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# SELECTED SOCIAL AND HEALTH PROBLEMS IN FUNCTIONING OF DISABLED RURAL AND URBAN INHABITANTS IN THE LUBLIN REGION – SIMILARITIES AND DIFFERENCES

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Abstract: The objective of the study was determination of the frequency of occurrence of selected difficulties associated with disability and social problems which disturb the functioning of the disabled in rural and urban areas in the Lublin Region. The study was conducted by trained surveyors with the use of a standardized questionnaire which covered: 1) Demographic data: age, gender, education level and marital status; 2) Information concerning biological and legal disability, degree of disability, its causes, functional limitations due to disability; 3) Information pertaining to difficulties and barriers in daily living of the disabled population. The study covered 403 disabled selected by the method of targeted sampling - 147 rural and 256 urban inhabitants. Log-linear model was applied for data analysis. Unfavourable demographic characteristics of the population of the disabled in the study: mean age 63; high percentage of never-married males and females; respondents possessing elementary education level; dominant number of those occupationally inactive. The most frequent limitations associated with disability: limitations in performing household jobs (70.9%), walking difficulties (68.1%). High intensity of material difficulties, in association with low education level and high percentage of those occupationally inactive, are the evidence of socio-economic deprivation of the population examined. Differences between rural and urban inhabitants was found: in the rural environment, compared to urban areas, the following were more frequently reported: lack of possibilities of rehabilitation in the place of residence, difficulties with access to medical specialist; alcohol abuse in the family, and family disagreements. Urban population more often than rural inhabitants perceived loneliness and isolation from the closest family.

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## INTRODUCTION

There are approximately 650 million disabled worldwide. They constitute a considerable percentage of the population in each society, both in the developed and developing countries. For example, in Ireland the disabled constitute 9.0%; in Italy -10.0%, in Portugal 7.0%; in Spain -7.5%; in Germany 9.0%, in Austria -18.0%; and in Greece -6.0% [3]. In Poland, the disabled constitute about 15-16% of the total population [5, 7, 8, 10]. According the

Received: 12 July 2010 Accepted: 5 December 2010 2002 National Census, the percentage of the disabled in the total Polish population was 14.3% [9, 13]. The differences between the percentages of the disabled reported by individual countries result from the lack of uniform criteria of evaluation of disability and the lack of a system of registration of this population group in the majority of the countries worldwide.

Also in Poland there is no central register of disabled persons, therefore it is not possible to quote genuine data pertaining to the size of disability. Due to the lack of such a register, which would perform the function of the all-Polish database concerning disability (number of disabled, types and causes of disability, satisfying medical and social needs), the data available are of estimation or local character. These data come from the National Censuses, micro-censuses, and the Studies of Population Economic Activity, which, since 1993, have been conducted quarterly by the Main Statistical Office. The last-mentioned studies concern exclusively the legally disabled, i.e. those who possess the decision by a medical commission concerning invalidity group or degree of disability. The information is also provided by all-Polish studies - rarely carried out due to high costs, as well as studies of a local scope conducted in various regions of the country, conducted primarily by research institutions, including the Institute of Philosophy and Sociology of the National Academy of Sciences in Warsaw, Institute of Agricultural Medicine in Lublin, and medical universities.

The disabled are among the most marginalized social groups [4, 20, 22, 25]. They constantly experience barriers in access to every realm of social life, which are for them a far greater obstacle in social functioning than their functional limitations resulting from the state of health. These barriers more frequently concern rural than urban inhabitants, although within the last two years a levelling up was observed of some differences in the occurrence of health and social hazards in daily functioning of the disabled from both environments, such as exposure to road accidents or accidents at home [2, 5].

#### **METHODS**

Research instruments. The studies were conducted with the use of the standardized 'Questionnaire for the Disabled' which covered: 1) Demographic and social data: age, gender, education level, marital status, information concerning sources of maintenance; 2) Data pertaining to disability: information concerning the legal decision about disability, causes of disability, types of limitations due to disability; 3) Information about difficulties and barriers encountered by the disabled in daily living.

The questions contained in the questionnaire were of two types: questions concerning the respondent's opinions and evaluations, and questions about facts. The majority of the items in the questionnaire were of a close-ended type. The surveyors collected information related to the decision concerning the degree and causes of disability, based on

medical records possessed by the disabled or institution where the respondent resided.

Selection of sample and course of study. A two-stage sample selection was applied. At the first stage, a list was compiled of nursing facilities, primary health care and specialist care outpatient departments, and hospital wards (in the Lublin Region). From this list, 40 facilities were selected by means of simple sampling. Facilities from which the consent of the manager was obtained were included in the study. At the second stage, the respondents were selected by means of targeted sampling from among patients in individual facilities. Into the study were qualified exclusively the disabled (legally or biologically) capable of participation in the survey, and who expressed their consent to participate. The study was carried out in individual facilities by trained surveyors. Valuable information was collected from the 403 disabled.

**Methods of statistical analyses.** Statistical analyses were performed by means of the SPSS PL, v. 12.

The preliminary phase of the analysis was the transformation of raw variables consisting in joining the detailed values within the frameworks of a few, wider categories. Age was handled in three categories: 1) under 50; 2) 50–64; 3) 65 and over. In addition, categorization covered detailed information concerning the following: sources of maintenance, limitations resulting from disability.

In the analyses of the demographic variables the log-linear model was applied, which is useful for uncovering the potentially complex relationships among the variables in a multiway crosstabulation, and allow the evaluation of the significance of all the potential effects and interactions in the set of categorial variables [21].

Each basic demographic characteristic of the study population: gender, age, place of residence, marital status and education level was compared with the reference population, who were the inhabitants of the Lublin Region or Polish population aged 18 and over; subsequently, the significance of the differences was evaluated. In the study population each demographic variable above mentioned was analyzed in the context of the remaining demographic variables in the log-linear model. Each variable concerning disability was analyzed in a log-linear model, considering the place of residence, gender and age. Table 1 presents statistically significant interactions.

# SOCIAL-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

**Gender.** The study covered 403 respondents, including 177 males (44.9%), and 226 females (56.1%). The structure by age did not significantly differ from that for the population of the Lublin Region aged 19 and over in 2008 (N=1,696,049), where the percentages of males and females were 47.7% and 52.3%, respectively (p=0.1).

In the population examined there were 147 rural and 256 urban inhabitants (36.5% and 63.5%, respectively (Tab. 1). The percentage of rural inhabitants therefore was significantly lower, while that of the urban population higher than that resulting from the structure of the population in the Region (p<0.0001). The percentage contributions of the rural and urban inhabitants in the Lublin Region aged 19 and over are 52.4% and 47.6%, respectively.

In the study population no statistically significant interaction was observed between gender, and age and place of residence. The age structure of males did not differ from that of females, and similarly, no differences were noted between age structure of rural and urban inhabitants.

Age. The mean age of the population examined was  $63 \pm 16$ , males  $-61 \pm 16.7$ , and females  $-65 \pm 15.4$  years. Females were older than males (p < 0.05). Nearly a half of respondents - 48.1% were aged 65 and over, those aged 50-64 - 33.5%, while those aged under 50 - only 18.4%. In the population of the Lublin Region the percentage of the above-mentioned groups were in the opposite order: 18.3%, 24.8% and 56.9% (p<0.0001).

In the population examined a significant interaction was noted between the age structure and respondents' place of residence (Tab. 3, No. 2). Among the rural inhabitants, the percentage of the disabled aged under 50 was nearly twice as high as among the urban population: 23.8% vs. 15.2%. In the group aged 50–64, the percentages of the rural and urban disabled population were similar: 32.2% and 34.0%, respectively; whereas the percentage of respondents aged 65 and over was non-significantly higher among the urban inhabitants (43.5% and 50.8%).

Marital status. Among the population in the study, the respondents who were married constituted 35.5%, followed by a slightly lower percentage of those widowed 31.8%, never-married - 22.3%, and divorced - 10.4%. In order to

Table 1. Population investigated by gender, age and place of residence.

		Т	`otal	Rui	ral area	Urban area		
	•	n	%	n	%	n	%	
	Total	403	100.0	147	36.5	256	63.5	
	Males	177	43.9	69	46.9	108	42.2	
	Females	226	56.1	78	53.1	148	57.8	
_	< 50	74	18.4	35	23.8	39	15.2	
<b>Fotal</b>	50-64	135	33.5	48	32.7	87	34.0	
	65 and over	194	48.1	64	43.5	130	50.8	
Ş	< 50	36	20.3	19	27.5	17	15.7	
Males	50-64	64	36.2	25	36.2	39	36.1	
	65 and over	77	43.5	25	36.2	52	48.1	
es	< 50	38	16.8	16	20.5	22	14.9	
Females	50-64	71	31.4	23	29.5	48	32.4	
Fe	65 and over	117	51.8	39	50.0	78	52.7	

compare the structure by marital status with the available data from the 2002 National Census for the population of the Lublin Region, the age group 30-59 was distinguished from among the disabled examined. In this group, both among males and females, the number of never married males and females, those divorced, separated and widowed was higher, and a smaller number of those who were married, compared to the reference population (p < 0.0001).

Significant relationships were observed between marital status and all the remaining demographic variables (Tab. 3, No. 1, p<0.001): gender, age, place of residence, and education level.

Among females, 42.5% were widows, whereas among males there were only 18.1% of widowers. Males were divorced nearly twice as often as females (14.1% vs. 7.5%, respectively). Never-married males constituted 27.7%, while never-married females – 18.1%, the percentage of married males was 40.1% and that of females -31.9%.

Table 2. Marital status

	Marital status		Ge	ender				A	\ge			т	otal
		n	nales	fe	males		< 50	5	60–64	65 a	nd over	1	otai
		n	%	n	%	n	%	n	%	n	%	n	%
	never-married	49	27.7	41	18.1	39	52.7	28	20.7	23	11.9	90	22.3
Total	married	71	40.1	72	31.9	21	28.4	65	48.1	57	29.4	143	35.5
To	divorced/separated	25	14.1	17	7.5	5	6.8	21	15.6	16	8.2	42	10.4
	widowed	32	18.1	96	42.5	9	12.2	21	15.6	98	50.5	128	31.8
g	never-married	22	31.9	9	11.5	21	60.0	8	16.7	2	3.1	31	21.1
area	married	33	47.8	34	43.6	11	31.4	21	43.8	35	54.7	67	45.6
Rural	divorced/separated	2	2.9	3	3.8	1	2.9	3	6.3	1	1.6	5	3.4
×	widowed	12	17.4	32	41.0	2	5.7	16	33.3	26	40.6	44	29.9
æ	never-married	27	25.0	32	21.6	18	46.2	20	23.0	21	16.2	59	23.0
area	married	38	35.2	38	25.7	10	25.6	44	50.6	22	16.9	76	29.7
Urban	divorced/separated	23	21.3	14	9.5	4	10.3	18	20.7	15	11.5	37	14.5
Ü	widowed	20	18.5	64	43.2	7	17.9	5	5.7	72	55.4	84	32.8

Table 3. Tests of partial associations<sup>a</sup> – significant effects.<sup>b</sup>

No.	Design	Effect Name	DF	Partial Chi-square	Probability
1	Resid*Sex*Age3*Marit	Resid*Age3*Marit	6	41,680	0.0001
	-	Resid*Marit	3	21,460	0.0001
		Sex*Marit	3	27,889	0.0001
		Age3*Marit	6	89,961	0.0001
2	Resid*Sex*Age3*Edu	Resid*Age3	2	11,032	0.004
		Resid*Edu	3	31,323	0.0001
		Sex*Edu	3	11,171	0.01
		Age3*Edu	6	61,792	0.0001
3	Resid*Age3*Edu*Marit	Age3*Edu*Marit	18	39,644	0.0023
		Edu*Marit	9	33,898	0.0001
4	Resid*Sex*Edu*Marit	Resid*Sex*Marit	3	8,388	0.0386
		Sex*Edu*Marit	9	33,710	0.0001
5	Resid*Sex*Age3*LegalDis	Resid*LegalDis	1	3,959	0.0466
6	Resid*Sex*Age3*CausDis	Sex*CausDis	2	12,176	0.0023
		Age3* CausDis	4	49,242	0.0001
7	Resid*Sex*Age3*nRepLimit	Sex*nRepLimit	1	4,249	0.0393
8	Resid*Sex*Age3*DiffWalk	Age3*DiffWalk	2	10,673	0.0048
9	Resid*Sex*Age3*LimimitOccAct	Resid*Sex*LimimitOccAct	1	8,446	0.0037
		Resid*LimimitOccAct	1	7,442	0.0064
		Sex*LimimitOccAct	1	10,150	0.0014
10	Resid*Sex*Age3*LimimitRel	Age3* LimimitRel	2	8,599	0.0136
11	Resid*Sex*Age3*HDisord	Sex*Age3* HDisord	2	10,262	0.0059
		Age3* HDisord	2	9,346	0.0093
12	Resid*Sex*Age3*Lone	Sex*Age3* Lone	2	6,438	0.0400
		Resid* Lone	1	10,138	0.0015
		Age3* Lone	2	15,857	0.0004
13	Resid*Sex*Age3*InfConFam	Resid*Age3*InfConFam	2	6,032	0.0490
		Resid*InfConFam	1	24,555	0.0000
		Age3*InfConFam	2	6,136	0.0465
14	Resid*Sex*Age3*CareDis	Age3*CareDis	2	17,577	0.0002
15	Resid*Sex*Age3*RehEqProbl	Age3*RehEqProbl	2	7,053	0.0294
16	Resid*Sex*Age3*LackEmp	Sex*LackEmp	1	5,218	0.0224
		Age3*LackEmp	2	47,146	0.0000
17	Resid*Sex*Age3*LackReh	Resid*LackReh	1	21,673	0.0000
		Age3*LackReh	2	25,651	0.0000
18	Resid*Sex*Age3*Alkohol	Resid*Alkohol	1	5,106	0.0238
19	Resid*Sex*Age3*FamDiagr	Resid*FamDiagr	1	5,583	0.0181
20	Resid*Sex*Age3*DiffOffce	Resid*DiffOffice	1	9,204	0.0024
		Age3*DiffOffice	2	10,604	0.0050
21	Resid*Sex*Age3*DiffMSpec	Resid*DiffMSpec	1	7,755	0.0054
22	Resid*Sex*Age3*DiffNurse	Sex*DiffNurse	1	4,075	0.0435
	-	Age3*DiffNurse	2	12,757	0.0017
23	Resid*Sex*Age3*DiffSocWork	Age3*DiffSocWork	2	24,624	0.0000

"The Table reports the significance of each of the individual k-way effects; bThe Table omits insignificant interactions, and significant interactions repeated in two or more different models; Age3 – age (3-categorial); Alcohol – alcohol abuse by a family member; CareDis – necessity of caring for a disabled person; CausDis – cause of disability; DiffMSpec – difficult access to medical specialist; DiffNurse – difficult access to environmental nurse; DiffOffice – difficulties in settling office matters; DiffSocWork – difficult access to services from social worker; DiffWalk – difficulties with walking; Edu – education level; FamDiagr – family disagreements; Sex – gender; HDisord – health disorders; InfConFam – too infrequent contacts with the family; LackEmp – lack of employment adjusted to disability; LackReh – lack of possibilities of rehabilitation at place of residence; LegalDis – legal disability; LimimitOccAct – limitations in occupational activity or household jobs; LimimitRel – limitations in interpersonal relations; Lone – loneliness; Marit – marital status; nRepLimit – did not report limitations; RehEqProbl – problems with provision of rehabilitation equipment; Resid – place of residence.

Table 4. Level of education.

	Education level Gender							A	ige .			Total	
		m	ales	fer	nales	<	50	50	-64	65 ar	nd over	10	Hai
		n	%	n	%	n	%	n	%	n	%	n	%
	elementary	67	37.9	109	48.2	17	23.0	40	29.6	119	61.3	176	43.7
Total	elementary vocational	40	22.6	22	9.7	18	24.3	27	20.0	17	8.8	62	15.4
$T_0$	secondary	49	27.7	65	28.8	25	33.8	42	31.1	47	24.2	114	28.3
	university	21	11.9	30	13.3	14	18.9	26	19.3	11	5.7	51	12.7
æ	elementary	32	46.4	49	62.8	10	28.6	22	45.8	49	76.6	81	55.1
larea	elementary vocational	17	24.6	12	15.4	12	34.3	10	20.8	7	10.9	29	19.7
Rural	secondary	16	23.2	11	14.1	8	22.9	13	27.1	6	9.4	27	18.4
~	university	4	5.8	6	7.7	5	14.3	3	6.3	2	3.1	10	6.8
es.	elementary	35	32.4	60	40.5	7	17.9	18	20.7	70	53.8	95	37.1
ı area	elementary vocational	23	21.3	10	6.8	6	15.4	17	19.5	10	7.7	33	12.9
Urban	secondary	33	30.6	54	36.5	17	43.6	29	33.3	41	31.5	87	34.0
5	university	17	15.7	24	16.2	9	23.1	23	26.4	9	6.9	41	16.0

In each of the three age groups a different marital status category dominated with respect to numbers, while the category dominant in an individual age group was clearly less numerous, compared to the remaining groups. The majority of respondents – as many as 52.7% aged under 50 – were nevermarried. In the subsequent older age groups the percentages of never married males and females were 20.7% and 11.9%. In the group aged 50–64 the largest number of the disabled were married – 48.1%, the percentages in the youngest and the oldest age groups were approximately 30% each. Among the respondents aged 65 and over those widowed constituted 50.5%, while the percentages in the younger age groups were 12.2% (aged under 50) and 15.6% (aged 50–64).

Among the rural, compared to urban population, the largest number of respondents were married (45.6% vs. 29.7%), whereas the percentage of those divorced was three-fold lower (3.4% vs. 14.4%). Similar percentages of never-married respondents were noted in both groups (21.2% and 23.0%, respectively), and of those widowed (30.1% vs. 32, 7%). It is noteworthy that among the rural population the most numerous group were those who were married, while among the urban inhabitants – those who were widowed (Tab. 2).

**Education level.** In the population examined the largest group were respondents who possessed an elementary education level (43.7%), followed by those who had secondary school education 28.3%, elementary vocational 15.4%, and university education level -12.7%. Percentages of respondents possessing elementary education among the disabled rural inhabitants examined were higher than in the rural population in Poland (p<0.01). Similarly, the urban population in the study more frequently possessed elementary education, compared to the urban population in Poland (p<0.00001).

Significant relationships were observed between education level and gender, age, place of residence, and, as described above, marital status (Tab. 3, No. 2, 3).

Males possessed elementary vocational education level more than twice as often as females -22.6 and 9.7%, respectively (p<0.05). Nearly 40% of males and 50% of females had an elementary education level, whereas secondary school education -28% of males and 29% of females, and university education -12% and 13%, respectively.

The structure of education of respondents aged under 50 years, and those aged 50–64, was similar, while those aged 65 and over differed from the two above-mentioned groups. Among the latter, 61% had an elementary education level, which in the first two groups was possessed by 23% and 30% of respondents, respectively. In the oldest age group, 9% of respondents possessed elementary vocational education, while in the younger groups – 24% and 20%, respectively. Among the oldest respondents, 6% possessed university education level, whereas in the younger groups – approximately 19% each (p<0.001).

More than a half of the rural inhabitants had an elementary education level, and the percentages of respondents who had the remaining levels of education were lower, the higher the education level. Among the urban population, the percentages of the disabled with elementary and secondary school education were similar – 37.0% and 34.2%. Rural inhabitants were worse educated, compared to the urban population. Those with secondary school and university education level constituted only one fourth, while urban inhabitants – more than a half (p<0.001) (Tab. 4).

**Sources of maintenance.** In the population examined, the most frequent source of maintenance was disability benefit (36.0%), followed by retirement pension (28.8%), and agricultural health benefit (12.7%). The percentages of the disabled who maintained themselves from non-agricultural sources and a mixed category: non-earned sources of maintenance and maintained by others were similar -9.7% and 8.9%. Those working in agriculture constituted only

Table 5. Source of maintenance.

	Source of maintenance		Geno	ler				Ag	ge			т	otal
	-	m	nales	feı	nales	<	50	50-	-64	65 an	d over	10	otai
	_	n	%	n	%	n	%	n	%	n	%	n	%
	agricultural work	7	4.0	9	4.0	5	6.8	11	8.1	0	0.0	16	4.0
	non-agricultural work	18	10.2	21	9.3	22	29.7	16	11.9	1	0.5	39	9.7
Total	agricultural health benefit	18	10.2	33	14.6	1	1.4	10	7.4	40	20.6	51	12.7
To	retirement pension	45	25.4	71	31.4	1	1.4	25	18.5	90	46.4	116	28.8
	disability benefit	69	39.0	76	33.6	33	44.6	61	45.2	51	26.3	145	36.0
	non-earned sources/maintained by others	20	11.3	16	7.1	12	16.2	12	8.9	12	6.2	36	8.9
	agricultural work	7	10.1	9	11.5	5	14.3	11	22.9	0	0.0	16	10.9
g	non-agricultural work	6	8.7	3	3.8	7	20.0	1	2.1	1	1.6	9	6.1
l are	agricultural health benefit	12	17.4	26	33.3	1	2.9	9	18.8	28	43.8	38	25.9
Rural area	retirement pension	10	14.5	16	20.5	0	0.0	7	14.6	19	29.7	26	17.7
~	disability benefit	28	40.6	19	24.4	17	48.6	16	33.3	14	21.9	47	32.0
	non-earned sources/maintained by others	6	8.7	5	6.4	5	14.3	4	8.3	2	3.1	11	7.5
	non-agricultural work	12	11.1	18	12.2	15	38.5	15	17.2	0	0.0	30	11.7
ırea	agricultural health benefit	6	5.6	7	4.7	0	0.0	1	1.1	12	9.2	13	5.1
Urban area	retirement pension	35	32.4	55	37.2	1	2.6	18	20.7	71	54.6	90	35.2
Urb	disability benefit	41	38.0	57	38.5	16	41.0	45	51.7	37	28.5	98	38.3
	non-earned sources/maintained by others	14	13.0	11	7.4	7	17.9	8	9.2	10	7.7	25	9.8

4.0% of the total population, whereas in the subpopulation of the rural inhabitants this percentage was 10.9%. Retirement pension and disability benefit were more frequent sources of maintenance among urban than rural population (35.2%; 38.3% vs. 17.7%; 32.0%) (Tab. 5).

Among the disabled rural inhabitants, males significantly more often maintained themselves from disability benefit (p < 0.05), while females – from agricultural health benefit (p < 0.05).

# DISABILITY AND ITS CAUSES

**Decision concerning disability, categories of disability.** The population in the study consisted of two subpopulations: respondents who had a decision concerning an invalidity group or degree of disability (legally disabled), and those who had no such legal decision, but satisfied the criteria of disability (biologically disabled). Among the total population examined 66.7% of respondents possessed a legal decision concerning disability. The percentages of the decisions concerning disability differed according to the place of residence, and did not significantly depend on age and gender of the disabled examined (Tab. 3, No. 5).

Among the rural population, the disabled who had the decision constituted 60.5%, whereas among the urban inhabitants -70.3% (p<0.05).

The percentages of those legally disabled were: 68.9% among males and 65.0% among females. Among males and females living in the rural areas these percentages were 61% and 60%, respectively; while among urban inhabitants

- 74% and 68%, respectively. In individual age groups starting with the youngest age group, the percentages of those legally disabled were 64%, 70% and 66%. Among rural inhabitants, in the subsequent age groups - 57%, 56% and 66%, while among the urban population 69%, 77% and 66% of those legally disabled (Tab. 6).

**Degree of disability.** In the total population in the study, respondents with the first, second and third degree of disability constituted 12%, 38% and 50%, respectively - a half of them possessed the decision confirming the highest degree of disability.

The structure of disability did not significantly depend on gender, age and the respondents' place of residence. Percentage contributions of the disabled with individual disability degrees among males and females, people of various ages living in rural and urban areas did not significantly differ from the above-quoted values.

Causes of disability. In the population examined, the prevailing cause of disability confirmed in 78.9% of respondents was a disease, followed by injury, which was the cause of disability in 17.3% of respondents, while the less frequent causes were congenital defects noted in 3.8% of the population in the study.

The structure of causes of disability changed according to gender (p < 0.01) and age (p < 0.001), and was independent of place of residence (Tab. 3, No. 6).

Among males, injuries constituted 24.8% of causes of disability, more than twice as frequently as among females

Table 6. Legal disability.

	Legal disability		Ge	nder				A	.ge			Total	
		m	ales	fer	nales	<	50	5(	)–64	65 a	nd over	10	Jiai
		n	%	n	%	n	%	n	%	n	%	n	%
	Legal disability												
	No	55	31.1	79	35.0	27	36.5	41	30.4	66	34.0	134	33.3
_	Yes	122	68.9	147	65.0	47	63.5	94	69.6	128	66.0	269	66.7
Total	Degree of disability												
	light (III)	11	9.0	18	12.2	4	8.5	9	9.6	16	12.5	29	10.8
	moderate (II)	48	39.3	45	30.6	19	40.4	33	35.1	41	32.0	93	34.6
	considerable (I)	63	51.6	84	57.1	24	51.1	52	55.3	71	55.5	147	54.6
	Legal disability												
	No	27	39.1	31	39.7	15	42.9	21	43.8	22	34.4	58	39.5
rea	Yes	42	60.9	47	60.3	20	57.1	27	56.3	42	65.6	89	60.5
Rural area	Degree of disability												
Ru	light (III)	5	11.9	6	12.8	3	15.0	3	11.1	5	11.9	11	12.4
	moderate (II)	16	38.1	18	38.3	8	40.0	9	33.3	17	40.5	34	38.2
	considerable (I)	21	50.0	23	48.9	9	45.0	15	55.6	20	47.6	44	49.4
	Legal disability												
	No	28	25.9	48	32.4	12	30.8	20	23.0	44	33.8	76	29.7
ırea	Yes	80	74.1	100	67.6	27	69.2	67	77.0	86	66.2	180	70.3
Urban area	Degree of disability												
Urb	light (III)	6	7.5	12	12.0	1	3.7	6	9.0	11	12.8	18	10.0
	moderate (II)	32	40.0	27	27.0	11	40.7	24	35.8	24	27.9	59	32.8
	considerable (I)	42	52.5	61	61.0	15	55.6	37	55.2	51	59.3	103	57.2

- 11.2%. For 70.9% of males and 85.4% of females a disease was the cause of disability. The percentages of congenital defects lying at the background of disability were similar in both genders – 4.2% and 3.4%, respectively.

In the age group under 50, a disease was the cause of disability in 47.9% of respondents. In the two subsequent older groups it was reported by 83.5% and 88.2% of respondents. Accident or injury were the causes of disability in 40.8% of the disabled aged under 50, and over three times more rarely in the older groups, where these causes were found in 12.4% and 11.2% of the disabled. In the group aged under 50, a congenital defect was the cause of disability in 11.3% of respondents, followed by those aged 50–64 – five disabled (4.1%), and the age group 65 and over – one disabled (Tab. 7).

The percentages of individual causes of disability among rural and urban inhabitants according to gender and age did not significantly differ from the percentage structure of the total population examined.

Limitations due to disability. The respondents most frequently mentioned the limitations concerning household jobs and/or occupational activity (70.9%). The subsequent troublesome limitations were difficulties with walking (68.1%), while 51.4% of the disabled in the study experienced limitations in interpersonal relationships; health

disorders, mainly in the form of pain, were reported by 11.6% of the total number, while 6.8% complained of limitations in independence.

Males reported the lack of limitations in functioning twice as often as females: 14.9% and 8.1% (p<0.05; Tab. 3, No. 7). No significant statistical differences were observed in the frequency of limitations in functioning according to age and place of residence.

The intensification of walking difficulties depended on the respondents' age, but was not significantly related to their place of residence and gender. These difficulties were reported by 76.0% of the disabled aged 65 and over, whereas the younger age groups more rarely complained of these limitations: at the age under 50 - 58.9%, 50-64 - 61.5% (p<0.01; Tab. 3, No. 8).

Rural inhabitants more frequently experienced limitations in occupational activity or performing household jobs, compared to the urban population:  $78.6\% \ vs. 66.7\%$ , respectively. At the same time, the differences between rural and urban areas concerned mainly females; 91.8% of females living in rural areas complained of the above-mentioned limitations, compared to 69.6% of urban inhabitants. These difficulties were experienced by 64.2% of rural males and slightly less -62.6% of males living in the urban areas (p<0.01; Tab. 3, No. 9). Limitations in interpersonal relations were troublesome for 60.3% of the disabled aged

Table 7. Causes of disability.

Cause of disability		G	ender					Age			- Total	
	r	nales	fe	males		< 50	5	60–64	65 a	nd over	1	otai
	n	%	n	%	n	%	n	%	n	%	n	%
Total												
disease	117	70.9	175	85.4	34	47.9	101	83.5	157	88.2	292	78.9
injury	41	24.8	23	11.2	29	40.8	15	12.4	20	11.2	64	17.3
congenital defect	7	4.2	7	3.4	8	11.3	5	4.1	1	0.6	14	3.8
Rural area												
disease	42	66.7	62	87.3	17	51.5	36	85.7	51	86.4	104	77.6
injury	18	28.6	7	9.9	13	39.4	4	9.5	8	13.6	25	18.7
congenital defect	3	4.8	2	2.8	3	9.1	2	4.8	0	0.0	5	3.7
Urban area												
disease	75	73.5	113	84.3	17	44.7	65	82.3	106	89.1	188	79.7
injury	23	22.5	16	11.9	16	42.1	11	13.9	12	10.1	39	16.5
congenital defect	4	3.9	5	3.7	5	13.2	3	3.8	1	0.8	9	3.8

under 50, while older age groups reported these difficulties more rarely: in the group aged 50-64-41.5%, and 65 and over -54.7% (p < 0.05; Tab. 3, No. 10). The frequency of the perceived limitations in interpersonal relations did not significantly change according to gender and place of residence.

Complaints due to health disorders were less frequent among the respondents aged 65 and over, mentioned by 6.8% of the disabled in this group. In the youngest age group, health disorders were experienced by 13.7% of respondents, whereas among those aged 50–64 – 17.7% (Tab. 8). The frequency of health disorders in individual aged groups was different among males and females. These disorders were indicated by only one male in the age group under 50, 24.5% in the age group 50–64, and by seven males (10.4%) in the group aged 65 and over. Among females aged under 50 health disorders were reported by 28.1%, in the group aged 50–64 – 15.4%, and among those aged 65 and over – 6 females, i.e. 5.7% (p<0.01; Tab. 3, No. 11).

Difficulties and barriers in daily living. The respondents marked the problems which concerned them on the list covering 16 problems in the form of various difficulties and barriers of everyday living. According to frequency, material difficulties occupied the first position on this list, and were mentioned by 80% of respondents, followed by – lack of possibilities of rehabilitation at place of residence (56.1%), and – loneliness (51.4%). These three problems concerned more than a half of the respondents in the study. The subsequent three problems reported by over 40% of the respondents were as follows: Too infrequent contacts with the family (49.6%), difficulties in settling bureaucratic matters (47.9%), and difficult access to medical specialist (47.6%).

The problems experienced with a similar frequency by the disabled, irrespective of their gender, age and place of residence, were: material difficulties, material dependence on others, lack of care by relatives and friends, and negative attitude of surroundings towards disability.

The intensity of eight problems varied according to place of residence, rural or urban. Urban inhabitants more often than rural disabled complained of loneliness: 57.8% and 40.1%, respectively (p<0.01, Tab. 3, No. 12) and too infrequent contacts with the family: 59.4% and 32.7%, respectively (p<0.0001, Tab. 3, No. 13). In turn, for the rural population, a considerably more frequent barrier than for urban inhabitants was the lack of possibilities of rehabilitation at place of residence: 70.7% and 47.7%, respectively (p<0.0001, Tab. 3, No. 17), as well as difficult access to medical specialist: 56.5% and 42.6%, respectively (p<0.01, Tab. 3, No. 21). The former twice as often as urban inhabitants complained of: alcohol abuse by a family member -20.4% and 12.5%, respectively (p<0.05, Tab. 3, No. 18), and also family disagreements – 40.1% and 29.7%, respectively (p<0.05, Tab. 3, No. 19). Rural more often than urban inhabitants had difficulties in settling bureaucratic matters -57.8% and 42.2%, respectively (p<0.01, Tab. 3, No. 20).

The intensification of nine difficulties and barriers significantly varied according to age. The problem of loneliness increased from the younger to the older age groups; in the group aged under 50 this problem was reported by 39.2% of the disabled examined, among those aged  $50-64-by\ 43.0\%$ , while at the age of 65 and over -61.9% (p<0.001, Tab. 3, No. 12). In the group aged 65, 56.7% of respondents complained of too infrequent contacts with the family, compared to 43.2% and 43.0% in younger age groups (p<0.05, Tab. 3, No. 13). The necessity of caring for a disabled person concerned primarily the disabled aged under 50-24.3%, followed by those aged 50-64

Table 8. Limitations in functioning resulting from disability.

Limitations in functioning resulting from disability		Ge	ender		Age						- Total	
	n	nales	fe	nales	<	< 50	5	0–64	65 an	d over	10	otai
	n	%	n	%	n	%	n	%	n	%	n	%
Total												
did not report limitations	26	14.9	18	8.1	13	17.8	12	9.2	19	9.9	44	11.1
limitations in occupational activity or household jobs	110	63.2	170	76.9	52	71.2	94	72.3	134	69.8	280	70.9
difficulties with walking	115	66.1	154	69.7	43	58.9	80	61.5	146	76.0	269	68.1
limitations in interpersonal relations	89	51.1	114	51.6	44	60.3	54	41.5	105	54.7	203	51.4
health disorders	21	12.1	25	11.3	10	13.7	23	17.7	13	6.8	46	11.6
limitations of independence	12	6.9	15	6.8	5	6.8	10	7.7	12	6.3	27	6.8
Rural area												
did not report limitations	12	17.9	4	5.5	7	20.6	4	9.3	5	7.9	16	11.4
limitations in occupational activity or household jobs	43	64.2	67	91.8	24	70.6	35	81.4	51	81.0	110	78.6
difficulties with walking	44	65.7	50	68.5	18	52.9	27	62.8	49	77.8	94	67.1
limitations in interpersonal relations	32	47.8	36	49.3	17	50.0	16	37.2	35	55.6	68	48.6
health disorders	9	13.4	10	13.7	5	14.7	9	20.9	5	7.9	19	13.6
limitations of independence	6	9.0	3	4.1	2	5.9	3	7.0	4	6.3	9	6.4
Urban area												
did not report limitations	14	13.1	14	9.5	6	15.4	8	9.2	14	10.9	28	11.0
difficulties with walking	71	66.4	104	70.3	25	64.1	53	60.9	97	75.2	175	68.6
limitations in occupational activity or household jobs	67	62.6	103	69.6	28	71.8	59	67.8	83	64.3	170	66.7
limitations in interpersonal relations	57	53.3	78	52.7	27	69.2	38	43.7	70	54.3	135	52.9
health disorders	12	11.2	15	10.1	5	12.8	14	16.1	8	6.2	27	10.6
limitations of independence	6	5.6	12	8.1	3	7.7	7	8.0	8	6.2	18	7.1

- 20.7%, and to a considerably smaller degree the group aged 65 and over -7.7% (p<0.0001, Tab. 3, No. 14). The intensification of problems with the provision of rehabilitation equipment decreased with age. In the subsequent age groups these difficulties were mentioned by 18.9%, 10.4% and 6.7% of respondents, respectively (p<0.0001, Tab. 3, No. 15). The problem of the Lack of employment adjusted to disability, was less frequently undertaken in the subsequent age groups: 44.6%, 24.4% and 6.7%, respectively (p<0.0001, Tab. 3, No. 16). The problem of lack of possibilities of rehabilitation at the place of residence occurred with lower intensity in the group aged 65 and over -43.8%, compared to those aged under 50 - 77.0%, and 50-65-62.2% (p<0.0001, Tab. 3, No. 17). Difficulties in settling bureaucratic matters were indicated with a similar frequency by the respondents aged under 50 - 58.1% and 50-64 - 54.8, while it was less frequently mentioned by the disabled aged 65 and over -39.2% (p<0.01, Tab. 3, No. 20). Among respondents aged 65, a smaller percentage - 20.6% reported difficult access to an environmental nurse, compared to the age groups under 50 and 50-64 -36.5% and 36.3%, respectively (p<0.01, Tab. 3, No. 22). Similarly, difficult access to services from a social worker was mentioned by 14.9% of disabled aged 65 and over, whereas in the age groups under 50 and 50-64-35.1% and 37.0% of respondents (p<0.0001, Tab. 3, No. 23).

Three types of problems of various intensity concerned both males and females. Loneliness was differently perceived by males and females at various ages (p<0.05, Tab. 3, No. 12). The percentages of males in the subsequent age groups who experienced loneliness were: 50.0%, 42.2%, and 55.8%, respectively, i.e. they differed only slightly. However, among females, the percentages of those experiencing loneliness increased in the subsequent age groups – 28.9%, 43.7% and 65.8%, respectively. Males mentioned lack of employment adjusted to disability more frequently than females – 25.4% and 15.0%, respectively (p<0.05, Tab. 3, No. 16). The difficult access to environmental nurse (p<0.05, Tab. 3, No. 22) was reported by 32.3% of females, and 24.3% of males (Tab. 9, Tab. 10).

#### DISCUSSION

The percentage of the disabled in Poland (16%) is presumably underestimated. All-Polish studies by the Main Statistical Office (1996) and the Institute of Agricultural Medicine show that the disabled living in rural areas constitute 20.1%—22.9% of the population [12, 17]. According to the data contained in the 'Programme of actions on behalf of the disabled inhabitants in the city of Lublin in 2008–2013', the Lublin Region is the area of the greatest intensity of disablement in Poland. Here, the disabled constitute 18.6% [14, 24].

**Table 9.** Difficulties and barriers in everyday life by gender.

	Difficulties	M	ales	Fer	males	Te	otal
		n	%	n	%	n	%
	Material difficulties	136	76.8	189	83.6	325	80.6
	Lack of possibilities of rehabilitation at place of residence	96	54.2	130	57.5	226	56.1
	Loneliness	88	49.7	119	52.7	207	51.4
	Too infrequent contacts with the family	84	47.5	116	51.3	200	49.6
	Difficulties in settling office matters	81	45.8	112	49.6	193	47.9
	Difficult access to medical specialist	76	42.9	116	51.3	192	47.6
	Negative attitude of surroundings towards disability	73	41.2	87	38.5	160	39.7
Total	Lack of care by relatives and friends	64	36.2	83	36.7	147	36.5
<u>1</u>	Material dependence on others	57	32.2	87	38.5	144	35.
	Family disagreements	59	33.3	76	33.6	135	33.
	Difficult access to environmental nurse	43	24.3	73	32.3	116	28.8
	Difficult access to services from social worker	42	23.7	63	27.9	105	26.
	Lack of employment adjusted to disability	45	25.4	34	15.0	79	19.0
	Alcohol abuse by a family member	21	11.9	41	18.1	62	15.4
	Necessity of caring for a disabled person	23	13.0	38	16.8	61	15.1
	Problems with provision of rehabilitation equipment	18	10.2	23	10.2	41	10.2
	Material difficulties	55	79.7	69	88.5	124	84.
	Lack of possibilities of rehabilitation at place of residence	47	68.1	57	73.1	104	70.
	Difficulties in settling office matters	39	56.5	46	59.0	85	57.
	Difficult access to medical specialist	37	53.6	46	59.0	83	56.
	Loneliness	29	42.0	30	38.5	59	40.
	Family disagreements	23	33.3	36	46.2	59	40.
	Negative attitude of surroundings towards disability	28	40.6	29	37.2	57	38.
area	Too infrequent contacts with the family	25	36.2	23	29.5	48	32.
귵	Difficult access to environmental nurse	21	30.4	27	34.6	48	32.
S.	Lack of care by relatives and friends	25	36.2	22	28.2	47	32.
	Difficult access to services from social worker	21	30.4	25	32.1	46	31.
	Material dependence on others	17	24.6	28	35.9	45	30.
	Lack of employment adjusted to disability	19	27.5	19	24.4	38	25.
	Alcohol abuse by a family member	9	13.0	21	26.9	30	20.
	Necessity of caring for a disabled person	9	13.0	16	20.5	25	17.0
	Problems with provision of rehabilitation equipment	8	11.6	11	14.1	19	12.9
	Material difficulties	81	75.0	120	81.1	201	78.
	Too infrequent contacts with the family	59	54.6	93	62.8	152	59.
	Loneliness	59	54.6	89	60.1	148	57.
		49			49.3		
	Lack of possibilities of rehabilitation at place of residence		45.4	73		122	47.
	Difficult access to medical specialist	39	36.1	70	47.3	109	42.
	Difficulties in settling office matters	42	38.9	66	44.6	108	42
rea	Negative attitude of surroundings towards disability	45	41.7	58	39.2	103	40.
Ξ	Lack of care by relatives and friends	39	36.1	61	41.2	100	39.
Urb	Material dependence on others	40	37.0	59	39.9	99	38.
	Family disagreements	36	33.3	40	27.0	76	29.
	Difficult access to environmental nurse	22	20.4	46	31.1	68	26.
	Difficult access to services from social worker	21	19.4	38	25.7	59	23.
	Lack of employment adjusted to disability	26	24.1	15	10.1	41	16.
	Necessity of caring for a disabled person	14	13.0	22	14.9	36	14.1
	Alcohol abuse by a family member	12	11.1	20	13.5	32	12.:
	Problems with provision of rehabilitation equipment	10	9.3	12	8.1	22	8.

The disabled are considerably worse educated that the able-bodied, although in recent years a gradual increase has been noted in the percentage of the disabled with secondary school or university education. In 2009, among the population of the disabled the percentage of those with secondary school education level was 32.1%, while those with university education level – 5.9% [3], compared to the total population 14.2% [10]. This is confirmed by the results of own studies, where the respondents with secondary school education constituted 28.3%, while those with university education – 12.7%. An excessive number of the disabled who had an elementary education level was observed – 43.7%, while in the Polish population this percentage is 18.7% [11].

In the population examined, the percentage of respondents disabled due to injuries was clearly higher – 17.3%, compared to the results of all-Polish studies carried out by the Institute of Agricultural Medicine – 10.3%, and the results of statutory university studies (1.2%, 12.8%) [5, 17]. Irrespective of the purpose of studies, in all of them the consequences of diseases were the most frequent cause of disability – from 78–88%, with a predominance of cardiovascular diseases and cancer [1].

In the population in the study a clear increase was observed with respect to the problem of injuries. Nogalski *et al.* pay attention to the fact that an increase is noted in the number of negative health characteristics which poorly differentiate the percentages of rural and urban populations, or are even similar. For example, the risk of injuries due to contact with animals is similar in rural and urban areas more important differences are associated with the types of animals, while previously, injuries of this type occurred primarily in rural areas [23]. The studies by Karwat *et al.* indicate that rural inhabitants constituted 34.0% of patients hospitalized due to head injuries, more frequently males and patients aged 65 and over [15, 16]. Specific causes of occurrence of eye injuries among rural inhabitants may be also mentioned as being associated with the occupation of a farmer [19].

As many as 90% of the disabled in the study experienced difficulties in everyday functioning due to limitations caused by disability. For the majority of respondents these were limitations associated with performance of household jobs and/or occupational activity (70.9%), as well as limitations associated with locomotor capabilities (68.1%). The most important problem in the functioning in the life environment of the disabled is unadjusted technical surroundings and unfriendly social environment. Unadjusted lodging and its yard, unadjusted buses, and architectural barriers are very often obstacles that cannot be overcome by the disabled with motor organ dysfunctions. These dysfunctions more often concern rural than urban inhabitants [6, 18, 26].

## **CONCLUSIONS**

1. The structure by age of the population examined differed from the structure of the population in the Lublin Region. The dominant numbers of respondents in the older

age groups indicate, growing with age, unfavourable effect of changes in the state of health leading to disability.

- 2. The fact that the structure by gender of the population examined did not significantly differ from the reference population shows an equal level of risk of the occurrence of the phenomenon of disability among males and females.
- 3. Among the disabled in the study, a considerable percentage of never-married males and females was observed in the age group 30–59, and at the same time, a low percentage of those who were married. This suggests that in association with poor health status, decreased physical efficiency, and limited possibilities of occupational activity never-married males and females could experience greater problems with finding a life partner, whereas those who were married problems with maintaining the family and fulfilment of the role of a spouse and parent.
- 4. The sub-population of the rural inhabitants had a more favourable structure by marital status, compared to the urban population. This was manifested by a higher percentage of those married and a lower percentages of the divorced.
- 5. In the population examined, a high percentage of respondents with elementary education level was observed, especially in the age group 65 and over. This confirms the regularity of higher intensity of disability risk among population groups with a lower education status, due to a limited level of knowledge concerning health and health-promoting life style, compared to those better educated, and low level of competence of the closest social surroundings as a potential source of support in the situation of illness. The lower education level is also accompanied by a poorer material standard of families.
- 6. In the population in the study, in all age categories, there dominated respondents who maintained themselves on non-earned sources of income. The sources of this situation may be sought for not only in disability, low education level of the respondents, but also in the low level of activities on behalf of occupational activation of the disabled in the environment of their residence.
- 7. A higher percentage of the biologically disabled was observed among rural than urban inhabitants. This may be associated with the low level of education of the rural population, compared to urban inhabitants, and the lower accessibility of specialist medical care in urban areas.
- 8. The structure by causes of disability among the rural inhabitants in the study did not significantly differ from than noted among the urban population. This evidences a high degree of homogeneity of both environments with respect to disability risk factors and the unification of the life style of inhabitants of these environments from the aspect of health behaviours. A higher percentage of injuries in the subpopulation of males, compared to females, is associated with greater inclination than among females for risky behaviours, and also with the performance by males of occupations and work activities with increased risk of accident or injury.

Table 10. Difficulties and barriers in everyday life by age.

D	ifficulties / Age	<	50	50	)–64	65 an	id over	Т	otal
		n	%	n	%	n	%	n	%
M	laterial difficulties	60	81.1	109	80.7	156	80.4	325	80.6
La	ack of possibilities of rehabilitation at place of residence	57	77.0	84	62.2	85	43.8	226	56.1
Lo	oneliness	29	39.2	58	43.0	120	61.9	207	51.4
To	oo infrequent contacts with the family	32	43.2	58	43.0	110	56.7	200	49.6
D	ifficulties in settling office matters	43	58.1	74	54.8	76	39.2	193	47.9
D	ifficult access to medical specialist	42	56.8	70	51.9	80	41.2	192	47.6
N	egative attitude of surroundings towards disability	43	58.1	59	43.7	58	29.9	160	39.7
Lotal M	ack of care by relatives and friends	26	35.1	47	34.8	74	38.1	147	36.5
e M	laterial dependence on others	26	35.1	46	34.1	72	37.1	144	35.7
Fa	amily disagreements	23	31.1	55	40.7	57	29.4	135	33.5
D	ifficult access to environmental nurse	27	36.5	49	36.3	40	20.6	116	28.8
D	ifficult access to services from social worker	26	35.1	50	37.0	29	14.9	105	26.1
La	ack of employment adjusted to disability	33	44.6	33	24.4	13	6.7	79	19.6
A	lcohol abuse by a family member	11	14.9	16	11.9	35	18.0	62	15.4
N	ecessity of caring for a disabled person	18	24.3	28	20.7	15	7.7	61	15.1
Pr	roblems with provision of rehabilitation equipment	14	18.9	14	10.4	13	6.7	41	10.2
M	laterial difficulties	30	85.7	41	85.4	53	82.8	124	84.4
La	ack of possibilities of rehabilitation at place of residence	30	85.7	36	75.0	38	59.4	104	70.7
D	ifficulties in settling office matters	22	62.9	29	60.4	34	53.1	85	57.8
D	ifficult access to medical specialist	21	60.0	28	58.3	34	53.1	83	56.5
Lo	oneliness	10	28.6	19	39.6	30	46.9	59	40.1
Fa	amily disagreements	14	40.0	23	47.9	22	34.4	59	40.1
, N	egative attitude of surroundings towards disability	20	57.1	20	41.7	17	26.6	57	38.8
To are	oo infrequent contacts with the family	13	37.1	16	33.3	19	29.7	48	32.7
Rural area	ifficult access to environmental nurse	15	42.9	18	37.5	15	23.4	48	32.7
<b>≃</b> La	ack of care by relatives and friends	12	34.3	19	39.6	16	25.0	47	32.0
D	ifficult access to services from social worker	13	37.1	20	41.7	13	20.3	46	31.3
M	laterial dependence on others	11	31.4	14	29.2	20	31.3	45	30.6
La	ack of employment adjusted to disability	18	51.4	11	22.9	9	14.1	38	25.9
A	lcohol abuse by a family member	9	25.7	7	14.6	14	21.9	30	20.4
N	ecessity of caring for a disabled person	9	25.7	9	18.8	7	10.9	25	17.0
Pr	roblems with provision of rehabilitation equipment	10	28.6	6	12.5	3	4.7	19	12.9
М	laterial difficulties	30	76.9	68	78.2	103	79.2	201	78.5
Т	oo infrequent contacts with the family	19	48.7	42	48.3	91	70.0	152	59.4
Lo	oneliness	19	48.7	39	44.8	90	69.2	148	57.8
La	ack of possibilities of rehabilitation at place of residence	27	69.2	48	55.2	47	36.2	122	47.7
D	ifficult access to medical specialist	21	53.8	42	48.3	46	35.4	109	42.6
D	ifficulties in settling office matters	21	53.8	45	51.7	42	32.3	108	42.2
- N	egative attitude of surroundings towards disability	23	59.0	39	44.8	41	31.5	103	40.2
Urban area	ack of care by relatives and friends	14	35.9	28	32.2	58	44.6	100	39.1
g M	laterial dependence on others	15	38.5	32	36.8	52	40.0	99	38.7
5 Fa	amily disagreements	9	23.1	32	36.8	35	26.9	76	29.7
	ifficult access to environmental nurse	12	30.8	31	35.6	25	19.2	68	26.6
	ifficult access to services from social worker	13	33.3	30	34.5	16	12.3	59	23.0
	ack of employment adjusted to disability	15	38.5	22	25.3	4	3.1	41	16.0
	ecessity of caring for a disabled person	9	23.1	19	21.8	8	6.2	36	14.1
	lcohol abuse by a family member	2	5.1	9	10.3	21	16.2	32	12.5
	roblems with provision of rehabilitation equipment	4	10.3	8	9.2	10	7.7	22	8.6

- 9. The most frequent limitations due to disability in the population examined concerned household jobs and/or occupational activity, and walking difficulties. The first limitations were perceived to a greater extent by rural than urban females. This regularity may be associated with the specificity of running farms, requiring greater effort and amount of labour, compared to urban households. Difficulties with walking increased at the age of 65 and over. Complaints of these limitations in interpersonal relationships were more frequent in the age group under 50 than in older groups. The level of sociability is higher in young people and decreases with age. These limitations may be among the causes of the high percentage of never-married males and females in the population examined.
- 10. A high percentage of the disabled who reported material difficulties, in association with low education level and high percentage of those occupationally inactive, are evidence of the socio-economic detriment of the population examined.
- 11. A part of the evaluated problems concerning the disabled in the study was independent of respondents' place of residence, gender and age. These were: material difficulties, material dependence on others, lack of care by relatives and friends, and negative attitude of surroundings towards disability.
- 12. The subsequent group of problems occurred with varying frequency among the disabled in rural and urban areas. The following problems are to the detriment of the rural inhabitants, compared to the urban population: more frequent lack of possibilities of rehabilitation at the place of residence, difficulties with access to a medical specialist, and in the family more frequent alcohol abuse by a family member and family disagreements. However, urban inhabitants, more often than the rural population, perceived loneliness and isolation from the closest family as the most pressing problems.

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