ANNALES
UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA
LUBLIN-POLONIA
VOL. LXI, N1, 72 SECTIO D 2006

Chair and Department of Internal Medicine, Medical University of Lublin

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Patients hospitalized in the Department of Internal Medicine in the year 2004

In present societies life-time is prolonging. This causes the necessity of the health care and social care over the increasing number of patients. The range of the health care requires changes (11, 14).

The aim of the work was the analysis of reasons of hospitalization in the Department of Internal Medicine in terms of estimation of these needs and directions of prophylactical-therapeutic activities.

MATERIAL AND METHODS

Reasons hospitalization of patients treated in the Department of Internal Medicine in the year 2004 were established using international clasification of diseases. For the hospitalization in the Department of Internal Medicine were qualified patients from the Hospital-Rescue-Department and patients within the framework of planned hospitalization. In the year 2004 were hospitalized 2,418, persons, in this 1,429 women (59.10%) and 989 (40.90%) men. The average age was 64.5 years, for women 66.5 years, for men 61.7 years.

RESULTS

The age of patients hospitalized was showed in Table 1. The largest group (almost 1/3) were patients aged from 70 to 79 year of life. Half of the patients hospitalized were aged between 60 and 79 years of life.

Table 1. Age of patients hospitalized in the Chair and Department of Internal Medicine in the year 2004

Age	Women	%	Men	%	Together	%
to 49 year	211	8.73	199	8.23	410	16.96
50 – 59	212	8.77	220	9.10	432	17.87
60 – 69	260	10.75	222	9.18	482	19.93
70 – 79	458	18.94	222	9.18	680	28.12
Over 80 year	288	11.91	126	5.21	414	17.12
Together	1429	59.1	989	40.90	2418	100.00

Table 2 shows basic reasons of hospitalization in the Chair and Department of Internal Medicine in the year 2004. In Table 3 there are presented the reasons of hospitalization of patients in the youngest group, before the 49th year of life.

Table 2. Reasons for hospitalization in the Chair and Department of Internal Medicine, Medical University of Lublin in the year 2004

Reasons for hospitalization of patients treated in the Department in 2004	Number of patients	%
Cardiovascular diseases	1164	48.0
Endocrine diseases	723	29.9
Diseases of the digestive system	72	3.0
Diseases of the respiratory system	50	7.1
Psychical and behaviour diseases	35	1.5
Other	374	15.5

Table 3. Reasons of hospitalization of people treated in the Department in 2004 in the age group up to 49 year of life

Reasons of hospitalizations of people treated in the Department in 2004 in the age group up to 49 years of age	Number of patients	%
Cardio vascular diseases	120	29.27
Endocrine diseases	132	32.20
Diseases of the digestive system	32	7.80
Diseases of the respiratory system	13	3.17
Psychical and behaviour diseases	16	3.90
Other	97	23.66

DISCUSSION

The majority of hospitalized patiens in the department were women (59.1%). Among patiens hospitalized in the Department the prevalence of women appears after 60 years of age, in the following decades of life this percentage grows larger to the advantage of women.

The average age of women was higher by about 5 years as compared to men. It could be explained by longer average of life of women (in the year 2003 the average of life of women was 78.8 years, for men 70.4 years) (9). More frequent hospitalization of women also results from the structure of the population of Lublin province, where women make up 51.8% of the population, and in the city of Lublin – 53.8% in 2004 (3).

Among all persons hospitalized in the course of the analysed period, 156 (12.8%) patients died. Other authors (12) observed the mortality in internal departments similar to that observed by us, dependent on diagnosing. It was greatest in patients who required repeated hospitalizations (7, 10, 15).

From results published by other authors, in internal departments there are hospitalized mostly geriatric patients with numerous diseases who need specialistic treatments (6, 8, 9), which is confirmed also by our observations. If we focus on patients over 60 years of age, they constitute almost 2/3 hospitalized, according to GUS the population above 60 years of age was 16.6% (9).

It ought to be emphasized that the location of the Department in the university town, with a variety of specialistic departments has an influence on the profile of hospitalization.

Among the reasons for hospitalization a large group are the diseases of the circulatory system, with prevalence of hypertension and coronary heart diseases. Patients with hypertension make up 25.23% (610 persons) of all hospitalized. Patients with coronary heart diseases were 225 persons (9.3%), those with acute coronary heart syndrome – 133 patients (5.5% hospitalized). Dysrhythmia of the heart from the hyperexcitability and disturbances of conductivities which need an intervention occurred in 7.07% patients (177 persons) of hospitalized. The heart failure was recognized in 81 patients (3.35% of the hospitalized). Relatively small percentage constituted

patients with valval defects of the heart (1.28% – of the 31 hospitalized). Among the reasons of hospitalization there were not acute rheumatic diseases.

In the Department of Internal Medicine patients with diseases of the circulatory system compose an important part. The care over cardiac patients in other countries is organized similarly, they are hospitalized both in cardiological and internal departments (15).

Frequent hospitalizations for cardiovascular reasons are associated both with the considerable prevalence of the hypertension, coronary heart diseases, the atherosclerotic process of vessels in our population (2). Reasons for the hospitalization respond to reasons for the morbidity and mortalities in the Polish population. Among inhabitants of Lublin province the index of morbidity because of hypertension in the year 2003 was 100.9/10,000 of the population, coronary heart diseases 43.5/10,000.

In Lublin province, just as in the whole Polish population for many years, diseases of the circulatory system are at the first place among reasons of deaths (in the year 2003 in Lublin province they were at the bottom of deaths at 49.8%) (3).

For many years in Poland and all over the world the number of deaths from cardiovascular reasons has been close to neoplasms. These diseases decide about prognosis and life-times of the population (14).

Our research is concordant with observations made in Łódź, in the academic town with numerous specialistic clinics, similarly as in the Lublin centre, where comparisons of reasons for hospitalizing patients from three internist departments were made. Diseases of the cardiovascular system were determined as the reason for hospitalization in 54.7%, that is in the approximately similar percentage to our observations (48%) (4).

We focused on a large group of patients with endocrine diseases, where the prevailing part were patients with diabetes of type 1 and 2. They made up about 17.54% of the hospitalized (424 persons). Among patients with diabetes those with diabetes of type 2 were prevailing – 348 persons (82% patients with diabetes). Such a situation is not related only to a greater prevalence of diabetes of type 2, but surely also with more advanced age of these patients and with frequent cardiovascular complications. In Lublin province in 2003 the index of classifying to the active care was 33.7/10,000. of inhabitants, including about 20% with insulin dependent diabetes (3). Similar percentage of hospitalized patients with diabetes of type 1 with relation to diabetes of type 2 was observed in our department.

The remaining endocrine diseases were the cause of hospitalization considerably more seldom: hypothyroidism occurred in 2.52% (61 persons), hyperthyroidism in 2.23% (54 patients), hyperlipidaemia in 1.12 % (27 persons). The obesity as the basic reason of hospitalization referred to 2.48% (60 patients), the remaining part were other endocrinic diseases, occurring in small percentage of cases.

If we consider patients in the youngest group of hospitalized patients up to 49 year of age, at the first place among reasons for hospitalization were endocrinological diseases (132 patients – 32.20%), including 56 patients with the diabetes (13.66%), whereas diseases of the circulatory system occurred at the second place (120 patients – 29.27%). Less frequent hospitalizations from cardiovascular reasons in this age group were connected with young age of the patients, and also shorter duration of diabetes and complications .

Smaller percentage were those hospitalized due to respiratory diseases – 2.06% (50 patients), and the digestive tract diseases – 2.99% (72 patients). Among the diseases of digestive tract dominate the gastric and duodenal ulcers and their complications – 19 patients (0.79%), irritable bowel syndrome – 13 patients (0.54%), diseases of the liver including cirrhosis 0.50% – 12 patients, and the hernia hiatus of esophagus of the diaphragm – 11 patient (0.45%). The remaining diseases of the digestive system occurred in the low percentage.

The dominant reason in diseases of the respiratory system is the pneumonia and it refers to 0.995 (24) of the hospitalized as well as chronic obstructive lung disease (0.70% – 17 patients). More seldom the course of the bronchial asthma demands hospitalization (0.29% – 7 hospitalized patients), which can be surely connected with the better care over patients with the asthma and

with the availability of efficient drugs, and also with the presence of pulmonology and alergology departmens in Lublin.

A certain group of patients in departments of internal medicine made up patients with psychiatric disorders (in our research 1.5%) who create a problem for internist departments (13).

Among all patients treated in 2004 in the department there were 262 patients (10.91%) hospitalized many times. Twice repeated hospitalizations referred to 195 (8.2%) patients, 3 and more times were treated 67 (2.8%) patients. Similar observations noted Matorras Galan et al. (6) and many other authors. They described repeated hospitalizations of geriatric patients with chronic diseases (5, 8).

The causes of hospitalization correspond to reasons for the morbidity and mortality in the Polish population, which are connected both with the considerable prevalence of hypertension, coronary heart diseases, and atherosclerotic process in vessels.

Needs regarding diseases of the circulatory system are still large, which is confirmed by the quantity of hospitalized for cardiovascular reasons. The aging of the society will cause that the number of hospitalized people with diseases of the circulatory system will be increasing.

CONCLUSIONS

The reasons for hospitalization correspond to the reasons for morbidity and mortality in the Polish population, which is connected both with a considerable prevalence of arterial hypertension, coronary heart diseases, atherosclerotic vascular process and diabetes.

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SUMMARY

The reasons for patients' hospitalization in the Department of internal Medicine in the year 2004 were analysed. In that period, 2,418 people were hospitalized: 1,429 women (59.10%) and 989 men (40.90%). Among the hospitalized patients 410 (16.96%) were up to 49 years of age, aged 50–59 were 432 (17.87%), aged 60–69 were 482 patients (19.93%), aged 70–79 – 680 patients (28.12%), above 80 years of age – 414 patients (17.12%). Among patients 1,164 (48.14% of the hospitalized) were those with cardiovascular diseases, 723 (29.90%) with endocrinological diseases, with diseases of the digestive tract were 73 (3.01%) patients, with diseases of the respiratory system – 50 (2.06%) patients, and 408 patients (16.87 %) with other diseases. The largest group were the patients with heart diseases, where arterial hypertension and coronary heart disease were predominant. Patients with hypertension accounted for 25.23% (610 people) of all hospitalized. There were 225 patients with coronary heart disease (9.3%), including 133 patients with acute coronary syndrome (5.5% hospitalized). Disturbances of the heart rhythm from the hyperexcitability and conductivity disturbances occurred in 7.32% hospitalized patients (177 people). Heart failure was recognized in 81 patients (3.35% hospitalized). A relatively low percentage constituted patients with valval defects of the heart – 1.28% (31 hospitalized) and with other diseases of the circulatory system. Worthy of attention was a large group of patients with endocrinological diseases, of which the major part were the patients with diabetes of type 1 and 2, requiring hospitalization. They accounted for about 17.54% hospitalized (424 people). The other endocrinological diseases were considerably more seldom reason for hospitalization: 2.52% (61 patients) with hypothyreosis, 2.23% (54 patients) with hyperthyroidism, obesity – 2.48% (60 patients), hyperlipidemia in 1.12% (27 people); other endocrinological diseases occurred in a small percentage of cases. Worthy of note is a low percentage of patients with respiratory system diseases and GI tract diseases. The major part of hospitalized patients are those over 50 years of age with diseases of the cardiovascular system (over 50%) including those with arterial hypertension and coronary heart disease, and also with diabetes.

Pacjenci hospitalizowani w Klinice Chorób Wewnętrznych w roku 2004

Analizowano przyczyny hospitalizacji chorych leczonych w Klinice Chorób Wewnętrznych w roku 2004. W tym okresie hospitalizowano 2418 osób, w tym 1429 kobiet (59,10%) i 989 (40,90%) mężczyzn. W wieku do 49 lat hospitalizowanych było 410 osób (16,96%), w wieku 50–59 lat 432 osoby (17,87%), w wieku 60–69 lat 482 chorych (19,93%), w wieku 70–79 lat (680 chorych (28,12%), powyżej 80 lat 414 pacjentów (17,12%). Wśród hospitalizowanych były 1164 osoby (48,14% hospitalizowanych) z chorobami układu sercowo-naczyniowego, 723 (29,90%) z chorobami endokrynnymi, 73 (3,01%) z chorobami przewodu pokarmowego, 50 (2,06%) z chorobami układu oddechowego, z innymi chorobami było 408 (16,87%) chorych. Najliczniejsza grupa to choroby układu krążenia, gdzie dominowało nadciśnienie tętnicze i choroba niedokrwienna serca. Pacjenci z nadciśnieniem tętniczym stanowili 25,23% (610 osób) wszystkich hospitalizowanych. Pacjentów z chorobą niedokrwienną serca było 225 (9,3%) w tym z ostrymi zespołami wieńcowymi 133 chorych (5,5% hospitalizowanych). Zaburzenia rytmu serca z nadpobudliwości i zaburzenia przewodnictwa wymagające interwencji występowały u 7,32% chorych (177 osób). Niewydolność serca rozpoznawano u 81 chorych (3,35% hospitalizowanych). Stosunkowo nie-wielki odsetek stanowili chorzy z wadami zastawkowymi serca – 1,28% (31 hospitalizowanych) i pozostałymi chorobami układu krążenia. Duża grupa pacjentów to chorzy z chorobami endokrynnymi, przy czym przeważająca część to pacjenci z cukrzycą typu 1 i 2. Stanowili oni około 17,54% hospitalizowanych (424 osoby). Pozostałe choroby endokrynne były powodem hospitalizacji znacznie rzadziej: u 2,52% (61 osób) niedoczynność tarczycy, u 2,23% nadczynność tarczycy (54 chorych), otyłość u 2,48% (60 chorych), hyperlipidemie u 1,12% (27 osób), pozostałą część stanowili chorzy z innymi chorobami endokrynnymi, występującymi w niewielkim odsetku przypadków. Odsetek chorych z chorobami układu oddechowego, przewodu pokarmowego był niewielki. Wnioski: Znaczną część pacjentów hospitalizowanych stanowili chorzy po 50 roku życia z chorobami układu sercowo-naczyniowego (ponad połowę), w tym z nadciśnieniem tętniczym i chorobą wieńcową, a także z cukrzycą.