

REDS II-INTERNATIONAL

Does pre-donation behavioral deferral increase the safety of the blood supply? Questions relating to survey objectives

The purpose of the interview questions is to collect donor profile data for stratifying the donor population into risk groups within the Deferral study. We also want to determine risk factors associated with Transfusion Transmitted Infections (TTI's) among deferred blood donors in Brazil.

Section A- Study Data

Objective: Section A will be completed by trained research staff. The following questionnaire items are related to the general profile of respondents (study subjects), and will be used for de-identified administrative record keeping, such as linking interview responses to health screening donor questionnaire and to the laboratory serological test results from study subjects.

Q. A1- Study ID

Q. A6.- Study subject is able to read?

Q.A7.- What level of education do you have?

Q.A8.- Even if you are currently not working, what is your occupation?

The following questionnaire items are related to general technical profile of blood bank staff and time and type of interview.

Q.A2.- Blood collection site

Q.A3.- Month of interview

Q. A4.- Year of interview

Q.A5.- Research Assistant Initials

Q.A9.- Type of interview

Section B- Demographic data

Section B will be completed by the study subject with the assistance of the trained research staff. This will allow the subject to become familiar with listening to and/or reading the questions and the use of touch screen for answering questions.

Objective: To obtain demographic data for general risk stratification based on the background of the subjects.

- Q.B1.- What is your gender?
- Q.B2.- What is your birth year?
- Q.B3.- What is your birth month?
- Q.B4.- What is your birthday?
- Q.B5.- What is your country of birth?
 - Q.B5a.- Please specify your country of birth
- Q.B6.- What is your ethnicity?
- Q.B7.- What is your current marital status?
 - Q.B7a.-If you are married or living with someone is your spouse/cohabitating partner.
- Q.B8. - What is your current employment status?
- Q.B9.- What is the combined monthly income for all members living in your household?

Section C- Blood Donation

Section C and all remaining sections will be completed by study subject in privacy. The purpose of using a self-administered instrument is to ensure that potentially stigmatizing behaviors will be reported as honestly as possible without fear or concern that an interviewer would stand in judgment.

Objective: To obtain data related to whether a deferred donor has donated blood before and if so the frequency of previous donation and knowledge of information regarding blood donor's eligibility. In Brazil the Disqualified Donor Directory (DDD) does not exist, indeed, a person at risk might donate blood in many blood banks. The purpose is to determine motivational factors and its frequency that lead participants to donate blood. The same set of motivation questions has been used in a separate Motivation Study.

- Q.C1.- Did you come to donate blood today to help a friend or relative undergoing treatment at the hospital?
- Q.C2.- How many times have you donated blood before at this or another blood center?
- Q.C3. - Please, indicate which of the following statements describe why you came to the blood center to donate blood.
- Q.C4. - Did any of the following factors have influenced your decision to try to donate blood?

Section D- Deferral

Objective: To determine if the donor understands the reason for his/her actual deferral, and his/her feelings regarding the deferral. We also want to assess whether the blood donor has been deferred before and how many times it has happened.

Q.D1. - Do you know the reason for today's deferral?

Q.D1a.- What was the reason? Please specify

Q.D2.- Do you understand the reason for today's deferral?

Q.D3.- What feelings do you have about today's deferral?

Q.D3a.- Please, specify other feelings.

Q.D4. - Before today, have you ever been deferred from donating blood?

Q.D4a. - In total, including today, how many times have you been deferred?

Section E- BLOOD TESTING AND HIV KNOWLEDGE

Objective: To determine whether deferred donors' intentions were to get an HIV test through blood donation.

Q.E1.- Do you believe that the blood center uses better HIV tests than are available at other places?

Q.E2.- Did you try to donate blood because you wanted to be tested for HIV?

Q.E3.- Please check all the boxes for the factors that contributed to your decision to come to the blood center to be tested for HIV.

Q.E3a.- Please specify other reason

Objective: To determine if the deferred donor exhibits HIV testing behavior that would suggest knowledge of risk factors for HIV acquisition and indicated if the donor has actively sought HIV testing before.

Q.E4.- Other than blood donation, have you ever been tested for HIV?

Q.E4a.- What was the reason for the HIV test?

Q.E4b.- Please specify the other reason for the HIV test.

Objective: To ascertain subject's intentions, hidden or not, to come to blood bank in order to get tested for Hepatitis or other tests.

Q.E5.- Did you try to donate blood because you wanted to be tested for hepatitis?

Q.E5a.- Please check all the boxes for the factors that contributed to your decision to come to the blood center to be tested for hepatitis.

Q.E5b.- Please specify other reason

Q.E6.- Did you come to the blood center to be tested for some other reason?

Q.E6a.- Please specify other reason

Objective: To determine whether medical staff have or had influenced deferred donor to attempt to donate blood to get tested. Health professionals may play an important role leading person to donate blood in order to get tested.

Q.E7.- Did a health worker such as a doctor, nurse, or someone from a health department suggest that you go to the blood center for a blood test for HIV, hepatitis, or for some other reason?

Q.E7a.- Who suggested you to come to the blood center to get tested?

Objective: To determine respondents' knowledge about HIV, risk behaviors and window period for HIV.

- Q.E8. - Do you think it is OK to donate blood in order to be tested for the AIDS virus?
- Q.E9. - Do you think it is OK to donate blood if you have engaged in risk behaviors for HIV or AIDS because the blood center tests all blood and throws away any infected blood?
- Q.E10. - Do you think it is OK to donate blood even if you have engaged in risk behaviors for HIV or AIDS as long as you have a negative HIV test?
- Q.E11. - Do you think the blood test for HIV identifies everyone who is infected with the AIDS virus?

Section G- GENERAL RISK FACTORS

Objective: To learn of sexual behavior, including, the number of sexual partners during the blood donor's lifetime. The sexual history will allow us to determine, the most prevalent sexual patterns for the Brazilian deferred blood donors and whether this pattern may or may not be correlated to specific serologic markers. HIV spread has moved from homosexual to heterosexual patterns, in many countries. A better understanding of these changing patterns may allow us to construct more accurate questions to improve donors' qualification.

Objective: To determine the general risk factors related to blood borne disease.

- Q.G1.- In total, how many tattoos do you have on your body?
- Q.G2.- In the last 12 months, have you had a new tattoo or had one re-applied?
- Q.G3.- In total, how many ear and or body piercings do you have?
- Q.G4.- In the last 12 months, have you had any new ear or body piercings?
- Q.G5.- Have you ever had a manicure or pedicure at a beauty salon or had a shave at a barbershop?
- Q.G6.- In the past 12 months, have you had a manicure or pedicure at a beauty salon or had a shave at a barbershop?
- Q.G7.- Have you ever had any minor or major medical surgery, tooth extraction, or other dental procedures?
- Q.G8.- In the past 12 months, have you had any minor or major medical surgery, tooth extraction, or other dental procedures?
- Q.G9.- Have you ever had an endoscopy (a medical test where a flexible tube is used to look inside of your throat and digestive system) or colonoscopy (a medical test where a flexible tube is used to look inside your colon/large intestine)?
- Q.G10.- In the past 12 months, have you had endoscopy or colonoscopy?
- Q.G11.- In your professional work have you ever gotten someone else's blood, body fluids or excrement splashed into your eyes, mouth or in an open skin lesion?

Q.G12.- In your professional work have you ever had a needle stick injury (accidentally been stuck by a needle or other sharp instrument used for providing medical care to someone else)?

Q.G13.- Have you ever received a blood transfusion?

Q.G14.- How many different times have you been transfused?

Objective: To determine the general risk factors related to blood borne disease for the participants' partners.

Q.G15.- To the best of your knowledge, have you had sex or intercourse with anyone who was an intravenous drug user?

Q.G16.- To the best of your knowledge, have you had sex or intercourse with any male who has also had sex with another male?

Q.G17.- To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for hepatitis?

Q.G18.- To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for HIV?

Q.G19.- To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for HTLV?

Objective: To obtain information related to exposure to HIV.

Q.G20.- To the best of your knowledge, have you had sex or intercourse with anyone who received a blood transfusion?

Objective: To ascertain sexual history.

Q.G21.- In the past 12 months, how many male sexual partners have you had? Please include both ongoing partners and one-time encounters.

Q.G22.- With regard to your sexual partners and one-time encounters in the above question, how often did you use condoms when you had sex?

Q.G23.- In the past 12 months, how many female sexual partners have you had? Please include both ongoing partners and one-time encounters.

Q.G24.- With regard to your sexual partners and one-time encounters in the above question, how often did you use condoms when you had sex?

Objective: To ascertain occurrences of money and or drug exchange for sex.

Q.G25.- Have you ever exchanged (given or received) money or drugs for sex?

Q.G26.- In the last 12 months have you exchanged money or drugs for sex?

Objective: To ascertain the non-prescription substance use and frequency.

Q.G27.- Have you ever injected illegal drugs, anabolic steroids or vitamins not prescribed by a doctor?

Q.G28.- Have you ever shared needles or syringes with another person?

Objective: To determine the participant's family history related to TTIs.

Q.G29.- To the best of your knowledge, are any members of your family infected with HIV?

Q.G30.- Can you tell us which family member is infected with HIV?

Q.G31.- To the best of your knowledge, are any members of your family infected with Hepatitis B or C

Q.G32.- Can you tell us which family member is infected with Hepatitis B or C?

Q.G33.- To the best of your knowledge, are any members of your family infected with HTLV?

Q.G34.- Can you tell us which family member is infected with HTLV?

Q.G35.- What is your mother's ethnic background?

Q.G36.- If Asian, is your mother of Japanese descent?

Deferral Study (English)

SECTION A - STUDY DATA

- QA1. Study ID: *Source: Original; new.* The Study ID is a bar code number that identifies the blood donor as subject in the study as well as a deferred blood donor. Through this bar code we will be able to detect; the deferred blood donors status: type of donor (volunteer or replacement); frequency of previous blood donation (first time, repeated or lapsed); and serological blood tests results performed for the subjects.
- QA2. Blood collection site. FPS - Sao Paulo; HEMOMINAS - Minas Gerais; HEMOPE – Pernambuco; HEMORIO-Rio de Janeiro. *Source: Original; new.* The deferral prevalence rates may vary from each city. Rio de Janeiro and Recife are coastal beach cities and Sao Paulo and Belo Horizonte are inland cities. Responses will be correlated to deferred donors' status (first-time, repeated or lapsed); motivation factors (including Test seekers and NO Test seekers) for future efforts target at ensuring a safe and adequate blood supply.
- Q.A3. A4.Month of interview; Year of interview. *Source: Original; new.*
- Q.A5. Research Assistant Initials: *Source: Original; new.* This question will be used to identify the research assistant. A research assistant or nurse will provide the ACASI laptop (including earphones to be able to listen to the questions confidentially) to each subject at the blood center. The study subject will be shown how to use the computer to complete the interview by entering basic demographic data with the help of the nurse, but will be given privacy to complete the rest of the questionnaire. The research assistant or nurse will remain available to answer questions and to provide assistance to the blood donor, if necessary. This information is important for follow up interviewer quality control
- Q.A6. Study subject is able to read. *Source: Original; new.* In Brazil, a subject may be able to read but may have varying educational levels. This is called "alfatebizacao" and it is related to poverty. It has already been described that transfusion transmitted infections (TTI) are correlated with poverty and low educational level throughout the country. This question is designed to capture low educational profile related to the question below.
- Q.A7. What level of education do you have? *Source: Original; new.* This question will classify the subject's educational level. The response will be correlated to their answers about attitudes, knowledge, exposures/unsafe behaviors to TTI transmission routes.
- Q.A8. Even if you are currently not working, what is your occupation? *Source: Original; new.* This question will classify the subjects by occupation.

Q.A9. Type of interview. *Source: Original; new.* The Deferral study will use the same approach that we have been using for the HIV case control questionnaire. Both instruments were designed to be done in a self-administered audio computer-assisted self-interview (ACASI) format on a laptop computer in order to maximize reporting of stigmatized behaviors. Previous pilot test done at Fundacao Pro-Sangue/Hemocentro –Sao Paulo-Brazil, has shown that blood donors have felt confident in answering sensitive questions in this new format.

SECTION B - DEMOGRAPHIC DATA

- B1.- What is your gender? *Source: Original; new.* This question will classify the deferred subject according gender. The blood donation in Brazil used to be mostly done by men. It has shifted and dropped from 80% to 60% in the past ten years. Response to this question will provide more information about blood donors and TTI's gender trends in Brazil.
- B2, B3, B4.-What is your birth year? What is your birth month? What is your birthday? *Source: Original; new.* This question will classify the deferred subject according to age. In the past 20 years Brazilian government has take many precautions to increase the blood supply safety, as such providing educational material and standardizing the health donor screening questionnaire, implementing new serological blood testing. We expected a lower TTI's prevalence and incidence among deferred subject age 18 to 30 years and higher among 31 to 50 years.
- B5, B5a.-What is your country of birth? B5a.Please specifies your country of birth. *Source: Original; new.* This question is designed to assess the subject's country of birth. Response to this question will provide more accurate information.
- B6. What is your ethnicity? *Source: Original; new.* This question is designed to assess the subject's ethnicity. Response to this question will provide more accurate information related to Deferrals and TTI's ethnicity network.
- B7. What is your current marital status? *Source: Original; new.* This question is designed to establish the deferred subject marital status. Response to this question will provide information about the role of current marital status regarding to deferrals and TTI's major transmission routes.
- B7a. If you are married or living with someone, is your spouse/cohabitating partner *Source: Original; new.* This question is designed to establish other engaged deferred subject status in order to correlate it to sexual and transfusion major transmission routes.
- B8. What is your current employment status? *Source: Original; new.* This question is designed to establish the employment status in order to correlate it with educational level and subject wealth.
- B9. What is combined the monthly income for all members living in your household? *Source: Original; new.* This question is designed to establish the subject family income in order to correlate it educational level and subject wealth.

SECTION C - BLOOD DONATION

- C1. Did you come to donate blood today to help a friend or relative undergoing treatment at the hospital? *Source: Original; new.* This question establishes the deferred subject type: replacement, those who come to donate blood to help a friend or relative from those who come to donate for a commitment to the society through an altruistic attitude. Responses to this question will be correlated to by first time, and repeated deferred subject. Are the replacement subjects more likely to be deferred compared to volunteer's deferred subjects?
- C2. How many times have you donated blood at this or another blood center? *Source: Original; new.* As the question above, this question is designed to ascertain whether the donation frequency is or is not related to a riskier deferred subject. Are deferred subjects less likely to donate blood more frequently?
- C3. Please, indicate which of the following statements describe why you came to the blood center to donate blood. (Check all that apply): To help a friend or relative undergoing treatment at the hospital, I received a letter from the blood bank, or a phone call from the blood bank; I wanted to get the day off work; In response to a TV or Radio announcement; My friend came and I decided to come too; My blood type is in high demand; I was passing by and decided to come in; None of them; Don't Know; Refuse to Answer. *Source: Original; new.* These questions are designed to ascertain 3 major motivator factors: altruistic, self-interest and direct appeal. The premises are that motivator's factor differs from first's time and repeated donors, mostly related to intrinsic and extrinsic factors. Responses to these questions will be correlated to deferred subject status (first-time, lapsed, repeated), volunteers *versus* replacement.
- C4. Did any of the following factors have influence on your decision to try to donate blood? (Check all that apply): To help someone in need of blood; I think it is good to give blood to help someone; I believe I am doing something important; I think blood donation is important for society; I may need blood myself someday; I want to get tested; I like to know about my health and giving blood is one way to find out; Blood center testing is more accurate than at other test sites; Blood center testing is confidential; Blood center testing is free; I was curious; None of them; Don't Know. *Source: Original; new.* These questions are designed to ascertain 3 major motivator factors: altruistic, self-interest and direct appeal. The premises are that motivator's factor differs from first's time and repeated donors, mostly related to intrinsic and extrinsic factors. Responses to these questions will be correlated to deferred subject status (first-time, lapsed, repeated), volunteers *versus* replacement.

SECTION D - DEFERRAL

- D1. Do you know the reason for today's deferral? *Source: Original; new.* This question is designed to ascertain whether the subject is aware of the factor(s) that lead his/her as a deferred donor for blood donation. It is important to establish whether the deferred subject was able to acknowledge the reason for it.
- D2. Do you understand the reason for today's deferral? *Original; new.* As the question above, this question is designed to ascertain whether the subject understand the reason for deferral. It has been noted that blood donors who do not understand the deferral reason are less likely to return in the future for blood donation, even if it was a temporary deferral.
- D3. D.3a. What feelings do you have about today's deferral? (Check all that apply): Disappointed; Relieved; Angry; Content; Unpleasant; Surprised; Nervous; Fear; Unfair; Other; Don't Know; Refuse to Answer. This question asks donors about any feelings they might have received regarding his/hers deferral. It has been demonstrated that blood donors feel uncomfortable when they are deferred as blood donors. Response to this question will guide future tools related to ensure blood donor confidence within this deferral process and clarify the importance of the correct response to ensure the blood safety.
- D4. Before today, have you ever been deferred from donating blood? *Source: Original; new.* These questions are designed to ascertain previous deferrals. The response will be correlated to replacement and volunteers; first-time lapsed and repeated deferred subject.
- D4a. In total, including today, how many times have you been deferred? *Source: Original; new.* These questions are designed to ascertain the number of previous deferrals. The response will be correlated to replacement and volunteers; first-time lapsed and repeated deferred subject. We will also correlate the answer to the serological tests results. Those donors who have been deferred many times are more likely to have serological positive tests?

SECTION E - BLOOD TESTING AND HIV KNOWLEDGE

- E1. Do you believe that the blood center uses better HIV tests than are available at other places? *Source: Original; new. Source: Original; new.* This question is designed to evaluate the blood donor confidence at the HIV test performed by the blood center. Response will be correlated to blood donors status (first-time, lapsed, repeated), volunteers *versus* replacement. Response to this question will help us pursue marketing strategies to ensure that counseling centers and other testing centers are better places to get tested than blood banks.

- E2. Did you try to donate blood today because you wanted to be tested for HIV? *Source: Original; new. Source: Original; new.* This question establishes the magnet effect among deferred subject. In some Brazilian blood centers this question is a reason for a clinical deferral. In reality, as many subjects have already known this deferral criterion, many of them may deny this question during the clinical screening in order to donate blood to get their test results. Response to this question will guide future marketing strategies at general population to reduce this magnet effect.
- E3.E3a. Please check all the boxes for the factors that contributed to your decision to come to the blood center to be tested for HIV. When you have selected all of your answers, please touch the "Next Question" box. (Check all that apply): Only place I know of offering tests; Testing is free; Testing is confidential; Testing is more accurate than at other sites; Testing is more convenient than at other test sites; Other reason; Don't Know ;Refuse to Answer. *Source: Original; new.* This question is designed to assess which are the factors that lead the magnet effect to the blood donors. Response to these questions will be correlated deferred subject (first-time, lapsed, repeated), volunteers *versus* replacement, for future efforts target at ensuring a safe and adequate blood supply.
- E4.E4a E4b.- Other than blood donation, have you ever been tested for HIV? E4a.What was the reason for the HIV test? (Choose one): Pregnancy care; Health insurance; Physician's order, routine medical care, hospitalization or surgery; I wanted to know my HIV status; Other; Don't Know; Refuse to Answer.E4b. Please specify the other reason for the HIV test. *Source: Original; new.* These questions are designed to ascertain other reasons and frequency for been tested for HIV other than blood donation. In Brazil the HIV test results may take longer when are performed by DST counseling centers compared to blood centers, at other hand in some private laboratories setting, the HIV test is very expensive. Test-seekers usually came to the blood bank in order to get their HIV test-results because it is easier, faster, and anonymous than to get it from a counseling DST center. Therefore it is important to establish whether there are differences among deferred subject status (first-time, repeated or lapsed); as well, volunteers *versus* replacement, for future efforts target at ensuring a safe and adequate blood supply.
- E5.E5a.E5b.E6.E6a. Did you try to donate blood today because you wanted to be tested for hepatitis? E6a. Please check all the boxes for the factors that contributed to your decision to come to the blood center to be tested for Hepatitis When you have selected all of your answers, please touch the "Next Question" box. (Check all that apply): Only place I know of offering tests; Testing is free; Testing is confidential; Testing is more accurate than at other sites; Testing is more convenient than at other test sites; Other reason; Don't Know; Refuse to Answer. E5b. Please specify the other reason.E6. Did you come to the blood center to be tested for some other reason? E6a. Please specify the other reason. *Original; new.* These questions have been formulated to determine other magnet effect than HIV test. What are the role, relevance and prevalence of other serological maker regarding to the magnet effect?

E7.E7a. Did a health worker, such as a doctor, nurse, or someone from a health department, suggest that you go to the blood center for a blood test for HIV, hepatitis, or for some other reason? E7a. Who suggested you come to the blood center to get tested? *Source: Original; new.* This question is designed to identify whether the health workers may have contributed or encouraged the participants to donate blood in order to get their test results. It has been already describe that in some Brazilian settings, the health staff may encourage persons to donate blood to get the test-results. The response to these questions will provide more accurate information which will help us to build special approaches towards health workers in Brazil in order to avoid this at risk procedure.

E8.E9.E10.E11. Do you think it is OK to donate blood in order to be tested for the AIDS virus? E9. Do you think it is OK to donate blood if you have engaged in risk behaviors for HIV or AIDS because the blood center tests all blood and throws away any infected blood? E10. Do you think it is OK to donate blood even if you have engaged in risk behaviors for HIV or AIDS as long as you have a negative HIV test? E11. Do you think the blood test for HIV identifies everyone who is infected with the AIDS virus? *Source: Original; new.* These questions are designed to ascertain the deferred subject's knowledge about risk behavior, AIDS, window period and HIV test-results. In previous pilot study we found out that Brazilian blood donors have a low HIV knowledge and it is even lower among test-seekers. Responses to these questions will be correlated to the deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement, TS *versus* No TS, for future efforts target at ensuring a safe and adequate blood supply.

SECTION G- GENERAL RISK FACTORS

- G1. In total, how many tattoos do you have on your body? *Source: Original; new.* This question is designed to evaluate whether the number of applied tattoos can be correlated to riskier deferred subjects. Response to this question will aid blood banks formulate risk reduction efforts to address clinical screen questions.
- G2. In the last 12 months, have you had a new tattoo or had one re-applied? *Original; new.* This question is designed to evaluate whether the number of applied tattoos in the last 12 months can be correlated to a riskier deferred subjects. Response to this question will aid blood banks formulate risk reduction efforts to address clinical screen questions.
- G3. In total, how many ear and or body piercings do you have? *Original; new.* Piercing is a practice that is not free of risk. Reported complications include among others, transfusion-transmitted diseases (hepatitis B virus, hepatitis C virus, HIV, syphilis), Chagas' disease and infective endocarditis. Response to this question will aid blood banks formulate risk reduction efforts to address clinical screen questions.
- G4. In the last 12 months, have you had any new ear or body piercings? *Original; new.* This question is designed to evaluate whether the number of applied piercing in the last 12 months can be correlated to a riskier deferred subjects. Response to this question will be correlated to questions related to other risk behaviors.

- G5. Have you ever had a manicure or pedicure at a beauty salon or had a shave at a barbershop? *Original; new*. This question is designed to evaluate lifestyle risk for being exposed to stick or sharp instruments. It has been shown that transmission of HIV, hepatitis B or C can occur due to stick injury. Response to this question will be correlated to other risk exposures.
- G6. In the past 12 months, have you had a manicure or pedicure at a beauty salon or had a shave at a barbershop? *Original; new*. This question is designed to evaluate whether the number of attendance for a manicure and or pedicure in the last 12 months can be correlated to riskier deferred subjects. Response to this question will be correlated to other risk exposures.
- G7. Have you ever had any minor or major medical surgery, tooth extraction, or other dental procedures? *Source: Original; new*. This question is designed to ascertain HIV transmission routes related to medical procedures. Blood borne viruses, notably hepatitis B virus and human immunodeficiency virus (HIV), may pose a risk for deferred subjects under these medical procedure. Response will aid blood banks formulate future policies regarding to clinical screening questions.
- G8. In the past 12 months, have you had any minor or major medical surgery, tooth extraction, or other dental procedures? This question is designed to evaluate whether the frequency of medical procedures in the last 12 months can be correlated to a riskier subjects. Response to this question will be correlated to other risk exposures.
- G9. Have you ever had an endoscopy (a medical test where a flexible tube is used to look inside of your throat and digestive system) or colonoscopy (a medical test where a flexible tube is used to look inside your colon/large intestine)? *Source: Original; new Source: Original; new* The risk of blood-borne virus transmission with an inadequately decontaminated endoscope during gastrointestinal endoscopy remains unclear. This question will help us evaluate the feasibility of this possible transmission HIV route. Response will aid blood banks in formulating future policies regarding clinical screening questions.
- G10. In the past 12 months, have you had endoscopy or colonoscopy? *Source: Original; new*. The risk of blood-borne virus transmission with an inadequately decontaminated endoscope during gastrointestinal endoscopy remains unclear. This question will help us evaluate the feasibility of this possible transmission HIV route and correlated it within 12 months since the last blood donation. Response will aid blood banks in formulating future policies regarding clinical screening questions.
- G11. In your professional work have you ever gotten someone else's blood, body fluids or excrement splashed into your eyes, mouth or in an open skin lesion? *Source: Original; new*. This question is designed to evaluate professional risk for been exposed to blood or other body fluids. It has been shown that transmission of HIV, hepatitis B or C can occur due to needle stick injury and, body fluids splash. Response to this question will be correlated to other risk exposures.

- G12. In your professional work have you ever had a needle stick injury (accidentally been stuck by a needle or other sharp instrument used for providing medical care to someone else)? *Source: Original; new.* It has been shown that transmission of HIV, hepatitis B or C can occur due to needle stick injury and, body fluids splash.
- G13. Have you ever received a blood transfusion? *Source: Original; new.* This question is designed to ascertain TTI's transmission routes related to medical procedures. In Brazil blood transfusion was an important route of HIV, Hepatitis B, Hepatitis C and Chagas disease transmission in the past 20 years. Response to this question will provide important information related to these TTI's pathway of transmission.
- G14. How many different times have you been transfused? *Original; new.* This question will measure the number exposure of blood transfusion and the odds of acquiring TTI's.
- G15. To the best of your knowledge, have you had sex or intercourse with anyone who was an intravenous drug user? *Original; new.* This question is designed to ascertain the deferred subjects risk taken for having sex to IDU partners in the past. We want to establish, whether this at risk past behavioral pattern may persist during the blood donors lifetime, and to correlate it to serological markers.
- G16. To the best of your knowledge, have you had sex or intercourse with any male who has also had sex with another male? *Source: Original; new.* This question is designed to evaluate the risk taken for heterosexuals having sex with homosexuals or bisexuals men. Bisexual men were the most likely to engage in high-risk behavior, usually related to higher frequency of unprotected sex with women.
- G17. To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for hepatitis? *Original; new.* This question is designed to ascertain the deferred subject's knowledge about their risks taken for having sex with hepatitis positive partners. Response will be correlated to other risk factors
- G18. To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for HIV? *Original; new.* This question is designed to ascertain the subjects knowledge about their risks taken for having sex with HIV positive. Response will be correlated to other risk factors.
- G19. To the best of your knowledge, have you had sex or intercourse with anyone who tested positive for HTLV? *Original; new.* This question is designed to ascertain the deferred subjects' knowledge about their risks taken for having sex with HTLV positive. Response will be correlated to other risk factors.
- G20. To the best of your knowledge, have you had sex or intercourse with anyone who received a blood transfusion? *Original; new.* This question is designed to ascertain whether having sex to a blood transfused person is related to TTI's transmission. In Brazil blood transfusion used to be an important route of TTI's transmission in the past 20 years.

- G21. In the past 12 months, how many male sexual partners have you had? Please include both ongoing partners and one-time encounters. *Source: Original; new.* This question is designed for heterosexual, bisexual and homosexuals. The intention is to capture the lifetime partners and correlate the response to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement, in order to ascertain riskier deferred subjects profiles based on lifetime sexual partners.
- G22. With regard to your sexual partners and one-time encounters in the above question, how often did you use condoms when you had sex? *Source: Original; new.* This question is designed to assess deferred subjects' unprotected sex. Responses to these questions will help us build guidance regarding HIV/STI transmission risk reduction education to ensure safer blood donation.
- G23. In the past 12 months, how many female sexual partners have you had? Please include both ongoing partners and one-time encounters. *Source: Original; new.* This question is designed for heterosexual, bisexual and homosexuals. The intention is to capture the lifetime partners and correlate the response to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement, in order to ascertain riskier subjects profiles based on lifetime sexual partners.
- G24. With regard to your sexual partners and one-time encounters in the above question, how often did you use condoms when you had sex? : *Original; new.* This question is designed to assess deferred subjects' unprotected sex. Responses to these questions will help us to build guidance regarding HIV/STI transmission risk reduction education to ensure safer blood donation.
- G25. Have you ever exchanged (given or received) money or drugs for sex? *Source: Original; new.* This question is designed to ascertain whether at-risk attitudes and behaviors may relate to specific TTI's. Responses will be tailoring risk reduction efforts to address certain drugs and sexual behavioral roles among at risk blood donors.
- G26. In the last 12 months have you exchanged money or drugs for sex? *Original; new.* This question is designed to evaluate whether the frequency of money and or drug exchange in the last 12 months can be correlated to riskier subjects. Response to this question will be correlated to other risk exposures.
- G27. Have you ever injected illegal drugs, anabolic steroids or vitamins not prescribed by a doctor? *Source: Original; new.* This question is built to ascertain the usage of other injected substances that may relate to specific HIV risk behaviors and or attitudes. Responses will tailor risk reduction efforts to address certain drugs and sexual behavioral roles among riskier subjects.
- G28. Have you ever shared needles or syringes with another person? *Source: Original; new.* This question is built to ascertain the usage and sharing of other injected substances that may related to specific HIV risk behaviors and or attitudes. Responses will tailor risk reduction efforts to address certain drugs and sexual behavioral roles among risk deferred subjects.

- G29. To the best of your knowledge, are any members of your family infected with HIV? *Source: Original; new.* This question is designed to ascertain whether the blood donor is aware of any family member with HIV. Response to this question will be correlated to other questions regarding HIV transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G30. Can you tell us which family member is infected with HIV? *Source: Original; new.* This question is designed to ascertain which family member has been infected with HIV. Response to this question will be correlated to other questions regarding HIV transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G31. To the best of your knowledge, are any members of your family infected with Hepatitis B or C? *Source: Original; new.* This question is designed to ascertain whether the blood donor is aware about any family member with Hepatitis B or C. Response to this question will be correlated to other questions regarding Hepatitis transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G32. Can you tell us which family member is infected with Hepatitis B or C? *Source: Original; new.* This question is designed to ascertain which family member has been infected with Hepatitis. Response to this question will be correlated to other questions regarding HIV transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G33. To the best of your knowledge, are any members of your family infected with HTLV? *Source: Original; new.* This question is designed to ascertain which family member has been infected with HTLV. Responses to this question will be correlated to other questions regarding HIV transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G34. Can you tell us which family member is infected with HTLV? *Source: Original; new.* This question is designed to ascertain which family member has been infected with Hepatitis. Responses to this question will be correlated to other questions regarding HIV transmission, window period, and motivational question, among others. Responses will be correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G35. What is your mother's ethnic background? *Source: Original; new.* This question is designed to ascertain subject ethnic background in order to correlate it with HTLV. Response to this question will be correlated to other questions regarding correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.
- G36. If Asian, is your mother of Japanese descent? *Source: Original; new.* This question is designed to ascertain subject ethnic background in order to correlate it with HTLV. There is a correlation among being Japanese descendent and HTLV. Response to this question will be correlated to other questions regarding correlated to deferred subjects status (first-time, lapsed, repeated), volunteers *versus* replacement.