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Analiza struktury świadczeń zdrowotnych Szpitalnego Oddziału Ratunkowego Samodzielnego Publicznego Szpitala Klinicznego nr 4 w Lublinie

Analysis of the structure of health benefits of the Hospital Emergency Ward at the Public University Hospital No. 4 in Lublin

Streszczenie

Wstęp. Szpitalny Oddział Ratunkowy (SOR) jest strukturą organizacyjno-instytucjonalną medycyny ratunkowej o zasadniczym znaczeniu dla funkcjonowania systemu ratownictwa medycznego w Polsce.

Cel. Celem badań była analiza struktury świadczeń zdrowotnych Szpitalnego Oddziału Ratunkowego PSK 4 w Lublinie.

Materiał i metody. W pracy zastosowano analizę dokumentacji medycznej Szpitalnego Oddziału Ratunkowego PSK 4 w Lublinie w okresie 1.01.2008–31.12.2008.

Wyniki. Wyniki badań wskazują na fakt, że najwięcej świadczeń zdrowotnych w badanym roku udzielono w Izbie Przyjęć Ogólnej – 11 237 porad ambulatoryjnych i 18 317 hospitalizacji. Najwięcej porad miało charakter nagły i dotyczyło Izby Przyjęć Ogólnej – 99,47%.

Wnioski. Niepokojąca jest przewaga liczby świadczeń ambulatoryjnych w Izbie Przyjęć Ogólnej i Urazowo-Chirurgicznej w godzinach funkcjonowania poradni podstawowej i specjalistycznej opieki zdrowotnej.

Słowa kluczowe: szpitalny oddział ratunkowy, świadczenie zdrowotne, ratownictwo medyczne.

Summary

Introduction. The Hospital Emergency Ward (Polish SOR) is the institutional and organizational structure of emergency medicine and it is fundamental and decisive for functioning of the medical emergency system in Poland.

Aim. The aim of the study was the analysis of the structure of health benefits offered by the Hospital Emergency Ward at the Public University Hospital No. 4 in Lublin.

Material and methods. The analysis of medical documentation including a year period (01.01.2008-31.12.2008) of the Emergency Ward of Public University Hospital No. 4 in Lublin was used in this study.

Results. Findings point to the fact that in the examined period the most health benefits were offered in General Admissions Room –11 237 consultations at an outpatients' clinic and there were 18 317 hospitalizations. Most of the consultations were emergency and took place in General Admissions Room – 99.46%.

Conclusion. It is alarming that majority of the clinical consultations in General Admissions Room and Traumatic-Surgical Department were given at the time of the primary and specialist health care units operation.

Key words: emergency ward, health benefits, medical life-saving.

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INTRODUCTION

Medical emergency system is a system functioning as the compact and coordinated preparedness of people and organizational units immediately activated for bringing urgent health threats under control independently of the cause, the time and the place [1-3]. There are two models of the medical emergency in Europe: on delivery – Germanic, based on the first aid stations, from which ambulance teams leaving for the patient into the scene, after the preliminary diagnosis and stabilization, decide about further actions taken to the patients by delivering them to all sorts of specialist hospital centres. There are well organised admissions rooms at these hospitals.

The other British – American model is based on hospital emergency wards which constitute the basic link of the system.

The program initiated in 1999 entitled „Integrated Medical Rescue" gave grounds for creation of the medical rescue system in Poland based on both of the above mentioned models. The purpose of the program was the creation of the material base of a system including a network of hospital emergency departments, emergency medical teams, emergency notification centers, and the restructuring of the sanitary aviation, ensuring proper functioning of the emergency system in Poland.

In accordance with the act on the National Medical Lifesaving of 25.07.2001, Hospital Emergency Ward (Polish SOR) is an organizational – institutional structure of rescue medicine having principal, decisive role for functioning of the system of the medical emergency in Poland [4].

A lot of elements influence effective SOR actions, i.e. number of patients (daily, annual), their condition (good, medium, severe or critical), accessibility of the staff and specialists adequate to injuries and pathological symptoms (task forces), availability of highly specialist equipment, diagnostic and therapeutic apparatus, using by everyone working in SOR of rescue procedures and diligently kept documentation, including appropriately prepared medical and nursing documentation.

The statutory activities of hospital emergency departments are specified as: provision of health services, consisting of the initial diagnosis and treatment to the extent necessary to stabilize the vital functions of persons in a sudden threat to life or health.

It is particularly important in case of accident, injury, poisoning in children and adults, providing health care to victims of disasters and states of emergency, provision of medical care to patients and arranging transport to other healthcare facilities in need of specialist treatment [4].

Benefits from functioning of hospital emergency wards are identical with objectives of rescue medicine. They are to reduce the mortality due to sudden causes so-called „avoidable deaths", to reduce the number and size of disability, reduce pain and suffering caused by a sudden threat to the health or life, finally to increase the sense of social security from the fact of one's readiness to perform these tasks.

Financing of health services offered by hospital emergency wards should take the following elements into account: round-the-clock readiness of the ward, fees for rescue and treatment procedures performed in patients treated in the SOR, including diagnostic procedures in it (CT – computer tomography, MRI – magnetic resonance imaging etc) [5].

The primary task of a hospital emergency department is to take or continue immediate treatment of the of adults and children who are victims and being in life-threatening situations, initiated by emergency medical teams. The main tasks of SOR is: suppression of the pathophysiology processes of early death and maintaining basic life functions. Hence, the need to establish and undertake the initial causative treatment, an initial and often the final diagnosis in order to determine the size of the threat, stopping the development of a shock through intensive fluid resuscitation, relieving of pain, the initial treatment of injury and to decide on the nature and mode of transport to specialized branch after determining of targeted therapeutic strategies [6, 7].

The aim of the study was the analysis of the structure of health services of The Emergency Department at the Public University Hospital No. 4 in Lublin.

MATERIAL AND METHODS

An analysis of medical documentation including a period of a year (01.01.2008-31.12.2008) of the Public University Hospital No. 4 Emergency Department in Lublin was used in this study.

RESULTS

The collected material was analysed in the following categories: the consultations at outpatients' clinic and hospitalizations, and the mode of admissions: emergency or planned.

The studies included medical services offered in: General, Traumatic-Surgical and Pulmonological admissions rooms.

In the examined year the most consultations were made at an outpatients' clinic in Traumatic – Surgical Admissions Room – 12 314. Mostly they were consultations conducted in emergency procedures from 8.00 a.m. to 3.00 p.m. – 4793 (39%). Most consultations were offered in summer months, and the highest number was recorded in May – 1189 (9.65%), whereas lowest in January – 912 (7.4%). In Surgical-Traumatic Admissions Room 10 427 hospitalizations were noted, and in emergency: 2867 (28.01%).

In the studied year in General Admissions Room 11 237 consultations were offered, almost all of them were done in emergency mode – 11 180 (99.47%). Almost the half of consultations 5338 (47.5%) were offered during working hours – between 8.00 a.m. and 3 p.m. in specialist clinics and at family doctors – 5338 (47.5%). Most consultations were noted in December – 1049 (9.31%), whereas least in January – 851 (7.6%). Among all hospitalizations most were reported in General Admissions Room – 18 317, including 7230 (39.45%) in emergency.

Relatively a low number of the consultations at the outpatients clinic were noted in Pulmonological Admissions Room – 326, including every second case in emergency – 146 (45.4%). The number of pulmunological consultations was

in 2008 on the similar level: in January – 36 (11.04%), in December 28 (8.6%).

There were 10 times more hospitalizations than consultations at an outpatients' clinic – 3308, planned hospitalizations constituted the vast majority in this number – 2927 (88.6%).

DISCUSSION

For many decades rates of the periaccidental mortality and sudden deaths have been on higher average level in Poland than in other European countries. The scope, the quality and the time for rescue teams to get to the victim, which constitute so-called survival chains, have significant influence on these factors, including prehospital proceedings and diagnostic – therapeutic actions in hospital emergency wards. These teams function in accordance with the Act on the National Medical Emergency System, the Integrated Medical Emergency program as well as with resolutions of the Minister of Health [4].

In accordance with the act each person in the state of the sudden threat of the health or life should be provided with the possibility of being admitted to the nearest healthcare centre and offered health services in the appropriate time and on the appropriate level.

In the quoted acts and regulations a standard of hospital emergency wards functioning was developed by specifying the requirements they must fulfill to get the permission for performing 24-hour health services and equipping the ward with the equipment and apparatus ensuring monitoring and support of life functions [8, 9].

Anhefel suggested rescue procedures called „chain of survival" but according to Polish and foreign reports in many situations the "chain" fails: an injured person very rarely can rely on the properly offered first aid or if it is offered at all, too long distance for rescue teams to get especially out of the city, too long time needed for transport to the hospital, often in an inappropriate manner to injuries and diseases. Also poorly equipped hospital emergency wards (often because of disposing the equipment to other medical wards) and staff without specialization in rescue medicine, affect he situation [10, 11].

The studies of many authors confirm that the most frequent reasons for patients hospitalization in SOR are life-threatening conditions originated by cardio-vascular diseases: collapsing, arterial hypertension, angina pectoris, cardiac infarction, auricular fibrillation [12].

In the studied material in General Admissions Room 11 237 consultations and 18 317 hospitalizations were provided at an outpatients' clinic. It is alarming that the majority of the consultations at an outpatients' clinic took place at the working time of the primary and specialist medical care.

Car crashes, falls from the heights, hits by cars, are the most frequent causes of injuries in SOR patients. Also patients are brought to the hospital emergency ward because of shooting with the gas weapon, electrocution, as well as they are suicide patients. Men are more often subject of injures than women [12]. The analysed data point to significant majority of health consultations in Surgical-Traumatic Admissions Room – 12 314 consultations at an outpatients' clinic (including the majority in emergency) and 10 427 hospitalizations. Similarly as in the case of General Admissions Room, emergency ambulatory health services dominated, and they were offered between 8 a.m. and 3 p.m.

The most frequent injury in case of seniors (60-80 years) is isolated head injury and loco typico fractures of the radial bone often requiring the reposition in short-intravenous anaesthesia and spraining of the ankle joints. Fractures of femoral bone neck prevailed at persons over 80 years old. In the group of older patients a greater post-traumatic mortality was observed. Patients with isolated injuries of the ankle and the foot constitute other urgent cases of the traumatic origin not being in the life-threatening condition [12].

The data analysis included in the references confirms that 10-80% of the head injury victims are people in state of intoxication. However about 80% participants of rows admitted in SOR (victims of the abuse and assaults) were drunk and alcohol concentration in blood was average 1.0 per mill [13].

CONCLUSIONS

The findings indicate that in the studied year the most health services were performed in General Admissions Room – 11 237 consultations at an outpatients' clinic and 18 317 hospitalizations.

Most of the consultations were of emergency character and concerned General Admissions Room – 99.47%.

There is an alarming fact that the majority of clinical consultations were in General and Surgical Admissions Room in working hours of primary health care and specialist health care.

The Hospital Emergency Ward being the last link of "rescue chain" should focus on treating patients in the life-threatening conditions and not be the cure for the failing primary health care system.

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