

**THE CHARACTERISTIC OF HIGHLY FREQUENT USERS IN THE
EMERGENCY DEPARTMENT AT UNIVERSITY HOSPITAL CENTER
“MOTHER TERESA” IN TIRANA**

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Abstract

Highly frequent users of the emergency department are defined as people making more than 12 or more than 18 yearly visits. They are known to be socially and medically vulnerable population. Albania emergency service faces a huge influx of patients, who are not always true emergencies.

Methods. We conduct a retrospective study. To describe what is known about the highly frequent users in Emergency Department at University Hospital Center “Mother TERESA” in Tirana, we analyzed the data from January first- December 31th, 2012, obtained from the registry of emergency visits for this period. We defined as frequent users of the ED all patients (>18 years old) who visited at least 12 times, the ED, during the study period. We collected the demographic data: sex, age, residence, profession, diagnosis, treatment, and where is addressed the patient (is back at home, is hospitalized).

Results. 1.03% of all pt are highly frequent users of ED. Number of visits represents 5.9% of all visits to ED for the year 2012 (234 pt and 3012 visits). 80.9% refer to be

unemployed or retired, 58.1% are male. The majority of them suffered from HTA (27%), chest pain (25%), heart failure (15%), and alcohol and drug users (4.7%).

35.5% (83pt) e HFU have been admitted to the hospital, 13,3% of them (11 pt) have been admitted three or more times, 27,7% (23 pt) have been admitted two times. Only 88 pt (37.6%) have had at least once a referral from a family doctor.

Conclusions. Our figures are higher than those of other countries. This requires depth studies to identify causes that force the patient to appear more often in emergency department. Regarding the vulnerability of the population, we can not conclude, because our records do not have information on health insurance, and social aspects of life of the patients.

Key words: *frequent users, emergency service, vulnerable population*

Background. Highly frequent users of the emergency department are defined as people making more than 12 or more than 18 yearly visits (1). They are known to be socially and medically vulnerable population. Albania emergency service faces a huge influx of patients, who are not always true emergencies. The frequent users of emergency department are a heterogeneous group with different dimensions and profiles(1,2,3). They are a very vulnerable population. They are in poor health and they have some risk factors to be in poor health (4,5,6).

Methods. This was a retrospective study. Study period was from 1 January - 31 December 2012.

Place of study was Polyvalent Emergency Service in the University Hospital Center "Mother Teresa" in Tirana.

Medical registry of the emergency service (7) at the University Hospital Center was used for data collection. Registry was built based on a progressive number, and in this registry was collected information on time (hour) of submission, patient's name and surname, gender, place of residence (rural / urban , Tirana , other districts), type of referral, diagnosis, treatment and the final destination where patient was directed (admitted or

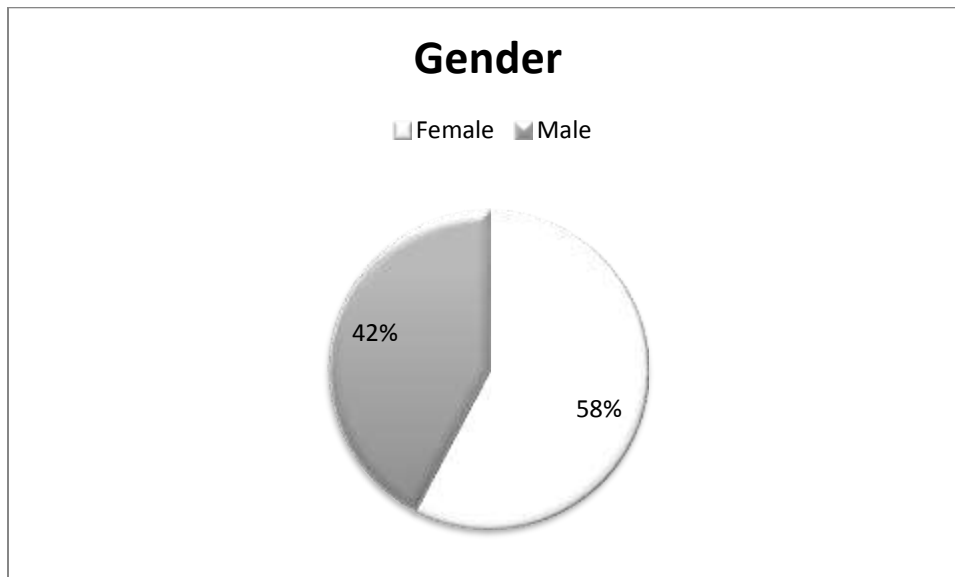
not) . We classified as frequent user of emergency service those patients who, in a year, have made more than 12 visits to the emergency service. The data were cleaned and checked for any deficiencies. Where information was not complete, the case was excluded from the analysis. Variables were coded to make data analysis easier. Adults only were included in this study (people over 14 years old). The diagnosis of patients was based on the international classification of diseases, ICD 9.

Different authors take different cut-off to determine the most frequent users of emergency service, starting from the 4 to more than 12 medical visits in a given year (8,9,10)

Results. In ED for this period were presented 22,718 patients, of which 1,03% (234 pt) were regular users, which had made 12 or more visits for the year 2012.

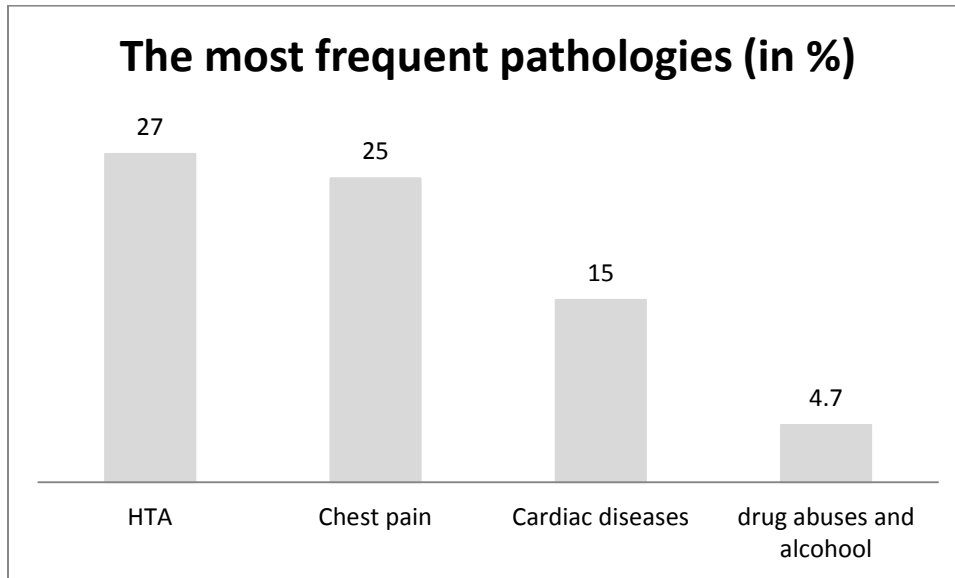
The average age of the most frequent ED users was 55.7 ± 10.33 years old, higher than the group that are not regularly frequent users (43.34 ± 9.32 years old), with a significant difference between them ($p < 0.001$).

57.7% (135 cases) of the most frequent users were female and 42.3% (99) males, without any statistically significant difference between them ($p = 0.235$). Graf1



Graf1. Presentation of frequent users by sex

The most frequent pathologies that this contingent of patients represented, were arterial hypertension (HTA) in 27% of cases, chest pain (25%), heart disease (15%) and alcohol or drug abusers (4.7%). Graf.2



Graf. 2 The most frequent pathologies in frequent users

Their number of visits accounted for 5.9% of all visits to emergency service for 2012 (pt 234 and 3012 visits). (0.8% Switzerland, ¹²)

These patients were at high risk of hospitalization, greater than random users of the emergency department. Frequent users are defined as "heavy users", for many other aspects of health care. Their characteristics vary according to the age, location and model of service that they have used.

The table 1 gives the time of presentation of the frequent users in the emergency department (ED) , where it is seen that the biggest number was registered at 8:00 to 10:00 (29%) and 17% of them at 10.00-12.00 am and about 37% of cases in the time interval from 16:00 to 20:00 pm.

Tab.1 Time of presentation in emergency department

Time of presentation in emergency	Frequency	Percent

6.00-8.00	2	0.85
8.00-10.00	68	29.06
10.00-12.00	40	17.09
12.00-14.00	2	0.85
14.00-16.00	5	2.14
16.00-18.00	40	17.09
18.00-20.00	47	20.09
20.00-22.00	7	2.99
22.00-24.00	7	2.99
24.00-6.00	16	6.84

Trying to collect information on whether patients were insured or not, showed that 80.9% of frequent users were unemployed (59.8%) or retired (21.1%).

So, the cost of treating these patients is very high.

Only 88 patients (37.6%) have had at least once a referral form from a family doctor.

Discussion

Frequent use of Emergency Services, is an indication of the problems that beset the health care system. Use of high emergency service, may not be an "abuse or misuse" of Emergency Services by many patients, but rather an indicator of unmet needs of these patients from primary care.

Important issue that deserves attention is the fact that patients with substance abuse disorders can not satisfy their needs for health care in addition to using the Emergency Service because of its accessibility and affordability.

The determination of the vulnerability of the population, we can not arrive at any conclusion, because our data do not have information on health insurance, and social aspects of life of patients.

So far in developed countries, the application of studies for case management have been successful in reducing the number of visits and emergency service costs. Efforts to divert patients from SHU are widely embraced in many countries, because many of these visits are set in accordance with medical necessity. In addition, patients have expressed their

preference for emergency care, often due to lack of health insurance documents and lower payments. (1,8,9,10)

Many frequent users of ED presented with real medical needs. This makes imperative to formulate a plan of interventions for this category (11).

The aim of intervention for the frequent user can reduce the use of ED. Management of cases, should be considered as intervention to reduce costs in the emergency department and can improve social and clinical outcomes(12). This should be useful for patients and hospitals be warranted. To implement case management for frequent users should initially becomes clear definition of what is a frequent user of ED.

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