

Emergency Department Mortality: Fair and Square

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Background:

This study explored the therapeutic approaches used for end-of-life (EOL) patients admitted to the emergency department (ED) and examined whether the decision to perform life-extending treatment (LET) or to allow natural death (AND) depends on patient characteristics, medical staff variables, and ED setting.

Methods:

A retrospective archive study was conducted from January 2015 to December 2017 in the ED of a tertiary hospital. The study sample were 674 EOL patients who had died in the ED. For each patient, data were collected and measured for dying process (LET vs. AND), patient characteristics, ED-setting variables, and medical-staff characteristics. The coprimary outcomes measured were the proportion of patients who received LET and the rate of contribution of each characteristic to the therapeutic approach.

Results:

The proportion of EOL patients undergoing LET increased from 18.1% in 2015 to 25.9% in 2016 and to 30.3% in 2017 ($p=.010$), and a quarter of them were treated by emergency medical services. Males tended to receive LET more than females ($p<.001$). An association was found between Jewish physicians and nurses and AND ($p=.001$). Heavier workload in the ED and greater severity of the triage classification predicted more LET (OR=1.67, CI=1.05-1.76, $p=.003$ and OR=1.42, CI=0.60-0.81, $p<.001$, respectively). Receiver operating characteristic analysis showed that patient characteristics contributed most crucially to the therapeutic approaches (C statistic 0.624-0.675, CI=0.62-0.71).

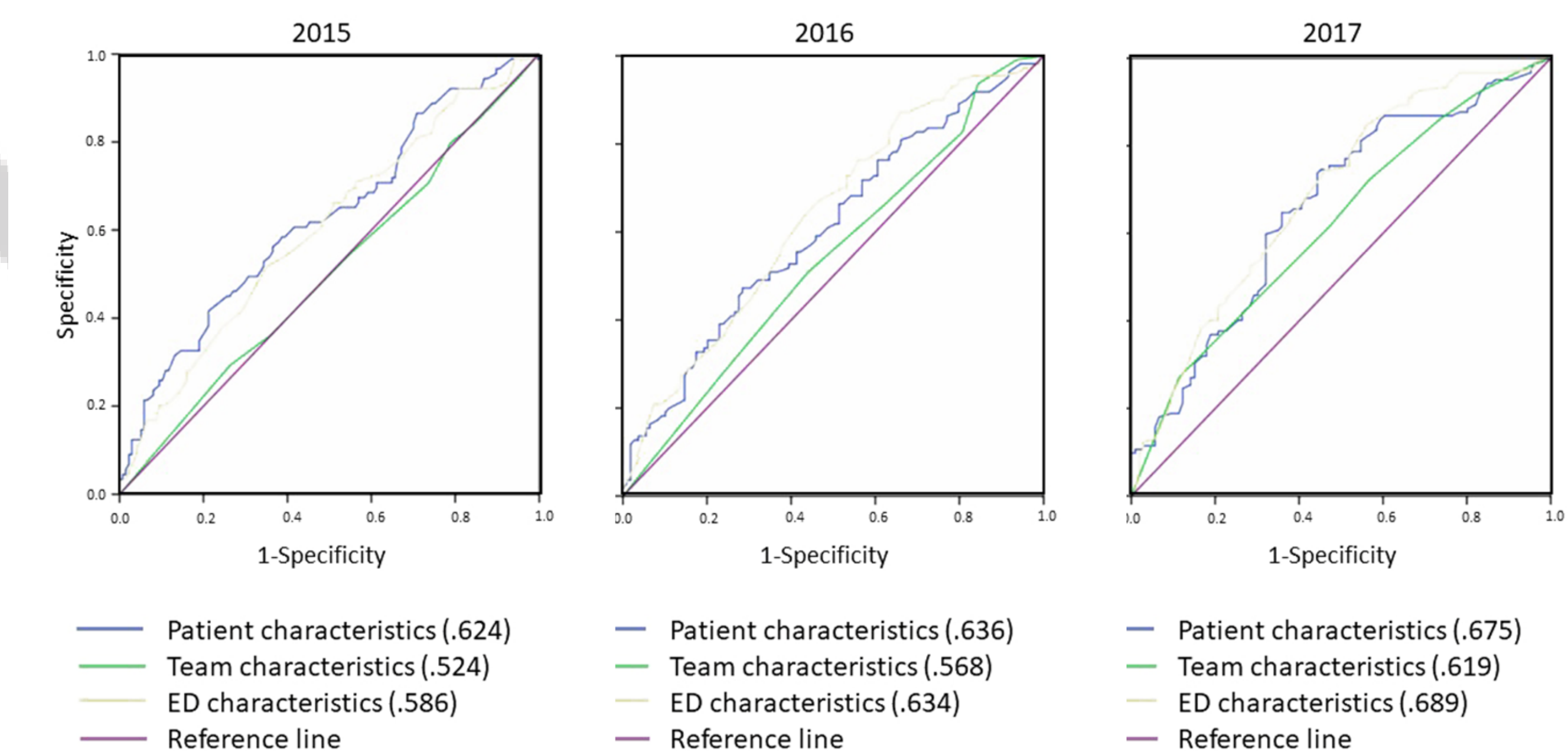


Figure 2 ROC Analysis To test the additive value of patient characteristics, team characteristics and ED-setting variables on dying-process

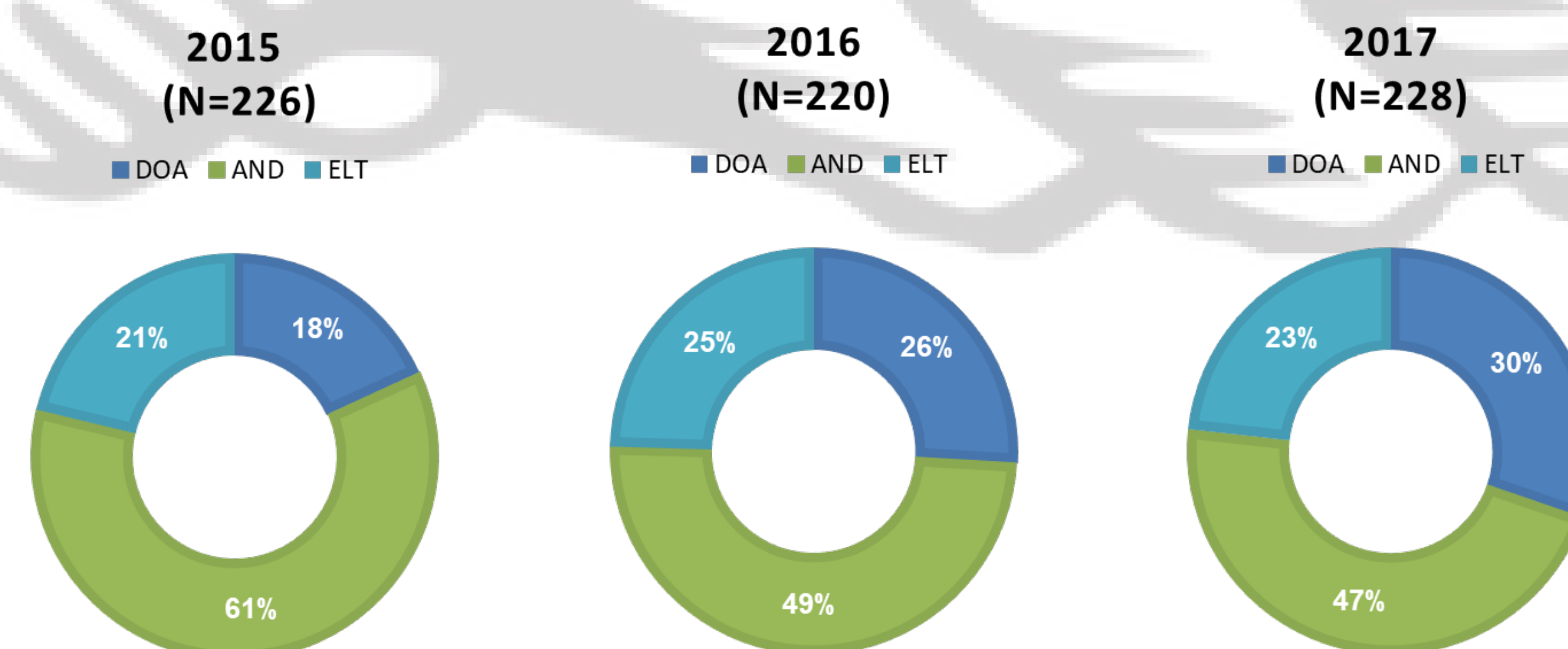


Figure 1: The distribution of the way of death during the study period.

Conclusion:

The therapeutic approach used for EOL patients in the ED depends on variables in all three treatment layers: patient, medical staff, and ED setting. Applicable national programs should be developed to ensure that no external factors influence the dying-process decision.