THE FEATURES OF INFECTIOUS DISEASES DEPARTMENTS AND ANTI-INFECTIVE PRACTICES IN FRANCE AND TURKEY: A CROSS SECTIONAL STUDY

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INTRODUCTION

The aim of this study was to assess the infectious diseases (ID) wards of tertiary hospitals in both countries for technical capacity, infection control, characteristics of patients, infections, infecting organisms, and therapeutic approaches.

MATERIAL AND METHODS

This cross-sectional study was carried on a single day in one of the weekdays of June 17-21, 2013. Overall 36 ID departments from Turkey (n=21) and France (n=15) involved. SPSS 15.0 (SPSS Inc., Chicago, IL, USA) for Windows Evaluation Version was used for statistical analysis. Descriptive statistics were presented as mean ± standard deviations, frequency and percentage. Student's t-test was used to compare continuous variables. Pearson chi-square or Fisher's exact tests were used to compare categorical variables as appropriate.

Figure 1. The cities where the participant centers in this study are located in France and in Turkey

RESULTS

In the study day, 273 patients were hospitalized in Turkish and 324 patients were followed in French ID departments. Numbers of patients and beds in the hospitals, presence of ICU room in the ID ward was not different in both France and Turkey.

Table 1. The features of infectious diseases departments on the study day in Turkey and France*

	Turkey	France	P value
Total number of participant centers	21	15	
Hospital capacity			
Mean number of hospitalized patients	763.4±351.6	710.6±408.9	0.712
Mean number of hospital beds	1002.4±446.4	1154.6±587.9	0.390
The ID wards			
Number of patients in the ID wards	273	324	
Mean number of patients in the ID wards	13.4±6.4	25.6±13.7	0.005
Bed occupancy rates in the ID wards	13.4/18.0	25.6/25.9	0.008
Status of the intensive care unit (ICU)			
Presence of ICU room in the ID ward	4 (19.0)	1 (6.7)	0.376
Total number of ICU room in the ID wards	13 (61.9)	6 (40.0)	0.194
Total bed number of ICU rooms in the ID wards	22	6	
Status of the negative pressure rooms (NPRs)			
Total number of centers with a NPR	3 (14.3)	8 (53.3)	0.025
Total number of NPRs	7	30	
Presence of room oxygenation system	20 (95.2)	14 (93.3)	1.000
Microbiology laboratory in the ID wards	15 (71.4)	3 (20.0)	0.002

*Data are presented as mean ± SD or No. or No. (%). ID, Infectious diseases; ICU, Intensive care unit.
**Pulsed field gel electrophoresis (PFGE) , Real time-polymerase chain reaction (RT-PCR)

Bed occupancy in the ID ward, single rooms, negative pressure rooms were significantly higher in France. Presence of a laboratory inside the ID ward was more common in Turkish ID wards. The configuration of infection control committees, and their qualifications, and surveillance types were quite similar in both countries. Although differences existed based on epidemiology, the distribution of infections were uniform on both sides. In Turkey anti-Gram positive agents, carbapenems, and tigecycline and in France cephalosporins, penicillins, aminoglycosides, and metronidazole were more frequently preferred. Enteric gram negatives, and hepatitis B and C were more frequent in Turkey while HIV and streptococci were more common in France (*$p<0.05$ for all significances*).

CONCLUSIONS

Various differences and similarities existed in France and Turkey in the ID wards. However, current scene is that IDs are managed with high standards in both countries.