CHARACTERISTICS OF SINGLE VEHICLE ACCIDENTS IN EUROPE
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INTRODUCTION
- Single vehicle accident (SVA) is a type of road accident in which only one vehicle and no other road user is involved.
- Almost one third of all road fatalities in the EU occurred in single vehicle accidents during 2006-2015.
- In 2015, 8,066 persons were killed in SVAs in the EU countries.

OBJECTIVE
The objective of this research is the analysis of characteristics of single vehicle accidents in European countries by the use of the EU CARE database with disaggregate data on road accidents.

METHODOLOGY
- Macroscopic road accident data from the EU CARE database for the 28 EU countries over the period 2006-2015.
- Road accident data involving SVAs correlated with basic safety parameters:
  - casualty age and gender
  - type of vehicle
  - area type and type of road
  - season of the year
  - lighting conditions etc.
- Available risk exposure data from other international data files (Eurostat, etc.).

ROAD SAFETY TRENDS OF SVAs
- The number of SVA fatalities decreased by 39% between 2006 and 2015.
- The highest decreases in SVA fatalities among the EU countries were recorded in Estonia (63%) and Spain (59%).
- The percentage of SVA fatalities overall road all fatalities varied within a narrow range over this decade.
- In 2015, the lowest SVA fatality rates per million population were recorded in the UK (6.1) and Sweden (8.8).
- The highest SVA fatality rates were recorded in Latvia (31.2) and Greece (30.9).

ROAD SAFETY PARAMETERS OF SVAs
- The highest percentages of killed drivers in SVAs concern the 25-49 years old age group.
- Almost 60% of all killed drivers aged 18-24 years were killed in SVAs.
- Males account for 83% of the SVA fatalities in the EU countries.
- 62% of the SVA fatalities occurred outside urban areas.
- A third of all motorway fatalities in the EU occurred in SVAs.
- 37% of all fatalities at no junction area involved a single vehicle, compared with 14% at a junction.
- In 2015, the peak of the SVA fatalities occurred in July and August (22%).
- One third of all fatalities in darkness concerned SVAs (34%).
- The respective percentage in daylight/twilight is below 30%.

DISCUSSION
- SVAs differ at a significant level from other types of road accidents, since specific types of road users or vehicles are most commonly involved in such accidents.
- A more detailed statistical analysis would contribute to the identification of the combined correlation of the parameters with an impact on SVAs and the underlying reasons behind the related fatalities.

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