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Sexual risk behaviour questions: understanding and mitigating donor discomfort

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Key words: blood donors, plasma donors, sexual behaviour questions, donor questionnaire, discomfort, behaviour-based screening, gbMSM

Running header: Sexual risk behaviour questions

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Abstract

Background: Blood operators are working to improve donor screening and eligibility for gay, bisexual and other men who have sex with men (gbMSM) and trans and nonbinary donors. Many consider screening all donors for specific sexual risk behaviours to be a more equitable approach that maintains the safety of the blood supply. Feasibility considerations with this change include ensuring donor understanding of additional sexual behaviour questions and minimizing donor loss due to discomfort.

Study design and methods: Qualitative one-on-one interviews were conducted with Canadian whole blood and plasma donors (N=40). Thematic analysis was conducted to assess participants' understandings of the questions, examine their comfort/discomfort, and identify strategies to mitigate donor discomfort.

Results: All participants understood what the sexual behaviour questions were asking and thought the questions were appropriate. Themes related to comfort/discomfort include: their expectations of donor screening, social norms that they bring to donation, whether their answer felt like personal disclosure, knowing the reasons for the question, trusting confidentiality, confidence in knowing their sexual partner's behaviour, and potential for the question to be discriminatory. Strategies to mitigate discomfort include: providing an explanation for the questions, forewarning donors of these questions, reducing ambiguity, and using a self-administered questionnaire.

Conclusion: While many blood operators and regulators view the move to sexual behaviour-based screening for all donors as a significant paradigmatic shift, donors may not perceive additional sexual behaviour questions as a significant change to their donation experience. Further research is needed to evaluate the effectiveness of strategies to mitigate donor discomfort.

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Keywords

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Introduction

Blood operators around the world are working to improve donor screening and eligibility policies for gay, bisexual and other men who have sex with men (gbMSM) and trans and nonbinary donors.[1-5] Currently in Canada, gbMSM must abstain from any sexual activity for a minimum of 3 months to be eligible to donate whole blood. Critics of this population-based approach argue that it is discriminatory and inequitable because it excludes all sexually active gbMSM and some trans women and men, screens populations based on sexual identity and not individual risk behaviours, and does not recognize within-group differences in risk among these populations.[6-10] Moreover, advocates for change argue that the current screening approach, first implemented in the 1980s, is no longer acceptable today given advancements in testing technologies and scientific evidence.[11,12] Current policies have also been criticized for limiting social inclusion and full participation in meaningful acts of social citizenship for gbMSM and gender diverse communities.[13,14] Screening all donors for specific sexual risk behaviours is an alternative to population-based screening that many gbMSM and proponents view as more equitable and acceptable.[15,16] This approach is being taken up by an increasing number of blood operators globally, including Canadian Blood Services.[3,17-19]

In Canada, donors must complete the donor questionnaire (DQ) either on a web-based app prior to arriving at the donor centre or on a digital tablet at the centre prior to donation. Donors complete one of two gendered versions of the DQ based on their male/female (binary options only) designation in the computerized donor system. The two questions currently under consideration for removal are, “In the last 3 months, have

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you had sex with a man?" (asked to donors registered as male) and "In the last 3 months, have you had sex with a man who, in the last 12 months, had sex with another man?" (asked to donors registered as female). If a donor answers "yes" to these questions, they are deferred for 3 months since the date of their last sexual contact. Prior to donation, donors are required to read an information pamphlet that includes a section on the possibility of HIV and hepatitis transmission through sexual contact with a footnote defining "sexual contact" as vaginal, oral, and anal intercourse with or without a condom.

Implementing a sexual behaviour-based screening approach would remove the two questions above and add specific sexual behaviour questions (e.g., concerning sexual activity with a new sexual partner or multiple sexual partners) in the DQ. Blood operators must consider: 1) the validity and reliability of sexual behaviour questions to maintain safety of the blood supply; and 2) understandability and acceptability of the questions to new and current donors to ensure sufficiency of the blood supply is maintained. While most donors would not be deterred from donating if asked new questions,[20] some concern remains that discomfort with these questions may lead to donor loss and compromise sufficiency.[20,21]

We report analytic results of qualitative data from Canadian blood and plasma donors that assesses their views on alternative sexual behaviour questions that may potentially be added to the DQ. Our analysis extends extant research in two ways. First, by examining both comfort and discomfort with alternative sexual behaviour questions, rather than applying an *a priori* assumption assessing discomfort only, a more thorough understanding of the impact of these questions on donors is possible. Second, results provide donor insights on how to mitigate discomfort with new sexual behaviour questions.

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Materials and methods

Qualitative data were collected to explore donors' understanding and acceptability of, and comfort level with alternative sexual behaviour questions in the DQ. Research Ethics Board approval was received from Canadian Blood Services and Western University.

Participant recruitment

Purposive and maximum variation sampling were used to identify and select individuals who would be knowledgeable about the topic of interest and provide as diverse a range of perspectives as possible.[22-24] Study participants were recruited through Canadian Blood Services' donor database. Inclusion criteria were: 1) 18 years or older; 2) able to speak and understand English; 3) donated whole blood (WB) or plasma at least once in the previous 12 months; and 4) not been recruited in the previous 6 months to participate in a study. Recruitment emails were sent to randomly selected donors meeting inclusion criteria, stratified by region and donation type (WB and plasma). In total, 400 recruitment emails were sent with an aim to obtain a sample of N=40 donors (20 WB and 20 plasma) since 20-30 interviews are generally sufficient to achieve saturation of themes.[24] Donors who received a recruitment email were directed to a secure online platform to complete a pre-screening questionnaire asking their age, gender, sexual orientation, city of residence, ethnicity, highest education level, and approximate number of donations. Ninety-two donors responded (23% response rate) and 40 were selected based on their answers in the pre-screening questionnaire. Participants were offered a $25 gift card for participation in an interview.

Data collection and analysis

Semi-structured one-on-one interviews were conducted by JH from January- 2021-March 2021. Participants were given the option to complete the interview either by videoconference (n=23) or by telephone

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(n=17). Prior to beginning the interview, verbal consent was obtained from all participants and interviews were audio-recorded with their consent. Interviews ranged from 30 to 75 minutes.

Interviews included both open-ended, exploratory questions and a "cognitive-interview" component[25,26] whereby participants were asked to provide detailed responses regarding their understanding of, and comfort with, sexual risk behavior screening questions. Following the presentation of each question, participants were asked to reflect on what they understood the question to be asking, any points of ambiguity, their anticipated comfort/discomfort with answering the question in the DQ, and their views on how comfortable/uncomfortable others might feel answering the question in the DQ. Cognitive interview questions included sex assigned at birth, current gender, and sexual behaviours; however, this paper reports analysis of responses to the sexual behaviour questions only. (See Table 1 for cognitive interview questions and topics explored).

Audio-recordings were transcribed by a professional transcriptionist and de-identified. Analysis was conducted using *NVivo 12* qualitative analysis software. Data analysis was informed by thematic[27] and grounded theory[28] approaches. JH and HW independently open-coded the same two interview transcripts to identify codes. These included categorical codes informed by questions asked, such as "understanding" with each sexual behaviour question, and thematic codes to capture emergent themes in the data, such as "confidentiality" and "equity." Next, they compared and discussed interview transcripts and codes to develop a coding framework. JH and HW then independently coded two additional transcripts using the coding framework and compared application of codes to ensure codes were applied consistently. JH and HW divided the remaining transcripts and coded according to the framework.

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Results

Summary of participants

Study participants ranged in age from 21-80+ with most either ≤ 29 (27.5%, n=11) or ≥ 60 (27.5%, n=11). Compared to all current active donors during the same period, our sample population has disproportionately greater representation from donors aged 20-29 and 60 and older (see Table 2 for details). Just over half identified as male (52.5%, n=21), 45.0% (n=18) identified as female, and one participant identified as nonbinary. This deviates slightly from the gender breakdown of the donor population which has slightly more donors registered as female (53.6%) than male (46.4%). Choosing a gender outside the binary is currently not an option for donors due to limitations in the computerized donor system. Study participants were more equally distributed across the four regions than the donor population. Most participants identified as heterosexual (90.0%, n=36), with two identifying as bisexual, and one each queer and questioning. Most identified as Caucasian (77.5%, n=31) and nine participants (22.5%) indicated a visible ethnocultural identity. Participants were mostly return donors with 85.0% (n=34) having donated at least 4 times.

Understandings and ambiguities

All participants indicated that they understood what the three sexual behaviour questions were asking. Interpretations of Q3, “In the last 3 months, have you had a new sexual partner?”, and Q4, “In the last 3 months, have you and your partner only had sex with each other?” were understood as either asking about: 1) sexual behaviour; or 2) the relationship. Notably, more participants understood Q4 as asking about ”infidelity” in their relationship, than Q3. Several participants also thought Q4 might be seeking to identify people in “open relationships” (WB09: 37 years/F/questioning/Caucasian). For Q5, “In the last 3 months, have you had anal

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sex?", most participants understood this question as asking about a specific sexual behaviour and described the question as "direct" and "clear."

Regarding ambiguities with question wording, all participants said they would not have any difficulties answering the questions, but many asked for clarification regarding some terms. Participants thought "sex", "new", and "partner" could be interpreted in multiple ways. For example, several thought "sex" could refer to a range of activities: "a lot of people only think of sex as penetrative sex or even more, specifically, penetrative vaginal sex. And I know many other people would think a lot of other things, like what's the clinical word for, manual sex?" (WB01: 27 years/nonbinary/queer/Caucasian). "New" might be asking about a person with whom they have engaged in sexual activity for the first time *ever* or someone with whom they had sex with in the past, stopped, and had sex again within the last 3 months. Several participants wondered if "partner" was referring to "a sexual relationship, like an actual relationship, rather than a one-night stand" (P07: 23 years/F/bisexual/Filipino). Several participants also questioned how "anal sex" was defined in Q5. For example, "you'd have to consider giving or receiving." (WB10: 68 years/M/heterosexual/Caucasian). Several participants thought ambiguities in these questions might make it challenging for some people to answer and thought greater clarity could improve accuracy of answers.

Reasons for comfort and discomfort

Overall, most participants expressed feeling comfortable answering all the sexual behaviour questions in the context of donation. All participants thought the questions were acceptable and would not be deterred from donating if they were asked. Participants' feelings of comfort and discomfort with sexual behaviour questions are related to the following themes: expectations of donor screening, social norms that donors bring to donation, whether their answer felt like personal disclosure, knowing the reasons for the questions, trusting confidentiality, confidence in knowing their sexual partner's behaviour, and potential for the question to be discriminatory.

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Comfort

Many participants explained that they were comfortable with all three questions since they were consistent with their *expectations* of donor screening which already includes personal questions. They considered the proposed questions as no more uncomfortable than those in the current DQ. For example, as one donor explained, "It's not that dissimilar from… asking if you've paid money for sex." (P18: 66 years/M/heterosexual/Caucasian). Several participants thought a question asking about anal sex was "basically stating the [current] question in a different way" (WB10: 68 years/M/heterosexual/Caucasian) and therefore no more uncomfortable than the current question. One participant said he was comfortable with the question because "this [is] a common thing to ask at an STI clinic" (P11: 21 years/M/heterosexual/South Asian) suggesting that donors who attend sexual health clinics may bring these expectations to the donor setting.

Participants felt comfortable with the sexual behaviour questions asking about a "new" partner or "exclusivity" of partner because these questions did not to deviate from their *social norms* regarding appropriate topics for public discussion. For example, "sexual partners, people talk about that [in] day-to-day conversation" (WB16: 32 years/F/heterosexual/Caucasian). Several participants, however, thought donors from different cultural or social backgrounds might experience discomfort. "Some people from specific cultures might have issues answering this [Q3] question, like especially in cultures where premarital sex is not exactly accepted" (P05: 36 years/M/heterosexual/Middle Eastern).

Participants expressed comfort with all three questions because they would answer "no" and therefore answering the question did not feel like *personal disclosure*. They explained that answering was "easy" and/or would always be "no" since they are in a long-term relationship or not sexually active. Interestingly, results show that regardless of how the sexual behaviour questions were phrased, participants generally understood a "no" answer as indicating not engaging in an activity that could lead to deferral. Most participants also said they felt comfortable answering the questions because they *know the reasons* why they are asked in donor

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screening. At least two participants, however, said they did not know why the questions were necessary but were comfortable with answering because their answers would always be "no." If a donor answers "no" to the questions, knowing the reason for the question may be less relevant to comfort level. Lastly, participants explained that knowing their answers would be kept *confidential* contributed to their comfort with sexual behaviour questions. Underlying this was their trust in the blood operator to keep their answers private.

Discomfort

Participants thought that newer, less experienced donors might feel discomfort if they are unfamiliar with the types of questions asked in the DQ, suggesting discomfort may arise if the questions deviate from *expectations* of donor screening. Notably, no participants who were newer donors reported discomfort with the questions for this reason. Several participants expressed some discomfort with the question asking about anal sex because it deviated from *social norms* of public conversation. Some considered it "pushing the boundaries" of acceptable topics and thought people generally viewed it as "more of a taboo subject" (WB06: 24 years/F/bisexual/Asian)

Several participants expressed potential discomfort if their answer to the question would feel like they were *disclosing personal* information that may elicit social judgement. For example, "I think it [Q5] would be [uncomfortable] if it applied to me as in, yes I had." (P13: 56 years/F/heterosexual/Caucasian). Participants described discomfort arising from personal disclosure as compounded for donors who may not trust that their information would be kept *confidential*. One participant thought this could be a particular concern for donors in smaller communities, "there could be some small communities where everyone knows each other, I'm from a small town originally, so I know that. And I can see people not wanting to start the gossip train type thing." (WB14: 35 years/M/heterosexual/Caucasian).

Participants identified unique reasons for discomfort with Q4, exclusivity with sexual partner, and Q5, anal sex. They thought potential discomfort might arise from uncertainty about their partner's sexual

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behaviour, including sexual activities outside of a monogamous relationship, and having to reflect on their relationship. One participant in her 60s thought this question was potentially more uncomfortable to answer than the question asking about anal sex. For Q5, some participants expressed discomfort if they perceived it as a "politically correct" way to discriminate against gbMSM. Concerns regarding how gbMSM might perceive this question were also raised.

Mitigating discomfort

Participants offered several ways to mitigate discomfort explicitly by making suggestions and implicitly in their discussions of their comfort level with the questions (see Table 3~~6~~ for details). First, ensuring adequate explanation for why the questions are being asked and how they relate to blood safety and equity were suggested as ways to mitigate discomfort. Results suggests offering explanations that provide different levels of detail (e.g., of the scientific research supporting the questions) would satisfy a range of donor interest levels. In addition, a brief explanation for the sexual behaviour questions embedded within the DQ may decrease discomfort. Second, ensuring donors are alerted to and prepared for new sexual behaviour questions in the DQ may mitigate discomfort. While providing an explanation for the questions increases donor understanding of the reasons for the questions, forewarning donors functions to shape donor expectations of the screening questions. Several participants also suggested that knowing about the new questions in advance would enable people to self-defer and avoid the discomfort of being deferred at the donor centre. Third, while some blood operators' may be concerned that explicit sexual behaviour questions will cause discomfort, participants suggested that ambiguity in questions may cause uncertainty. Several explained that greater specificity would reduce the guesswork of what activity the blood operator is screening for and reduce the need to clarify with staff. Lastly, answering questions in a self-administered DQ, such as on a web-based app, was preferable to answering the questions with staff in-person. Several participants mentioned that having to talk about personal

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matters with staff would cause greater discomfort, especially if staff are not comfortable with sexual behaviour questions and topics.

Discussion

Results suggest that donors will find the proposed sexual behaviour questions clear, direct, and understandable with clarity enhanced by blood operators' providing definitions of key terms used. Results expand understandings of the potential impact of sexual behaviour questions on donors by exploring both comfort and discomfort with these questions within the context of donation. In particular, a novel finding is the preference some donors expressed for the question asking about anal sex over the current "MSM question." Many viewed it as clearer and less discriminatory by screening all donors, regardless of sexuality, for specific behaviours. Results suggest that some donors would prefer answering new sexual behaviour questions to the current questions provided it is clear to them why the questions are being asked and that they provide a more equitable approach to screening and eligibility. This is consistent with research that shows German and Austrian donors found the "MSM question" unfavourable and that it had a negative impact on their mood.[29] That donors value equity in donor screening is consistent with findings that blood donors are more concerned with equity and fairness than non-donors.[30]

Our results demonstrate that comfort level with sexual behaviour questions is influenced by the expectations and social norms donors bring to the donation experience, and their specific sexual behaviours close to the time of donation. Experienced donors with a single, long-term sexual partner would likely experience no or minimal discomfort with these questions. How newer and first-time donors might differ from experienced donors requires further research. While some participants who were experienced donors thought newer donors would feel discomfort because they may not know what to expect in donor screening, we did not find this among our participants who were newer donors. On this point, first-time donors may be the group

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most likely to experience discomfort if they do not know what questions are asked in donor screening. However, whether first-time donors would experience any greater discomfort with new sexual behaviour questions than current questions in screening, including questions about paying money for sex, is yet unclear. Donors who have engaged in the sexual behaviours being screened for may experience some discomfort with having to disclose this information. However, our results suggest that social factors (e.g., sociocultural group and norms) will influence the level of discomfort and ensuring confidentiality will mitigate discomfort. Results also suggest that over time, as donors come to expect sexual behaviour questions in donor screening, any donor deterrence due to discomfort will likely decrease.

Results also suggest that some small proportion of donors will experience discomfort with new sexual behaviour questions and blood operators would be well-advised to make efforts to mitigate such discomfort. Mitigation strategies include ensuring adequate explanation to donors for why the new questions are being asked and reducing ambiguity in the terms used in the questions. Studies have shown that reducing ambiguity may facilitate answering questions more honestly.[29] While many donors may skim read materials provided, pay little attention, and may have low literacy,[31-33] our results suggest that some donors do want details including the scientific evidence supporting these questions. As such, blood operators may consider a range of explanations from very short to more detailed explanations. Sandner et al.'s[29] suggestion that blood operators consider providing information in short videos rather than written text is also worth considering here.

Blood operators may also mitigate donor discomfort by forewarning new and return donors of sexual behaviour questions that will be asked in donor screening. Knowing in advance what questions will be asked will enable self-deferral and shape donors' expectations of the screening process. Blood operators may also consider grouping all sexual behaviour questions together in the DQ. While it is yet unclear whether it is better to organize DQ questions by topic or chronology,[29,34] it makes some intuitive sense to group sexual behaviour questions together and add explanatory information as a preface to these questions. For blood operators that have implemented a computerized self-administered DQ, incorporating sexual behaviour questions into this

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format will likely mitigate discomfort. Our results are consistent with research showing that computer-assisted self-administered interviews result in higher reporting of sensitive activities, including sexual behaviours, than phone interviews[35,36] and are perceived as more private.[37] Results suggest that blood operators should develop strong communication plans to prepare donors and prospective donors for the new questions. Comprehensive staff preparedness training would also facilitate staff comfort with discussing and explaining sexual behaviour questions to donors in centre.

This study has several limitations. Participants were all current donors and over half were experienced donors (i.e., >20 donations). Given their familiarity with screening questions, it is possible that the study population may report less discomfort with sexual behaviour questions than first-time or prospective donors. This study is also limited in its ability to offer a comparative analysis of comfort level with the new sexual behaviour questions vis-a-vis the current questions in the DQ. To build on qualitative findings, we will conduct a quantitative survey of a representative sample of donors for comparative analysis of 1) relative comfort/discomfort with the questions under study; and 2) comfort/discomfort with a DQ including new questions vis-a-vis the current DQ. We will also evaluate the effectiveness on donor understanding and discomfort of grouping sexual behaviour questions together in the DQ with a heading and brief explanation.

Implementing sexual behaviour-based screening for all donors is a move towards greater equity in blood donation while maintaining the safety of the blood supply. Blood operators may be encouraged by evidence that suggests new sexual behaviour questions will not deter most donors from donating. These results are consistent with prior research that shows that only a very small minority of Canadian donors would be deterred from donation because of discomfort with new sexual behaviour questions.[20] While many blood operators and regulators view the move to sexual behaviour-based screening as a significant paradigmatic shift, donors may not perceive additional sexual behaviour questions as a significant change to their donation experience.

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Table 1. Interview guide

Cognitive interview questions	Topics explored with open-ended questions
Q1: What was your sex assigned at birth? Q2: What is your current gender? **Q3: In the last 3 months, have you had a new sexual partner?*** **Q4: In the last 3 months, have you and your sexual partner only had sex with each other?*** **Q5: In the last 3 months, have you had anal sex?***	• Experiences with blood/plasma donation • Reasons for donating • Experiences with completing the DQ • Awareness of Canadian Blood Services' efforts to advance screening and eligibility for gbMSM and trans, nonbinary, and gender diverse donors • Views on Canadian Blood Services' efforts

* Analysis of this question is included in the paper

Table 2. Summary of participants

Participant characteristics (N=40)	n	%	Donor population characteristics ** (N=389,342)	n	%
Age			**Age**		
19*	0	0.0	17-19	17, 595	4.5
20-29	11	27.5	20-29	85,022	21.8
30-39	7	17.5	30-39	78,645	20.2
40-49	5	12.5	40-49	65,298	16.8
50-59	6	15.0	50-59	72,838	18.7
60-69	7	17.5	60-69	55,232	14.2
70+	4	10.0	70+	14,712	3.8
Gender			**Gender**		
Female	18	45.0	Female	208,637	53.6
Male	21	52.5	Male	180,705	46.4
Nonbinary	1	2.5	Nonbinary	u/k	u/k
Region			**Region**		
BC/Yukon	10	25.0	BC/Yukon	66,630	17.1
Prairies	12	30.0	Prairies	118,290	30.3
Ontario	12	30.0	Ontario	166,452	42.8
Atlantic	6	15.0	Atlantic	37,970	9.8
Sexuality					
Heterosexual	36	90.0			
Bisexual	2	5.0			
Queer	1	2.5			
Questioning	1	2.5			
Ethnicity					
Caucasian	31	77.5			
Middle Eastern	2	5.0			
Chinese	2	5.0			
East Asian	2	5.0			
Filipino	1	2.5			
South Asian	1	2.5			
Bi-racial	1	2.5			
No. of donations					
1-3	5	12.5			
4-20	11	27.5			
21-100	11	27.5			
101-999	11	27.5			
1000+	1	2.5			
Unknown	1	2.5			

* Minimum age of recruitment was 19

** All unique whole blood and plasma donors over the same period of recruitment (February 2020 – January 2021).

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Table 3. Mitigating discomfort in donors

What?	Why?	How?
Providing an explanation for the questions	• To ensure that donors understand the relevance of the SBB questions to blood safety • To explain how the SBB questions may increase equity in blood donation • To explain what happens based on the answer to sexual behaviour questions (e.g., deferral? additional testing?) • To explain the rationale for the progression of sexual behaviour questions	• Group all sexual behaviour questions together in the DQ and provide a short explanation in the DQ prior to these questions • Ensure that explanations are non-stigmatizing and non-judgmental of sexual activities and sexual identities • Offer a range of explanations from very brief to detailed scientific evidence • Provide comprehensive staff training to ensure staff can provide clear explanations for the questions • Provide comprehensive staff training to ensure staff are comfortable discussing sexual activities in a non-stigmatizing and non-judgemental manner
Providing forewarning of questions	• To inform donors and prospective donors of questions to be asked to shape expectations • To enable donors to self-defer if they would answer "yes" to the questions (i.e., the questions would screen them out)	• Ensure a comprehensive communications plan to donors and prospective donors prior to implementation
Reducing ambiguity in questions	• To decrease the need for donors to clarify with staff what is meant by the question • To increase clarity and understanding of what the blood operator is specifically trying to assess • To encourage greater accuracy in answers	• Implement questions that are clear and specific • Provide online and hardcopy materials that clarify potentially ambiguous terms in sexual behaviour questions • Provide comprehensive staff training to ensure staff can clarify and explain the terms used in the questions
Answering questions on self-administered format (e.g., web-based app) and not in-person	• To enable donors to answer sexual behaviour questions in a way that mitigates discomfort and supports a feeling of personal privacy	• Implement sexual behaviour questions in a self-administered format • Minimize staff-mediated administration of sexual behaviour questions

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