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**Profil chorych kierowanych do leczenia w zakresie  
rehabilitacji ogólnoustrojowej**

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# Profil chorych kierowanych do leczenia w zakresie rehabilitacji ogólnoustrojowej

*The profile of patients referred for systemic rehabilitation*

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## Streszczenie:

Celem pracy było przeprowadzenie próby charakterystyki profilu pacjenta kierowanego do leczenia w zakresie rehabilitacji ogólnoustrojowej w warunkach stacjonarnych. Analizie poddano również ocenę skuteczności zastosowanej rehabilitacji u tych pacjentów.

Materiał badawczy stanowiły dane sprawozdane przez 24 oddziały rehabilitacji ogólnoustrojowej w warunkach stacjonarnych posiadające zawarte umowy z Łódzkim Oddziałem Wojewódzkim Narodowego Funduszu Zdrowia. Wszystkie świadczenia zostały wykonane w 2013 roku.

Badania wykazały, że najlichnieszą grupę pacjentów poddawanych rehabilitacji ogólnoustrojowej w warunkach stacjonarnych na terenie województwa łódzkiego w roku 2013 stanowili chorzy w wieku 46-85 lat (89,48% ogółu badanych). Analiza badań wykazała, że w grupie chorych w wieku 46-75 lat najczęściej sprawozdawane rozpoznanie dotyczyło „innych spondyloz”. Analiza trybu wypisów chorych z oddziałów rehabilitacji wykazała, iż tryb wypisu „skierowanie do dalszego leczenia w lecznictwie ambulatoryjnym” oraz „zakończenie procesu terapeutycznego lub diagnostycznego” stanowiły w każdej grupie wiekowej około 50% ogółu sprawozdawanych wypisów.

## Słowa kluczowe:

rehabilitacja ogólnoustrojowa, profil pacjentów, skuteczność rehabilitacji

## Abstract

*The aim of the paper is to create a profile for patients referred for systemic rehabilitation treatment in inpatient care. The efficiency of the rehabilitation used for these patients has also been analysed.*

*The research material consisted of data provided by 24 Systemic Rehabilitation departments providing inpatient care, which have agreements with the Łódzki Regional Branch of the National Health Fund. All services were performed in 2013.*

*The analysis of the provided research material indicated that a significant number of patients undergoing systemic rehabilitation in stationary conditions included patients in the 46-85 age group (89.48% of all respondents). The analysis of the provided research material indicated that "other spondylosis" was the most commonly reported diagnosis for patients aged between 46-75 years. The analysis of hospital discharge cards from the rehabilitation departments indicated that the discharge mode "Patient referred for further treatment in outpatient therapy" and "Completion of the therapeutic or diagnostic process" constituted approximately 50% of the total reported discharges.*

## Key words:

systemic rehabilitation, profile of patients, efficiency of rehabilitation

Systemic rehabilitation in inpatient care is designed for patients who, due to the continuation of treatment, require comprehensive rehabilitation services and twenty-four hour nursing and medical supervision. This is particularly the case for patients after injury, surgery and chronic disease exacerbation and who also require therapeutic, educational, preventive and other diagnostic activities [1, 2]. There are currently no publications available that provide

comprehensive analysis of the profile of physiotherapy patients in Systemic Rehabilitation Departments. The aim of the paper is to create a profile for patients referred for systemic rehabilitation treatment in inpatient care. The efficiency of the rehabilitation used for these patients has also been analysed.

The research material consisted of data provided by 24 Systemic Rehabilitation departments providing inpatient care, which have agreements with the Łódzki Regional Branch of the National Health Fund. All services were provided in 2013. The data used in this research were provided by the Łódzki Regional Branch of the National Health Fund. The data was analysed using Microsoft Office Excel 2007. The data obtained from the service providers was divided into 8 age groups: under 25 years, 25-35 years, 36-45 years, 46-55 years, 56-65 years, 66-75 years, 76-85 years and over 85 years of age. Research material was analysed taking into account patients' gender, age, hospital discharge mode and the most common primary diagnoses in a specific age group.

Analysis of the research material indicated that, in 2013, systemic rehabilitation in stationary conditions in the Łódź region under the agreements with Łódzki Regional Branch of the National Health Fund covered 7676 patients. The research material comprised data for 34% male and 66% female respondents.

Analysis of the provided research material indicated that a significant number of patients undergoing systemic rehabilitation in stationary conditions included patients in the 46-85 age group (89.48% of all respondents). The lowest number of patients undergoing rehabilitation in stationary conditions was in the "under 25" age group (0.60% of all respondents). The number of respondents from the 25-35 and "over 85" age groups was similar and amounted to 2.44% and 2.75% of all hospitalised respectively. It has been found that the number of patients in the 36-45 age group accounted for 4.73% of all respondents. (Fig. 1.)

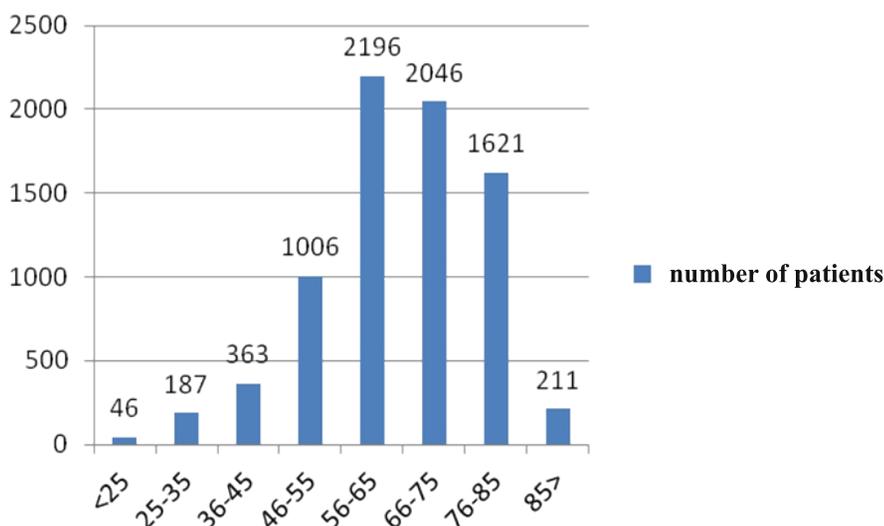


Fig. 1 The number of respondents included in the study

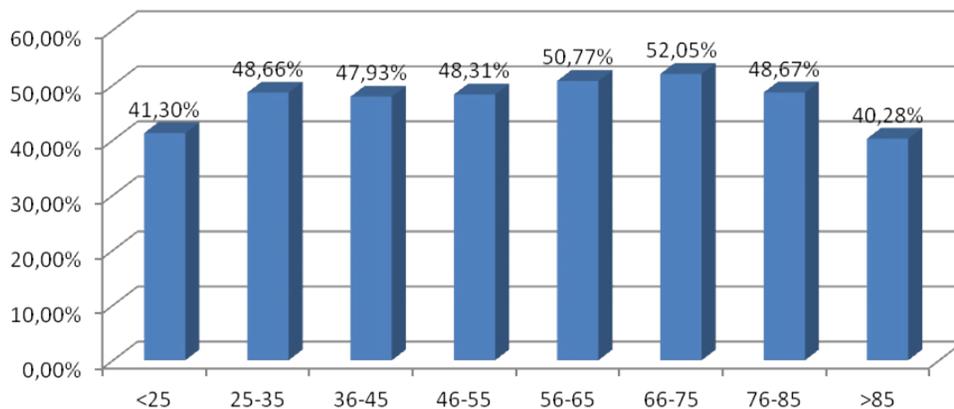
Analysis of the data provided indicated that two main discharge modes from the Systemic Rehabilitation Departments amount to 97.57% of all discharge types. Discharge due to the "Completion of the therapeutic or diagnostic process" was the case for 49.82% of all respondents, and discharge due to "Patient referred for further treatment in outpatient therapy" was the case for 47.75% of respondents (Table 1).

**Table 1. Hospital discharge mode**

Hospital discharge mode	%
Patient voluntarily left therapeutic facility performing medical activities in inpatient care and 24h care before the therapeutic or diagnostic process was completed	0.01%
Patient was referred for further treatment in a non-hospital therapeutic facility conducting medical activities in inpatient care and 24h care	0.09%
Patient was referred for further treatment in a different hospital	1.28%
Patient was referred for further treatment in outpatient care	47.75%
Discharge on the basis of Art. 29. Para. 1 Sec. 3 of the Act of the 15 April 2011 on medical activity (quote: "When the patient the patient flagrantly violates the rules of the hospital or the process of providing health services, while there is no risk that refusal or termination of the provision of health services may result in an imminent danger to their life or health or the life or health of others.") [3]	0.09%
Discharge at the request of the patient	0.83%
Completion of the therapeutic or diagnostic process	49.82%
Patient's death	0.09%
Lack of available data	0.04%

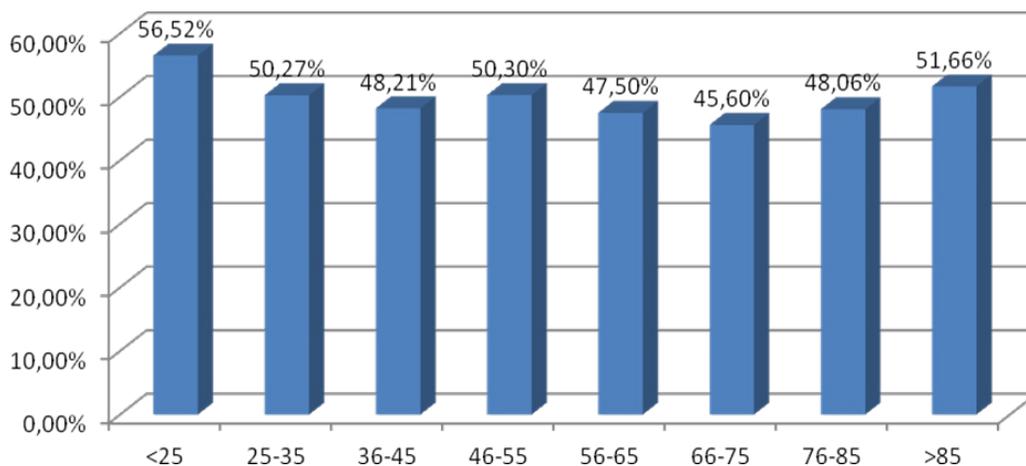
It needs to be assumed that the latter of these two modes of discharge ("the completion of therapeutic or diagnostic process" confirms the effectiveness of the rehabilitation process. The other mode ("Patient referred for further treatment in outpatient therapy") may indicate a lack of satisfactory rehabilitation results and the necessity for the therapy to be continued in an outpatient setting. The above quoted discharge modes were the most common in all age groups; other discharge modes did not exceed 2.5% of all respondents.

Discharge mode ("Completion of the therapeutic or diagnostic process" in specific age groups was the case for 41.30%, 48.66%, 47.93%, 48.31%, 50.77%, 52.05%, 48.67% and 40.28% of respondents respectively (Fig. 2).



**Fig. 2. The number of patients discharged due to the completion of the therapeutic or diagnostic process in different age groups**

Discharge mode "Patient referred for further treatment in outpatient treatment" in specific age groups was the case for 56.52%, 50.27%, 48.21%, 50.30%, 47.50%, 45.60%, 48.06% and 51.66% of respondents respectively (Fig 3).



**Fig. 3. The number of patients referred for further treatment in outpatient therapy in the different age groups**

Additionally 5 most common primary diagnoses for patients in specific age groups were analysed.

Data analysis of the data in the <25 age group years indicated that a majority of diagnoses involved nerve root and plexus disorders and lower extremity injuries. The most common diagnoses accounted for 4.35% of all diagnoses in the researched age group (Table 2).

**Table 2. The most common diagnoses reported in the <25 age group**

The most common diagnosis in the <25 age group	% Share in total of reported diagnoses for the <25 age group
G54 – Nerve root and plexus disorders	4.35%
G54.9 – Nerve root and plexus disorder, unspecified	4.35%
G81.0 – Flaccid hemiplegia	4.35%
M24.5 – Contracture of joint	4.35%
T93.3 – Consequences of dislocations, sprains and tears of the lower limb	4.35%

In the 25-35 age group, "Intervertebral disc disorders" (6.42%) the most common diagnoses, followed by "Consequences of lower limb fractures" (4.28%), "Other spondylosis," "Flaccid paralysis of the limbs" and "Nerve root and plexus disorders" (each 3.21%) (Table 3).

**Table 3. The most common diagnoses reported in the 25-35 age group**

The most common diagnosis in the 25-35 age group	% Share in total of reported diagnoses for the 25-35 age group
M51.1 – Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy	6.42%
T93.2 – Consequences of the other lower limb fractures	4.28%
M47.8 – Other spondylosis	3.21%
G82.0 – Flaccid paralysis of the limbs	3.21%
G54 – Nerve root and plexus disorders	3.21%

The research indicated that the most common diagnoses reported in the 36-45 age group included "Intervertebral disc disorders with radiculopathy" (9.09%), "Nerve root and plexus disorders" (5.23%), "Unspecified spondylosis" and "Other spondylosis" which accounted for 4.68 % and 4.13% respectively. The diagnosis of "Multiple sclerosis" totalled at 3.58% of cases (Table 4).

**Table 4. The most common diagnoses reported in the 36-45 age group**

The most common diagnosis in the 36-45 age group	% Share in total of reported diagnoses for the 36-45 age group
M51.1 – Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy	9.09%
G54 – Nerve root and plexus disorders	5.23%
M47.9 – Unspecified spondylosis	4.68%
M47.8 – Other spondylosis	4.13%
G35 – Multiple sclerosis	3.58%

Analysis of reported diagnoses in the 46-55 age group indicated that "Other spondylosis" was the most common diagnosis (10.04%). "Intervertebral disc disorders with radiculopathy" diagnoses accounted for 8.25% and "Multiple sclerosis" for 4.67% of all diagnoses. In this group hospitalisation was necessary more often due to increased recognition of "Degenerative changes of the hip" (4.37%). "Nerve root and plexus disorders" were reported in 3.98% of patients (Table 5).

**Table 5. The most common diagnoses reported in the 46-55 age group**

The most common diagnosis in the 46-55 age group	% Share in total of reported diagnoses for the 46-55 age group
M47.8 – Other spondylosis	10.04%
M51.1 – Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy	8.25%
G35 – Multiple sclerosis	4.67%
M16.0 – Primary bilateral coxarthrosis	4.37%
G54 – Nerve root and plexus disorders	3.98%

It was found that the most common diagnosis among respondents aged 56-65 resulting in hospitalisation in Systemic Rehabilitation Departments was "Other spondylosis" (10.84%). Diagnoses of "Intervertebral disc disorders with radiculopathy" accounted for 6.24% of all diagnoses in this age group and diagnoses of "Degenerative hip" for 5.37%. Diagnoses of "Osteoarthritis of the knee" accounted for 3.91% of all diagnoses and the "Unspecified consequences of a stroke (hemorrhage or infarction)" for 3.19% (Table 6).

**Table 6. The most common diagnoses reported in the 56-65 age group**

The most common diagnosis in the 56-65 age group	% Share in total of reported diagnoses for the 56-65 age group
M47.8 – Other spondylosis	10.84%
M51.1 – Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy	6.24%
M16.0 – Primary bilateral coxarthrosis	5.37%
M17.0 – Primary bilateral gonathosis	3.91%
I69.4 – Unspecified consequences of a stroke (hemorrhage or infarction)	3.19%

It was found that the most common diagnosis among respondents aged 66-75 resulting in hospitalisation in Systemic Rehabilitation Departments was "Degenerative changes of the spine" (15.10%), "Degenerative changes in the knee" (7.77%) and "Degenerative changes in the hip" (7, 33%). In this age group the number of diagnoses of degenerative changes in the knee was higher than for the number of diagnosis of degenerative changes of the hip. The research analysis indicated that the diagnosis of "Primary generalized osteoarthritis" accounted for 5.28% of all diagnoses, and the "Intervertebral disc disorders with radiculopathy" in this group accounted for 3.13% of all diagnoses (Table 7).

**Table 7. The most common diagnoses reported in the 66-75 age group**

The most common diagnosis in the 66-75 age group	% Share in total of reported diagnoses for the 66-75 age group
M47.8 – Other spondylosis	15.10%
M17.0 – Primary bilateral gonathosis	7.77%
M16.0 – Primary bilateral coxarthrosis	7.33%
M15.0 – Primary generalized (osteo)arthritis	5.28%
M51.1 – Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy	3.13%

Respondents in the 76-85 age group were most commonly referred to rehabilitation wards as a result of degenerative diseases of the spine (13.63%), primarily generalized osteoarthritis (10.55%), primary bilateral coxarthrosis (7.34%), primary bilateral gonathosis (6.85%) and femur fracture (4.94%) (Table 8).

**Table 8. The most common diagnoses reported in the 76-85 age group**

The most common diagnosis in the 76-85 age group	% Share in total of reported diagnoses for the 76-85 age group
M47.8 – Other spondylosis	13.63%
M15.0 – Primary generalized (osteo)arthritis	10.55%
M16.0 – Primary bilateral coxarthrosis	7.34%
M17.0 – Primary bilateral gonathosis	6.85%
T93.1 – Consequences of femur fracture	4.94%

For the oldest respondents, the most reported common primary diagnoses included "Consequences of femur fracture" (14.21%), "primary generalized osteoarthritis" (13.27%), "Other spondylosis" (8.53%), "Petrochanteric fracture" (4.74%), and "Consequences of a stroke" (3.79%) (Table 9).

**Table 9. The most common diagnoses reported in the <85 age group**

The most common diagnosis in the <85 age group	% Share in total of reported diagnoses for the <85 age group
T93.1 – Consequences of femur fracture	14.21%
M15.0 – Primary generalized (osteo)arthritis	13.27%
M47.8 – Other spondylosis	8.53%
S72.1 – Petrochanteric fracture	4.74%
I69.4 – Unspecified consequences of stroke (hemorrhage or infarction)	3.79%

## Conclusions

1. Studies have shown that the largest group of patients undergoing systemic rehabilitation in inpatient care in the Łódź region in 2013 included patients aged 46-85 as they constituted 89.48% of all respondents.
2. The research analysis showed that for patients aged between 46-75 years, "other spondylosis" was the most commonly-reported diagnosis.
3. The analysis of hospital discharge cards from the rehabilitation departments indicated that the discharge mode "Patient referred for further treatment in outpatient therapy" and "Completion of the therapeutic or diagnostic process" constituted approximately 50% of the total reported discharges.

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