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IMPROVING OF URBAN PUBLIC SPACES SAFETY IN ORDER TO USING PHYSICAL DISABLED PERSONS

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ABSTRACT*: Today, one of the problems in our cities is inappropriate urban public spaces in order to using physical disabled persons. There are obstacles at urban sidewalk that have been led to problems for them. Obstacles are such as: inappropriate stairs, unsuitable cover streets, connectivity bridges and etc. so, making condition for creating appropriate spaces in our cities is important issue. The aim of this paper is to focus attention on the needs of disabled people for special solutions in the design of squares, pavements, parks and other pedestrian areas. My point is, that besides actually making life easier for the disabled, these solutions will enhance the places they are used – and they are neither uglier nor more expensive. In this process the meaning of "equality" is that a society, we can call it a city, belongs to everyone .So a good city for every one is a city which all the facilities and opportunities for the better life are accessible to everyone. This research is applied. the research method is" analytical – descriptive". Finding shows urban planning is succeed while paying attention to all of people in cities. So, terms should be defined for all..*

KEYWORD*: Disabled persons, public urban space, sidewalk, urban planning*

INTRODUCTION

There is considerable proportion of each society, disabled persons. According to the United Nations convention on the rights of persons with disabilities, around ten percent of the world's population- 650 million people live with a type of disability; and in effect, they can be considered as the World's largest minority. While, around eighty percent of these populations live in developing countries, Iran -as one of them- faces a more serious problem due to the eight-year war with Iraq (1980-1988).

Disability is a comparative term, and has been addressed as an obstacle to human activities being carried out in a natural way. Until around 1980, the word handicap was mainly used rather than disability **[1]**. The main elements of disability are a lack of independence in a person's daily activities and life. Disability and handicap are also defined according to functional restrictions and significant decreases of daily activities compared to an individual's previous level of activity [**2]**.

According to statistics, the "classic" disabled people, e.g. wheel chair users, rollator users, and blind people, are perhaps one or two percent of the entire population. But in reality many more people are somehow physically impaired in their daily life for many different reasons, perhaps as parents pushing a pram, as tourists carrying heavy luggage or as elderly people that have just lost some of their ability to walk. Calculated this way, accessible solutions are of use to up to 25 % of the population at any given time, and almost everybody will at some point in his or her life be thankful for what I call accessible solutions [**3**].

Totally, human interest connects to social space. Accessibility is main point for connection with around environment. Therefore, human don't connect with environment due to reasons. They are:

- Inappropriate urban spaces.
- Disable physical people.

Designing accessible solutions is about following a number of simple principles that used together will allow disabled people almost the same freedom in pedestrian areas as able people. Among the main principles of accessible street design are (according to Danish principles)

- Even surfaces in a width of at least 1.5 m
- Gradients of a maximum of 1 in 20 and 1 in 40 across.
- Kerbs lowered to a height of 3 cm at all crossings (a lower kerb cannot be detected by a blind person's cane – a higher kerb cannot be crossed in a wheel chair.)
- Tactile guidelines and warnings for blind people
- Sufficient and correctly sized parking spaces reserved for disabled people
- High kerbs at bus stops to allow easy entering and exiting

Some urban designers seem to regard these principles as an obstacle to aesthetically beautiful design and choose not to comply. This can have two results. Either the square or whatever is not accessible to disabled people which are unacceptable. Or – to make it accessible – the owner of the square is forced e.g. by pressure from the disabled people's organizations to make some last-minute addition to the design to make it accessible. Now the square is probably functional, but the aesthetics are not.

In my view these principles are to be seen as logical functional requirements. Instead of denying them, the urban designer should see them as a challenge, just as any other functional requirement. Not only will this ensure that as many people as possible will have the opportunity to use and enjoy the space he or she has designed, but it may even turn out that the need for accessible solutions may actually generate new physical solutions that are also aesthetically pleasing and interesting.

In several countries, rules or guidelines have been published with advice on how to achieve the best solutions. The urban designer's task is then – in my opinion – to interpret these guidelines in an aesthetically acceptable way that fits the other ideas in the design [3].

Research Hypothesis

- There is appropriate urban facilities and equipment for using disabled people.
- There is positive relation between location of urban facilities and equipment and urban sidewalk safety.

Anyway, handicap is a reality which all societies face, regardless of their level of development. Societal events such as wars and revolutions also cause handicap, which then has significant social consequences. The phenomenon of being handicapped appears in its own ways and forms, and according to the interpretations that society gives to it [4].

RESEARCH METHOD

This research is applied. Also, method of research is "descriptive – analytical", and data collection method is "document –field". The data are generally gathered from academic centre libraries like universities, organizations, institutes and research centers such as management and planning organization and internet, official statistics and censuses, urban development plans by consulting engineers, and so on. Statistic society is citizens and city of Mashhad in Iran. Therefore, at first were reviewed criteria in order to using disabled people. Then, was considered current condition in studied area. After that was compared current condition with criteria.

THEORETICAL PRINCIPLES

As Oliver notes, disabled people have been perceived as dependents or individuals with a specific problem which marks them out as different from the rest of the 'normal' population. An important element in disabled people's lives is their ability (or otherwise) to gain access to particular places. However, various features of contemporary cities – including physical design, institutional policies and mobility systems – might have prevented disabled people from participating in the mainstream of urban social life. Evidence suggests that the physical construction of urban spaces – including both macro land use patterns and the internal design of buildings – often produces or reinforces distinctive spatial ties of exclusion for people with a range of physical and/or mental impairments, and serves to reinforce their 'incomplete citizenship' **[5,6]**. According to Gleeson **[7]**, the 'Disability discrimination' takes the form of: (1) physical barriers to the movement of disabled people, including broken surfaces on thoroughfares, streets, gutters, paving and so on, all of which reduce or annul the effectiveness of mobility aids such as wheelchairs or walking frames. (2) Building architecture that excludes the entry of anyone unable to use stairs or hand-opened doors. (3) Public transport modes which assume that passengers have a common level of walking ability.

In addition to the problem of inaccessibility in public urban spaces, disabled people also experience barriers to choice in their preferred living and working environments. They are often denied employment opportunities because of inaccessible workplaces [**6]**. Considering all these dimensions, it can be concluded that inaccessibility and exclusion define a city of enclosure, a social space marked by institutional and physical barriers that separate disabled people from the mainstream of social and economic life [**7]**. Adapting urban areas is a major element in achieving equal opportunities for all people and citizens to travel and move across

a city so as to provide access for everyone to every urban area and public space – all of which are a requirement for the healthy growth and development of a society [**8]**.

Movement limitations and city and architectural obstacles are factors that affect the disable's social participation in society. This can lead to isolating this group from wider society. In fact, the relation between a human being – disabled or normal – and his environment does not only relate to his or her place of residence. Rather, it encompasses the spiritual matters, thoughts and beliefs, common ceremonies, urban planning and emotions of all the people in a society. This theory takes on practical significance when human requirements acquire physical- spatial aspects, with the goal of achieving an environment which suits human needs [**9]**. Nowadays, disabled citizens have to travel to every corner of a city to fulfill their needs. If they constantly meet with such urban and architectural obstacles across the city, that can increase the burden on their physical disabilities and finally make them more reserved, introvert, and ultimately dependent – even if they had no intention of becoming such a person. In their article entitled "Public urban areas; a qualitative revision and examination", Rafieian and Seyfaee **[10]** concluded that the major factors determining the quality of public urban areas from the point of view of citizens (especially disabled people) are: 1 – cleanliness; 2 - access to urban areas; 3 – attractiveness; 4 – a relaxing environment; 5 - integrity; 6 - being active and dynamic; 7 – performance; 8 – distinction; 9 - safety and security; and 10 - power and health. There are scholars who conducted research on measuring the level of satisfaction of people in relation to disabled people. First, they categorized disabled people (both mentally and physically) by the degree and severity of their disability. Their findings show that people with lower degrees of disability, and with greater contacts with others, had more meaningful satisfaction with their lives, not least through making friendly and intimate relationships. But more severely disabled people with fewer contacts suffered more from depression and mental and physical disorders. Hanniff and Kheder **[11]**, in an article named "Women with Disabilities in the Urban Environment", noted that while women with disabilities are important members of Canadian society; yet inappropriately designed urban areas could prevent them integrating into society and instead push them to the margins of the urban economy. They found that access to city facilities was heavily influenced by factors like disability, sex, the level of urbanization, culture and heritage, age, economic conditions, and social position. So care must be taken for such individuals in social and economic issues by designing and making suitable urban areas that will allow them to participate in social activities effectively. In fact, people enjoy urban areas by looking and moving around them; and one of the first human needs is the freedom to move. In fact, the part of society with physical disabilities loses access to urban areas, then looks for the reasons in "being disabled themselves" rather than in "the city being disabled" – and consequently abandons those areas.

Studied area

Studied area is a particular neighborhood in the eighth district of Holly Mashhad/Iran: This location is at the core of Kooh- Sangi [1]region, and is also nearby the Kooh-Sangi Park.The Kooh-Snagi neighborhood is located in the eighth district of Holly Mashhad/Iran, and is also considered to be one of the oldest and greenest parts of Mashhad city. The presence of Kooh-Sangi Parkland, and more importantly it's historic trees which have poetically casted a stream of shadow on the neighborhood's main pathway, are one of the few natural assets of this particular neighborhood.

[1] - Kooh- Sangi is famous location that has been located in Mashhad metropolitan.

Figure 1: studied area

FINDING

The process of paper is, has been studied criteria of disabled in urban space and then was compared between current conditions by them. The main aim of paper is, detecting weakness and Strengths. This article has tried to highlight weakness and Strengths in urban fabric in the studied area (kooh sangi neighborhood of Mashhad city); also, proposing achievable solutions and guidelines to solve them. The problems we have addressed are just some particular instances among many others. In continue, was organized tables in three sections. 1- Codified criteria 2- current condition 3- detecting of weakness and Strengths.

Table 1: criteria-condition-weakness

Criteria	Current condition	Weakness
Should be used sensitive element in connective location		There aren't appropriate sensitive elements.
Should be located urban facilities in appropriate location.		There is bad location in sidewalk.

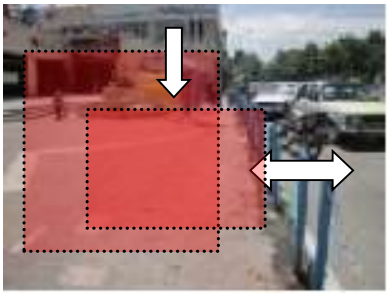
It is necessary there isn't elevation between caps in sidewalk.		There are elevation between caps and sidewalk.
In public station should be considered 3% to physical disabled persons.		There is no space to disabled persons in mentioned spaces .
The width of connective bridges should be 150 cm.		There isn't mentioned width .

Table 2: criteria-condition-weakness

Criteria	Current condition	Weakness
Should be considered two parking for disabled persons each 500 meter		There aren't any parking in studied area

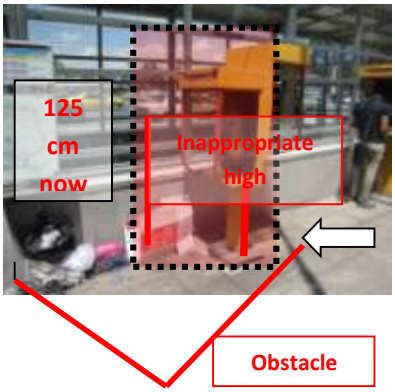
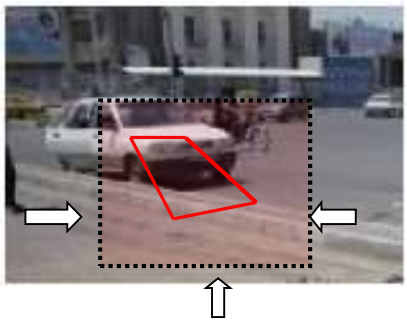
Should be forecasted 110*140 cm space around telephone box. Also the high of box telephone should be considered 100 cm.		There aren't mentioned criteria in this location.
In public spaces should be considered drinking place for disabled persons.		There are obstacles in order to access urban facilities.
Should be used appropriate sensitive cover for detecting in urban public spaces .	 	There isn't appropriate sensitive cover in studied area

Table 3: criteria-condition- Strengths

Criteria	Current condition	Strengths
Should be located urban facilities in appropriate location.		Appropriate location
It is necessary, should be created elevation between sidewalk and roadways.		There is elevation between sidewalk and roadway.
There isn't elevation between connective bridges.		It is appropriate condition in studied area.
Should be forecasted connectivity bridges between sidewalk and roadway each 500 meter.		There is mentioned condition in this area.

CONCLUSION

The concept of providing justice in urban life focuses on making changes for the benefit of groups of people who have more limited opportunities to take advantage of facilities than others. Measures to promote equal opportunities can be defined as a process by which broad elements of society such as the physical and cultural environment, housing and transportation, social and health services, sport facilities, and entertainment are provided for everyone. Not

only does a disabled person need to adapt to his environment, but the general way in which a society is organized has to be adapted to such people.

From a theoretical point of view, everyone has a right to access and use urban spaces. Taking into account the circumstances and needs of physically disabled people in urban public areas, and considering those needs in developed countries after World War II, engineers, researchers, and urban planners have increasingly had to consider disabled people's needs and requirements as part of the society when planning urban areas.

In this research, was considered kooh-sangi Avenue in Mashhad city. Therefore, at first were reviewed criteria in order to using disabled people. Then, was considered current condition in studied area. After that was compared current condition with criteria. Findings show some weakness and Strengths in urban fabric. Although, studied area is one of the oldest neighborhood but don't access for all of people. On the other hand, if urban planners want to achieve the aim of a "city for all", they cannot neglect social minorities such as the disabled people. Thus, are proposed some suggestion in order to improving quality of urban environment and achieving to city "for ALL".

Suggestions

- Creating urban space without obstacles in order to using physical disabled persons.
- Using of accessible element for all of people in urban space.
- Creating culture in order to facing disabled persons in social apace.
- Creating facilities and standard entertainment centers for using disabled persons in urban environment.
- Planning for creating public space and appropriate locations for all people.
- Designing appropriate urban spaces in order to increasing participant of physical disabled persons.
- Creating location in order to comfort moving.
- Using of ramps instead steps or stair-like structures.
- Many bus stations in the studied district are located on a platform, and there is no ramp or other access for people in wheelchairs. It would also be better if the front of station was marked or covered by a material that blind people could recognize by touch.
- Most of the shops in the studied area are located at a higher level than the pavement. There is a drain under the street, which may be one of the reasons why all the shops are located higher. But this solution has caused serious problems. As a result, these shops are inaccessible to parents with a stroller, elderly people, or anyone in a wheelchair.

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