Abstract:

BACKGROUND: Analysis of the literature suggests that changes relating to blood donations and blood component transfusion are occurring due to the aging of the population.

OBJECTIVE: To gain better understanding of the demand and supply of these inputs over time, and to identify the main associated demographic characteristics.

DESIGN AND SETTING: Systematic review conducted on time series relating to blood donations and blood component transfusions worldwide.

METHODS: A systematic review of the literature was conducted based on articles that presented time series relating to blood donation or blood component transfusion.

RESULTS: We found 1,814 articles. After the deletion process, only thirteen were read. Overall, these suggested that there is increasing demand for blood components and decreasing donation. The existence of seasonality regarding blood donation was pointed out. Men usually donated more blood and demanded more blood components than women. Approximately 50% of blood transfusions were performed in people aged ≥ 60 years.

CONCLUSIONS: This analysis on articles that presented time series relating to blood donations and blood component transfusion showed that aging of the population was the main factor associated with the increasing demand for blood and the decreasing supply of blood.

Reference: