

REVIEW OF THE DAMAGES AND PROBLEMS OF PUBLIC TRANSPORTATION FOR THE DISABLED IN GORGAN CITY

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ABSTRACT

Iran has the highest population statistics for the disabled a large group of whom are the veteran of the years of Defa'eMoghadass . That part of the society has practically been deprived of using urban space due to physical disability which is because of their disabilities. According to the statistics of World Health Organization, ten percent of the population of the world somehow suffers from physical disability. Because of such process, several issues are tangible in solving general problems of the disabled as a considerable class of the society since the disabilities have grown in many dimensions in proportion with population growth and it leads to their isolation which has great economic and social damages in the long run as its consequences. Providing transportation vehicles for the disabled is among vehicles that shall be considered by not only the rehabilitation authorities and educators but also by the authorities and designers, factory owners and manufacturers and even legislators. One of the most important items of the transportation vehicles for the disabled is public transportation. The cause of it can be searched for in their disability. That is why the problems of transportation of the disabled and veterans have been considered as one of the vulnerable groups of the society in this research. In this research, pathology of the condition of the transportation of the disabled and veterans in the city Gorgan has been reviewed. The results show that the strategies of development of public transportation special for the disabled in the city Gorgan is not proper and requires accurate programming in order to improve and reform the current condition and transportation network and to increase safety and easiness with the presence of the disabled and veterans.

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KEY WORDS

Public Transportation, Disabled, Gorgan, Damages, Problems

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INTRODUCTION

Making the urban space proper and improving accessibility and activity of people with disabilities are very important in reducing poverty [1]. All of the disabled people in developing countries of the world, especially our country, suffer from a high rate of prevalence of poverty and inaccessibility of equal social and economic opportunities and subsequently inappropriateness of urban spaces and facilities. One of the most important urban facilities is public transportation who has always observed the maximum volume of the users and meets the main needs of citizens in various dimensions. Today, urban public spaces have become significant in urban development programs. This is due to the effect on promotion of sociocultural aspect of the city and therefore production of social capital [2]. In urban development issues, spaces are divided into three classes: 1- public spaces which is the area of the social interaction of all citizens of the city; 2-semi-public spaces which are considered as the average of the area of public and private behaviors; 3- private spaces which are considered as the privacy of special groups and individuals [3]. According to the statistics of the World Organization, ten percent of the population of the world somehow suffers from a kind of physical disability, all of whom require having access to public systems of the society including health centers, public and private transportation, administrative, entertainment, business, service, educational, religious and athletic centers [4]. Making arrangement for having and providing the services of these centers will be a reason for recognizing the social rights of these people and considering the principle of equalization of opportunities for all classes of the society. The disabled people's access to urban equipment and transportation network not only leads to useful usage of their talents and potentials, but it is considered as a kind of prevention of occurrence of new disability [5]. Among these and given the significance of transportation of the disabled people throughout the city, it is public transportation that plays the most important role in this matter and it should be greatly considered [6]. Having public transportation is effective not only in social and economic life but also in the mental status of the disabled as well. Presence of proper transportation vehicles is one of the basic conditions for

each disabled individual to meet his or her social objectives so much so that without these vehicles, a great obstacle will be created in the way of the disabled. Generally, what has been studied in this research is evaluation of the public transportation system for the disabled and veterans [7].

Among the necessities of growth and development of the societies, creation of proper physical and spatial substrates for all of the groups of the society to use public services and facilities is significant for a better mobility and transportation and an easier accessibility throughout the city [8]. Physically disabled people and veterans are a group of the people in a society who need to have access and to use public services and facilities like others [9]. However, existence of some obstacles especially in the method of designing, architecture and urban development, many urban spaces, especially public passages, parks and green spaces, has lacked the necessary conditions for meeting the needs of accessibility of the disabled people. Given the significance of the issue, urban transportation shall be in such way that it is used by the disabled people and veterans [10]. Transportation is one of the inseparable components of today's life. In urban transportation, what is important is the transportation systems which increases the speed and prevent loss of time as well as guaranteeing health and safety of the trip. In order to meet the transportation needs of the disabled and the veterans is a proper design of the infrastructures of public transportation has always been one of the challenges of the urban transportation programming [11]. With a brief look at the structure dominating the space of the cities of Iran, we understand that all spaces, including terminals, have all been planned, designed and executed for healthy people and it is one of the most important tasks of urban management in any society to prepare the substrate of the city for a proper usage of all citizens [12].

MATERIALS AND METHODS

Among the challenges and problems, we can refer to the following items:

- High energy consumption: transportation is one of the main and basic sections of energy consumption and is considered as one of the problems given its excessive consumption.
- Noise and air pollution: the problem of noise and air pollution, in a majority of the cities of the world, is mainly caused by the traffic of vehicles.
- Lack of an accurate programming in urban transportation: passages, highway networks, parking and etc. haven't gone through any changes in proportion with population growth and increase of number and today, we see that passages and allies and streets are the parking spaces for vehicles. Absence of urban unit management leads to the creation of chaos and disorder in the urban performance and none of the relevant organizations have accepted the problems.
- Waste of time: one of the important and efficient indexes in the desirability of the transportation methods is the index of time. By creating proper substrates in the development of public transportation and sufficient educations in this field, millions of minutes can be saved by reducing the usage of personal transportation vehicles and turning to public transportation systems.
- Reduction of safety: one of the other problems of transportation is reduction of safety. As the usage of personal transportation vehicles and creation of traffic density and mental pressures of the drivers increase, the risk factor also increases in the majority of drivers and this often leads to violation of laws and ultimately, it will reduce the safety index in transportation.

RESULTS

Special place: according to the law, each train shall at least have one special place for the disabled on wheelchairs. Larger trains shall have a larger number of these places. For example, trains with 12 or more wagons must have 4 or more places for the disabled people on wheelchairs.

Information: destinations shall be written inside and outside of the train or the tramway as well as being announced.

Doors: BRTs and tramways are at the same level as the stations. Other trains have instruments for the disabled people to get on which are ramps. Most of these ramps can be carried and most of the time, the ramps are in put in the stations by the workers for the disabled people. In inter-city trains, if a disabled person has reserved the train, these facilities will be provided for him/her in advance. Some special doors have been considered for the disabled people to use which are larger than normal. A lamp with pink signs shows when the door is open and when it is closed. Inside the train and tramway: the distance between the door and the special space for the disabled is 850mm wide and there is enough space for the wheelchair to turn. The inside doors are automatic ones or they open with a simple touch. The fences and the doorknobs are colored and easily seen. The length of the special place for the wheelchair is at least 1300mm and its width is 750mm. There are some emergency exists as well. If

the wagon has a telephone, this telephone is put in a place which can be easily accessed by the disabled person and if it doesn't, the disabled person can ask to use the mobile phone of the staff of the train which will be accepted.

Bathroom: there is a definitely bathroom close to the special space for the disabled on wheelchair.

Restaurant and diner: if the disabled persons are not able to go to the restaurant or buffet of the train, their food will be brought to them.

Facilities of the intra-city buses

According to the law of the buses with the capacity of transporting more than 22 travelers shall have special facilities for the disabled people on wheelchair and they are included in the law mentioned above.

Doors: buses which move on a lower level than the ground use ramps for the disabled people to get in. It is the driver who is responsible for the ramp and the angle of the ramp to the ground shall not exceed 8 degrees. In most buses, the space for the disabled faces the other seats. In this mode, it is safer for them and the wheelchair won't be deviated, fall down or turn. In this mode, it is not necessary for the disabled to fasten their seatbelts. In a small number of buses, the special space for the disabled does not face the other seats and it faces the front of the bus. In these buses, the bus drivers are responsible to attach the straps of the wheelchair to the place and there is also a seatbelt which is fastened by the disabled person [13].

Bell: there is a bell close to the special space for the disabled which rings while pressed by the hand.

Bars: there are vertical and horizontal bars in various sections of the bus and in the special space for the disabled. The inputs and outputs have bars in the both sides.

Problems of development of public transportation in Iran

- 1- Expenses of the establishment of public transportation systems such as metro are very high and it requires intense and efficient supervision and management that most of the third world countries lack.
- 2- Constructing some public transportation systems such as monorail which will be problematic given the urban traditions of the third world countries especially in Islamic countries due to creation of closeness and maintenance of privacy.
- 3- Due to low rate of income of the majority of the public, public transportation system, especially buses which are the main element of the public transportation system, is limited. It shall be known that in general, public transportation have undesirable features in third world countries which has led to the fall of traffic safety. Briefly, management of public transportation is at a low level in these countries. It is the improper economic conditions that play a main role in the formation of this.

Problems in the matter of traffic of the disabled people in Gorgan city

- 1- Excavations associated with the development of municipal utilities
- 2- Uneven, narrow sidewalks and absence of rough and rugged mosaics on the ground of the passages for the blind people to navigate
- 3- Absence of phonic warning signs in the crossroads
- 4- Presence of improper bridges and stairs in the passages
- 5- Wide and long boulevards in the middle of the street in the pedestrian crosswalks
- 6- Short height of the shadings of the stores and presence of tree branches with short height in the sidewalks
- 7- Absence of an internal plan of the governmental and nongovernmental offices and organizations roughly in their entrances
- 8- Presence of unpredictable obstacles on the way such as mailboxes and so on
- 9- Presence of stairs in the entrance of most of the educational, health, administrative, service and entertainment complexes and centers and lack of predicting ramp for these centers
- 10- Absence of a especial bathroom for the disabled people in public places

Obstacles on the way of making the traffic of the disabled people proper in Gorgan city

Despite the considerable efforts the organizations responsible for the matter of optimizing urban spaces have made, there is still no kind of cohesion in the process of these activities. These are the causes of this problem:

- 1- The current approvals and laws in this regard lack the necessary executive guarantee and therefore, violation of their execution is unavoidable.

- 2- Lack of prediction of the required validities in making it proper
- 3- Unawareness of the responsible organizations of the current laws and necessity of their execution and thus lack of need in the authorities for following up the process of executing programs of making these proper throughout the country
- 4- Inexistence of provincial supervision committees and inaccessibility of specialized experts in this field in beneficiary organizations which has sometimes caused the made efforts to lead to making it improper instead of creating changes in proportion with the needs of the disabled people
- 5- Ignorance of economic benefits of the executors and people involved with the establishment of public places and passages and lack of government's financial support of these individuals with the purpose of encouraging them to consider the principles of this method
- 6- Lack of cohesion in the efforts and lack coordination and parallelization between the beneficiary organizations in this process with leads to waste of energy, credit resources and time being

DISCUSSION AND CONCLUSION

Given the mentioned challenges, some recommendations are provided as follows for accelerating the process of making the urban spaces proper for the disabled people of the city Gorgan:

- 1- making people and authorities aware about the necessity of the presence of disabled people in the society through the social medias
- 2- accurate supervision of the executive authorities on the construction process of places and passages in terms of formation of supervision committees and application of the encouragement and punishment policy for accelerating this matter
- 3- predicting specific credit rows for various organizations for an active participation in the matter by the programming and management organization
- 4- Creating coordination and cohesion between the beneficiary organizations as well as assigning a special organizational position called the expert for making this matter proper for each organization

Making the public transportation proper and facilitating it for the disabled people of Gorgan city has the following outcomes:

- 1- Development of active participation of the disabled people in various sections of the society
- 2- Reinforcement of self-esteem, motivation, effort and love for life in this group of individuals for making the future better
- 3- Increasing the level of social stations for the disabled people through attaining the more effective roles in the society
- 4- Using hidden creativities and capabilities of the disabled people in facilitating the process of social development
- 5- Combining various dimensions of the person with disability with other members of the society and avoiding their separation from other groups of the society.

The last thing to say is this: let us thing in another way from now on. Making the process proper and improving the living environment are a divine and humanistic responsibility for the disabled people. If we accept this absolute reality in a framework bigger than regulations and rules, we will have a society as beautiful as the paradise in which all persons take advantage of their share of life [14]. In such a society, we definitely no longer hide the heroes of sacrifice and resistance. We don't make the mothers, under whose feet lies paradise, fail against environmental obstacles only because they can't stand on their feet. With an indifferent look, we don't gaze at those whose eyes lack the sight of apparent eyes and we don't forget elders in disappointment and isolation who are the prophets of their tribes.

CONFLICT OF INTEREST

Authors declare no conflict of interest.

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