



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_25449
Title of the Manuscript:	Prevalence of Transfusion Transmissible Infections among Blood Donors in a tertiary care Hospital of Mysuru District – A six years study.
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	Abstract: This is well written but will need few modifications. 1. The authors should avoid beginning a sentence with a figure. (Please see result section, line 3. 2. Please write all abbreviations in full at first mention (e.g HIV, ELISA, HBV etc) for clarity. 3. Is the prevalence of TTIs in the 18-25 years age group 27% or 27.60%? The figures mentioned in the result sections of abstract and manuscript texts are different. Please correct this. 4. The abstract conclusion sounds more like recommendations only and does not highlight the main findings of this work. The conclusion should emphasize the main findings of the work and then recommendations may follow. A suggestion is, "The prevalence of TTIs among blood donors in Mysuru district is higher /lower/the same as previously reported in the Indian population" Introduction: The international reader may want to know the	(All necessary changes are incorporated and highlighted in yellow) The sentence is changed. (changes incorporated : Abstract - result) All abbreviations in full are written at first. (changes incorporated : Abstract - introduction) The prevalence of TTIs in the 18-25 years age group is 27.60%. The same is corrected in manuscript. The conclusion is rewritten as suggested. (changes incorporated : Abstract - conclusion)



SDI Review Form 1.6

	predominant blood donor type in Mysuru district and in India in general. In the literature, blood donors have been sub-divided into voluntary, family replacement and commercial (paid/professional) donors. What is the situation in the study area? The predominant donor type has been shown to influence the prevalence of TTIs among blood donors. It will significantly improve the quality of this paper if the authors could compare the donor type distribution in their centre and in India in general with what is obtainable in other developing economies such as sub-Saharan Africa. The following references may be of help in this regard; A) Okocha EC, Aneke JC, Ezech TU, Ibeh NC, Nwosu GA, Okorie IO et al. The epidemiology of transfusion-transmissible infections among blood donors in Nnewi, South-East Nigeria. African Journal of Medicine and Health Sciences. 2015;14:125-9. B) Kimani D, Mwangi J, Mwangi M, Bunnell R, Kellogg TA, Oluoch T <i>et al.</i> Blood donors in Kenya: a comparison of voluntary and family replacement donors based on a population-based survey. Vox Sang. 2011;100:212-8 Materials and Methods: “Strict donor selection criteria were followed to eliminate professional donors” Lines 33-34. Could the authors kindly use 2 or 3 lines to describe this criteria. Does this mean that voluntary donors consisted 100% of the donor set in this study period? Results:	The predominant donor type in the study area is replacement donors. The donor type distribution in our centre and in India in general with what is obtainable in other developing economies such as sub-Saharan Africa is compared and incorporated in the introduction. The suggested reference also quoted. (changes incorporated : introduction , Para – 2, line 28-43) Donor selection criteria described in detail. (changes incorporated : Materials and Methods: Para – 1, line 50-62. Para – 2, line 64-68) The donor set up consisted both voluntary and replacement donors .
--	---	---



SDI Review Form 1.6

	Please include the percentage of donors that were males and females of the total for each year in Table 1. E.g 2009 9361 9253 (98.84%) 108 (1.15%) Same should also be done for Table 2 with regards to the prevalence of TTIs for each year. Discussion: 1. Studies in Africa also agree with a male dominated donor pool, (Lines 80-82). The authors may wish to buttress this point with the following reference: A) Okocha EC, Aneke JC, Ezeh TU, Ibeh NC, Nwosu GA, Okorie IO et al. The epidemiology of transfusion-transmissible infections among blood donors in Nnewi, South-East Nigeria. African Journal of Medicine and Health Sciences. 2015;14:125-9. 2. Is there any reason for the lower prevalence of TTIs in this study compared to that by Chaurasia and Karmaka (could this be due to differences in the study site, sample size, methods of screening for TTIs used etc). It will also be interesting if the authors could broaden the discussion by including the prevalence rates of TTIs from parts of Africa among blood donors and patients with increased transfusion requirements such as SCD patients. The degree of transfusion safety will influence the prevalence of TTIs in patients that require regular transfusion such as SCD patients. These few references are worth considering to further clarify this matter; A) Matte MIN, Magesa PM, Lyamuya EF.	(changes incorporated : Results: Table 1) (changes incorporated : Results: Table 2) The point is discussed with reference to Okocha EC et al. Incorporated in discussion (para- 2, line - 110-113) The differences in prevalence of TTIs in different studies in India might be due to the use of different generation of ELISA test kits, having different sensitivities and specificities. Changes incorporated in discussion (para- 3, line - 126-132) Incorporated in discussion (para- 3, line - 132-137)
--	--	---



SDI Review Form 1.6

	Seroprevalence of human immunodeficiency virus, hepatitis B and C viruses and syphilis infections among blood donors at Muhimbili National Hospital in Dar Es Salaam, Tanzania. BMC Public Health. 2006; 6:21 http://www.biomedcentral.com/1471-2458/6/21 B) Kassim OD, Oyekale TO, Aneke JC, Durosinmi MA. Prevalence of seropositive blood donors for Hepatitis B, C and HIV viruses at the Federal Medical Centre, Ido-Ekiti Nigeria. Annals of Tropical Pathology. 2012; 3: 47-55. C). Bolarinwa RA, Aneke JC, Olowookere SA, Salawu L. Seroprevalence of transfusion transmissible viral markers in sickle cell disease patients and healthy controls in Ile-Ife, SouthWestern Nigeria: A case-control study. J Appl Hematol 2015;6:162-7. DJ. Ségbéna AY, Prince-David M, Kagoné TS, Dagnra AY. Human immunodeficiency virus, hepatitis C virus and hepatitis B viruses in patients with sickle-cell disease in Togo. Transfus Clin Biol. 2005;12:423-426. 3. Is there any reason for the higher prevalence of TTIs in the 18-25 year age groups? 4. What is the prevalence rate of malaria parasitaemia in the general population of Mysuru district or in the Indian general population? Asymptomatic carriage of malaria parasite is very	No particular reason was noted. The prevalence of TTIs in the 18-20 year age groups was low, but gradually increased with age above 20 years. This could be attributed to change in the sexual behavior.
--	--	--



SDI Review Form 1.6

	common in sub-Saharan Africa . What is the experience in the study location? Low parasitaemia may be responsible for the zero prevalence rates for malaria among the donor set in this study. 5. Female donors had zero prevalence rates for all TTIs. What could be responsible for this (sample size, cultural issues, sexual behavioral differences etc?) This observation was equally emphasized by other studies: A) Matte MIN, Magesa PM, Lyamuya EF. Seroprevalence of human immunodeficiency virus, hepatitis B and C viruses and syphilis infections among blood donors at Muhimbili National Hospital in Dar Es Salaam, Tanzania. BMC Public Health. 2006; 6:21 http://www.biomedcentral.com/1471-2458/6/21 B. Okocha EC, Aneke JC, Ezech TU, Ibeh NC, Nwosu GA, Okorie IO et al. The epidemiology of transfusion-transmissible infections among blood donors in Nnewi, South-East Nigeria. African Journal of Medicine and Health Sciences. 2015;14:125-9.	Incorporated in discussion (para- 9, line – 204-212) Low parasitaemia (very low annual parasite index(API <1) may be responsible for the zero prevalence rates for malaria among the donor set in this study. Incorporated in discussion (para- 2, line – 114-115)
--	--	---



SDI Review Form 1.6

<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	This work is good, even though it has been researched a number of times in different parts of the world, it's conclusions however remain relevant to transfusion safety. These corrections will greatly improve the quality of the manuscript.	All the recommended corrections are made and incorporated in the manuscript.