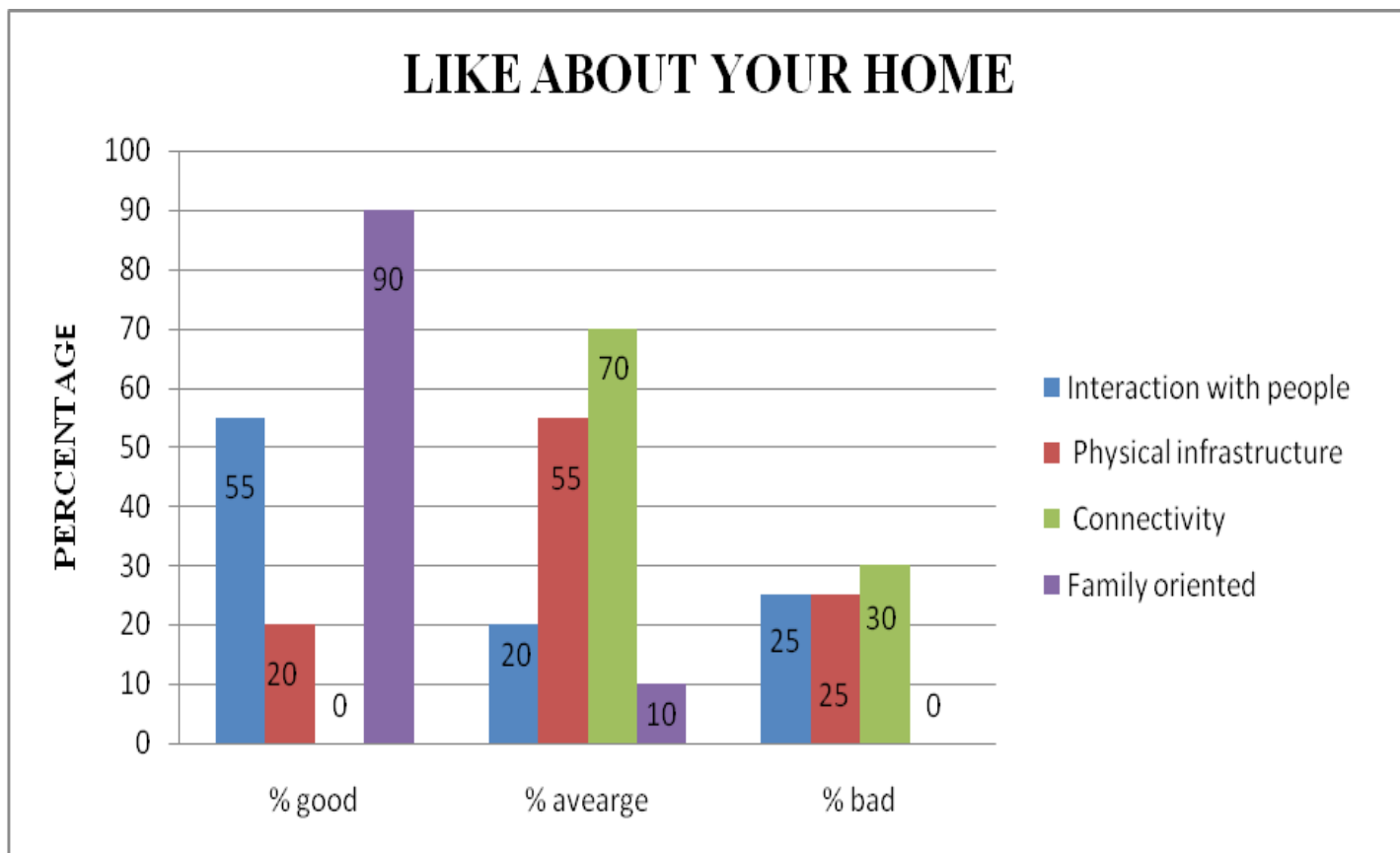
SATISFIED OUTSIDE THE HOUSE



From the above graph it can be stated that 65% of the respondents were fully satisfied with the width of doors for entry of their wheel-chairs. 55% of the respondents were fully satisfied with ramped entrance near their houses.

50% of the respondents were fully satisfied from the car parking spaces close to the entrance. 45% of the respondents were fully satisfied from the hospital 40% of the respondents were fully satisfied from the car space. 50% of the respondents were partially satisfied with car space and hospitals. 25% of the respondents were partially satisfied with malls and ramps. 65% of the respondents were not satisfied with cinema 50% of the respondents were not satisfied with malls 45% of the respondents were not satisfied with gently sloping approach to entrance. Because some features (ramp) were provided but not up to the mark accessibility problem is the main big problem.

Like about your Home



When the investigator asked from the respondent as to how satisfied they were with their home, having lived here for a while. The respondent further asked, what they particularly like about their home. As in indicated from the above graph it can be stated that 55% of the respondents feel that the interaction with people were good. 20% of the respondents feel that the interactions with people were average and 25% of the respondents feel that the interactions with people were bad. Those who said that they uncomfortable with the behaviour of the people around the emphasized that the people behave in a rude way.

Some of the respondent further added that if they were wheel-chair users and people would miss behaved with them then how would they felt .Hence, these people should also try and respect the wheel-chair users.

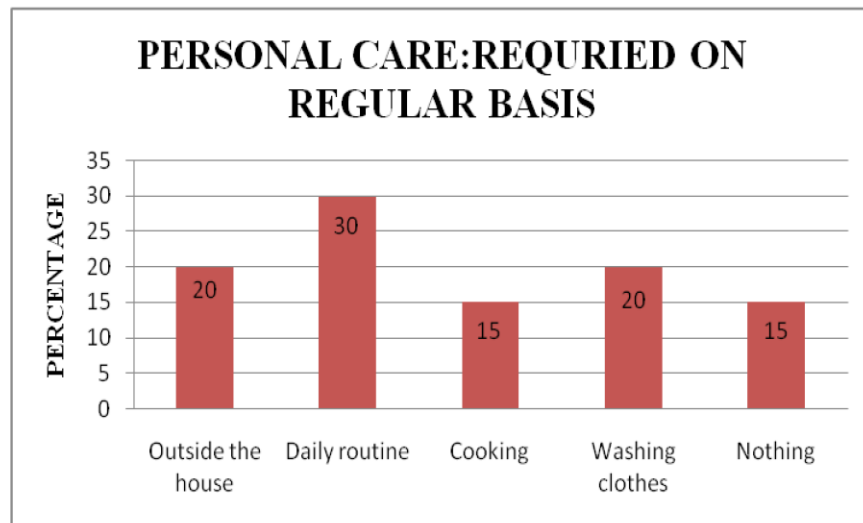
As part of the same question which was with reference to the satisfaction of the wheel-chair users, the respondents answers related to the physical infrastructure were as follows. Nearly 20% of the respondent said that the physical infrastructure of the house were built in a good way 55% of the respondent said that the physical infrastructure of the house were built in an average way ,whereas 25% of the respondent said that the physical infrastructure of the house were built in a bad way .

In continuation with the above question with reference to the connectivity of the wheel-chair users to public spaces.70% of the respondents said that the connectivity to various public spaces was okay. Another 30% of the respondents said that the connectivity to the various public spaces are not at all up to the mark. It is interesting that nobody said that connectivity is good .this seems to be a clear indication that the need to improve the connectivity and to make the public places accessible is of prime importance.

When the respondents were asked regarding the co-operation and support to the family it is interesting that the respondents felt the family were very co-operative and supportive.

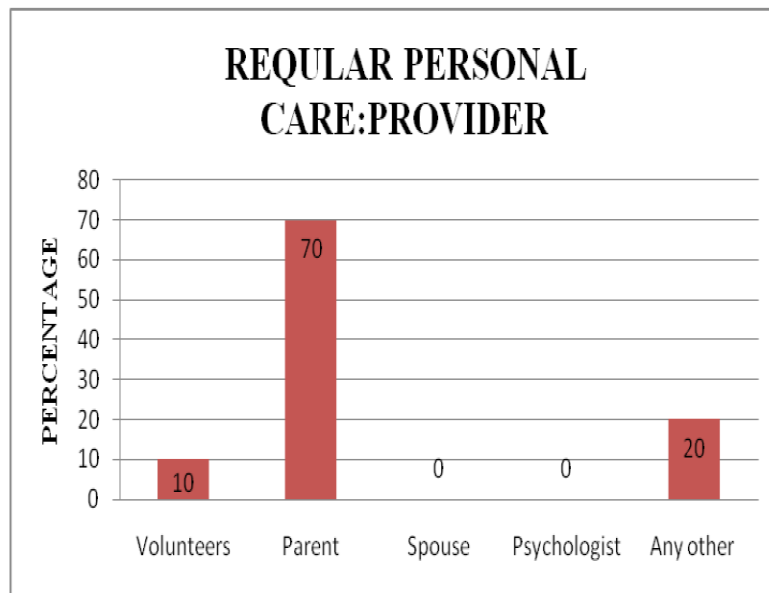
2.7PROVISION OF CARE

PERSONAL CARE: REQUIRED ON REGULAR BASIS



From the above graph it can be stated that 30% of the respondents faced problem in a daily routine activities. 20% of the respondents faced problem in washing clothes and also had difficulty in going outside the house on their own. 15% of the respondents had difficulty in cooking food themselves. The remaining 15% of the respondents stated that they do not have any problems while doing any personal activities.

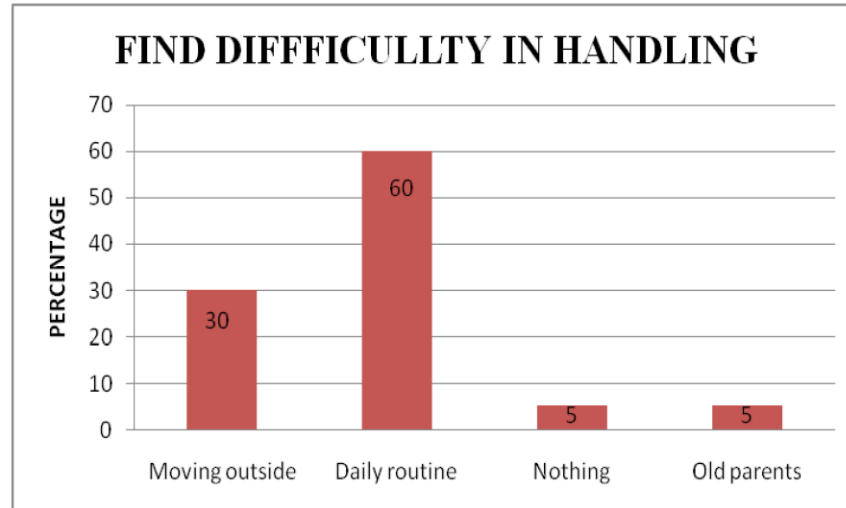
REGULAR PERSONAL CARE: PROVIDER



It is seen that 70% of the parent provides regular personal care to the respondents, therefore 20% of the brothers or sisters provide regular personal care to the respondents and 10% of the respondents are provided regular personal care by paid helpers.

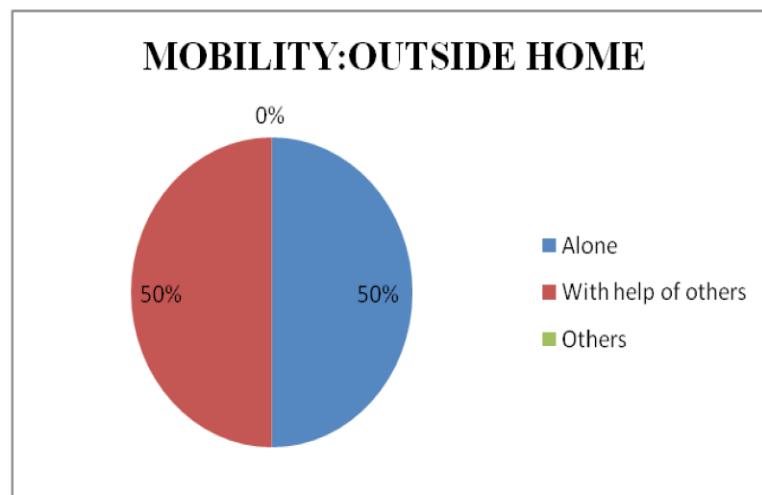
So it indicates that most of parents provide regular personal care of the respondents because the respondents stated that they live with them and they can take care better than other.

FIND DIFFICULTY IN HANDLING



From the above graph it can be stated that 60% of the respondents were finding difficulty in handling the daily routine activities because as a wheel-chair user it takes time to complete the tasks specially when the infrastructure is not facilitated enough. 30% of the respondents were finding difficulty to move outside the house because the places were not accessible and rest of the respondents stated that they finding it difficulty to take care of their old parents.

MOBILITY: OUTSIDE HOME



From the above graph it can be stated that 50% of the respondents were often go out of the house alone and 50% of the respondents were often go out of the house with somebody else. This data correlates the information stated in this thesis elsewhere that 50% of the respondents were partial wheel-chair users whereas as 50% full wheel-chair users.