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SELECTED HEALTH AND SOCIAL NEEDS RESULTING FROM STATE OF HEALTH OF DISABLED RURAL INHABITANTS FROM THE ASPECT OF PROBLEMS WITH DEFINING DISABILITY

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Abstract

Introduction

The state of health of an individual and the population depends on many factors, their number and type constituting a specific background of consequences which model the level of health. Human health status is determined by so many factors that despite many scientific studies, also from philosophical aspect, to-date an unequivocal determination of the term – health has not been possible. A similar situation concerns the defining of disease and states of disability. Determination of the dimensions of disability in this respect should be based on a long-term, multi-stage prospective population epidemiological studies, with consideration of constantly performed corrections in order to specify health and social needs. Place of residence, i.e. rural or urban area, is one of the factors which condition the state of health of an individual and the population.

Objective

The aim of the study was presentation of the most important medical and social problems resulting from the state of health of adult disabled persons living in rural areas from the aspect of defining disability. The main goal was pursued based on two sources of results of research, the first of which were the results of a study conducted within the system of statutory research

at the Chair and Department of Epidemiology, Medical University in Lublin. The other source were the results of studies published by other researchers concerning the discussed problem.

Selected results of own study and studies by other researchers

The article presents the selected results of studies which constitute a certain type of a compendium of scientifically documented problems of the disabled, with particular consideration of such characteristics as: place of residence, causes of disability, objective and subjective state of health, health and social needs. On the level of organization of some studies the dimensions of disability were also considered in rural settlements, communes and provinces. In 1987-1990, a study of the disabled was carried out by a team of researchers from the Institute of Rural Health in randomly selected rural areas of agricultural and industrialized character. Parallel to the above-mentioned study, a comprehensive, all-Polish research of the state of health of rural population was conducted at the Institute of Rural Health. Among the many goals of these studies was the assessment of the state of health and determination of medical and social needs of the disabled. In order to perform a reliable and valid evaluation for the qualification of the examined population of the disabled a 5-degree scale of medical epicrisis was developed. A relatively large research task concerned the epidemiological trends in the occurrence of chronic diseases and the size of disability in Poland during 1990-2006. Own research instruments and data from the reports by the Main Statistical Agency (GUS) and other institutions were used for analysis. The subsequent research task concerned analysis of the selected epidemiological characteristics of disability in Poland and their importance for health care organizations. Patients in hospital wards were examined, as well as primary health care units, specialist outpatient departments, residential homes and occupational therapy workshops. The main aim of the next research task (2013-2015) was determination of the trends in the occurrence of the most important problems of the disabled, according to the cause of disability, as well as the importance of the obtained study results for health care organizations and health policy in the Lublin Province. Also, Lech Panasiuk dealt with the selected characteristics of the state of health of rural inhabitants, and performed analysis of the most important medical and social problems of adult inhabitants of the Lublin Province. The results of studies published by other Polish and international institutions were also presented.

Summary and conclusions

Similar to many countries, the percentage of the disabled in Polish society is determined in terms of estimates. The main reason for such a situation is the lack of uniform methods and principles of qualification of persons into the group of the disabled.

The greatest problems of the disabled living in rural areas include multimorbidity, lack or insufficient provision of rehabilitation, orthopaedic equipment and technical aids, loneliness and various forms of discrimination.

It is necessary to carry out multi-thematic health education addressed to rural inhabitants, both the disabled and healthy.

Great hopes for improving the quality of life of people with disabilities are connected with the philosophy of the International Classification of Functioning, Disability and Health. To-date, this is the only classification addressing the need for unification of the assessment of the state of health, with consideration of the environment where the disabled person lives, and evaluation of this person's potential. Similar to earlier Classifications and definitions, the ICF is a 'live' classification because efforts are still continuing to make it more comprehensive and detailed.

Key words: state of healthy, health and social needs, disabled rural inhabitants

Introduction

The state of health of an individual and the population depends on many factors, or rather groups of factors, the number and type of which constitute the specific background of consequences modelling the level of health. Here, the level of development of a country from the economic and cultural aspects, as well as educational possibilities, demography, or geopolitical conditioning is of primary importance.

The human state of health is determined by so many factors that despite many scientific studies and theoretical considerations, also from philosophical aspect, to-date it is almost impossible to unequivocally specify the term 'health'. A similar situation concerns the defining of disease and state of disability. It is an obvious fact that the more uniform or precise the definition of disability, the more accurate the possibilities and methods of support for persons with various body dysfunctions. However, categorical limitations of the definition content create the risk for the actual assessment of the health status, both of an individual and the population. This is due to many reasons; nevertheless the main cause is the changeable character of risk factors which shape the level of health. They change sufficiently enough so that it is increasingly more difficult to classify them according to the categories of factors adopted to-date, those of an environmental, social, quality of life, cultural, ecological, and genetic character [1,2]. Thus, the numerousness of the groups of factors, and their known and unknown relationships are important, and even exert an effect on the level of health and quality of life of an individual in society. Identification of the share (proportions) of particular components in the specified groups of factors which participate in the shaping of health status is very difficult. This depends on the character of consequences in the form of disorders in the

state of health, while these, in a cascade way generate distant disorders with respect to functioning in the environment, including integration [3,4]. In Poland, two groups of the disabled are conventionally adopted, which differ with respect to the legal sanctions. The first group are legally disabled persons, i.e. those who possess a medical certificate of the degree of disability. In turn, the second group are biologically disabled persons who do not have such a document; however, due to the consequences of a disease, injury, or congenital defects consider themselves as disabled [5,6]. Determination of the dimensions of disability in this respect should be based on long-term, multi-stage prospective epidemiological population studies, with consideration of constantly made corrections in order to specify health and social needs [7].

Place of residence, i.e. rural or urban area, is among the important factors conditioning the state of health of an individual and the population. Geographic, infrastructural, and cultural conditions are, to a great extent, direct or indirect characteristics which condition the occurrence of inequalities in health affecting rural inhabitants, compared to urban residents. This is confirmed by many studies conducted by research teams of physicians, nurses, physiotherapists, sociologists, psychologists, and economists [8,9,10].

In 2018, rural areas covered 93% of the territory of the country and were inhabited by nearly 40% of Polish population; per 1 km² of rural areas there are 53 inhabitants, whereas in cities – 1,047 [11].

Apart from knowledge and skills, health resource is one of the forms of human capital, which may also be called health capital [12]. Therefore, while specifying or defining the state of health, the element of subjective assessment should be taken into account. This concerns both persons with complete health and those who are disabled.

Objective

The aim of the study was presentation of the most important medical and social problems resulting from the health status of adult disabled rural inhabitants from the aspect of defining disability. The main goal was pursued based on two sources of results of research. The first source were the results of a study conducted within the system of statutory research at the Chair and Department of Epidemiology, Medical University in Lublin. The author of the presented study was co-organizer and co-investigator in this research. The other source concerned the results of studies published by other researchers about the discussed problem.

Definitions of disability as a support in diagnosing health and social needs of persons with various body dysfunctions

The term disability is a complex problem to which contribute many characteristics taken into account in the assessment of the state of health, as a result of which the most important health and social needs are identified. While specifying this concept, it is necessary to possess knowledge concerning defining health and disease, the definitions of which have to find an arbitrary solution [13]. Scientific reports in theory and practice published to-date, both

in Poland and other countries worldwide, are not an interpretation for arriving at a uniform definition of disability. Despite this, in order to avoid freedom in interpreting definitions and legal regulations, it is necessary to organize these concepts, taking into account the scheme of the scope of their usefulness.

Many researchers, mainly physicians, psychologists and sociologists, consider the fact of the lack of possibility to provide an unequivocal definition of disability due to constant changes occurring, together with new phenomena specified in the categories of health and environment. This includes, among other things, the discovery of new syndromes of genetic defects, occurrence of new or recurrent diseases, or new pathogens, or new social pathologies. Due to these reasons, both the general definition and definitions of individual types of disability should be enriched with new elements. In order to assess the 'quality' of disability it is necessary to evaluate the state of health, which is indispensable to determine more valid and sensitive measures of disability [14,15].

Considering the availability of many definitions of disability, health and disease in scientific literature, here only one definition of disability is presented adopted by the experts from the World Health Organization. According to this definition, the disabled are considered persons who cannot partially or totally provide themselves the possibility of independent individual and social life, due to congenital or acquired impairment of physical and/or mental abilities [16].

A great contribution to discussion about further work on the definition of disability is the International Classification of Functioning, Disability and Health – (ICF) adopted on 22 May 2001. The main goal of the ICF is adopting reasonably unified, standard language which would allow the description of health and states related with health. In this Classification, health components are specified, and some conditions of wellbeing related with health, i.e. good wellbeing, such as, e.g. education and work. Therefore, problems presented in the ICF were divided into: health domains and health-related domains. They were described from the perspective of the human body, the individual person and society, and placed on two lists: 1) Body functions and structures, and 2) Activities and participation [17,18].

Selected results of own studies and studies by other researchers

The experience of disability is nearly always associated with many struggles, which are the consequence of acquired, genetic or congenital diseases, injuries and accidents. Incomplete body ability is the cause of disorganization of life in almost every aspect. Reconciliation of a disabled person with often irreversible effects of the state of health is possible due to carrying out rehabilitation, understood as a complex process of interrelated and interlocking dependent links, or only its selected stages. Professor Wiktor Dega, an outstanding physician and co-founder of the Polish School of Rehabilitation, adhered to the principle that if therapeutic rehabilitation is not be closely connected with social and occupational rehabilitation, the outcome of rehabilitation will not be complete. The team of

co-founders of the School ascribed four characteristics to the rehabilitation process, which provide possibilities for achieving by a disabled person a high level of improvement in the state of health and quality of life. These are the following characteristics: 1) universality – which brings together all medical disciplines and is available to all those who need it; 2) complexity – is coherent, because it considers all aspects of rehabilitation, i.e. therapeutic, psychological, social and occupational; 3) is undertaken early – begins possibly early, already during the period of treatment; 4) continuity – combines medical, social and vocational rehabilitation [19,20]. Unfortunately, this scheme is increasingly less appreciated, by both specialists and organizers of health care. Here, financial shortcomings are not without significance.

In this part of the study, selected results of research are presented which are a certain type of compendium of scientifically documented problems of the disabled, with particular consideration of such characteristics as: place of residence, objective and subjective state of health, health and social needs.

On the level of organization of some studies, the size of disability in rural areas, communes and provinces was also considered. During the period 1987-1990, a team of researchers from the Institute of Rural Health carried out a study of the disabled in randomly selected rural areas of an agricultural and industrialized character. The following research instruments were applied: a Standardized Questionnaire, Environmental Chart, and Scientific-Research Protocol. It was found that the disabled living in agricultural areas more frequently evaluated their state of health in more negative terms, compared to those living in industrialized areas. The consequences of disability were most often somatic diseases, followed by injuries and accidents; however, here a higher percentage concerned inhabitants of industrialized areas. In both subpopulations, the level of provision with orthopaedic, rehabilitation and technical aids was low, but nearly 80% of persons living in agricultural areas were provided only with basic equipment [21].

Parallel to the above-mentioned study, a comprehensive, all-Polish research of the state of health of rural population was conducted at the Institute of Rural Health. The research tools used were Medical Examination Chart, Environmental Studies Chart, Chart for the Disabled, and medical epicrisis scale. Among the many goals of these studies was assessment of the state of health and determination of medical and social needs of the disabled.

Here, a great challenge was the problem of identification in the examined population of persons qualified into the group of the disabled. Many studies and considerations concerning the defining of disability demonstrate that there are no unequivocal criteria for qualification into the disability group. Therefore, in order to perform a reliable and valid analysis for the qualification from among the examined population into disability group, a 5-degree medical epicrisis scale was developed (Tab. 1). Based on this instrument, from among the total number of study participants of 6,511 a group of 1,491 persons was selected with

various degrees of body deficiencies, as a subpopulation of the disabled. They constituted 22.9% of the population in the study.

The determination of an appropriate degree of medical epicrisis specified in this Scale was based on the disease diagnosed, intensification of its symptoms, course, complications and the course of consequences. After performing analyses of the characteristics provided, the necessary scope of medical assistance was evaluated, rehabilitation services, care on the part of others, types of provided orthopaedic, rehabilitation, and auxiliary aids, and assessment of social welfare. A higher level of medical epicrisis determined indicates the most important demands for medical, prophylactic and social assistance. This means, that the disabled person required also assistance mentioned in the lower stages of the epicrisis.

Table 1. Scale of medical epicrisis compiled based on overall assessment of the state of health and demand for medical, social and rehabilitation care*

Degrees of epicrisis: → health situation of disabled person	Categories of care: → scope of necessary medical, prophylactic, care and social assistance
I. Without pathologic symptoms (healthy)	0 – does not require treatment and care
II. Slight deviations in the state of health, periodically occurring symptoms of disease, full capability for work, threat is imperceptible	1 – periodical primary care
III. Chronically ill person with slightly decreased degree of overall body ability, with acute infectious disease which does not cause consequences, periodical disability hindering work. satisfactory health prognosis.	2 – constant primary medical care 3 – periodical specialist care 4 – active counselling
IV. Chronically ill person, with possibility of permanent consequences, with considerably decreased degree of body ability, questionable prognosis for recovery, considerable limitation of possibility to work permanently or periodically.	5 – intensive specialist treatment (hospitals, clinics, sanatoria) 6 – full process of rehabilitation or its selected stages (including provision with rehabilitation, orthopaedic, auxiliary aids, psychological care)
V. Seriously ill patient (acute, chronic disease with deteriorations and complications) incapable of independent life and work. Unfavourable prognosis concerning life span.	7 – intensive medical, nursing care and intensive care on the part of others (family member, nurse, medical caretaker) 8. terminal care (hospice and 1, 5 and 6)

*The scheme was developed specially for the purposes of qualification of disabled persons, out of the general population in an all-Polish study of the state of health of disabled rural inhabitants [22].

Among many results obtained in this study, the most important include: - in the group of the disabled the percentage of those who possessed medical certificate of the degree of disability, i.e. those classified into the subpopulation of legal invalids, was higher, while the remainder were biological invalids; 55.7% of the disabled were private farmers; - nearly 60% had primary education; - in the majority of the disabled, multimorbidity was observed; 62.8% of study participants had cardiovascular disease diagnosed, 49.3% - disease of the

musculoskeletal system and connective tissue; 21.5% respiratory system disease. Health problems following injuries were observed in 29.0% of the disabled, five times more often than in those with the medical certificate of invalidity group. The oldest respondents, those with a worse material standard, with a legal decision concerning the invalidity group, and with high categories of medical epicrisis, most frequently evaluated their state of health in negative terms. Only 17.0% of respondents were provided with any orthopaedic and rehabilitation equipment, and technical aids; however, this was mainly the simplest range of equipment, e.g. crutches, Wheeler frame [22].

A relatively large research task concerned – Epidemiological trends in the occurrence of chronic diseases and size of disability in Poland during 1990-2006. The main research instruments were Scientific-Research Protocols developed based on medical and demographic records available in State institutions and scientific departments; results of studies analyzed by the Main Statistical Agency (GUS) from the National Census of Population and Housing 2002. The results of studies published by researchers dealing with this scope of problems were also used.

Analysis of the frequency of occurrence of selected chronic diseases and the size of disability was used to determine trends in the occurrence of these diseases and contributed to the assessment of the state of health of the Polish population. It was confirmed that cardiovascular diseases still remained the cause of the highest number of deaths (in 2006 – 45.6%; an improvement was observed compared to 1990, when these diseases were the cause of over 52% of deaths). A rapid increase in the number of deaths due to cancerous diseases with a simultaneous increase in the number of new cases among both rural and urban inhabitants occurred to be an especially unfavourable phenomenon. In 2006, these diseases were the cause of death of 24.8% of patients, while in 1990 – 18.7%. Injuries and poisonings occupied the third position among causes of death – 6.8% (2006).

Ageing of the population is an important health and demographic problem. The percentage of persons who achieved post-productivity age increased, and in 2006 was about 15.7%.

Among the very important and difficult issues, both health and social, is an increase in the number of the disabled, especially at working age. A detailed determination of the size of disability causes various difficulties, not only in Poland, mainly due to the lack of uniform methods for registration of these persons. There are no precise, up-dated data concerning the number of the disabled, causes of disability, and medical and social needs of this population group. Random, targeted studies and data from the National Censuses do not provide up-to-date and fully current information, due to the fact that they are irregularly performed and published. In Poland, the numbers of the disabled are provided in terms of an estimate. These percentages range from 12.0-14.3% of the general population.

To the group of growing trends classified to social problems belong alcoholism, cigarette smoking, drug addiction, suicidal attempts and committed suicides, prostitution,

robberies and homicides. An increasing problem becomes the lack of skills of coping with stress, unemployment, workaholism and addiction to the computer and mobile phone [23].

The research task entitled 'Analysis of selected epidemiological characteristics of disability in Poland – importance for health care organizations' conducted in 2007-2009 covered 680 adults. The research tools applied for this purpose were a Questionnaire and a Scientific-Research Protocol'. The respondents were examined in such institutions as: hospital wards – rehabilitation, neurology; primary health care outpatient departments; specialist outpatients; residential homes; and occupational therapy workshops. The disabled living in rural areas constituted 36.2%.

Most frequently the cause of respondents' disability was a disease – 79.0%; followed by injuries and accidents – 27.0%, and congenital defects – 4.0%. Legal invalids (with a medical certificate for an invalidity group or degree of disability) constituted 38.0% - most often females, the remainder of legal invalids were males. As many as 60.0% of the total number of respondents were provided with any orthopaedic, rehabilitation equipment and technical aids; however this was the simplest equipment, e.g. walking sticks, crutches, Wheeler frame. The younger the age category, the more often the disabled reported needs concerning the provision of orthopaedic-rehabilitation aids. The number of respondents whose locomotive abilities were limited to moving around the apartment or household was the highest. With respect to social support, most often the respondents could count on family members, whereas 10% only on themselves. The respondents' self-reported health was low – 43.0% evaluated their health as mediocre, while 31.0% - as poor or very poor. The majority of the disabled, mainly with dysfunctions of the motor organs, reported the need to organize rehabilitation in their place of residence in order to undertake or continue the rehabilitation process or its selected stages [24].

The subsequent research task entitled 'Disability as medical and social problems in the Lublin Province - importance for organization of health care and health policy of the region pursued during 2013-2015' - included respondents living in the city of Lublin and the Lublin Province. The places where the study was conducted were: hospital wards, family medicine practices, specialist outpatients, residential homes, and day care centres.

The primary aim of the study was determination of the occurrence of the most important problems of the disabled, according to the causes of disability, as well as importance of the results of the study obtained for organization of health care and health policy in the Lublin Province.

The following research method and instruments were used: Questionnaire for the disabled, Scientific-Study Protocols for the collection of medical documentation; and the HADS-M scale for assessment of anxiety and depression.

Among the total number of 830 adults with a medical certificate for the group of invalidity/degree of disability (legal invalids), and without medical certificate for the degree of disability (biological invalids), rural inhabitants constituted 33.2%.

In the population of the disabled, the most frequently occurring medical and social needs were determined, as well as medical-social needs that are difficult to separate. It was confirmed that many of the needs occurring among respondents living in rural areas were fulfilled only to a small extent or not at all. Rural inhabitants, more often than urban inhabitants were provided with aids facilitating locomotor skills. In residential homes the disabled were better provided with orthopaedic, rehabilitation equipment and technical aids, from the aspects of both quantity and quality. Injuries and congenital defect were the causes of disability which more frequently generated the need for provision of orthopaedic aids [25].

The selected characteristics of the state of health were also investigated by L. Panasiuk, who analyzed the most important medical and social problems of adult inhabitants of the Lublin Province. The selected group met the conditions of a representative group for the Province. The examined population included 4,004 persons, of whom 56.4% were rural inhabitants. The percentage of males and females was the same in both sub-populations.

The researcher indicated differences in the state of health and inequality in health between the two subpopulations, i.e. rural and urban inhabitants. The percentage of respondents with obesity was significantly higher among rural than urban inhabitants – lipid disorders, apart from hypertriglyceridaemia, slightly more often occurred in rural than urban inhabitants; the percentage of persons with arterial hypertension was similar among the subpopulations living in rural and urban areas; the percentage of respondents with diabetes was slightly higher among urban than rural inhabitants. The percentage of persons who sustained injuries, burns and poisoning were similar in the subpopulations of rural and urban inhabitants. Malignant cancer was significantly more frequently diagnosed among urban than rural inhabitants. Great differences between the two subpopulations were observed in the state of dentition. The number of missing teeth and the number of toothless persons significantly more often concerned rural inhabitants. Urban inhabitants, significantly more frequently than rural inhabitants used the services of a dentist. Analysis of data concerning anti-health behaviours showed that the percentage of cigarette smokers was significantly higher among urban than rural inhabitants, while the problems resulting from alcohol abuse significantly more often occurred among rural inhabitants, compared to families living in urban areas. The feeling of loneliness was significantly more frequent among urban than rural inhabitants. Urban women significantly more frequently used the consultations of a gynaecologist, while the percentage of women who had never visited a gynaecologist was twice as high among women living in rural areas. The percentage of the biologically disabled was higher in the subpopulation of rural inhabitants, compared to urban inhabitants. Urban inhabitants evaluated their state of health in more negative terms, compared to rural inhabitants [26].

The subsequent study published in 2015 by the European Fund for the Development of Polish Villages, demonstrated that the health situation in rural areas is still not good. It was confirmed that nearly 35% of males living in rural areas had not visited a first contact physician for more than 12 months, and every fourth male had never visited a medical

specialist. Slightly more than 40% of women living in rural areas had not visited a physician within the last year.

Poorly developed infrastructure of health care facilities still remains a great problem. In rural areas there are three outpatient departments per 10,000, while in urban areas – 6.5 outpatients. The smallest number of outpatients is in the Poznań Province, while the largest in the Katowice Province. In the Szczecin Province, there are only 1.3 pharmacies per 10,000 population, whereas in the Katowice Province – less than three. It was confirmed that the most frequent reasons of resigning from a visit to a doctor were: long waiting time for a visit, lack of financial means, difficult access due to too great a distance, or no means of transport. Certainly these are some of the causes of the lack of certain prophylactic examinations, as well as a lower disease detection, mainly: diabetes, cancer, and cardiovascular diseases [27].

High hopes are placed on the programme by the European Health Interview Survey (EHIS), which is one of the main tools for the realization of primary goals of the European Union in the domain of public health statistics. This is a system of health monitoring which includes such components as: state of health, including mental health, morbidity, accidents and injuries, use of health care, prophylaxis and health promotion, as well as life style. The study is carried out cyclically, every five years in the EU countries by direct interview method. The results of this study are a good source for recognition of the health situation of inhabitants of the European Union, and the recognition of its conditioning according to demographic and social characteristics and place of residence.

The last study was conducted during the period September-December 2014, and was covered by EU legal regulation. For the first time, all EU member countries were obliged to pursue this study, according to Eurostat guidelines. Due to random selection of the population, the study was of a representative character on a country level, as well as selected information on the provincial level. This study considered four thematic areas, i.e.: 1) state of health (self-reported state of health, chronic diseases, limitations in functioning and their direct effect on daily life, accidents, psychological wellbeing); 2) health care (use of medical care, use of medicines, prophylaxis); 3) determinants of health, mainly life style; 4) demographic and social characteristics of persons and households. Some results of the study are available in a report [28].

Needs for developing maps of health needs of disabled rural inhabitants

Multiple health and social needs of disabled rural inhabitants which, due to various reasons, are frequently not diagnosed, is a basis for the development of territorial maps of the types of these needs. Lack of diagnosis of actual health and social needs of the disabled is due to many causes, the main causes of which are organizational shortcomings of the health service, staff shortages, non-systematically performed statistical analyzes, too rarely undertaken scientific studies, both targeted and population [29,30]. These maps are beneficial for both parties, i.e. those concerned and their families, as well as State administration on

various levels of functioning. There is no doubt that the needs of the disabled differ according to regions and areas; therefore, permanent assessment of these needs allows their fulfilment in order to improve the quality of life of those concerned. For organizational reasons these domains should involve areas of each province, which would provide at least an indicative determination of the frequency of occurrence of the types of needs. These needs should be divided into individual needs, dependent on the state of health, type and degree of disability. Some of them may occur typically for a given area of the country, which should encourage researchers to undertake research procedures.

The development of maps of health needs is a difficult task, from both the organizational and methodological aspects, and require high financial outlays. A high level of this undertaking may be provided by the performance of relevant tasks by an experienced multi-disciplinary team, directed by an epidemiologist possessing comprehensive knowledge in the domain of methodology of research and biostatistics [31,32].

Focusing attention on individual health needs provides great possibilities for targeting programmes of health education at the most critical types of health and social problems [33,34]. The higher the health knowledge, the greater the possibilities of the ill or healthy person to exert an effect (modulate) the level of own health.

Health needs – importance in assessment of the state of health

Determination of the types of health needs is always related with the state of health of a disabled person. They are the consequence of the type of causes for body dysfunction. This is an especially difficult task in the case of occurrence of multiple disability, also called complex disability. It constitutes a complicated structure of disability, and the fact of ‘inseparable whole’ of its two or more conjugated types [35]. The problems become considerably more complicated when the limitation of ability is non-typical and occurs very rarely.

The gradation of health needs differ, therefore while determining this gradation the time of realization and means should be specified. Actual health needs are divided into: 1) expressed health needs, i.e. those known from medical records, demographic data needs reported by the patient and/or family members – constituting approximately 20%; 2) non-expressed needs, i.e. needs which are not known to medical staff, mainly due to patients’ low health knowledge, or unwillingness to visit a physician. Here, should be mentioned organizational shortcomings of the health service, staff shortages, or non-systematic performance of statistical analyses (approximately 80%) [36].

In literature there are many definitions of health needs, the content of which covers different aspects, according to the causes of their occurrence, as well as research goals. The most frequent health needs include the need for treatment and nursing, need for care in the environment of life, institutional care needs, psychological needs, rehabilitation and education needs.

Effectiveness and reliability of diagnosing health needs is associated with the application of modern methods and ways of recognizing these needs. For methodological reasons, it is necessary for researchers to use knowledge in the domains of epidemiology and statistics [37].

Undoubtedly, the needs of the disabled differ in terms of regions, areas, and therefore permanent assessment of these needs allows their fulfilment in order to improve the state of health and the quality of life of these people. For this reason, there should be a requirement to develop maps of health needs. These maps are beneficial for both parties, i.e. those concerned and their families, as well as State administration on various levels of functioning.

In order to develop maps of health needs, information is necessary contained, among others, in medical records, mainly medical history. The outstanding specialist in the domain of public health, Professor A. Wojtczak, emphasizes that in medical facilities there is a lack of attention to the completion of data in applicable documents [38]. Many points are omitted while admitting the patient to hospital. These shortcomings effectively decrease not only the quality of statistical analyses, but also make it impossible to perform analyses of the occurrence of specified characteristics, both health and social.

Secondary disability as an unfavourable phenomenon of rehabilitation abandonment

The phenomenon of secondary disability has its causes in the lack or limited possibilities to continue widely understood care in the environment of life. This concerns mainly constant care and rehabilitation activities. For various reasons, also financial and lack of information, the support for the disabled at their place of residence is highly insufficient. Considerably more often this concerns persons living in rural areas and small towns. There is no longer any doubt that one of the end achievements of rehabilitation in the undertaking of work by the disabled person, with the workplace adjusted to the type of disability. Many disabled are exposed to the occurrence of so-called secondary disability. This is a state resulting from the lack of continuation of locomotor, psychological, and especially occupational rehabilitation, which contributes to a decrease or loss of skills acquired earlier during previously carried out rehabilitation. Secondary disability may be defined as a reappearing loss of functions, both physical and psychological which, within a relatively short period of time, lead to the detriment of rehabilitation achievements. Even more serious consequence of abandonment of the rehabilitation process or its stages may be the aggravation of body dysfunction in somatic and psychological spheres [39].

In considering the problem of disability, one should necessarily take into account the individual abilities of each person. Each cause of the loss or limitation of ability often has different consequences of somatic, psychological and social character. In order to reliably assess the results of neglect in care and rehabilitation leading to secondary disability, it is necessary to collect so-called support data concerning self-reported state of health, and determine health and social needs by the disabled persons themselves.

Undertaking the rehabilitation of patients in the state of secondary rehabilitation is possible, but it is extremely difficult to achieve the desired effects. Here, the greatest barrier in obtaining good outcomes are psychological aspects. For many disabled persons, financial difficulties play an important role in the limitations of rehabilitation.

Summary and conclusions

At present, the disabled persons constitute one-seventh of our globe. The latest estimation data show that this is over a billion people, a number which is constantly increasing [40,41]. In the light of the results by the National Census, in 2011 in Poland, there were 4,697,000 persons with disabilities, which is more than 12% of the population of the country. Similar to other countries, the percentage of the disabled in Polish society is determined in terms of estimates. The main cause of such a situation is the lack of uniform methods and principles for qualification into the group of the disabled. This is associated with the lack of unified definitions of a disabled person. Efforts on this problem became intensified as a result of classification documents by the WHO experts (1980 and 2001), and the International Classification of Functioning Disability and Health (ICF) [42].

Types of difficulties which are the consequence of the state of health of a disabled person

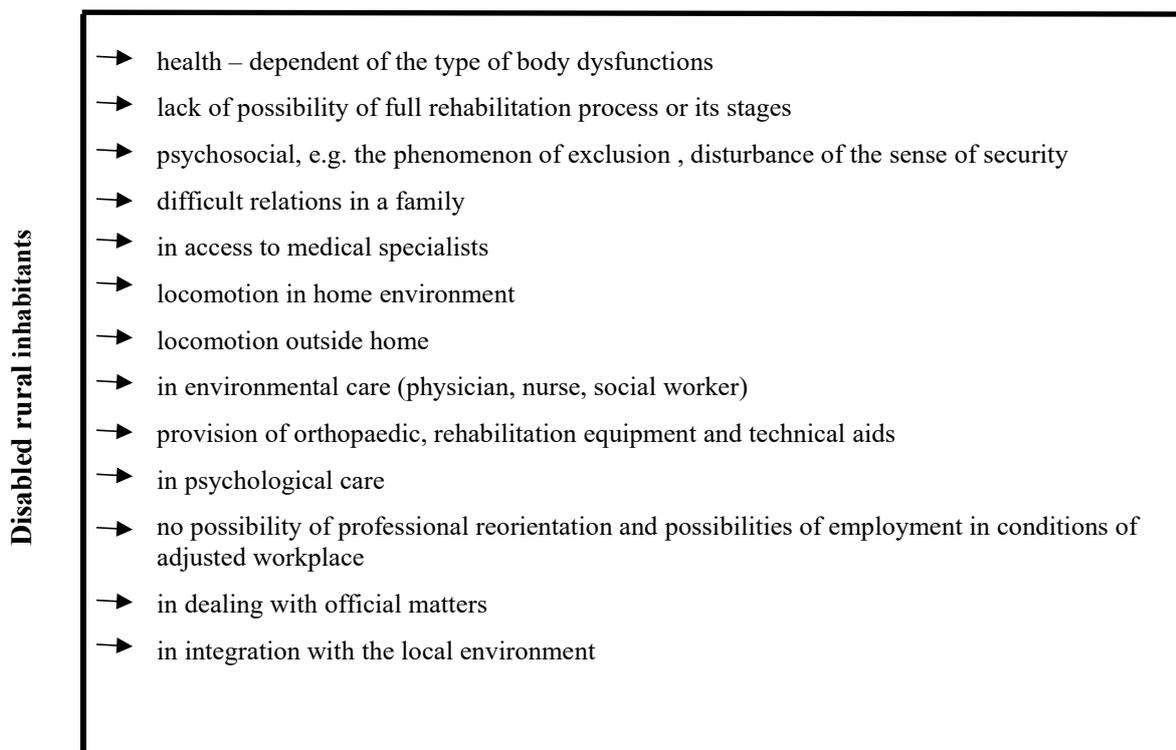


Figure. 1. Types of difficulties occurring as a result of health state dysfunctions (own compilation).

Figure 1 presents types of difficulties which are the complicated consequence of the state of health and types of body dysfunctions as a result of the character of causes. Overcoming by a disabled person of nearly all listed difficulties requires the completion of full rehabilitation process or its selected stages. This is the only method in overcoming marginalization and its effects.

The presented results of studies by various researchers dealing with the scope of problem of disability demonstrate that despite beneficial changes concerning certain health phenomena, there are many problems which are troublesome and very often difficult or impossible to solve or eliminate. The greatest problems of the disabled rural inhabitants are multimorbidity, lack or insufficient provision with rehabilitation, orthopaedic equipment and technical aids, loneliness and various forms of discrimination. It is necessary to carry out long-term health education addressed to rural inhabitants, not only those disabled but also the healthy. The problems of disabled rural inhabitants are also undoubtedly problems for public health. In order to determine health and social needs, systematic, multi-stage studies should be carried out by interdisciplinary teams. In order to develop individualized social programmes it is necessary to support these actions by local politicians in order to eliminate environmental, social, and infrastructural barriers [43].

High hopes for improvement of the quality of life of the disabled depend on the philosophy of the International Classification of Functioning, Disability and Health. This is the only classification to-date addressed to the needs for unification of assessment of the state of health with consideration of the environment of life of the disabled person, and evaluation of this person's potential. Similar to earlier ICF Classifications and definitions, this is a 'live' classification because efforts are continuing for its expansion and more detail.

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