Causes of admission of patients 18-30 years old in intensive care units

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CAUSES OF ADMISSION OF PATIENTS 18-30 YEARS OLD IN INTENSIVE CARE UNITS

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Abstract

Introduction: The causes that lead to the admission of young adults into Intensive Care Units (ICUs) are a multivariable phenomenon of modern times with a variety of social extensions.

Aim: The purpose of this study was to investigate the causes of admission of young adult population aged 18-30 in Intensive Care Units.

Method and material: The studied population consisted of people aged 18-30 years who were hospitalized in an Intensive Care Unit of Attica, Greece during the years 2016 and 2017. A specially formatted registration form was used to collect the data, which except for the demographic data, included variables related to the reasons of admission to ICU, the duration of the hospitalization, as well as the final outcome. The SPSS 23 statistical package and the x^2 method were used to analyze the data.

Results: The 71.1% of the study population were male and 28.9% female. Regarding nationality, 81.1% were Greeks, while 18.9% were foreigners. As a first cause of admission to ICU was the road traffic accidents with percentage of 41.2%, followed by pathological causes with 32%, postoperative monitoring with 16.2%, suicide attempts at 4.4%, drug abuse at 3.5%, and work-related accidents at 2.6%. The statistical analysis of the results showed that men were more frequently admitted into the ICUs compared to women with a statistically significant difference p <0,000. The marital status does not seem to be related to the frequency of admission, which also applies to nationality, comparing the percentage of foreigners in the sample with the percentage of the population, there was no statistically significant difference. By studying the other social and demographic characteristics, there was a statistically significant dependence of the causes of admission both with the profession (p = 0.001) and with the place of residence (p = 0,013). The overwhelming majority (87.5%) of drug addicts and 50% of those who attempting to commit suicide were unemployed.

Conclusions: It is identified that demographic and social characteristics affect to a large extent the admission of young people into the ICU.

Key words: Intensive Care Unit, causes of ICU admission, ICU hospitalization, young population, causes of admission.

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INTRODUCTION

The admission of young people under the age of 30 to hospitals and in particular to the Intensive Care Units (ICUs) is a complex phenomenon that varies between regions and countries.[1]

The ICU is an essential and indispensable part of a hospital, as severely ill patients with different diseases and unstable vital functions are unable to recover without constant monitoring and systematic support. Additionally, patients with critical illnesses in ICUs are known to be prone to rapid clinical degradation.[2]

Although a disease is the primary cause of hospital admissions, this is not the case when we refer to admissions of young people to ICUs, as other factors that involve extreme or intrusive behaviors are often responsible.[3,4]

According to studies, the most common causes of admission of young people to ICUs are social and financial reasons, such as poverty, unemployment, low level of education or even psychological reasons, like anxiety, low self-esteem, uncertainty and insecurity for the future, etc. As a result, these individuals are usually not accepted by the community and experience a form of exclusion, inability to adapt and coexist with the society and deviance from socially acceptable standards, resulting in dangerous or degrading behaviors, such as the use of violence, drug abuse, etc., which are significantly related to the admission into ICUs.[3-6]

AIM

The aim of the present research study was to investigate the causes of admission of young adults aged between 18 and 30 years old to Intensive Care Units in Greece, in relation to their demographic and social characteristics.

MATERIAL AND METHODS

The sample of the study consisted of N=228 patients aged between 18 and 30 years old, hospitalized in the General Intensive Care Units of two major general public hospitals of Attica, Greece during the years 2016 and 2017.

The sources from which the primary data of the survey were collected, are the ICU patient records and the Electronic Patient Register system of the two hospitals. The data collection was performed between March and May 2018.

The two hospitals selected for the collection of the sample data serve very large areas of Attica, with different social groups and strong multicultural character, without any limitation as of the type of incidents they serve. Moreover, these two hospitals are between the largest in the district of Attica, with 12 and 24 beds respectively, in total of three different ICUs.

All the data in the collection phase were recorded on a specially configured form and then transferred to Microsoft Excel spreadsheets, in order to be stored electronically. These spreadsheets were later imported to the SPSS 23.0 statistical package for the statistical processing.

During the statistical analysis, the demographic and social characteristics of the patients in the sample were studied in relation to those of the population and the causes of admission to the ICUs of the two hospitals were examined upon the different characteristics, the duration and the outcome of the hospitalization.

Ethics

In order to conduct this research, the necessary approvals were obtained from the Scientific Committee of each hospital, following corresponding requests to them by submitting the research protocol. The main condition for the approval of our research was the full compliance with the rules of ethics and confidentiality.

STATISTICAL ANALYSIS

All the categorical variables were described in the form of absolute and relative (%) frequencies. For the quantitative variables the mean values (± standard deviations), the median, the interquartile range and the prevailing value were calculated. In order to study the possible differences between the frequencies observed in the sample and the respective expected population values, the Binomial Test and the single-factor Chi-Squared Test were used. Examining the existence of correlation between two categorical random variables was performed using the Chi-Squared Test and the Fischer's Exact Test. For the cases of a categorical and a quantitative variables was performed by one-way ANOVA. The Pearson's correlation coefficient was calculated between two quantitative variables.

For data processing, the SPSS 23 statistical package was used.

RESULTS

Of the 228 patients studied, 71.1% (n = 162) were males and 28.9% (n = 66) were females. As regards the nationality, the majority of the patients were Greeks (81.1%, n=185), while 18.9% (n=43) were foreign patients. (Table 1)

Regarding their marital status, 83.8% of the patients were single, while 16.2% were married. At the same time, residents of Attica accounted for 77.2%, provincial residents was the 21.5% and the rest 1.3% concerned foreign citizens.

Regarding the education, the majority of the patients (55.3%) were high school graduates, 35.5% were graduates of higher education, while some patients were graduated from technical schools or they were illiterate. Concerning the profession, 39% were private employees, 28.1% were high school or university students, 24.6% were unemployed and 6.6% were public servants.

As regards the causes of admission, the most common ones were the traffic accidents with 41.2% and the pathological issues with 32%. Suicide attempts (4.4%), post-surgery treatment (16.2%), working accidents (2.6%) and drug use (3.5%) were additional recorded causes. (Table 2)

After the performance of Binomial tests on the sample, a statistically significant difference (p-value <0.000) appeared between the percentage of men and women that admitted to ICUs. On the other hand, the marital status and the nationality do not seem to be related to the admission frequency. (Table 3) Looking more closely at the differences between the two sexes, it was found that the first cause of men's admissions into ICUs was the traffic accidents (49.4%), the second was the pathological issues (27.2%) and the third cause was the post-surgery treatment (11.7%). Less often causes were the drug use (4.3%), working accidents (5.6%) and suicide attempts (3.7%).

For women, the first cause of admission was the pathological issues with 43.9%. The second cause was the post-surgery treatment (27.3%), the third was traffic accidents (21.2%) and the last causes were the suicide attempts (6.1%) and the drug use (1.5%). (Table 4)

Regarding the profession, it was found that unemployed was the

87.5% of the drug addicts, 50% of the people who attempted to suicide, 30.6% of those who admitted for pathological issues, 20.4% of those who were admitted due to traffic accidents and 8.6% of patients admitted after a surgery. (Table 4)

Regarding the outcome of the hospitalization in ICUs, the majority of the patients, 52.6%, were transferred to another clinic of the hospital, 15.8% of them died, while the 15.8% was transferred to Increased Care Units. (Table 5)

The average duration of the patients' hospitalization was 15.55 days (std. 20.4).

In terms of mortality by cause of admission, 33.3% of the deaths in ICUs occurred after road accidents, 33.3% due to pathological issues, 16.7% caused by drug use and 5.6% occurred after suicide attempts, work accidents and surgeries. (Table 6)

Finally, studying the other social and demographic characteristics, there was a statistically significant dependence of the causes of admission on both the occupation (p-value = 0.001) and the place of residence (p-value = 0.013). The overwhelming majority (87.5%) of drug addicts were unemployed, and 50% of those who attempted suicide were unemployed, too. For those who were hospitalized after surgery, only 8.6% of them were unemployed. On the other hand, many of them were private employees (48.6%) and students (37.1%). Moreover, the percentage of students who had a traffic accident was 38.7%.

Regarding the place of residence, 37.8% of residents of the provincial areas were admitted to ICU after surgery, while only a few of them were admitted due to suicide attempts, work-related accidents, drug use and pathological issues. A high percentage of the residents of Attica admitted due to a pathological issue (87.7%), while they represented the 100% of the suicide attempt admissions. (Table 4)

DISCUSSION

The results of this study showed that the causes of admission of young people to ICUs are related to their demographic characteristics. By comparing the percentages of males and females in the sample with those of the general population, there is a statistically significant difference in the admission frequency, indicating men as most frequently hospitalized in

ICUs compared to women. The current study showed that 71.1% of ICU admissions were about men and 28.9% were about women. As far as the nationality is concerned, 81.1% were Greeks and 18.9% were foreigners, which is very close to the distribution of the population of these ages in Attica, according to the Greek statistical authority.[7] The above results agree both with the Greek and international literature. A survey by Fakhouri et al.,[3] states that the majority of the admissions into the ICUs consisted of men by 57.9%, while a study by Ziala et al.,[4] reported that 74.9% of the total admissions of young adults in ICUs concerned men and 25.1% women, while 78.4% of them were Greeks and 21.6% foreigners.

As concerns the most frequent causes of ICU admissions, traffic accidents were the most frequent one with 41.2%, followed by pathological issues (32%), post-surgery treatment (16,2%), suicide attempts (4.4%), drug use (3.5%), and accidents at work (2.6%). Studies by Ziala et al.,[4,5,8] also report the traffic accidents as the main cause of admission of young patients to ICUs. Furthermore, Motshasham-Amiri et al.,[9] report that people aged between 20-29 years old were hospitalized twice more frequently due to traffic accidents than people of any other age group. By examining the different age groups (18-22, 23-26 and 27-30), there was a statistically significant difference in admission frequency, as it was found that adults between 27-30 were more frequently admitted into ICUs than the other two groups.

Regarding the causes of admission, it appeared that there are statistically significant more frequent admissions due to traffic accidents and pathological issues in contrast to the other causes. Also, the cause of admission seems to be related to the gender of the patients. Particularly high was the rate of men who admitted due to traffic accidents (85.1%), compared to that of women which was 14.9%, while the mean age of these patients was the 25 years. Vlachopoulos et al.,[10] found the same results with an admission rate of 82.2% for men and 17.8% for women and a mean age of 26.5 years.

Examining the admissions related to pathological issues, it was found that 39.7% of them were about women patients and 60.3% about men. The difference is for smaller post-surgery treatment, as the 51.4% of admissions were about men patients

and 48.6% about women.

It is worthy to mention that even for reasons with smaller number of admissions, the percentage of men was particularly high, as in the case of work-related accidents, where 100% of admissions were made by men and in the case of drug use, where men accounted for 87.5% of the total admissions. This may be explained by recent Eurostat figures, which show that more than two out of three non-fatal accidents in Europe were related to men and the difference between sexes was even larger for fatal accidents in the workplace, with 19 out of 20 fatal accidents involving men. This can be explained as men can be found more frequently in factories, manufacture places, and agriculture than women. An survey of the Greek statistical authority also shows that the ratio between men and women who had a work related accident is 3:1.[7,11] Also, in the case of drug use, European Center for Drug Addiction Research reports that the victims of drugs in Europe are mainly men.[12]

Examining the two sexes separately, the first cause of men admissions into ICUs was found to be the traffic accidents (49.4%), the second cause was the pathological issues with 27.2%, the third cause was the post-surgery treatment with 11.7% and less common causes were the drug use (4.3%), work-related accidents (5.6%) and suicide attempts (3.7%). For women, the most frequent cause of admission was found to be the pathological issues (43.9%), the second cause was the post-surgery treatment with 27.3%, the third cause was the traffic accidents with 21.2% and finally, the suicide attempts and the drug use with 6.1% and 1.5%, respectively. A survey by Tziala et al.,[4] indicates traffic accidents as the main cause of admission to ICU for both sexes, which in our study was partially confirmed, as it is the third most frequent cause of admission for women between the ages of 18-30. However, a recent survey on traffic accidents reports that the majority of men who were hospitalized for traffic accidents were aged between 20 and 29 years old, while women were aged between 30 and 39.[9] People above 30 years old were in our exclusion criteria and we did not study them and this may the reason why fewer women were found to be admitted due to traffic accidents in our sample.

No statistically significant correlation was found between the nationality and the cause of admission. However, half of the

drug-related admissions concerned foreigners, but the number of recorder incidents was very small. Statistically significant dependence was observed between the causes of admission and occupation, but also with the place of residence. The overwhelming majority of drug addicts were unemployed (87.5%), while 50% of those who attempted suicide were also unemployed, too. Research by Ayllón et al.,[13] states that there is a positive relationship between the level of unemployment and the consumption of narcotic drugs, such as cannabis and other illicit substances, as 1% increase to unemployment is linked to an increase of 0.68% to young adults who use cannabis, while in the case of other illicit drugs the increase is 0.49%. The majority of those who admitted for post-surgery treatment were private employees (48.6%) and students (37.1%). Also, a high percentage of students were admitted due to traffic accidents (38.7%). Finally, working accidents were mainly caused to private employees (83.3%), a result quite expected.

Concerning the place of residence, a high percentage of residents of Attica were admitted due to a pathological cause (87.7%), while they were the only ones who were admitted due to a suicide attempt, something that could be related to the demanding lifestyles of the big cities and the stress of everyday life experienced by people in the city in relation to the country's quieter living conditions. Additionally, high was the percentage of the provincial residents who admitted due to surgery (37.8%). Moreover, according to this study, 60% of all the admissions due to suicide attempt were about men and 40% about women. Also, 90% of those attempted to commit suicide were single and 50% were unemployed, while 60% of them were 27 to 30 years old and finally, in our sample, 100% of those who died due to a suicide attempt were men. Research by Mergl et al.,[14] mentions that men's suicide attempts are more lethal than women's, as they choose methods that, to a large extent, are leading to death. Heron's research reports that suicide is the 10th cause of death in America and that 11.2% of deaths are among people aged between 25-44.[15] A report from the World Health Organization also states that in Europe, men are led to death after committing suicide 4 times more than women, while proportionally fewer attempts were made by them.[16] The same result came to the Greek statistical authority for suicides in

Greece with a ratio of male and female deaths to 4:1.[7] Finally, Fond et al. who studied the deaths from suicide attempts in America, concluded that deaths from men's suicides increased by 2.2%, while from women's they decreased by 7.8%.[17]

The level of education and the cause of admission appears to be unrelated, however high was the percentage of people with technical education that had work-related accidents, which is highly anticipated.

By studying the relation between the age groups and the causes of admission, for each gender separately, marginal statistical results were observed for men. Among men between 18 and 22 years old, there were few admissions due to pathological issues (15.9%). On the other hand, this number is much higher for men between 27-30 year old (37.3%). Patients between 23-26 years old were admitted by 64.7% due to a traffic accident, while for those between 27-30 years old, the percentage was 39.8%. According to a study by Sotiriadou et al.,[18] who studied the driving behavior, men and especially young people are very often the ones that take part in traffic accidents, as they tend to consider their own driving behavior and ability to be superior to the rest, thus overestimating the capability of dealing with the various incidents that may arise during driving.

Correlating the outcome of the hospitalization with other variables, a statistically significant relationship was found with the causes of admission. 75% of those who admitted to the ICU due to drug use eventually died. According to studies, between 10% and 23% of mortality of people among 15-49 years old can be attributed to opioids use.[12,19]

Concerning the drug use, in the current study, 100% of those who were admitted to the ICU were are not married and 87.5% were men. 83.3% of deaths due to drug use were about men and 16.7% about women. According to Borriello et al.,[19] which took place in Italy, it was found that among the total deaths of drug users, 94% were men and 6% women, while drug-related deaths of women were recorded at a significantly lower degree than men's in every age group. Furthermore, statistics about the demographic characteristics of drug users in Greece indicate that the 85% of them are men with an average age of 31.8 years old, 62.3% are unemployed, while 37.6% high-school graduates. In addition, 39.6% of them are young people aged between 19

and 29 and 42.1% aged between 30 and 40 years old.[20]

Also, 12.8% of people admitted due to traffic accident died, of whom 100% were men. The high mortality rate of male following a traffic accident is consistent with a survey by the Greek statistical authority, which states that in the year 2016 all over the country the deaths of men after traffic accident were 5.5 times more than those of women.[7]

The outcome of the hospitalization presented a statistically significant correlation with the age groups. Of those who died, 61.1% were between 27-30 years old and many of those between 23-26 years old (30.6%) were transferred to an Increased Care Unit.

On the other hand, the outcome was not found to be correlated with the gender. However, it is worth-mentioning that 83.3% of those who died were men and only 16.7% were women. The majority (69.2%) of those who finally return to their home were hospitalized due to pathological issues, while the majority (61.1%) of those who were transferred into an Increased Care Unit had a traffic accident. In most causes of admission, the majority of ICU patients were transferred to another clinic of the hospital.

Analyzing in more detail the characteristics of the patients who died, there was no statistically significant correlation with the other characteristics. A marginal significant difference was only found between the percentage of men and women who died, 18.5% and 9.1%, respectively.

Considering the variance of the age of the patients in relation to their characteristics, statistically significant differences can be observed according to the marital status, profession and level of education. As regards the marital status, the mean age of the married patients was 29.22±1.36 years, while for the unmarried it was 22.15±4.15 years, a difference that was quite expected. About the level of education, there was a statistically significant difference between high school and higher education graduates, also reasonable, with an average age of 23.84±4.14 and 28.73±1.51 years, respectively. Concerning the profession, the mean age of the unemployed was 26.34±3.58 years, the civil servants' 28.8±1.32 years and the private employees' 28.36±2.17 years.

Regarding the variance of the age by cause of admission, it was found that the mean age of those who attempted suicide was 26 years, of those with work accidents was 27 years, the drugs users' was 26 years, for the patients with the pathological issues was 26.5 years, 25 years for those with traffic accidents and 25.8 years for the ones who had a surgery. In a corresponding study by Tziala et al.,[4] it was found that the average age of the persons admitted for attempting suicide was 27 years, of those with an accident at work was 25.5 years, for drugs users was 27 years, for pathological issues 26, for traffic accidents 23 and for surgical causes 24 years.

Studying the length of stay into the ICU, in this study, the mean value was 15.55 days. More specifically, for traffic accidents, the average length of stay was about 18 days, while in a study by Tzialla et al.,[5] the hospitalization of 18-30 year-old patients admitted after traffic accidents lasted in average 14.9 days. Still, statistically significant differences in the mean length of stay were found depending on the final outcome. More specifically, there was a difference between those who died (13.08±13.83 days) in relation to those transferred to an Increased Care Unit (28.94±28.31 days) and those who were transferred to another clinic of the hospital (12.11±17.68 days). Finally, the patients' age and their length of stay in ICUs were not found to be correlated.

CONCLUSIONS

According to the results of this study, it is found that the majority of the patients admitted into ICUs are male. About the causes of admission, traffic accidents are the main cause of ICU admissions and the second cause is pathological issues.

The causes of admission were found to be related to the gender of the patients. Particularly high were percentages of men admitted as a result of a traffic accident, drug use and suicide attempt, compared to women.

Moreover, correlations were found between the cause of admission and both the patients' profession and the place of residence. In addition, the overwhelming majority of those who admitted due to drug use and those who attempted suicide were unemployed, while the percentage of students who were involved in a traffic accident was also high. Regarding the place of residence, it seems that the inhabitants of the provincial areas are more often imported into ICUs after a surgery, while fewer

incidents were related to other causes.

The majority of those who attempted to commit suicide were single and in large percentage unemployed, while the age of most patients admitted for attempting suicide was between 27 and 30 years old.

Finally, as regards the outcome of hospitalization, the majority of those who were admitted to the ICU due to drug use mostly died. Also, it is worth mentioning that the large majority of patients who died after admitted in ICUs were males.

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ANNEX

Table 1. Sample frequency distributions

VARIABLE		FREQUENCY	PERCENTAGE %
SEX	MALE	162	71.1
	FEMALE	66	28.9
NATIONALITY	GREEK	185	81.1
	FOREIGN	43	18.9
MARITAL STATUS	SINGLE	191	83.8
	MARRIED	37	16.2
PLACE OF RESIDENCE	ATTICA	176	77.2
	PROVINCE	49	21.5
	ABROAD	3	1.3
EDUCATIONAL LEVEL	HIGH SCHOOL	126	55.3
	HIGHER EDUCATION	81	35.5
	ILLITERATE	2	0.9
	TECHNICAL SCHOOL	3	1.3
	UNKNOWN	16	7.0
PROFESSION	UNEMPLOYED	56	24.6
	CIVIL SERVANT	15	6.6
	PRIVATE EMPLOYEE	89	39.0
	STUDENT	64	28.1
	UNKNOWN	4	1.8

Table 2. Sample frequency distributions

CAUSES OF ADMISSION	FREQUENCY	PERSENTAGE %
SUICIDE ATTEMPT	10	4.4
WORK ACCIDENT	6	2.6
DRUG USE	8	3.5
PATHOLOGICAL ISSUE	73	32.0
TRAFFIC ACCIDENT	94	41.2
POST-SURGERY TREATMENT	37	16.2

Table 3. Binomial tests

VARIABLE	CATEGORIES	N	PERSENTAGE IN SAMPLE	PERCENTAGE OF COMPARISON	P-VALUE
SEX	MALE	162	.71	.49	**.000**
	FEMALE	66	.29		
MARITAL STATUS	SINGLE	191	.84	.84	.490
	MARRIED	37	.16		
NATIONALITY	FOREIGN	43	.19	.16	.139
	GREEK	185	.81		

Table 4. Correlation between causes of admission and gender, occupation and place of residence

| | CAUSE OF ADMISSION TO ICU | | | | | | p-value |
	SUICIDE ATTEMPT	WORK ACCIDENT	DRUG USE	PATHOLOGICAL ISSUE	TRAFFIC ACCIDENT	POST-SURGERY TREATMENT	
SEX							
MALE	6	6	7	44	80	19	
	3.7%	3.7%	4.3%	27.2%	49.4%	11.7%	
	60.0%	100.0%	87.5%	60.3%	85.1%	51.4%	0.000
FEMALE	4	0	1	29	14	18	
	6.1%	0.0%	1.5%	43.9%	21.2%	27.3%	
	40.0%	0.0%	12.5%	39.7%	14.9%	48.6%	
OCCUPATION							
UNEMPLOYED	5	0	7	22	19	3	
	8.9%	0.0%	12.5%	39.3%	33.9%	5.4%	
	50.0%	0.0%	87.5%	30.6%	20.4%	8.6%	
CIVIL SERVANT	0	0	0	6	7	2	
	0.0%	0.0%	0.0%	40.0%	46.7%	13.3%	
	0.0%	0.0%	0.0%	8.3%	7.5%	5.7%	0.001
PRIVATE EMPLOYEE	3	5	1	32	31	17	
	3.4%	5.6%	1.1%	36.0%	34.8%	19.1%	
	30.0%	83.3%	12.5%	44.4%	33.3%	48.6%	
STUDENT	2	1	0	12	36	13	
	3.1%	1.6%	0.0%	18.8%	56.3%	20.3%	
	20.0%	16.7%	0.0%	16.7%	38.7%	37.1%	
PLACE OF RESIDENCE							
ATTICA	10	5	8	64	67	22	
	5.7%	2.8%	4.5%	36.4%	38.1%	12.5%	
	100.0%	83.3%	100.0%	87.7%	71.3%	59.5%	
PROVINCE	0	1	0	9	25	14	
	0.0%	2.0%	0.0%	18.4%	51.0%	28.6%	0.013
	0.0%	16.7%	0.0%	12.3%	26.6%	37.8%	
ABROAD	0	0	0	0	2	1	
	0.0%	0.0%	0.0%	0.0%	66.7%	33.3%	
	0.0%	0.0%	0.0%	0.0%	2.1%	2.7%	

Table 5. Sample distribution according to outcome

OUTCOME	FREQUENCY	PERCENTAGE%
DIED	36	15.8
DISCHARGE FROM HOSPITAL	26	11.4
TRANSFER TO ANOTHER HOSPITAL	10	4.4
TRANSFER TO INCREASED CARE UNIT	36	15.8
TRANSFER TO ANOTHER CLINIC OF THE HOSPITAL	120	52.6

Table 6. Correlation between outcome/causes of admission (frequency - percentage by line - percentage by column)

CAUSE OF ADMISSION	OUTCOME					p-value
	DIED	DISCHARGE FROM HOSPITAL	TRANSFER TO ANOTHER HOSPITAL	TRANSFER TO INCREASED CARE UNIT	TRANSFER TO ANOTHER CLINIC OF THE HOSPITAL	
SUICIDE ATTEMPT	2 20% 5.6%	0 0% 0%	0 0% 0%	2 20% 5.6%	6 60% 5%	0.000
WORK ACCIDENT	2 33.3% 5.6%	1 16.7% 3.8%	2 33.3% 20%	0 0% 0%	1 16.7% 0.8%	
DRUG USE	6 75% 16.7%	0 0% 0%	1 12.5% 10%	0 0% 0%	1 12.5% 0.8%	
PATHOLOGICAL ISSUE	12 16.4% 33.3%	18 24.7% 69.2%	3 4.1% 30.0%	8 11% 22.2%	32 43.8% 26.7%	
TRAFFIC ACCIDENT	12 12.8% 33.3%	3 3.2% 11.5%	3 3.2% 30%	22 23.4% 61.1%	54 57.4% 45%	
POST-SURGERY TREATMENT	2 5.4% 5.6%	4 10.8% 15.4%	1 2.7% 10%	4 10.8% 11.1%	26 70.3% 21.7%	