



ELSEVIER

Contents lists available at ScienceDirect

Transfusion and Apheresis Science

journal homepage: www.elsevier.com/locate/transci

Factors associated with positive attitude towards blood donation among medical students

Tatjana Gazibara, Nikolina Kovacevic, Gorica Maric, Ilma Kurtagic, Selmina Nurkovic, Darija Kisic-Tepavcevic, Tatjana Pekmezovic *

Institute of Epidemiology, Faculty of Medicine, University of Belgrade, Visegradaska 26A, 11000 Belgrade, Serbia

ARTICLE INFO

Article history:

Received 6 November 2014

Received in revised form 10 July 2015

Accepted 13 July 2015

Keywords:

Medical students

Blood donation

Attitude

ABSTRACT

The aim of this study was to assess attitudes and practice of blood donation among medical students. Medical students were recruited at Medical Faculty, University of Belgrade, Serbia. Of 973 students, 38.4% of freshmen and 41.4% of final year students have donated blood ($\chi^2 = 0.918$, $p = 0.186$). Blood donors had significantly more positive attitude towards some aspects of blood donation. Being female, residing in a city other than the capital and previous blood donation experience were independent predictors of positive attitude towards being a blood donor to an unknown person. Efforts are required to augment blood donor pool among future physicians.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Blood donation is, for the most part, voluntary and non-remunerated, even though some health care systems practice payments for donating blood [1]. A number of countries encounter major challenges in recruiting voluntary blood donors for transfusion services [2–4]. Previous studies reported that altruism, cognitive attitude, high level of self-efficacy, lower level of anxiety and previous blood donations were associated with a higher likelihood of becoming a blood donor [5–9]. On the other hand, common barriers to donation represent misbelief and fear of blood donation and subsequent manipulation [10,11]. To ensure the quality of blood donation, the crucial step is to determine the eligibility of the donors. Potential blood donors require pre-screening for factors that might expose them to increased risk of donation such as health and behaviour history, physical examination, blood pressure measurement and blood test. To select adequate blood donors, national transfusion

services must adhere to donor selection guidelines that take into account local environment [12,13].

In the Republic of Serbia, blood donation is voluntary and non-remunerated. Healthy adults aged 18 to 65 are encouraged to become blood donors, given that 1000 blood units are required daily at a national level [14]. Overall, around 3.0% of the total population have donated blood at least once, while similar proportions of blood donors have been registered in the neighbouring countries [14]. This prevalence is, however, lower than that in the European Union [14]. Majority of blood donors in Serbia (69.0%) comprise the employed, while University students account for 13.0% [14]. A recent study of blood donor satisfaction in the capital city of Belgrade suggested that the majority of donors were satisfied with the entire procedure of blood donation (expressed through tolerable venipuncture, communication with staff and subjective feeling after the procedure), with a notable difference between first-time donors compared with returning donors in terms of presence of fear and anxiety [15].

Although a number of authors have investigated attitudes towards blood donation in general population [2,4,7–11], a small number of studies have explored opinions and attitudes among medical students. Given that future health-care workers represent a significant taskforce and will potentially participate in promotion of blood donation, the aim of this study was to assess attitudes and practice of blood

* Corresponding author. Institute of Epidemiology, Faculty of Medicine, University of Belgrade, Visegradaska 26A, Belgrade 11000, Serbia. Tel.: +381 11 3607 062; fax: +381 11 3607 062.

E-mail address: pekmezovic@sezampro.rs (T. Pekmezovic).

<http://dx.doi.org/10.1016/j.transci.2015.07.007>

1473-0502/© 2015 Elsevier Ltd. All rights reserved.

donation among medical students. In addition, the purpose of this study was to estimate factors associated with positive attitude towards being a blood donor.

2. Materials and methods

2.1. Subjects

The study was conducted in the first week of December 2013. Students in the first and the final, sixth, year were recruited at the Faculty of Medicine, University of Belgrade, before the start of compulsory practical sessions in the classrooms. A total of 599 persons were enrolled in the first year and 501 were enrolled in the final year of studies. After questionnaire distribution, 572 freshmen and 415 sixth year students agreed to participate in the study (response rate for 1st year, 95.4%, and for 6th year, 82.8%). Four investigators (NK, GM, IK, SN) introduced the study in detail to the students. Participation was voluntary and anonymous. Ethical approval was obtained from the Institutional Review Board of the Faculty of Medicine, University of Belgrade.

2.2. Instrument

The questionnaire explored the following demographic characteristics: age, gender, place of residence before entering the faculty (towns of less than 50 000 inhabitants/cities of 50 000–500 000 inhabitants/the capital Belgrade), place of current residence (with parents/in a student dormitory/in a rented apartment) and average mark obtained during studies (minimum 6.0, maximum 10.0). To assess potential differences in attitudes, the students were asked about their previous blood donation experience.

The set of 7 items exploring attitudes towards blood donation was modified from Kowsalya et al. [16]. The questionnaire examined students' attitudes as to whether they would be willing to donate blood to a family member and to an unknown person, but also in case they were to be blood recipients. Furthermore, the students were asked whether blood donation was sufficiently promoted in Serbia and should be an obligation for all healthy individuals as well as whether physicians should promote blood donation by being donors. Finally, the students were asked to rate their confidence in institutions dealing with organization of transfusion. Each answer was rated on a 5-point Likert scale, where rank 1 denoted "I strongly disagree" and rank 5 denoted "I strongly agree" with a given statement.

2.3. Data analysis

Differences in examined variables were assessed by using Chi square test. Spearman's correlation test was used to investigate association between the variables. To assess the effect measure for each attitude statement in relation to study year, univariate logistic regression was performed. In this analysis, dependent variable was study year (sixth vs. first year), whereas independent variable was attitude for each statement categorized as positive (marked 4 or 5 on Likert scale) or other (marked 1–3 on Likert scale). The same univariate logistic regression model was used to assess the effect measure for previous blood donation experience

(independent variable was being blood donor, while independent variable were corresponding statements). The effect measure was expressed as odds ratio with corresponding confidence interval.

To determine factors associated with positive attitude towards being a blood donor to an unknown person, we also performed univariate logistic regression analysis. In this case, positive attitude (marked 4 or 5 on Likert scale) was dependent variable, while gender, study year, median grade, place of residence before enrolling at the University and past blood donation experience were independent variables (risk factors). All variables univariately statistically significant and marginally significant (according to Hosmer and Lemeshow variables with $p < 0.250$) entered the multivariate logistic regression models. Probability value of $p < 0.05$ was considered significant. The SPSS 17.0 statistical software package (SPSS Inc, Chicago, IL, U.S.A.) was used in the statistical analysis.

3. Results

Of 987 students, 58.5% (572) were the first-year students, while 41.5% (403) were in the final (sixth) year. There were 35.9% (354) males and 64.1% (633) females. Average age among freshmen was 18.9 ± 0.5 years (the youngest was 18 and the oldest 23), and in the population of sixth-year students it was 24.7 ± 1.7 years (the youngest was 23 and the oldest 37).

As much as 38.4% of freshmen and 41.4% of final year students have already been blood donors ($\chi^2 = 0.918$, $p = 0.186$), while 3.8% students in the first year and 1.1% students in the sixth year have been blood recipients ($\chi^2 = 0.019$, $p = 0.509$). Proportions of students who had positive attitude in relation to given statements over total number of respondents are presented in Table 1. Overall, the largest proportion of students in both study years who expressed positive attitude was observed for the assertion "I would be a blood donor to a member of my family". Statistically significant difference in attitudes between the students in first and sixth year was observed for the following assertions: "I would receive blood transfusion if required", "Blood donation was sufficiently promoted in Serbia" and "I am confident in institutions dealing with organization of transfusion in Serbia" (Table 1).

After stratification of students according to previous blood donation experience, there were statistically significantly more student blood donors who expressed positive attitude on 4 out of 7 assertions (Table 2). Having donated blood was not associated with higher average grade during studies ($\rho = 0.030$, $p = 0.540$). A highly significant relationship was established between being a blood donor and more positive attitude towards the assertion that "Blood donation should be an obligation of each healthy individual" ($\rho = 0.174$, $p = 0.001$) and that "Physicians should be the first to promote blood donation by being donors" ($\rho = 0.176$, $p = 0.001$).

A univariate logistic regression demonstrated that being male was a predictor of previous blood donation (odds ratio [OR] = 1.41, 95% confidence interval [CI] 1.08–1.84, $p = 0.011$), while senior year at the Faculty was not associated with higher likelihood of being a blood donor (OR = 1.03, 95% CI 0.97–1.08, $p = 0.338$). Table 3 summarizes results of univariate and multivariate logistic regression analysis. In the

Download English Version:

<https://daneshyari.com/en/article/6114035>

Download Persian Version:

<https://daneshyari.com/article/6114035>

[Daneshyari.com](https://daneshyari.com)