

Epidemiology of occupational accidents in five Portuguese hospitals between 2000-2010.

Martins Matilde DS¹, Barbieri Maria CF², Correia Teresa IG³

Polytechnic Institute of Bragança; Institute of Sciences Abel Salazar; Research Center in Sport Sciences, Health Sciences and Human Development¹
School of Nursing of Oporto; University of Oporto; Institute of Sciences Abel Salazar²
Polytechnic Institute of Bragança; Research Center in Sport Sciences, Health Sciences and Human Development³

Introduction: hospital workers perform their activity in terms of potential professional risk, namely accidents at work. These setting a public health problem by the individual, social and economic repercussions that entail.

Aims: analyze the epidemiology of occupational accidents in five Portuguese hospital units between 2000 and 2010 and examine the variables that correlate with work absenteeism.

Methods: retrospective cross-sectional epidemiological study for the period of January 1st, 2000 and December 31st, 2010. The information was obtained through anonymous survey for accident notification 3382 workers. Data collection was performed by one of the researchers, after authorization of the Board of Directors between March and September 2011 on working days between the 09:00 and the 17:00 hours in occupational health service.

Results:

Chart n°1- Distribution of accidents throughout the years.

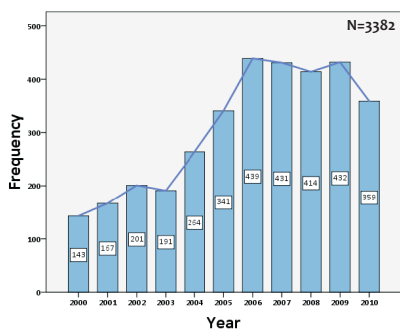


Table n°1 - Characterization of the sample.

Variables	N	%
Gender		
Female	2805	82,9
Male	577	17,1
Qualifications		
<9º year	954	28,2
>9º ≤12º year	449	13,5
High Level Course	1979	58,5
Jobs		
SHT*	1954	57,8
MA**	1112	32,9
Administrators	138	4,1
Other staff	178	5,3
Age group		
20-29 years	982	29,1
30-39 years	891	26,4
40-49 years	785	23,3
50-59 years	617	18,3
> 60 years	107	3,2
Period of service		
<5 years	1246	36,8
5-10 years	695	20,5
> 10 years	1441	42,6
Time Table		
Fixed	588	17,4
Shifts	2794	82,6

*Superior Health Technicians; **Medical Auxiliaries

In the morning period there are usually (65,2%) of accidents of the total

Table n°2 - Characterization of the accidents.

Variables	N	%
Place of accident		
Internment	1377	40,7
Urgency Service	444	13,1
Surgery block	308	9,1
Room between services	164	4,8
Pharmacy/Lab	138	4,1
External appointment	150	4,4
Stairs	73	2,2
In itinere	178	5,3
Others	550	16,3
The action that lead to wound		
Pinch with needle/Cut with an object	1728	51,1
The fall of the labour/objects	791	23,4
Excessive efforts/wrong movements	515	15,2
Caught between objects	139	4,1
Exposed to dangerous situations	161	4,8
Others	48	1,4
The cause of the injury		
Tools/instruments	1634	48,3
Pavement	579	17,2
Keep patients steel	444	13,1
Means of transport	144	4,3
Others	581	17,1

On average the accidents occurred at 12.8 hours (± 4.6 s), on Monday (18%) in the first two working days after weekly rest (56.8%) and between the 1st and 3rd hour of work (47.1%).

Table n°3 - Consequences of the accident

Variables	N	%
Type of Injury		
Wound	1517	44,9
Sprain / Strain	651	19,2
Contusion / Crushing	462	13,7
Fracture	151	4,5
Dislocation	112	3,5
Others	489	14,2
Part of the body affected		
Superior members	1870	55,3
Inferior members	541	16,0
Body	481	14,2
Head	287	8,5
Various	203	6,0
Missing job		
Without absent	2368	70,0
With absent	1014	30,0

The total of days lost at job were 45 817 of days, changing between the minimum of 1 and the maximum of 941, with the average per accident of 45,36 days.

Through the pearson correlation, we see that the number of days lost is positively and significantly correlated with the time of service, the type of injury and age and negatively with the academic qualifications, the number of hours completed by the accident, the day of the week and the year.

Conclusions: labour absenteeism increases with age, time of service, low academic qualifications and in the early hours of work. The data provide scientific support to implement preventive measures and health protection of workers in hospitals.