

Data Analysis

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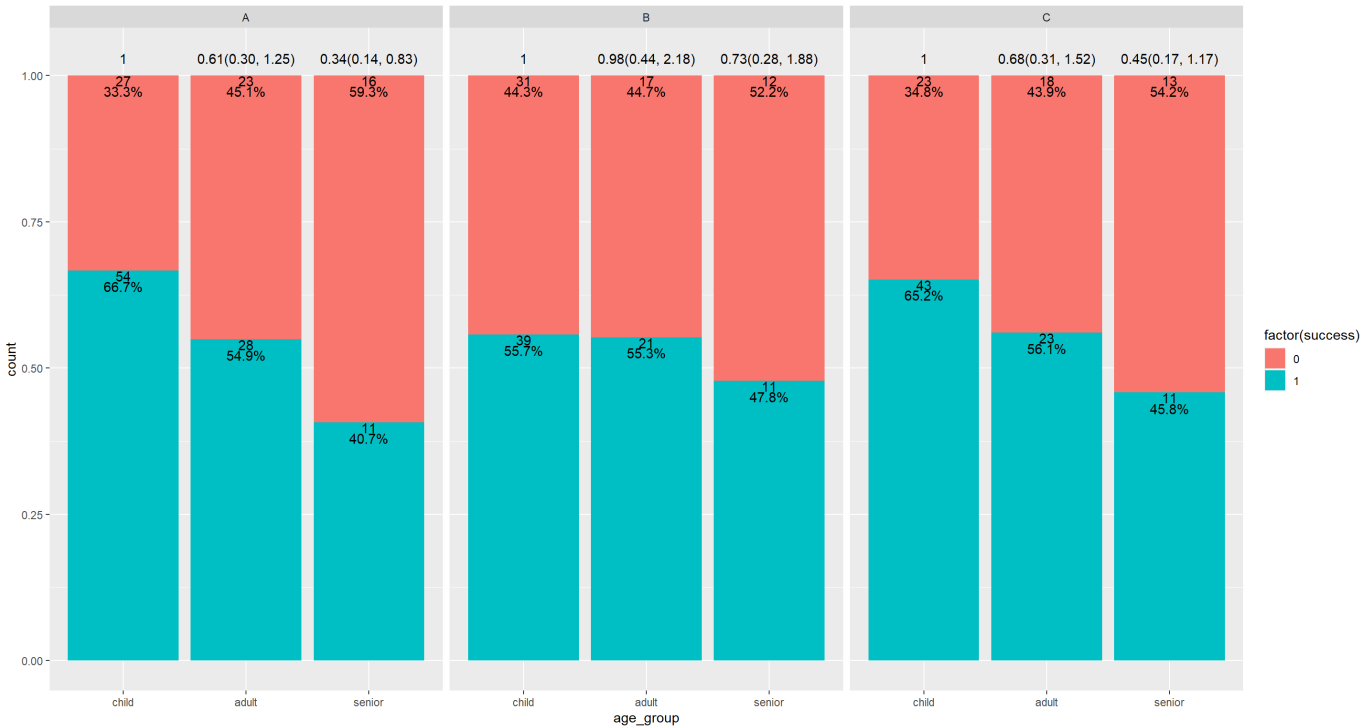
Bar plot with proportion as well as odds ratio / univariate analysis

Plots below include information of

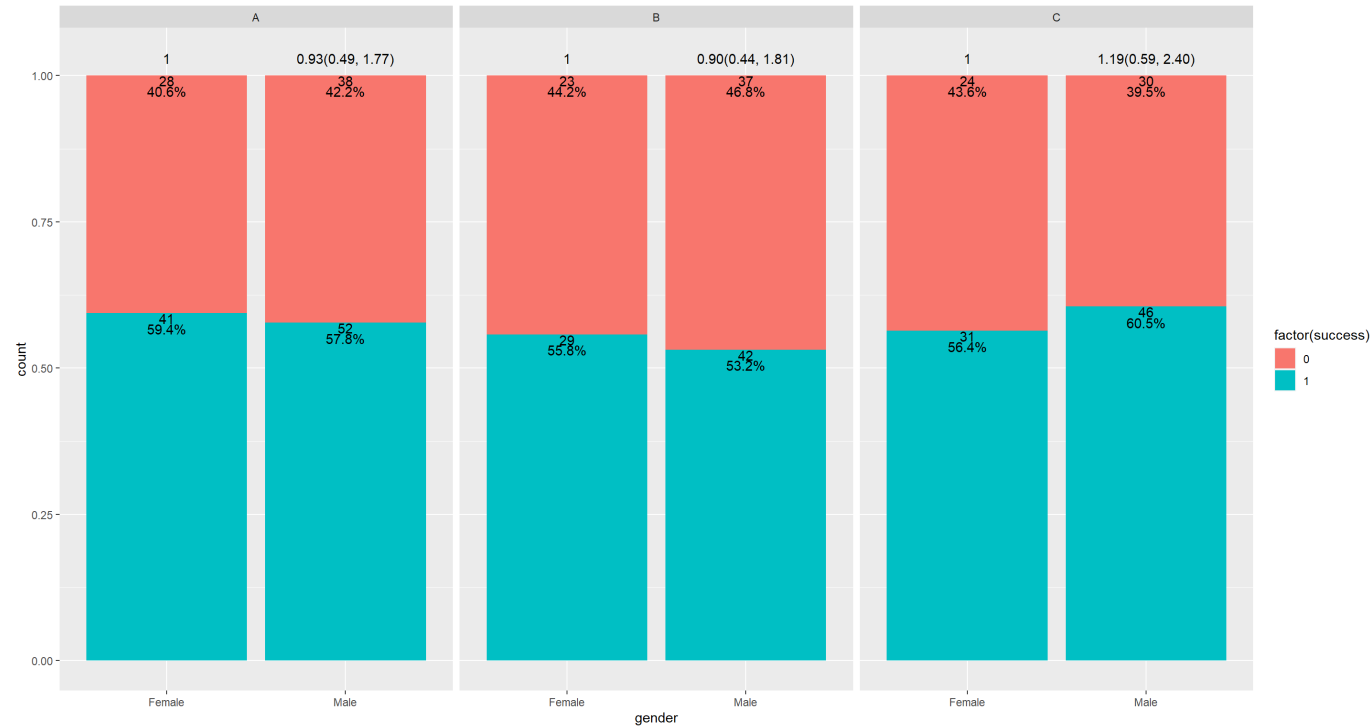
- Number of patients
- Proportion of Patients by success or not
- Odds ratio and its 95% confidence interval with the reference group (always the first subgroup)

by treatment and subgroup.

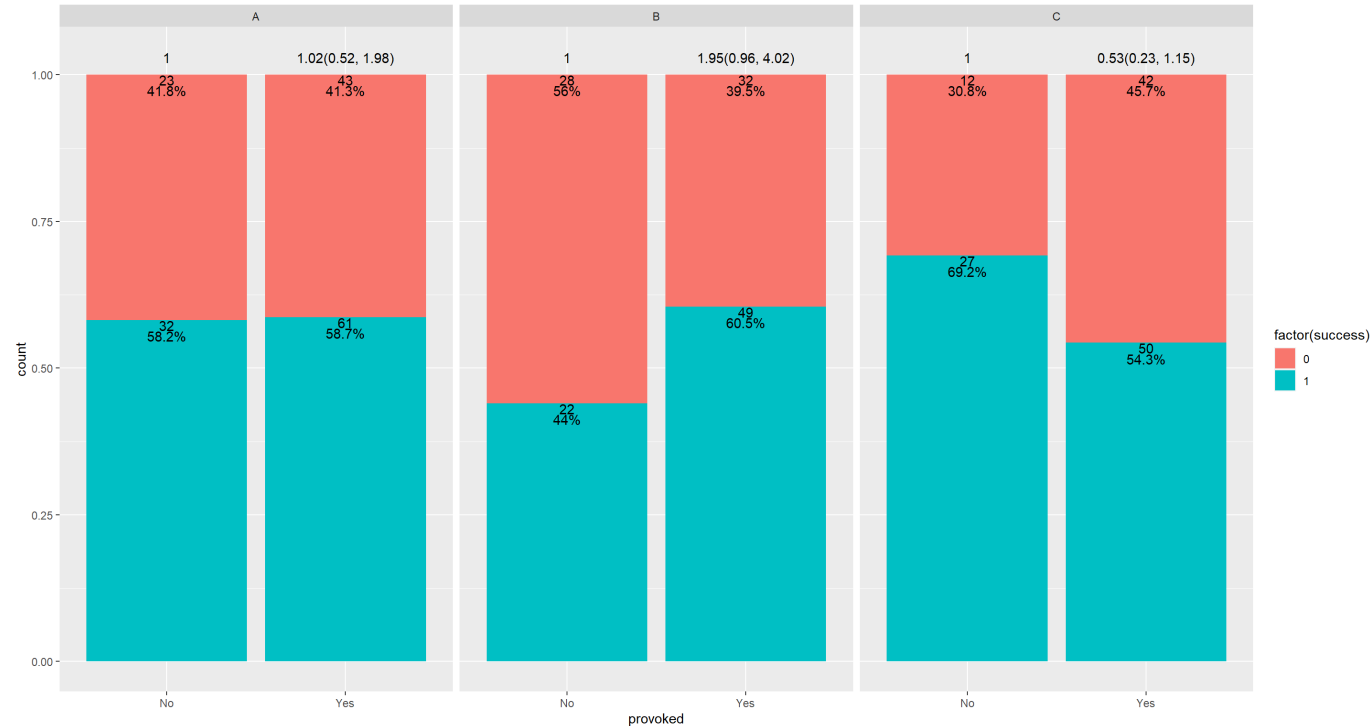
age group



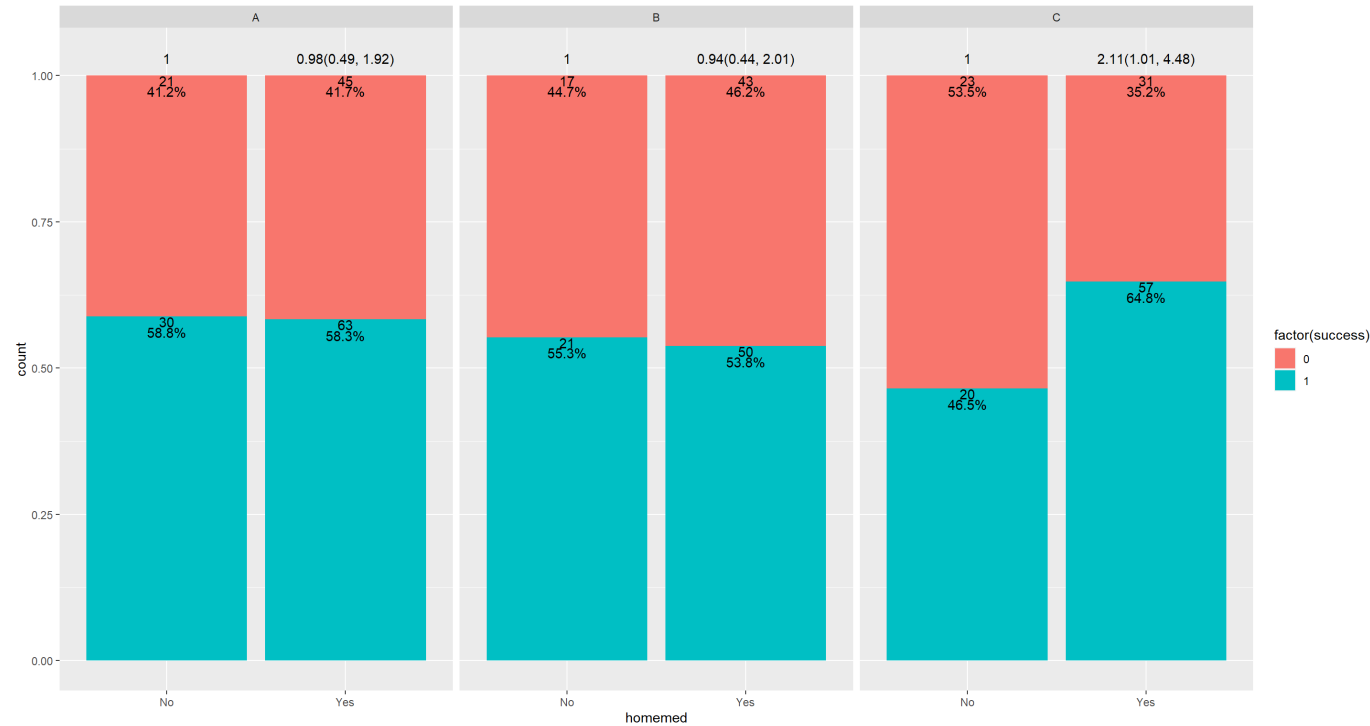
gender



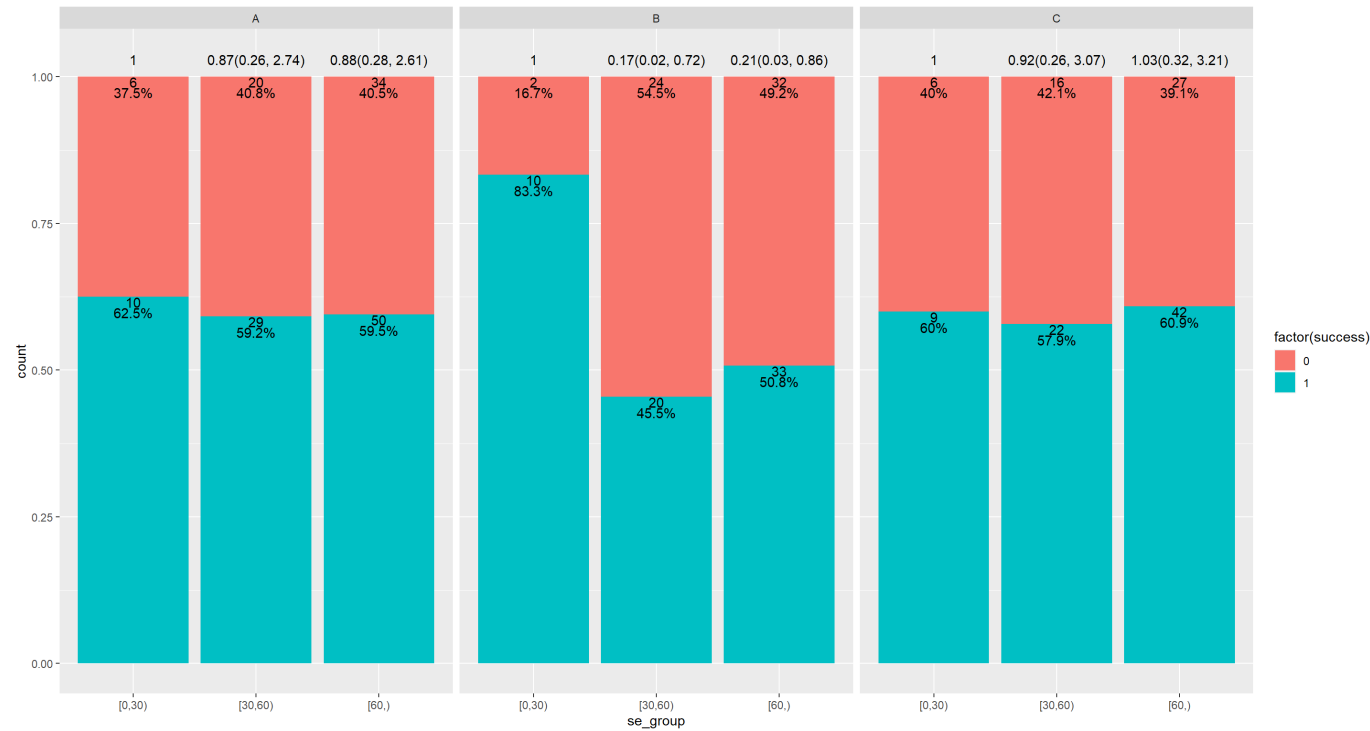
Provoked or not



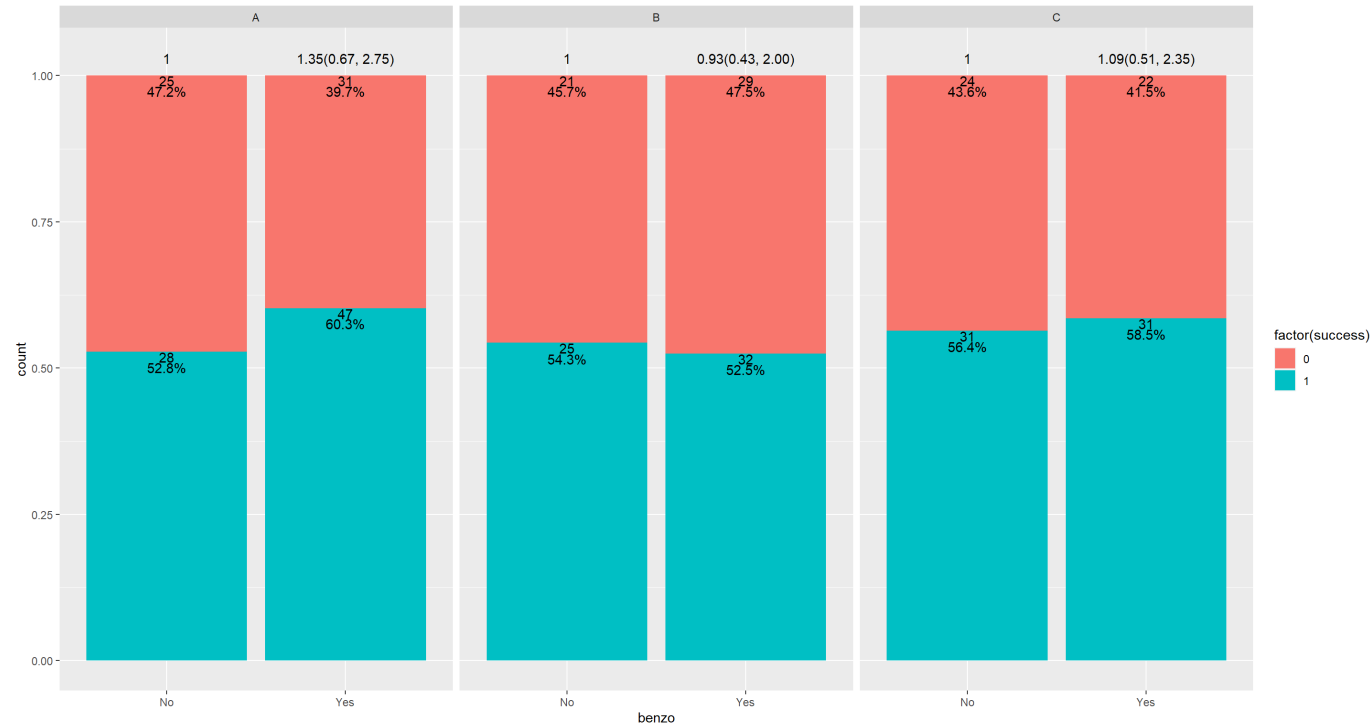
Home antiepileptic medication



Seizure duration 0/30/60/ (n = 392)

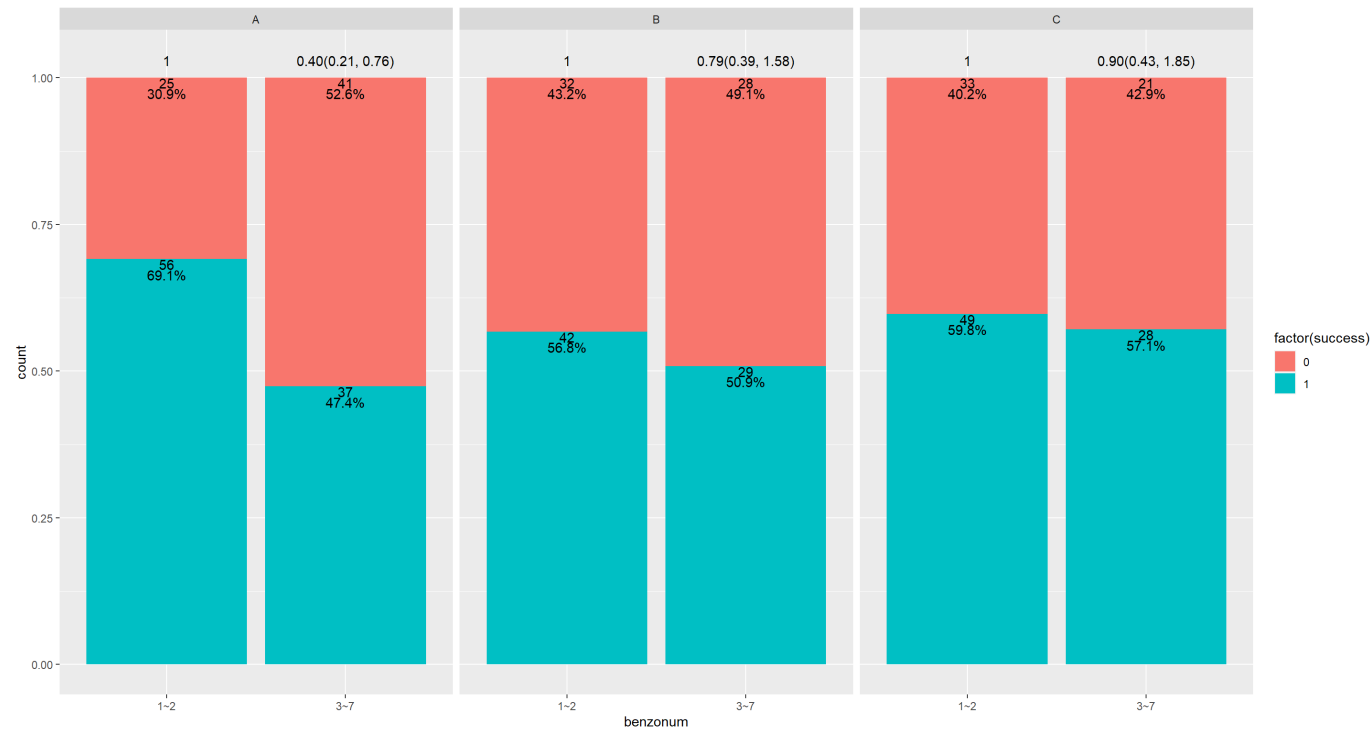


Benzodiazepine prior to ED visit (n = 346)

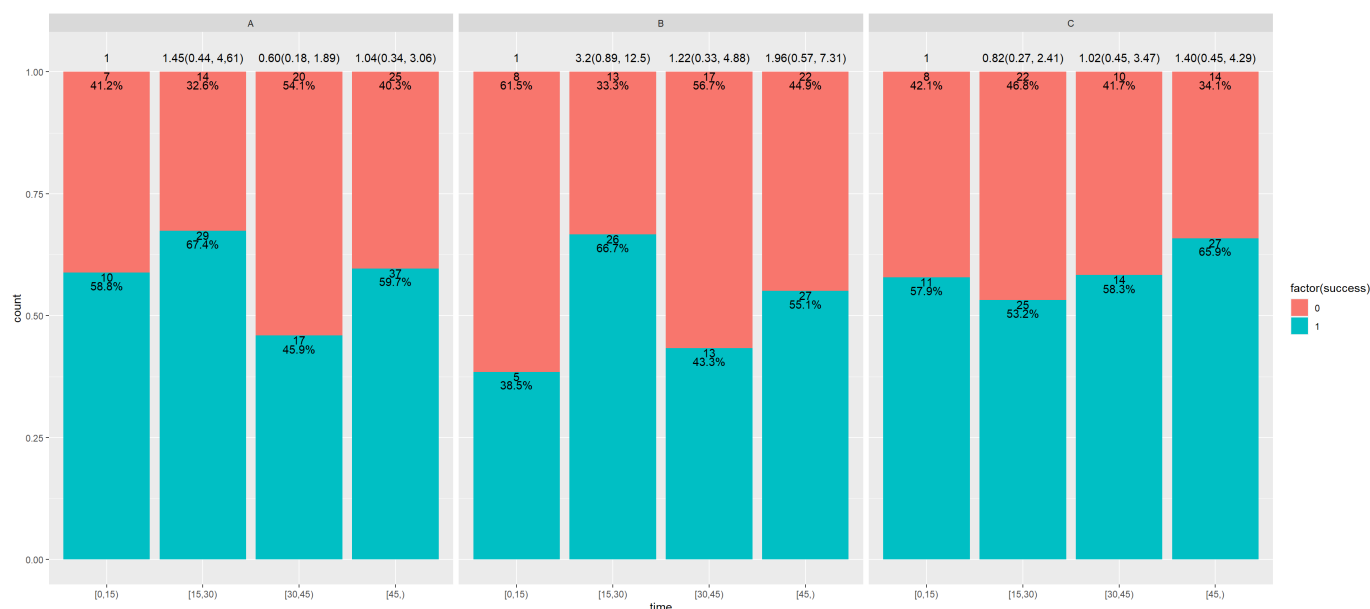


Number of doses of benzodiazepine given prior to study drug

(3-7 doses vs 1-2 doses)



Time of 1st dose of benzodiazepine to time of study drug administration 0/15/30/45/ (n = 337)



Variable selection

include 322 patients after remove NA in age_group, gender, provoked, homemed, se_group, benzo, benzonum, time

Summary:

Forward selection's tend to keep all variables in all situation.

For drug A, both backward selection and stepwise regression generate formula as

$$success \sim age + benzo + benzonum$$

For drug B, both backward selection and stepwise regression generate formula as

$$success \sim se\ group$$

Provoked is the last removed variable

For drug C, both backward selection and stepwise regression generate formula as

$$success \sim homemed$$

Provoked is the last removed variable

include 392 patients after remove NA in age_group, gender, provoked, homemed, se_group, benzonum

In this case, I exclude variables related to Benzodiazepine prior to ED visit and Time of 1st dose of benzodiazepine to time of study drug administration 0/15/30/45/. These 2 variable include large number of NAs. In addition, from the bar plot, univariate analysis, and above variable selection, they have none influence to success odds of drug B and drug C

For drug B, both backward selection and stepwise regression generate formula as

$$\textit{success} \sim \textit{provoked} + \textit{se group}$$

For drug C, both backward selection and stepwise regression generate formula as

$$\textit{success} \sim \textit{homemed}$$

Provoked is the last removed variable