Risk behavior disclosure among blood donors in Sao Paulo, Brazil

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The two main goals of blood banks are to ensure consistent and safe blood components to reduce morbidity and mortality in their surrounding communities. To achieve these goals, blood banks worldwide have implemented multiple methods including continuous improvements in the donor selection and retention, serological testing for transfusion transmissible infectious agents, standard written procedures, and investments to upgrade collection, screening, and storage technologies. Despite of precautions, there is still a risk of transmission of an infectious agent when individuals donate blood during the serological window period; that is, before the detection limits of the tests but after the donor is contagious. Therefore, the success of a blood transfusion system relies on effective donor recruitment and deferral strategies in addition to serological testing.

Donor recruitment and retention are focused on identifying donors at low risk of infection while donor deferral criteria are used to distinguish those at high risk of infection, based on the epidemiology of the blood born infection. However, blood donor selection has been increasingly challenging due to educational, cultural, and socio-economic diversity, in addition to differences in the epidemiology of the diverse transfusion transmitted infections worldwide. The donor screening process and the deferral timeframe has varied across countries and over time. Nonetheless, there are common, basic requirements. For example, blood donors in most settings are required to complete a health history questionnaire and answer questions regarding their current and past sexual behavior and use of intravenous drugs. High risk behaviors that may result in deferral from donation include being a male having sex with other males, having multiple sexual partners, being male or female sex workers, using intravenous drugs, or being the sex partner of any of these persons or of a person known to have HIV for any reason. The donors screening process is usually conducted in a private area to ensure confidentiality; it can be performed by trained physicians, nurses, or other trained health care providers using a standardized printed or electronic questionnaire, in face to face interviews, or by the donor answering the questions under physician supervision. Unfortunately, several studies have demonstrated low compliance with screening questionnaires in that some donors do not disclose high-risk behavior which ultimately poses a threat to the blood supply.

In this issue of the *Revista Brasileira de Hematologia e Hemoterapia*, one article "Factors associated with failure of clinical screening among blood donors who have altered serological results in the Centro Regional de Hemoterapia de Ribeirão Preto" describes aspects of the failure of clinical screening among blood donors in a center in Sao Paulo State in Brazil[1]. In this study, 106 blood donors with positive results for hepatitis B and C, syphilis, and HIV were interviewed when they came back for their medical consultation to be informed about their test results. Reported reasons for not revealing risk factors were confidence in the accuracy of the test results, discomfort in answering certain questions, considering some questions not relevant to disclose, the length and tone of the clinical screening (fast and "mechanical"), the lack of skilled interviewers (e.g., young and lack of involvement), embarrassment, and doubts regarding confidentiality. Overall, 14.2% of the participants donated blood for the purpose of obtaining the results of the serological tests. Nearly 70% were not aware of the existence of services that offer tests for free and among those; only 9.4% were aware about Volunteer Testing Centers available in the state.

These results are in concordance with similar studies worldwide, showing that some high-risk donors are aware they undertake risky behavior, however, prefer to use blood donation as a means to learn whether they are infected with HIV or hepatitis B and C, although anonymous voluntary counseling centers are available[2-4]. Several factors are associated with this low compliance including the level of confidence between blood donors and physicians who performed clinical screening[3,5] age, gender, and education[6,7] which are also associated with low HIV/AIDS knowledge.

The recent Retrovirus Epidemiology Donor Study- II (REDSII) study aimed to assess current risk factors for HIV infection among HIV positive and HIV negative blood donors in Brazil using Audio Computer Assisted Self Interview (ACASI), allowing increased privacy

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and standardization in interviews in order to improve the risk disclosure[8]. For the study, 341 HIV cases and 781 un-infected controls completed the ACASI questionnaire. The primary disclosed risk factors for HIV infection in blood donors in Brazil are having male-male sexual contact, having sex partners who are known to be HIV+ and having unprotected sex or multiple sexual partners. Intravenous drug use was also a risk factor. Overall, 7% of cases had not previously disclosed any potential behavioral risk factor that were asked by ACASI. In addition, when re-analyzing risk disclosure, 23% of cases did not disclose behavioral risk factors associated with HIV.

The results of these studies demonstrated that it is necessary to reinforce the information provided and assess the educational level of blood donors. In addition, it is necessary to improve the personnel skills of the blood bank staff in order to transmit confidence to donors.

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