

Problems of housing environment for the elderly

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Abstract: The aging is a growing concern in Saudi Arabia, as is the case in other countries, where Saudi culture is based on the close relationship between the elderly and their families. So, there is an urgent need to understand the cultural viewpoints of the people of Saudi Arabia's elderly to assess the extent of adaptation of the elderly with housing environment in the family, to stay at home independently as national policies should for housing, municipal and household application of the conditions that must be taken into account when discussing the housing needs of people with disabilities, elderly people and a commitment to the principles of the design world to the seventh Assistant elderly to continue to live in their own homes as long as possible and provide a better living environment for them. Furthermore, is to facilitate their movement and ensure their integration in society and consolidate this culture in society.

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The aging world population increases steadily and at an amazing rate. It is estimated that the ages of 23 million people in 2040 will be between the ages of 75 to 84 years old, so, 12 million will reach the age of 85 years and over, and most of them adults who suffer from aging and physiological changes show a desire to stay in their homes and would shrink the number of older people who have daily activities by 123% between 1990 to 2030 for the total world population. As well as 70% of the elderly as those living in the community find it difficult to bathe, use the phone, cooking, and washing. (Sonia et al., 1997)

Thus, the aging of the population is a growing concern in Saudi Arabia, as is the case in other countries, where Saudi culture is based on the close relationship between the elderly and their families. Most older people prefer to live in their homes, where they lived when they were younger more than the specialized institutions. So, there is an urgent need to create the environment to the needs and activities of the elderly in daily life, on the basis of international designs that provide a higher level of ease of use, ease of access and the ability to adapt to all users regardless of their age, or their potential. (Afacan and Futures, 2008). Then, It is imperative to conduct studies to understand the cultural viewpoints of the people of Saudi Arabia's elderly to assess the extent of adaptation of the elderly with housing environment with their family, to stay at home independently. Where, independency is intended not to adopt and support for non-elderly, while, environmental adaptation Means the need to intervene to help the elderly to stay at home

independently and ease the burden of care on their families (Laura, 2009).

The Paragraph 1 of Article 10 and the recommendations no. 25 and 29 of the international recommendations Action Plan on Ageing, as States parties should make every effort to support, protect and strengthen the family and to help them, according to a system of cultural values in every society, to meet the needs of their elderly dependents.

The recommendation 29 encourages Governments and non-governmental organizations to establish social services to support the whole family when elderly people at home, and to implement measures especially for low income families wishing to care for the elderly at home. It should also provide such assistance to people living alone or elderly couples who want to stay in the house.

Also, the recommendations 19 to 24 confirms that, the elderly housing should be viewed as more than just a shelter, as it, in addition to the significance of physical, psychological and social significance which should be taken into account. Thus, national policies should help elderly persons to continue living in their homes as long as possible, through the reform of housing and development, improvement and adaptation to the ability of those persons to access and use (Recommendation 19). Recommendation 20 emphasizes on that plan and the laws of the reconstruction and development of urban paying special attention to the problems of the elderly and to provide assistance to them to ensure their social integration. While, recommendation 22 draws attention to the need to take into account the functional capacity of the elderly in order to provide a better living environment for them, and to facilitate

their movement and communication through the provision of adequate means of transport. (Committee on Economic, social and Cultural Rights, 1995).

Conditions that must be taken into account when discussing the housing needs of people with disabilities and the elderly.

Universal Design:

The design of products and environments to be usable by all people, to the extent Possible, without. Need for adaptation or specialized design (Skulski, October 2007).

Can be accessed:

Generally refers to houses or other dwellings that meet the requirements specified with special needs to access. These requirements Found on in international and local standards building codes, model, and regulations of the amendments to the Housing Act of 1988, the Institute of American National Standards institute (ANSI), Standards A117.1 - 1998 with the guiding principles of the U.S. Disability Act. These rules, guidelines and laws show the standard dimensions such as the width of the door, and space for wheelchair movement, and elevations for cabinets, sinks and kitchens, and high electrical outlets, etc. (NATTAP, 1998).

Adaptable:

The design allows to change some features of the housing design's to meet the needs of the individual with a disability or a person who is facing travel restrictions by age. These elements of the basic design can be modified such as doors and entrances, wide halls with free of obstacles as part of the basic



Fig.1 People who require an accessible entrance should not be exiled to a remote delivery area such as the one shown here.

([Rudolph et al., 2001](#))

design. The adaptable intended concept is adaptation that allows the design (amendment or addition) easily and without the use of skilled labor, and without changing the basic structure of the building, for example, may support the design of the walls of the bathroom bars additional to the future, (fig., 6).

Cupboards can be designed under the basin to be removable where it is replaced storage space under the sink to the area of the knee for the wheelchair user.

Visible

Intended to be a housing suitable for the reception of people with special needs, and/or the elderly, even the owners of housing are not from these categories, and meet their needs in the future when they get older, for example, the doors wide enough for a wheelchair, and corridors can be accessed easily. This features make the dwelling for residential not change due to disability and lack of movement of its occupants.

The seven principles of universal design: (Demirkan, 2007; Rudolph et al., 2001; Skulski, October 2007)

1. Design capability for use of persons with different abilities (fair use)
Equitable use the design is useful and marketable to people with diverse abilities
Should design the building so that it is subject to the use of all persons without exception, and not to isolate or grants privileges to a group without the other and provide privacy, security, safety and comfort for all, for example, be a means to enter the building and one for all. Figs. (1 and 2)



Fig.2 People who require an accessible entrance should not be exiled to a remote delivery area such as the one shown here.

2. Flexibility in use:

The design accommodates a wide range of individual preferences and abilities, providing the

option in the methods of use, and provides the ability to adapt quickly to the user. fig. (3)



Fig. 3. Available space for the movement of the chair is not flexible enough for the passage of the chair easily by threshold and increase the difficulty of Use

3. Simple and intuitive use:

It is easy to understand, regardless of the user experience, knowledge, language skills, or current concentration level. Fig. (4)



Fig. 4. The absence of detectable information makes these elevator call buttons difficult for first time users with reduced vision to recognize. (Rudolph et al., 2001)

4. Concrete information:

Perceptible information The design communicates necessary information effectively to the user,

regardless of ambient conditions or the user's sensory abilities. Actually reach the necessary information to the user, regardless of the circumstances surrounding or sensory abilities. fig. (5)



Fig.5 In these images, you can see the band which helps the blind people to find their directions. However, the band above is blocked by a buffet <http://studyofintroductiontoarchitecture.blogspot.com>

5. Tolerance for Error:

The design leads to reduce errors and risk intentional or unintentional. It also gives notice hazards and the adverse consequences of accidental

or unintended actions of the warnings and errors, and to provide security an Tolerance for error the design minimizes d safety. fig. (6)



Fig. (6) processing bath chair Palmkabd mobile, The design leads to reduce errors and risk
http://ezaccessbathrooms.com/Senior_Friendly_Bathroom_Houston.aspx

Low physical effort:



The design can be used efficiently comfortable_and with a minimum of fatigue fig.(7)



Fig. 7 Climbing these stairs needs much physical effort, and it makes people tired .This kind of design is completely contradictory to universal design.

7. Providing appropriate size and space for movement

Regardless the size and length of the users, fig.(8).



Fig.(8) Size and space for approach and use Appropriate size and space is provided for approach, reach, manipulation and use, regardless of the user's body size, posture, or mobility

Conclusion:

From this point to be taken into account the conditions that must be taken into account when discussing the housing needs of people with disabilities and the elderly, and design principles of the seventh global planning and organization of

studies on the creation of the housing environment for the elderly, both within their homes or in public areas and has appeared now in Saudi Arabia Assembly government under the Ministry of Social Affairs and developed from within the objectives of the establishment and restoration of facilities needed

by the elderly in their homes and the role of worship as "charity care rights.". There is a strong need emphasizes the need for more research, studies, and increased attention to issues of different affecting this area, both in the field of housing policy and/or the environment, social studies, educating families and the community of the importance of these studies and to their scarcity and in spite of its importance.

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