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*Evaluation of demand for care among patients with an official  
decision concerning incapability of independent existence,  
based on the example of people insured  
by the Agricultural Insurance and Health Care*

Constant increase in the number of disabled and those incapable of independent existence creates the need for an evaluation of their actual, or close to actual demand for care. In a well-organized health system the needs of this group of patients and the scope of professional actions supporting their care should be well recognized and defined. It should be mentioned that in the national health system, information concerning the number of people who have an official decision about disability are better known than the analyses concerning their further fate and means of organizing or supporting their care. Therefore, it is very important to recognize the scale of the phenomenon based on verified methods with reference to the planned staff resources needed for care of this group of patients. There are few reports in the literature concerning the degree of prevalence of functional, cognitive and emotional disability among people considered as incapable of independent existence. Studies of this problem were carried out mainly among the elderly – aged over 75 (2, 3, 4, 5) or in people with a defined type of disability, e.g. dementia syndrome (7). There are also few scientific publications pertaining to the verified research methods evaluating the demand for care, as well as the description of the actual state of care over this group of patients.

The objective of the study was the evaluation of the demand for care among people with an official decision concerning capability for independent existence and insured by the Agricultural Insurance and Health Care (KRUS).

Therefore, the following research problems were posed: 1) How do people incapable of independent existence evaluate their own functional efficiency? 2) What is the actual demand for care among people incapable of independent existence?

#### MATERIAL AND METHODS

The study was conducted in 2004 and covered 116 people with official decisions made concerning incapability of independent existence. The respondents were examined in the consultation room at the Local Agency of the KRUS in Przeworsk (72 people) and at their place of residence. The study was carried out at home in cases when it was impossible for a patient to report to the consultation room. The decision about examination at the place of residence was made based on medical records or the opinion of the physician in charge.

The research tool applied was the EASY-care questionnaire form, Geriatric Scale for Assessment of Depression, and Cognitive Function Impairment Test. With the use of the EASY-care questionnaire the respondents were classified into the following 3 categories of care within each category of everyday living activities: 1) respondents performing an individual activity without difficulties, 2) respondents requiring certain assistance from another person, 3) respondents incapable of performing an individual activity.

Respondents who were not capable of performing individual activities entirely independently (required some assistance or were totally dependent on their care provider) were considered as dependent with respect to an individual ADL activity (*Activities of Daily Living*). Those who were not capable of performing at least one function I-ADL were considered as disabled in the area of I-ADL, but capable with respect to P-ADL. Those who were incapable of performing at least one P-ADL activity without help from other people, irrespectively of the number of difficulties regarding I-ADL, were considered as disabled with respect to I-ADL and P-ADL.

Depression was evaluated by means of the 15-score Geriatric Scale for Assessment of Depression (142). The result from 0–5 scores showed a normal emotional state of the respondent, the result from 6–15 – indicated depression of increasing intensity.

The Cognitive Functions Impairment Test was applied in cases where disorders of this type were reported among the reasons for granting a nursing benefit. The test result from 0–10 indicated a normal state or mild impairment of cognitive functions, while from 11–28 scores – a moderate or severe cognitive functions impairment. The research method applied in the study was a diagnostic survey.

The research tool for the evaluation of the efficiency of people incapable of independent existence was the EASY-care questionnaire form, version 1999–2000, with 100-score daily living activities assessment scale (Annex 4.1), Cognitive Functions Impairment Test (Annex 4.2) and Geriatric Scale for Depression Assessment (Annex 4.3).

The study was conducted in 2004 and covered 116 people with official decisions made concerning incapability of independent existence. The respondents were examined in the consultation room at the Local Agency of the KRUS in Przeworsk (72 people) and at their place of residence. The study was carried out at home in cases when it was impossible for a patient to report to the consultation room. The decision about examination at the place of residence was made based on medical records or the opinion of the physician-in-charge. The patients were inhabitants of southeastern Poland – the former area of the Przemysł Region, aged 75 and over, who have been covered by the local agency of the Agricultural Insurance and Health Care Fund in Przeworsk for at least 5 years (the required period of contributing insurance premium in order to obtain health benefit). The study covered 116 people, including 46 males (39.65%) and 70 females (60.35%). Mean age in the population examined was 61.86, 66.20 – among females and 57.52 – among males. The majority of males were aged under 65 (43.47%, whereas females – over 65 (45.54%).

The vast majority of respondents had an elementary education level (86.21%), only a small group of the youngest people (13.79%) completed vocational schools. The respondents belonged mainly to the post-war generation who took over the farms from their parents, and those who achieved education and migrated to the developing cities.

The greatest number of respondents lived with their families (91.38%), which was the result of the multi-generation family model being still preserved in rural areas. People in the study most often evaluated their housing situation as average or good. Females evaluated their situation in more positive terms – good housing conditions were mentioned by over 17% of females in the study.

## RESULTS

All respondents were dependent with respect to I-ADL; however, a large majority of females (91.43%) and males (65.22%) showed dependence with respect to both groups of functions – I-ADL and P-ADL (Tab. 1).

Table 1. Disability concerning activities of daily living

Efficiency	Gender	Males N=46		Females N=70		Total N=116	
		L	%	L	%	L	%
I-ADL dependent (requiring assistance in instrumental activities)		46	100.00	70	100.00	116	100.00
I-ADL and P-ADL dependent (requiring assistance in instrumental and basic activities)		30	65.22	64	91.43	94	81.03

Disability with respect to 8–12 ADL activities, was most frequently observed, i.e. moderate dependence – 54 respondents (46.55%) with the greatest number being females – 36 (51.43%); 18 people (15.52%) were not capable of performing more than 13 ADL activities. Slight dependence (in 3–7 ADL activities) was noted in 44 people (37.93%), equally frequent among both genders (Tab. 3).

The mean number of scores obtained on ADL scale was 34.5, with the higher number of scores observed in females rather than males – 38.11 and 30.99 respectively. A very important problem was the concomitance of disability with respect to the performance of ADL activities and intellectual (dementia) and emotional (depression) disability (Tab. 2).

The frequency of concomitance of ADL and depression-type disorders in the group of respondents with the least disability (3-7 ADL activities) was 64.72% (44 people), in the group of those with disability concerning 8-12 ADL activities – 53.20% (50 respondents), and in the group with the greatest disability (13-17 ADL activities) – 42.11% (10).

Concomitance of ADL disability and cognitive functions disorders among those disabled with respect to 3–7 ADL activities was 17.64% (12 people), in the group of those with disability concerning 8–12 activities – 23.40% (22) and among respondents with the greatest disability, 13–17 ADL activities – 31.58% (12).

The group of respondents with probable depression, cognitive disorders and disability concerning 3–7 ADL activities covered 12 people; the group of those disabled with respect to 8–12 ADL activities with probable depression and cognitive disorders – 22; the group with the greatest disability (13-17 ADL activities with probable depression and cognitive disorders) – 10 people. The most severely disabled respondents, 12–17 ADL activities with probable depression and cognitive disorders, made up a group of 10 (26.31%).

Table 2. Concomitance of disability with depression and cognitive disorders

Disability \ Gender	Males N=38		Females N=30		Total N=68	
	L	%	L	%	L	%
3-7 ADL activities with probable depressions	22	57.90	22	73.34	44	64.72
3-7 ADL activities with cognitive disorders	8	21.05	4	13.33	12	17.64
3-7 ADL activities with probable depressions and cognitive disorders	8	21.05	4	13.33	12	17.64
In general	38	100.00	30	100.00	68	100.00
	Males N=32		Females N=62		Total N=94	
	L	%	L	%	L	%
8-12 ADL activities with probable depressions	16	50.0	34	54.84	50	53.20
8-12 ADL activities with cognitive disorders	8	25.0	14	22.58	22	23.40
8-12 ADL activities with probable depressions and cognitive disorders	8	25.0	14	22.58	22	23.40
In general	32	100.00	62	100.00	94	100.00
	Males N=16		Females N=22		Total N=38	
	L	%	L	%	L	%
13-17 ADL activities with probable depressions	6	37.50	10	45.46	16	42.11
13-17 ADL activities with cognitive disorders	6	37.50	6	27.27	12	31.58
13-17 ADL activities with probable depressions and cognitive disorders	4	25.00	6	27.27	10	26.31
In general	32	100.00	22	100.00	38	100.00

Table 3. Dependence on care provider

Dependence \ Gender	Males N=46		Females N=70		Total N=116	
	L	%	L	%	L	%
Slight (in 3-7 ADL activities)	22	47.83	22	31.43	44	37.93
Moderate (in 8-12 ADL activities)	18	39.13	36	51.43	54	46.55
Severe (in 13-17 ADL activities)	6	13.04	12	17.14	18	15.52
In general	46	100.00	70	100.00	116	100.00

## DISCUSSION

An objective of every health care system, among other things, is to guarantee and provide the whole population with possibly the widest range of medical services needed and to organize care in the best way possible (6). People who are deprived of their psycho-physical autonomy and become dependent on the assistance of others are not able to demand services from the system of care, if only for the reason of ambition, sense of honour, or lack of strength or access to information (1). For this reason, there is a necessity for actions on the part of health services biased towards the evaluation of the demand for care in this group of the disabled.

## CONCLUSIONS

1. The results of the study confirmed a considerable degree of functional disability among people considered as incapable of independent existence. All respondents were dependent with respect to the instrumental activities; however, simultaneously a large majority showed dependence also with respect to basic activities. The degree of prevalence of emotional and cognitive disorders indicates that it is necessary to consider this problem while analysing health needs among people incapable of independent existence.

2. The study confirmed a considerable demand for care in people with official decisions made concerning independent existence. EASY-care questionnaire form may be a useful method for the assessment of the demand for care among these people.

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## SUMMARY

The objective of the study was the evaluation of functional, emotional and cognitive disability, as well as the actual demand for care among people with decision made concerning incapability of independent existence insured by Agricultural Insurance and Health Care Fund (KRUS). The method of a diagnostic survey was applied. The research tool was the EASY-care questionnaire form, version

1999–2000, with 100-score activities of daily living evaluation scale; Cognitive Functions Impairment test, and Geriatric Scale for Depression Assessment. The study was conducted in 2004, and covered 116 people with decisions concerning their incapability of independent existence. Respondents were examined in a consultation room at the local agency of KRUS in Przeworsk (72 people) and at their place of residence. The results of the studies confirmed a considerable degree of functional disability, emotional and cognitive disorders in people considered as incapable of independent existence. The study indicated that there is a considerable demand for care among people with a decision made concerning independent existence. The EASY-care questionnaire form may be a useful method for evaluating the demand for care among such people.

Ocena zapotrzebowania na opiekę pacjentów z orzeczoną niezdolnością do samodzielnej egzystencji na przykładzie osób ubezpieczonych w Kasie Rolniczego Ubezpieczenia Społecznego

Celem badania była ocena niesprawności funkcjonalnej, emocjonalnej i poznawczej oraz rzeczywistego zapotrzebowania na opiekę osób z orzeczoną niezdolnością do samodzielnej egzystencji, ubezpieczonych w KRUS. Zastosowano metodę sondażu diagnostycznego. Narzędziem badawczym był kwestionariusz EASY-care w wersji 1999–2000 z 100-punktową skalą oceny funkcji życia codziennego, Test Upośledzenia Funkcji Poznawczych i Geriatryczna Skala Depresji. Badanie przeprowadzono w roku 2004, przebadano 116 osób z orzeczeniami o niezdolności do samodzielnej egzystencji. Osoby były badane w gabinecie lekarskim Oddziału Terenowego KRUS w Przeworsku (72 osoby) oraz w domu respondentów. Wyniki badań potwierdziły znaczny stopień niepełnosprawności funkcjonalnej zaburzeń emocjonalnych i poznawczych u osób uznanych za niezdolne do samodzielnej egzystencji. Badanie potwierdziło duże zapotrzebowanie na opiekę osób z orzeczoną niezdolnością do samodzielnej egzystencji. Kwestionariusz EASY-care może być przydatną metodą oceny zapotrzebowania na opiekę osób niezdolnych do samodzielnej egzystencji.