

Introduction: Limited participation in blood donation is a significant obstacle to improve capacity to save lives in South Sudan County and in many other developing countries. Community based interventions to improve blood donation have had some impact however scale of the activities is still desired.

Objective: The objective of the study was to determine factors influencing donation of blood among secondary school students in Juba County, South Sudan and identify interventions that could address barriers of the willingness to donate blood. The findings will form a basis for further research on the factors influencing donation of blood among other eligible blood donors.

Methodology: A cross-sectional study design was carried out employing a quantitative approach of investigating the research problem using closed and open ended self-administered questionnaires. Data was collected from secondary students selected randomly from 5 sampled schools. Data was entered into EPIDATA and exported to SPSS 21 for analysis, associations were made at bivariate and multivariate levels of analysis while a Chi-square p-value of <0.05 with CI at 95% was considered to justify associations between variables.

Results: Major determinants of blood donation were age, knowledge of blood donation benefits, beliefs and myths, health education and counselling. The factors selected were all encompassed in the individual, cultural and staff variables specified in the objectives. Among individual factors, all (100%) participants aged below 24 were likely (OR=2.10) to donate blood compared to participants aged above 24 while knowledge of blood donation benefits and payment for blood play a similar likelihood (OR=3.33 and 4.32 respectively).

Negative beliefs and myths among cultural factors limited behaviour toward blood donation by Odds of 4.24 while negativity attached to blood donation associated risks contributed 2.12 Odds of non-participation.

Awareness in form of health education could increase blood donation likelihood by Odds of 3.74 and counselling improved likelihood by 3.12 Odds among staff related factors.

Conclusion: Being informed about blood donation and its life-saving benefits improves students' attitude towards blood donation. Willingness to donate blood is revealed after health talks, counselling and knowledge of its benefits.

Recommendation: Increasing literacy levels in form of formal education and general awareness about blood donation is ideal if scale up of the activity is to be achieved among students.