



Evaluation Of Challenges In Post Donation Counselling Of Ttd Reactive Donors: An Experience In A Tertiary Care Government Hospital In Ajmer, Rajasthan

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Abstract

Aims and Objectives: This study was undertaken to determine the response rate following notification of reactive status to blood donors, to know about their demographic characteristics and their attitudes following post donation notification and to assess treatment compliance in HIV and syphilis reactive donors. **Study Design:** Cross sectional and Prospective. **Place and Duration of Study:** Department of Immunohematology and Transfusion Medicine, JLN Medical College and Associated Group of Hospitals, Ajmer; 6 months. **Materials and Methods:** 7727 blood units were screened for the mandatory Transfusion-transmitted diseases (TTD). All TTD reactive units were retested and notified of their status by telephone and called for repeat testing followed by face-to-face counselling and referral for treatment. All reactive donors were followed up for compliance. **Results:** Out of 123 TTD reactive donors, only 92 (75%) could be notified, out of which only 52 (56.5%) came to the blood bank for counselling. Of the 6 HIV reactive donors that came for counselling, all of them were continuing with their treatment while only 12 out of 19 syphilis reactive donors were compliant with their treatment after counselling. **Conclusion:** Post-donation reactive donor counselling is a strenuous task. Whether a reactive donor responds or not, can be influenced by several factors, which include the age, educational and occupational status. A centralised donor database that connects all government authorised blood banks can be a potential solution to the worrisome issues of non-notification, non-responders and test seekers that are still prevalent in India's blood supply chain.

Keywords: Blood donor, TTD screening, counselling

Introduction

Screening of blood donor units for Transfusion-Transmitted diseases (TTDs) has become one of the cornerstones of safe blood supply. To achieve the same, the WHO has recommended that all donor units must be screened, at the very least, for Human-Immunodeficiency virus (HIV), Hepatitis B virus (HBV), Hepatitis C virus (HCV) and syphilis.¹ The former three are well recognised to cause chronic-debilitating clinical end-points in many patients, while syphilis, albeit a tad historical and with very

good treatment available, still continues to wax and wane, with sero-prevalence ranging between 0% to 0.54%, in different donor populations, if we consider the last couple decades or so.^{2,3}

It has been estimated that the risk of acquiring various TTDs is approximately 1 in 493,000 for HIV, 1 in 103,000 for HCV and 1 in 63,000 in USA through blood transfusion.⁴ As per a SIMS Blood Bank report of Ajmer in 2011-12, 1.23% and 0.049%

of all blood units collected were found positive for Hepatitis B and Hepatitis C respectively.⁵

So, in an effort to limit this spread of TTDs, the government of India (after Judgement of Supreme Court of India, 1996) made it compulsory to screen all donated blood for HIV (1989), HBV (1996), Malaria (1996), Syphilis (1996) and HCV (2001).⁶For this purpose, most hospitals in government setups started to use serological tests to screen for TTDs, which include rapid tests, Enzyme Linked Immunosorbent Assay (ELISA) or Chemiluminescence. This has indeed proven very helpful as the percentage of donor units found reactive for Hepatitis B and Hepatitis C fell from 1.23% and 0.049%, to 0.80% and 0.018% respectively, as per the SIMS report of Ajmer 2019-20.⁵Use of Nucleic Acid Testing (NAT) in some centres have helped reduce the window period further, thereby improving detection rates. However, despite so many technological advances since the beginning of the 21st century, there is no test that can completely ascertain all window period donations. There was an instance in 2009 where NAT was unable to detect HIV and HCV in a study, due to low levels of viremia and/or suboptimal amplification efficiency.⁷

After screening, if a donor unit is found reactive for any of the TTDs, the tests are performed again by taking fresh sample from concerned blood bag by using either a different assay with a different principle or in duplicate with the original assay, so as to be doubly sure before notifying the donors. Donors who come back for counselling to the blood bank are then usually re-tested, and if found reactive; they are referred to Integrated Counselling and Testing Centres (ICTC) for HIV, gastroenterology for HBV/HCV and Sexually Transmitted Diseases (STD) clinic for syphilis, respectively for further management. This is done as per the guidelines of National Blood Transfusion Council (after adoption of the National Blood Policy, 2002) that mandated all blood banks to obtain a written consent from the donor on the donor questionnaire and consent form at the time of donation that whether they wish to be informed about a reactive test result or not.⁶

Despite an allegiance to strict standard of procedures and good procedural hygiene, there is always a chance that these serological tests and even NAT

might present false-positive or false-negative results. In addition, most of the blood banks don't possess the facility to perform confirmatory tests. So, donors are informed only on the basis of the screening tests available in the blood bank. Quite expectedly, donors with altruistic intentions might become disheartened and even extremely distressed if they were to be informed about their abnormal results. They could very well develop a negative feeling towards the act of donation or might become scared, all courtesy of the stigma of some these TTDs.⁸This is especially true for HIV sero-reactive blood donors. Several studies have been carried out to understand the impact of HIV-related stigma in various settings. Moreover, it is known that revelations of this stigma can manifest in many forms, including isolation, ridicule, physical and verbal abuse, and denial of services and employment.²⁰On the contrary, some individuals can ignore this notification and might even continue to donate their blood someplace else. In the long run, such practices can diminish the quality of life of not only the donor's own family, but that of countless other's as well.

Keeping all this in mind, donor notification can be a strenuous process and therefore, it demands special skills from the staff involved in notification and counselling. This would also include the stages of pre-donation information, in which donors are explained about the process of donation, mandatory ABO grouping and TTD testing and potential adverse effects & pre donation counselling, which includes taking their informed consent for blood donation.¹⁹

As per a NACO report (2016), the state of Rajasthan had 65.5% Voluntary Blood donations with sero-activities of 0.09%, 0.12%, 1.21%, 0.31% and 0.02%, for HIV, HCV, HBV, Syphilis and Malaria, respectively.⁹ So far, there is very little data related to counselling of TTD-reactive donors and their response towards the blood bank's post-donation advice in the state. So, we undertook this study with the aim:

1. to determine the response rate following notification of reactive status to donors
2. to study demographic characteristics of reactive donors, and

3. to get to know about donors' attitudes following post-donation notification.

4. to follow up HIV and syphilis patients; to get to know whether they were continuing with their treatment.

Materials and Methods

This is a 6-month cross-sectional as well as a prospective study conducted by the Department of Immunohematology and Transfusion Medicine, JLN Medical College and Associated Group of Hospitals, Ajmer (Raj.), from January 1, 2023 to June 30, 2023. All blood donors were requested to complete the donor-screening questionnaire printed form, which contained a written informed consent as well, that specified that their donated blood would be tested for the mandatory TTDs, and whether they would like to know their reactive status. A total of 7727 donor units were screened during this time period which had 4114 donations in voluntary camps and 3603 in the hospital blood bank.

Five mandatory TTD screening tests for HIV (Genscreen™ HIV Ag-Ab qualitative enzyme immunoassay from BIORAD), HBV (Monalisa™ HBsAg ULTRA qualitative enzyme immunoassay from BIORAD), HCV (NANBASE C-96 V4.0 from General Biologicals Corporation), syphilis (Precision Syphilis Ab Rapid Test) and malaria (@Sight Malaria Card Antigen (Pf/Pv) by Mediclone Biotech Pvt. Ltd.) were performed on 3 ml clotted and 3 ml ethylenediaminetetraacetic acid (EDTA) blood collected in pilot tubes from post-donation samples.

The donors reactive for HIV, HBV, HCV by ELISA in duplicate (first sample from pilot tube and another from blood bag), and those reactive for syphilis and malaria by rapid tests, were notified of their abnormal test results. This included only those donors who had given their consent to be informed of their results.

The blood bank counsellor informed the reactive donors of their test results and advised them to come to the blood bank for in-person counselling, repeat testing, and referral to the appropriate hospital department for further care. The counsellor contacted the donor by phone and WhatsApp text-service a total of three times, with each call at least 15 days apart.

Those donors who could be reached by phone or text were considered to have been notified while those who could not be reached even after three attempts were considered not to have been notified (non-notified donors). Confidentiality was maintained throughout the process. When contacting donors by phone, their identity was confirmed by comparing the demographic information they provided with the information on their donor form. Their demographic information was categorised as per the modified Kuppuswamy scale.¹⁰ Among the notified donors, those who came back to the blood bank for counselling were considered responders, and the others were considered non-responders. The Response rate was then calculated as follows:

$$\text{Response Rate} = \frac{\text{No. of notified donors who came back for counselling to the blood bank}}{\text{Total no. of Notified donors}}$$

When donors came for counselling, their identity was verified again and confidentiality was maintained at all steps. During face-to-face counselling, it was ensured that the donors understood the interpretation of the test results. The donor's medical history was reviewed and any associated risk factors were noted.

After counselling The HIV-reactive donors were referred to the ICTC with a referral slip for

confirmatory testing and further treatment. Syphilis-reactive donors were referred to a STD clinic. Other reactive donors were referred to a physician/gastroenterologist for further management. This was done in a very compassionate manner, keeping in mind the emotional state of the responsive donors.

Donors were educated about the modes of transmission of the infection and the precautions they should take until the conclusion is made. They were also advised not to donate blood again. All communication was done in the language that they could understand.

HIV and Syphilis reactive-responsive donors were followed up with a call over telephone and their attendance tallied with ICTC centre and STD clinic respectively, to make note of their compliance.

Results

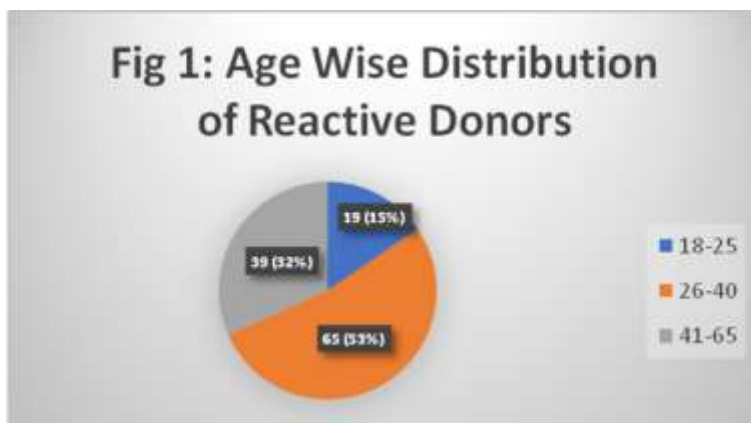
A total of 7727 donations were assessed between 01.01.2023 and 30.06.2023, under the Dept. of Immunohematology and Transfusion Medicine, JLN

Medical College and Associated Group of Hospitals, Ajmer (Raj.), out of which 88.6 % were voluntary donations (VD) and 11.4 % were replacement donors (RD). The male population constituted the majority of these donors (n=7415; 96%) while only 4% donors were females.

Out of the total donations, 123 donors came out to be sero-reactive for TTDs. This gave a 6-month period prevalence of 1.59% for all TTDs. 64 donors were positive for syphilis, 41 were positive for HBV, 8 were positive for HIV, 6 were positive for HCV and 5 were positive for Malaria. One donor was positive for both HIV and HCV. Period prevalence for individual TTDs is shown in Table 1.

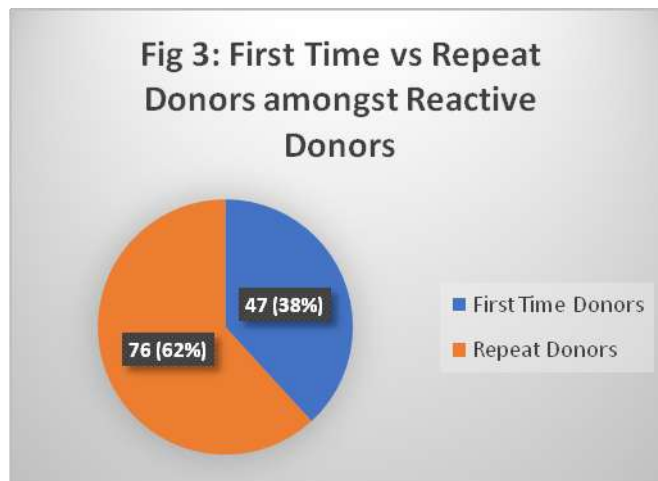
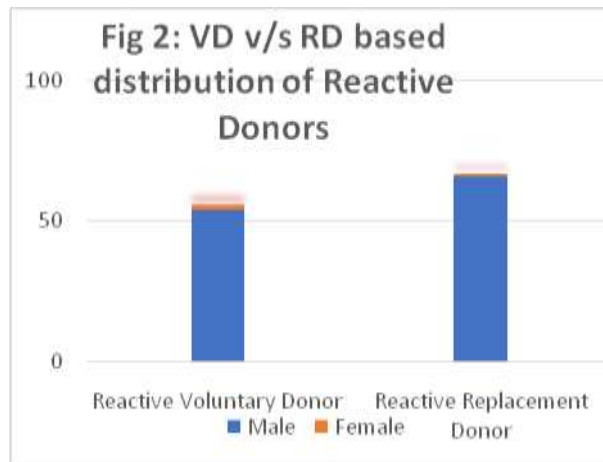
	No. of Donors(123)	Reactive	Period Prevalence (1.59%)
HIV	8		0.10%
HBV	41		0.53%
HCV	6		0.07%
Malaria	5		0.06%
Syphilis	64		0.82%

120 out of 123 reactive donors (97.5%) were males while only 3 females (2.5%) were reactive donors. Majority of these donors (53%; n=65) belonged to the age group of 26-40 years, which was followed by age group of 41-65 years (32%; n=39). 18-25 year age group only had 15% of reactive donors (n=19). The Age based distribution of reactive donors is depicted in figure 1.

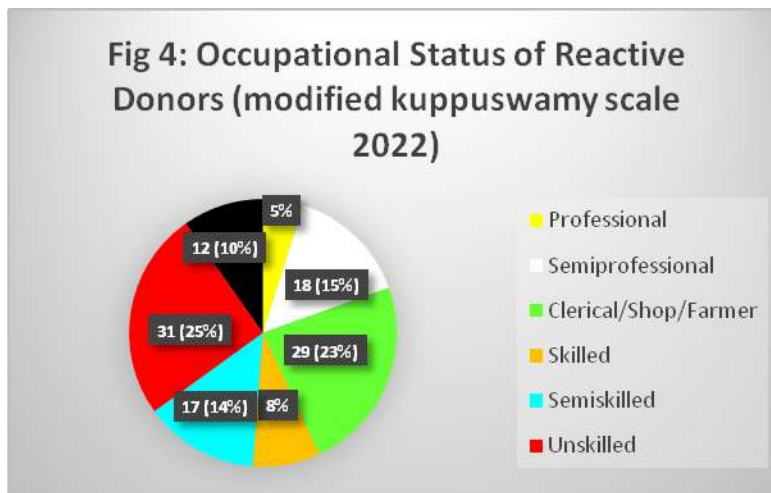


56 (45%) out of 123 reactive donors were voluntary donors (VD) and the remaining 67 (55%) were replacement donors (RD). 62% (n=76) of the total reactive donors were Repeat donors and the rest 38% (n=47) were First-time donors. 72 donations (59%) which were reported reactive, were done in the hospital blood bank, whereas 41 (41%) were done in voluntary donation camps. A major share (85%; n=105) of the reactive donors were

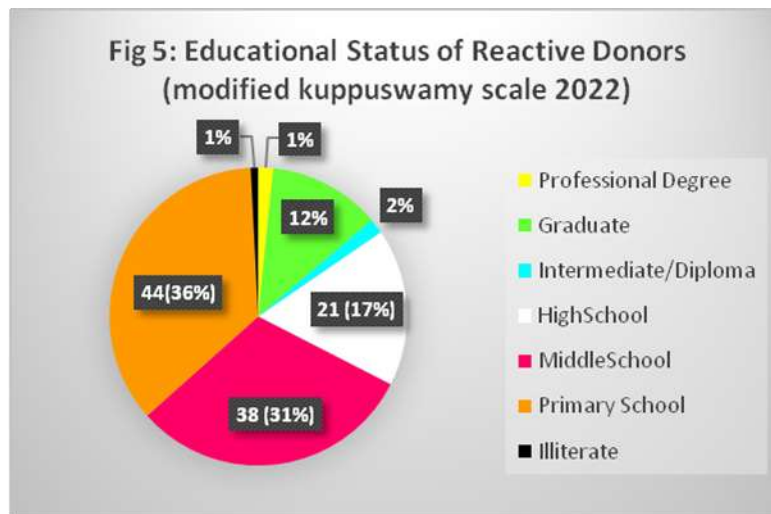
married and the rest 15% (n=18) were unmarried. VD v/s RD proportion and First-time donor v/s Repeat donor proportion, of all the reactive donors are shown in Figures 2 and 3 respectively.



With regards to the occupational status of the reactive donors, around 25% (n=31) and 23% (n=29) of these donors belonged to the Unskilled category and the Clerical category respectively. This was followed by the Semi-professional and the Semiskilled categories, comprising 15% and 14% of the reactive donors respectively. The occupational status of the reactive donors is depicted in Figure 4.



As for the educational qualifications of the reactive donors, a relatively high percentage of the reactive donors had primary school (36%; n=44) or middle school (31%; n=38) education. Around 17% (n=21) and 12% (n=15) belonged to the high school category and the graduate category respectively. The detailed educational status of the reactive donors is illustrated in Figure 5.



Amongst the 123 reactive donors, 92 could be reached by phone (notified donors) while the remaining 31 were not reachable by phone (non-notified donors). In the 31 non-notified donors, 21 (68%) did not pick up the phone at all, 8 (26%) provided us with the wrong contact details and 2 (6%) were non-reachable in all our three attempts to reach them.

Of the 92 Notified donors (and total 123 reactive donors), 52 came to our blood bank for counselling (Responders; Response rate 56.5%). The rest 40 were non-responders. Among these non-responders, 23 (57%) answered that they cannot come as their schedule is busy, 11 (28%) said that they were not interested and 6 (15%) informed us that they had consulted other doctors. Response rate among reactive donors is given in Table 2.

	No. of Responders/Total no. of Notified Donors	Response Rate
Overall	52/92	56.52%

HIV	6/7	85.71%
HBV	23/34	67.64%
HCV	2/5	40%
Syphilis	19/43	44.18%
Malaria	2/3	66.67%

Among the 52 responders, 25 (48%) belonged to the 41-65 age bracket, while only 19 and 8 of them belonged to the 26-40 and 18-25 age brackets respectively. Majority (69.4%) of the Notified donors in the age group 41-65 returned to the blood bank for post-donation counselling while only 45.2% of notified donors from 26-40 age group returned to the blood bank for the same. Table 3 depicts the Response rate in all notified donors as per their age brackets.

Age (years)	No. of Notified donors	No. of Responders (%)
18-25	14	8 (57.14%)
26-40	42	19 (45.2%)
41-65	36	25 (69.4%)

Replacement Donor had a comparatively slightly higher response rate (~63%; 31/49) as compared to Voluntary Donors (~48%; 21/43).

29 of the 52 responders (56%) were Repeat donors whereas 23 (44%) were First Time donors. Response Rate was slightly higher in First time donors as compared to Repeat donors. Response Rate in First time vs Repeat donors is shown in Table 4.

	No. of Notified Donors	No. of Responders (%)
FTD	37	23 (62.1%)
Repeat Donors	55	29 (52.7%)

Of the 52 Responders, 43 of them were married while only 9 of them were unmarried. The response rate in married and unmarried responder brackets was comparable (55% vs 64% respectively).

34 out of 52 Responders had donated In-hospital whereas only 18 of them had done so in outside voluntary camps. The response rate was comparatively higher in In-hospital donors (62.9%; 34/54) than in Camp donors (47.3%; 18/38).

Regarding the educational level in responders, 18 (34%) and 16 (31%) donors had Middle school and primary school qualifications which was followed by 12 (23%) donors who had High school qualification. 4 (8%) of them were Graduates while only 2 (4%) had an Intermediate/Diploma degree. The Response rates were higher in Intermediate/Diploma and High School groups (100% and 70.6% respectively) in comparison with Middle and Primary school groups (56.2% and 55.1% respectively). The educational status of the responders is demonstrated in Figure 6. Table 5 shows individual response rates as per educational qualification in the responders.

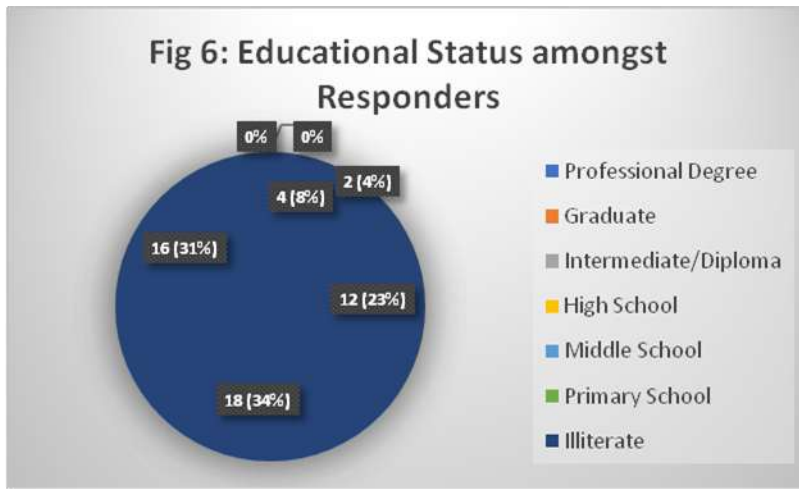


Table 5: Response Rate as per Educational Status

	No. of Notified Donors	No. of Responders(%)
Professional Degree	1	0 (0%)
Graduate	10	4 (40%)
Intermediate/Diploma	2	2 (100%)
High School	17	12 (70.6%)
Middle School	32	18 (56.2%)
Primary School	29	16 (55.1%)
Illiterate	1	0 (0%)

As for the professional status in the 52 responders, majority of them (13;25%) belonged to the Clerical/Shop/Farm bracket which was trailed by Semi-Skilled (10;19%) and Unskilled (10;19%) labour. The detailed professional status of the Responders is depicted in Figure 7.



The response rate was the greatest in the Skilled and Semi-Skilled strata (75% and 71.4% respectively) and on the other hand, it was lesser (62.5% each) in the Unskilled and Unemployed strata. Table 6 depicts the individual response rates as per the occupational status.

	No. of Notified Donors	No. of Responders (%)
Professional	5	2 (40%)
Semi-Professional	13	6 (46.1%)
Clerical	28	13 (46.4%)
Skilled	8	6 (75%)
Semi-Skilled	14	10 (71.4%)
Unskilled	16	10 (62.5%)
Unemployed	8	5 (62.5%)

Authors	Study Period	Reactive Donors	No. of Responders	Response Rate %
Present Study	Jan2023-Jun23	90	52	56.50%
Syal <i>et al.</i>	2021	15	14	93.30%
Bhasker PM <i>et al.</i>	2015-18	107	49	45.70%
Patel SG <i>et al.</i>	2012-14	320	261	81.50%
Kotwal <i>et al.</i>	2012	229	225	98.20%
Mukherjee <i>et al.</i>	2011	138	47	34.05%
Agarwal <i>et al.</i>	2010-11	249	182	73.09%

Of the 6 HIV-reactive donors who were referred to the ICTC centre, we found that 100% of them were following up with their treatment. 12 out of 19 syphilis-reactive responders had continued with their treatment at the STD clinic.

Discussion

The sero-prevalence of various TTDs in blood donors has been very dynamic in the last couple of decades, not only in different regions, but in the same regions as well. We reported an overall sero-prevalence of 1.59% for all TTDs. Meena *et al.* reported a sero-

period prevalence of 1.19% in their study from 2017-2022 in the same region.¹¹ However, they found that Hepatitis B had the highest sero-prevalence over the course of their study (0.71%) whereas in our study, we found that syphilis was most prevalent in blood donors with a 6-month sero-prevalence of 0.82%.

This uprising of syphilis' prevalence is also noticeable in Meena *et al.* as in 2021 and 2022, its period prevalence was 0.85% and 0.69% respectively.¹¹

Comparable sero-prevalences of TTDs were also reported by Mukherjee *et al.* (1.59%), Patel *et al.* (1.41%) and Bhasker PM *et al.* (1.07%).¹²⁻¹⁴ On the other hand, Syal *et al.*, Kotwal *et al.* and Chaurasia *et al.* have publicized higher sero-prevalences of TTDs at 2.15%, 3.02% and 2.51% respectively.^{3,15,16} Such changes in sero-prevalences in donor populations over time, in different time periods as well as regions, are suggestive of the fact that changes must have happened in donor habits and attitudes, as well as in testing technologies, over the course of time.

Majority of Reactive donors (53%; 65/123) in our study belonged to the age bracket of 26-40 years, which was followed by 41-65 age bracket (32%; 39/123). Similar findings were reported by Chaurasia *et al.* where 54.3% of sero-reactive blood donors belonged to the 26-40 age bracket.¹⁶ Patel *et al.* also found out in their study that most of their reactive donors (74.7%) belonged to the age bracket of 21-40 age group.¹³ These findings are consistent with the generalised assumption that most adults become sexually active after 21 years of age in India, and the fact that donors are able to blood only after the age of 18 years in India. Since 4 out of the 5 tested TTDs can be transmitted sexually, it is obvious that this age bracket of 21-40 would have a comparatively higher seropositivity of TTDs.

In a study by Vucetic *et al.* in Serbia, they reported that HBV and HCV were most prevalent in blood donors aged 18-29, whereas syphilis was seen most in donors aged 50-65 years old.¹⁷ This is somewhat in contrast with our findings where we found 24 out of 41 HBV reactive donors and 32 out of 64 syphilis reactive donors, both in the 26-40 age group. This could suggest that the transmissibility of TTDs, in and outside of India, would also depend on the cultural background of a country.

62% (76) of Reactive donors in our study were repeat donors and the remaining 47 were first time donors. Similar results were reported by Kumari S where 52% of reactive donors were repeat donors.² This information does shed some light on the fact that the repeat donors could have been test seekers. However, during counselling phase of responders, none of the

donors responded to have ever gotten a call back from any blood centres, where they might have donated blood previously. It has been found earlier that in certain parts of India, donor counselling and reactive donor notification services were inadequate and that only 53% of the donors were aware that the blood bank was supposed to inform TTD reactive donors about their situation.¹⁸ However, it is the moral obligation of the blood banks to inform reactive donors of their test results, so that after proper counselling and further tests to confirm diagnosis, required treatment can be started as soon as possible. Another possibility is that reactive donors could have indeed been "test seekers" but did not disclose such information during pre-donation counselling as well as post donation counselling. This can be due to many factors, especially due to the fact that 4 out of 5 of these TTDs can also be transmitted by sexual route, and are therefore any information that might be pertinent would be undisclosed by the donor.⁸ Currently, we rely on the good will of blood donors to disclose their correct particulars and information and though we are not wary of one's intentions, we can help divert one's thoughts towards good will and honesty by proper dialogue between donor and the blood bank authority.

Test seekers who still continue to donate blood, even after proper disclosure of their test results, will become a menace in the blood banking system. There is no proper system in place to identify such donors right away and therefore, a lot of resources are wasted in such situations. We could potentially perform pre-donation testing for TTDs using rapid kits but such a practice is impractical in our setting where 53% of total donations were in the camp setting. Another practice to identify such rogue donors could be to introduce a computerised system where every donor is registered in a database. If reactive donors would attempt to donate after, their particulars would show up in the system. However, installing such a system nationwide would be a challenge.

We also found that most (~70%) of the reactive donors were doing small clerical jobs, unskilled jobs (labourers, shop workers, transporters) or semi-skilled/skilled jobs (drivers, transporters, small scale traders etc.). Very few of them had a professional or a semi-professional status. Quite alike findings were also reported by Kumari S, where 40 out of 116

reactive donors were farmers and only 11 owned a private business.² Such findings do put forward the notion that certain sects of the occupational strata are more well connected and informed regarding TTDs and how they are transmitted. So, donors belonging to professional/semi-professional occupational strata would be less often exposed to TTD causing pathogens.

The same can be inferred from the educational status of the reactive donors. Only 15% of the reactive donors were those who had a professional degree, were graduates or had some kind of a diploma. The remaining majority (~67%) had primary to middle school education; at which level information discerning TTDs is clearly not dispersed. This again reiterates the notion that a more aware and a more literate donor population would have lesser chances of getting infected with TTDs.

The notification rate in our study was ~75%. Rest 25% (31) of the reactive donors could neither be communicated with a phone call nor through a texting service. The reasons for not being able to notify reactive donors were primarily either not picking up the phone (68%; 21) or providing false contact details (26%; 8). Similar reasons were depicted in the studies done by Mukherjee *et al.* and Bhasker PM *et al.*^{12,14}

Amongst the 92 notified donors, only 52 came to the blood bank for counselling, which gave us a Response rate of 56.5%, which is low. Studies by Bhasker PM *et al.* and Mukherjee *et al.* showed a low response rate as well, at 45.7% and 34.05% respectively.^{12,14} In sheer contrast, a response rate of 98.2% was reported by Kotwal *et al.* which showed that donors do act upon promptly when they are given information in a right way with carefully used words, in the language that the donor understands. Such skill, though, needs time and patience to be built up.³ The response rates in different similar studies is shown in Table 7.

Quite similar to Kumari S, our study also reported a higher response rate in replacement donors (63%) in comparison with voluntary donors (48%).² In our case, this could be due to the fact that most of voluntary blood donations in our blood bank also tend to take place in blood donation camps in remote locations. Donors from such places have a hard time to get back in touch with our blood bank. In a couple

such instances, however, two of our reactive donors responded back by informing us that they had consulted a local doctor for further investigations. Moreover, 34 out of 52 responders had donated blood in the hospital. This suggests that they must be living in much closer proximity to our blood bank than the other 18. To help in such situations, government could intervene and propose some kind of transport facility for such donors who live in far flung areas.

We also compared the response rates as per educational and occupational strata, within the 52 responders. On completion of survey, we found that response rates were much higher in responders who higher levels of education (70% in high school and 100% in Diploma) as compared to those with primary (50%) and middle School (56%) qualifications. Quite similarly, responders who belonged to a higher professional stratum had better response rates of 75.5% and 71%, in skilled and semi-skilled categories respectively. Unskilled and unemployed categories had a rate of 62.5% each only. These numbers reflect the fact that a higher level of education has a positive role in creating good social awareness in the donor population regarding TTDs, and regarding being able to understand the counsellor.

We also interviewed telephonically those who were unable to come for counselling after being notified. Out of 40 non-responders, 23 said that they were too busy while 11 were not interested and 6 made a consultation with some other doctor. In Bhasker PM *et al.*'s study, however, 30 out of 58 non-responders were too busy to come for counselling.¹⁴ This is a red flag as this could very well mean ignorance on their part and could very well end up in chronic and debilitating ailments, not only for them but for their family as well. Although, this could be tackled by taking full contact details of each and every donor but it would be impractical in a voluntary blood donation camp setting. Another approach to handle this would be to have separate teams who could track down and counsel non-responders as well as non-notified donors, but at the same time this process would need to be done sensitively; otherwise, people might feel threatened that their privacy is being invaded.

100% (6/6) responder-reactive donors with HIV were taking treatment whereas only 63% were taking the same for syphilis (12/19). This might mean that

people in general are not as aware of syphilis as they are of HIV. In the past, our government has created awareness through the medium of newspaper and television advertisements, which is possibly one of the reasons that it is taken seriously by most of the people.

Conclusion

Delving information about TTDs to reactive donors is a sensitive as well as time intensive task. With a response rate of only 56.5%, we can see that the response of a reactive donor can be influenced by several factors, most noticeably the level of awareness, which can further depend on the age, educational, occupational status and several other factors. Furthermore, a person usually donates blood out of the goodness of one's heart and one can very easily develop negative emotions after being given information regarding sero-reactive status. The role of blood bank authorities, therefore, is very challenging, and as such highlights the importance of pre-donation information and pre-donation counselling. These two very acts, if done in a sound and reassuring manner, might very well be the backbone that separates the donors who responds from those who are ignorant. Also, non-notified donors, non-responders and potential test seekers are a continuing problem to a safe blood supply in any region. A centralised donor database that would be available in every government authorised blood bank can potentially be a starting solution to these problems.

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