Category :**Sepsis/septic shock: management**

A28 - ***Eclipse-it: elderly critically ill patient's representation in interventional trials, a systematic review***

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Introduction:

Older adults (65 years and above) represent 40 to 50% of the ICU population. Unfortunately, critical care evidence-based guidelines for this population are lacking and its representation in randomized control trials (RCTs) is unknown. We aimed to evaluate older adults' participation in critical care RCTs and whether age is considered during analysis.

Methods:

We conducted a systematic review of systematic reviews in Pubmed, Ovid, Central and Cochcrane, from January 1st 2009 to October 16th 2019. We included critical care systematic reviews and meta-analysis of RCTs based on five ICU topics deemed important for older ICU patients: Acute respiratory distress syndrome, sepsis, nutrition, mobilization and sedation. We collected studies' baseline characteristics, intervention type, and extracted any age information in methods and results. We calculated the proportion of RCTs excluding older adults, with an age central tendency above 65 years, and with outcomes stratified by age and with age-specific subgroup analysis. We used Chi-squared and Kruskal-Wallis tests for comparison between groups.

Results:

We included 152 RCTs in our systematic review. Older age was an exclusion criterion in 17 (11%) RCTs. Between them, average age was over 65 years for 4 (24%) RCTs and over 70 years for 1 (1%). Those proportions were similar to the 132 trials without age exclusion (p=0.581). Through the 152 RCTs, outcomes were stratified by age for 5%. Age-specific exploratory subgroup analysis were performed in 5 (3%) trials and 1 RCT reported an interaction between age and intervention, and reported different outcomes in older adults and not for younger ones.

Conclusion:

Older adult's participation remains underrepresented in intensive care RCTs. The treatment effect differences are not documented. This heightens the need for more age consideration in studies and more studies dedicated for older adults in order to help clinician treat this growing population.