

## The Ability of Wheelchair Users in Utilizing Urban Facilities, Sari 2011

*Mehdi Golestanibakht, Khadijeh Rabiei, Reza Lahmian*

(Mehdi Golestanibakht, Bachelor of economy, wheelchair user, Sari, Iran, pmgolestany@yahoo.com)

(Khadijeh Rabiei, MD, Traditional and Complementary Medicine Research Center, Mazandaran University of Medical Sciences, Sari, Iran, mprabie@yahoo.com)

(Reza Lahmian, Urban planning, Payam Noor University, Sari, Iran, rlahmian@yahoo.com)

### 1 ABSTRACT

**Purpose:** Wheelchair users have much more problems than other disabled people. The only way for them to participate in social activities is through using wheelchairs. On the other hand, if urban facilities aren't convenient for them, wheelchairs won't be useful. We studied the ability of wheelchair users to enter urban facilities without helps.

**M&M:** The study was done in summer 2011. One hundred and forty wheelchair users were selected. The questionnaire consisted of 20 statements starting with the phrase: "I can use... without help". Answers in 4 scales of "almost always, usually, sometimes and rarely" were equivalent to getting nil to 3 points respectively. Reaching the points 40-60, 30-39 and <20 was considered as "easy access", "rather easy access" and "no access" respectively. Content validity was achieved by expert consultation. The reliability of the checklist was attained by retesting the 20 people in 2 weeks (Pearson Correlation Coefficient,  $r= 0.89$ ). Questionnaires were totally anonymous in order to participant feel free to express their opinions. Descriptive statistics were reported using SPSS (16) software.

**Results:** One hundred and twenty (80%) of participants responded. Eighty percent stated as "no access" whereas 20% were "rather easy access". One hundred percent could not get in public buses, the beaches, clinics, religious places, registration offices and libraries.

**Conclusion:** Despite international and national codes, the majority of urban facilities are not appropriate for wheelchair users.

### 2 INTRODUCTION

As wheelchair users are dependent to others in most of their needs, access to social facilities should be as such that they could use them without help or with minimal help one. The United Nations General Assembly (UNGA/GA) adopted resolution 31/123 of 16 December 1976, proclaiming 1981 the International Year of Disabled Persons; It is a cornerstone towards recognizing the rights of the disabled and enhancing the understanding of their needs and appreciation of their capabilities (1). A major outcome of the "International Year of Disabled Persons" was the formulation of the World Program of Action (WPA) concerning Disabled Persons, adopted by the General Assembly on 3 December 1982, by its resolution 37/52(2-4). The WPA is a global strategy to enhance disability prevention, rehabilitation and equalization of opportunities, which contributes to full participation of the disabled in social life and national development. The WPA also emphasizes the need to approach disability from a human rights perspective (3). In its resolution 37/53 of the same date, the General Assembly proclaimed the period 1983-1992 the United Nations Decade of Disabled Persons. These actions enhanced considerable activity in the field of disability at international, regional and national levels (1). Among the major outcomes of the decade, dedicated to meet the needs of disabled, was the adoption of the standard rules on the equalization of the opportunities for the disabled by General Assembly on 20 December 1993 (resolution 48/96 annex). Equalization of opportunities is a central issue in the WPA and its assisting philosophy for the achievement of full participation of persons with disabilities in all aspects of social and economic life. An important rule underlying this theme is that issues related to persons with disabilities should not be treated in isolation, but within the context of normal community services (3). The Ministry of Social Affairs is cooperating in the area with the National Committee for the Disabled in an integrated approach and a program that includes: quality of services suggested, ease of procedures followed, current legislation, and standards to be adopted for training and rehabilitation. The approach is to progress into the present of accessibility for the disabled, a design manual for a barrier-free environment (1). A barrier-free environment is a space that allows free and safe movement, function and access for all, regardless of age, sex or condition, a space or a set of services that can be accessed by all, without obstacles, with dignity and with as much independence as possible(5). Barrier-free design includes a design that removes those barriers that obstruct the social participation of disabled people. It started in 1953

as a movement to remove barrier for the disabled, which is referred to as "welfare community development" in Japan, began in Machida city in 1974(6). The developing countries can apply this manual as a reference and guideline. They should consider their environment and try to renovate the existing buildings and inspect new spaces so that every person could utilize urban facilities without segregation. All people have equal rights to use urban facilities and enjoy life.

The Declaration on the Rights of Disabled Persons with the International Covenants on Human Rights, The Declaration on the Rights of Mentally Retarded Persons in the Universal Declaration of Human Rights stated that all people have equal right to utilize various urban facilities without discrimination. The Declaration on Social Progress and Development remarked the necessity of respecting the rights of physically and mentally disabled people and assuring their welfare and rehabilitation. All urban facilities such as the physical and cultural environment, accommodation and transportation, social and health services, educational and work opportunities, cultural and social life, including sports and recreational facilities must be accessible for all (2-3). The developing countries can apply this manual as a reference and guideline. They should consider their environment and try to renovate the existing buildings and inspect new spaces so that every person could utilize urban facilities without segregation. All people have equal rights to use urban facilities and enjoy life.

The Conference on the Capabilities and Needs of Disabled Persons in the United Nations Economic and Social Commission for Western Asia (ESCWA) Region was held in November 1989. Their purpose was attention to urban facilities for disabled persons. They recommended that city planning and construction legislation, should consider the conditions that ease the movement of disabled persons and ensure their safety, including in the design of infrastructural services, transport and the entrances and interiors of buildings (1). There are more than 500 million persons with different kinds of disabilities. They have the same rights and equal opportunities like other normal human beings (2). Researches show the world's population is going toward aging in such a way that number of the elderly over 60 years old will reach 1.2 billion in 2025 and the necessity of attention to these group increases (7). It is inevitable that human is base of sustainable development and attention should be paid to all strata of society. In a healthy society, all citizens have equal rights to its services. (8). Disabled persons should have job opportunities to be active members of the society (1, 4). Disabled persons especially wheelchair users have lots of physical problems. They need especial medical and rehabilitative care so that they can participate in society actively. Accessibility of the environment is that of the "trip chain". It means they are able:

- to go from home to a working place
- to go from home to sidewalk or pathway
- to enter in a vehicle
- to go out of the vehicle to sidewalks or pathways near the working place
- to reach the entrance of the building
- to enter the building
- to move around in the building
- to enter the office or other kind of place for work
- to reach the working station

If only one link is not accessible, then the journey becomes impossible. Each link must be considered and improved as necessary (6). Poor socio-economic conditions contribute significantly to disability in developing countries. The United Nations states that poor nutrition, dangerous working and living conditions, limited access to vaccination program, and to health and maternity care, poor hygiene, bad sanitation, inadequate information about the causes of impairments, war and conflict, and natural disasters all cause disability (9-10). People who use wheelchair have lots of problems. Typical problems include maneuvering through narrow spaces, going up or down steep paths, moving over rough or uneven surfaces, using toilet and bathing facilities, reaching and seeing items placed at conventional heights, and negotiating steps or changes in level at the entrance/exit point of a building(11). In this study we tried to survey the ability of wheelchair users in utilizing urban facilities without helps.

### 3 MATERIAL & METHODS

The study was done in summer 2011. One hundred and forty wheelchair users were selected. Questionnaires were totally anonymous, therefore participants filled free to express their opinions. The questionnaire consisted of 20 statements starting with the phrase: "I can use .....without help". Answers in 4 scales of "almost always, usually, sometimes and rarely" were equivalent to getting nil to 3 points respectively. Reaching the points 40-60, 30-39 and <20 was considered as "easy access", "rather easy access" and "no access" respectively. Content validity was achieved by expert consultation. The reliability of the checklist was attained by retesting the 20 people in 2 weeks (Pearson Correlation Coefficient,  $r= 0.89$ ). Questionnaires were anonymous in order to participant feel free to express their opinions. Data were reported using SPSS (16) software.

### 4 RESULTS

One hundred and twenty of participants (80%) responded. All of participants were man and between 35-60 years old. One hundred percent could not go to bus station and get in; As well as beaches, clinics, religious places, Registration offices, libraries and public toilets. Eighty percent of participants stated as "no access" whereas 20% were "rather easy access" (Table1 and Fig. 1).

Row	I can use .....without help.	Almost always No. (%)	Usually No. (%)	Sometimes No. (%)	Rarely No. (%)
1	Get to the banks	0(0)	0(0)	6(5)	114(95)
2	Use cash dispensers	0(0)	0(0)	6(5)	114(95)
3	Gets to hospitals	0(0)	0(0)	6(5)	114(95)
4	Go to pharmacies	0(0)	0(0)	6(5)	114(95)
5	Get to clinics	0(0)	0(0)	0(0)	120(100)
6	Get to university	0(0)	12(10)	12(10)	96(80)
7	Get to libraries	0(0)	0(0)	0(0)	120(100)
8	Use public drinking-fountains	0(0)	0(0)	12(10)	108(90)
9	Use public toilets	0(0)	0(0)	0(0)	120(100)
10	Get to religious places	0(0)	0(0)	0(0)	120(100)
11	Get to gyms	0(0)	0(0)	6(5)	114(95)
12	Get into shopping centers	0(0)	0(0)	6(5)	114(95)
13	Use public & private recreational	0(0)	0(0)	6(5)	114(95)
14	Get to cinemas	0(0)	0(0)	12(10)	108(90)
15	Get in park & use their facilities	0(0)	0(0)	12(10)	108(90)
16	Go to restaurant & eat lunch	0(0)	0(0)	12(10)	108(90)
17	Get to bus stations/buses	0(0)	0(0)	0(0)	120(100)
18	Going around as pedestrians	0(0)	12(10)	96(80)	12(10)
19	Getting to beaches	0(0)	0(0)	0(0)	120(100)
20	Getting to registration offices	0(0)	0(0)	0(0)	120(100)

Table 1: The distribution of the ability of wheelchair users in utilizing urban facilities, Sari 2011.

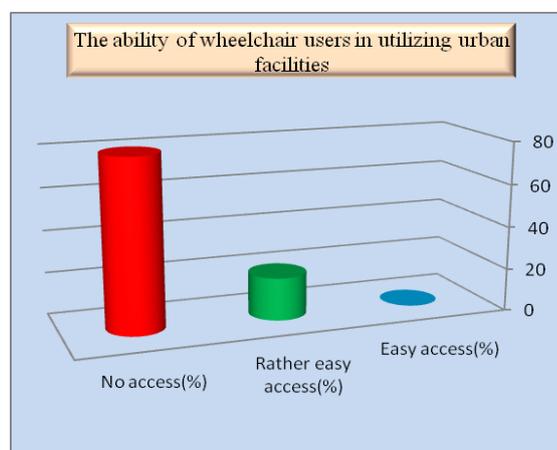


Fig 1: The access of wheelchair users to urban facilities, Sari 2011

How can disabled persons take advantage from urban facilities when they cannot get into the buildings and areas? (All photos have been taken by author, Sari, September 2011)



Picture 1: The ramp isn't standard and wheelchair users could not go to beach. Picture 2: There is no ramp in the beach.



Picture 3: The ramp is not standard and suitable for the disabled



Picture 4: An entrance to a general hospital, the slope of ramp is not standard and is unprotected border. Picture 5: Ramp of inappropriate slope for access into a clinic.



Pictures 6 and 7: A not standard ramp to a bank.

## 5 DISCUSSION & CONCLUSION

The study showed almost all of urban facilities were not appropriate for wheelchair users. In another research that was performed on private and public buildings in Sari, we found that they were not suitable for these people (12). In spite of the existence of law since more than 11 years in the country, the majority of urban areas didn't meet the urban designs criteria (13). Some research showed in many areas of Tehran in Iran, there aren't the minimum amenities for the disabled and no appropriate welfare amenities and facilities based on their needs are considered. Streets, sidewalks, shopping centers, educational centers, hospitals and other urban facilities still are far from global standards. In most European and American countries that number of their disabled and elderly are far less than Iran, attention to this stratum of society is enormous. There is direct relationship between levels of development of countries; citizenship rights and considering all strata of society especially disabled persons (8, 14). There are international and national legislations for the disabled and many countries especially the developed countries performed them so that the people with disabilities could work and attend in the society (15-25). We all may experience some types of disabilities in different periods of our life. Every person has ability to be an active member of society. Disabled people have equal rights and duties. The authorities and government should provide career and vocational opportunities for them. They should try to renovate the existing buildings and inspect new spaces so that every person could utilize urban facilities without segregation. The urban facilities should help them to put their abilities in beneficial way because they have right to live and feel pleasure like normal people. Because almost all of cities in Iran don't have standard designs for people with disabilities, we recommend the international conventions observe Iran as a pilot country so that all can take advantage of the same facilities in the society.

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