### ANNALES

# UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA LUBLIN - POLONIA

VOL. LX, N 2, 186

SECTIO D

2005

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Architectonic barriers making difficulty for people with disabilities – what do the medical students know about the problem?

Disability manifests itself in many spheres of life. The term 'disability' includes both permanent and temporary fitness impairment. It refers to various functional limitations resulting from disability to do certain activities in the way that is regarded as normal in the society (2). We can distinguish physical, sensory and intellectual disability. The adjudication on the level of disability is regulated by the bill of September 27, 1997 about professional and social rehabilitation, and employment of the disabled. It distinguishes considerable, moderate and slight levels of disability depending on one's need for help of other people in everyday life, ability to work and fulfil social roles. Inability of living an independent life means such a body fitness impairment, that one cannot satisfy his basic vital needs without other people's help. It refers especially to self-service, moving and communication (7). At present the possibility of full participation in social life is treated equally with medical and functional dimensions of disability. It has become quite popular to think that disability cannot be defined only as a limitation of an individual in use of his rights, but as lack of society's adjustment to the needs of the disabled in order to guarantee them full participation in social life. Quite often this is because of presence of architectonic barriers.

In Poland, at the beginning of 1990s after the breakdown of education, rehabilitation and employment system for the disabled, the situation of this social group has become especially complicated. The disabled have limited access to education, rehabilitation and employment. Therefore, they are in danger of being treated marginally or even being excluded from the society. This may be caused, among others, by the presence of architectonic barriers and poor knowledge about the needs of people on wheelchairs. The problem occurs especially in the rural areas. The research made by Styk among the disabled living in the country in the Lublin region showed that majority of them were at the production age, but only 6.2% had jobs (6). The percentage of the disabled in our country makes up 17.47% of the total population.

The EC countries execute their common policy towards the disabled, whose main objective is widely known prohibition of discrimination and persecution because of disability. The EC countries have, however, freedom of changing the law within the confines defined by the European Community. There are about 37 million of disabled people living in the EC countries. It makes up 12% of the EC population. In different countries this percentage varies from 10% to 15%. The differences are caused by formal and legal differences in the principles of adjudication on disability.

Polish legislation referring to elimination of architectonic barriers does not differ from the EC standards in this respect. There is, among others, the decree of Spatial and Building Administration of December 14, 1994 which regulates technical conditions of the buildings and their location. The decree includes detailed guidelines referring to the entrances to buildings, their longitudinal (max. 5%) and

transverse (max. 2%) slopes, parking lots for the disabled, fences, the width of gates, lifts and ramps or other technical devices that help people with disabilities to get to the flats on the ground floor, location and width of the entrance doors in the buildings (min. 0.9 m), installation of stairs and ramps, measurements and installation of showers and toilets (8).

The aim of the work was to check medical students' knowledge about the architectonic barriers that limit or make it impossible for the disabled to have access to the public utility buildings. It was done with the use of the example of Collegium Medicum of Medical University of Lublin, where the Chair and Department of Hygiene are located.

#### MATERIAL AND METHODS

The research was carried out by means of a questionnaire including 15 questions. 151 third-year medical students were interviewed: 101 women and 50 men, 20 to 29 years of age (73.5% aged 21).

#### RESULTS AND DISCUSSION

The majority of the examined students identified the architectonic barriers correctly (Tab. 1). 94.7% of them answered correctly that the building of Collegium Medicum was not adapted to the people on wheelchairs (Tab. 2).

Table 1. Students' knowledge about architectonic barriers making difficulty for people with disabilities, especially on wheelchairs

Do you consider	% of answers		
it an architectonic barrier making difficulty for people with disabilities?	yes	no	i do not know
narrow doors	99.3	0.7	0
narrow entrances	99.3	0.7	0
narrow corridors	91.4	5.9	2.7
small rooms	70.2	21.2	8.6
small bathrooms	93.4	6	0.6
floor level differences	92.7	4.6	2.7
stairs and steps	98.6	0.7	0.7
elevators without automatic doors	88.08	7.28	4.64
high located electric switches	93.4	4.6	2
high located door knobs	94.04	5.3	0.66
slippery floors	82.12	10	7.88

Table 2. Students' assessment of the building of Collegium Medicum accessibility for people on wheelchairs

Do you consider the building	% of answers		
of Collegium Medicum	yes	no	i do not know
accessible for people	4.63	94.7	0.67
on wheelchairs?		<u> </u>	

The decree of the disabled people's rights of August 1, 1997 states that the disabled, in accordance with legal standards and common law, have right to independent and active lives and they cannot be discriminated (1). In 1994 the United Nations announced the Standard Principles to even out the

opportunities. It meant the beginning of the process thanks to which institutions, services, information and documentation, were becoming commonly available to everyone, but especially to the disabled. The principle of equal rights means that each individual's needs are equally important and that they have to be a basis on which one can plan a life in the society (9). The European Commission in its documents pays a lot of attention to so-called 'Invisible Citizens' who live with disabilities, to their being on the margin of the society, to their discrimination and unemployment. More and more often the Commission uses the term 'mainstreaming' that means putting in the center of attention the issues connected with education, rehabilitation, employment and evening out the opportunities of the disabled (4).

The architectonic barriers in schools and at universities, lack of adjusted means of transportation, limited forms of education by the Internet, the requirements concerning good health condition of candidates to schools contribute to the present level of education of the disabled. In the Lublin region 42% of the disabled living in the country have elementary education, 35% vocational education, 18% secondary education and only 0.75% higher education with a MA degree, 0.93% have no education at all. Only 6.2% of people with disabilities have jobs in the Lublin region (5, 6). In the other EC countries 35–45% of the disabled are people at the age of 65 and more. The disabled at the age below 20 make up only about 3% of the total EC population. The disabled at the age of professional activity make up 6–8% of the whole population at the age from 15 to 64. The index of unemployment in the group of the disabled in other EC countries is 11% (6% among the healthy people). There are more disabled men (36%) than women (25%) who are employed (4). All in all the chances for getting education and employment by the disabled in Poland, and especially in the Lublin region are much poorer than in other EC countries.

Although Polish and European law regulations are constatuly being adapted to the needs of the disabled, there are still architectonic barriers that cannot be overcome by people on wheelchairs. The research by Orzeł (2000) showed that the majority of churches, schools, and university buildings in Lublin are not accessible to people on wheelchairs. Neither is the building of Collegium Medicum. Among 29 architectonic criteria of accessibility that were taken into consideration, the building of Collegium Medicum met only 12. Because of the steep stairs at the entrance and the lack of a ramp, a person on a wheelchair cannot get into the building (3).

#### CONCLUSIONS

- 1. The majority of the third-year medical students of the Medical University of Lublin can identify the architectonic barriers making difficulty for people with disabilities correctly.
- 2. The students can also estimate correctly the level of adaptation of the building to the needs of the people with disabilities.

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#### **SUMMARY**

People with disabilities cannot fully participate in social life due to the existence of architectonic barriers. The aim of the work was to find out the knowledge of third-year medical students about architectonic barriers. 151 third-year medical students were interviewed. Vast majority of the examined students classified correctly narrow doors, narrow passages, corridors, small restrooms, floor level differences, stairs, high located electric switches and door knobs as architectonic barriers. Evaluation of the results leads to certain conclusions: the students can identify correctly the architectonic barriers and the level of adjustment of the building for people with physical disabilities.

Bariery architektoniczne utrudniające poruszanie się osobom z niepełnosprawnością ruchową – wiadomości na ten temat studentów III roku Wydziału Lekarskiego Akademii Medycznej w Lublinie

Osoby niepełnosprawne zagrożone są marginalizacją społeczną, spowodowaną między innymi obecnością barier architektonicznych. Celem pracy było sprawdzenie wiadomości studentów medycyny na temat barier architektonicznych ograniczających lub uniemożliwiających osobom z niepełnosprawnością ruchową dostęp do budynków użyteczności publicznej. Badaniem ankietowym objęto 151 studentów III roku Wydziału Lekarskiego Akademii Medycznej w Lublinie. Ankietowani studenci w większości nie mieli wątpliwości, że barierami architektonicznymi są wąskie drzwi, przejścia i korytarze, małe łazienki, różnice poziomów podłoża, schody, stopnie, wysoko ustawione wyłączniki elektryczne i klamki. Studenci poprawnie identyfikują bariery architektoniczne i potrafią prawidłowo ocenić stopień przystosowania obiektu do potrzeb osób z niepełnosprawnością ruchową.