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## Prevalence of Lewis, Kidd, Duffy, Kell and M blood group antigens among blood donors in Aminu Kano Teaching Hospital, Kano, Nigeria

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**Background:** Haemolytic transfusion reactions are generally the result of transfusion of ABO incompatible blood. However, weak antibodies notably of the Rh, Kell, Kidd, Duffy, MNS and Lewis blood groups that do not seem to be clinically significant *in vitro* have also been reported to cause antibody formation, severe transfusion reactions and haemolytic disease of the newborn (HDN).

Aim: To determine the prevalences of Lewis, Kidd, Duffy, Kell and M antigens among blood donors in Kano.

**Method:** Consecutive blood sample of consenting blood donors at Aminu Kano Teaching Hospital blood donor bay were tested with potent commercially prepared anti Le<sup>a</sup>, anti Le<sup>b</sup>, anti Jk<sup>a</sup>, anti Jk<sup>b</sup>, anti Fy<sup>a</sup>, anti Fy<sup>b</sup>, anti k and anti M antisera.

**Result:** One hundred and six samples were screened each with the eight anti sera. The prevalence of the different antigens are as follows: Lea: 26.4%, Leb: 15.1%, M: 20.8%, k (cellano): 21.7%. The Duffy (anti Fy<sup>a</sup>, anti Fy<sup>b</sup>) and Kidd (anti Jk<sup>a</sup> anti Jk<sup>b</sup>) antigens were not detected among the donors.

**Conclusion:** The finding of this study highlights high prevalence of the Lewis, M and Kell antigens among our donor population, which can serve as an additional data towards provision of safe blood transfusion. Incorporation of extended blood group phenotyping prior to transfusions will go a long way in reducing the rate of antibody formation, transfusion reaction and HDN especially among transfusion dependent patients in our environment.

## **Biography**

B Yusuf Jamoh has completed his MBBS programme from Bayero University, Kano, Nigeria and had MSc Cancer Biology, with commendation, from Kingston University, London. He is a Fellow of National Postgraduate Medical College of Nigeria and was appointed as Honorary Consultant Physician, Ahmadu Bello University Teaching Hospital (ABUTH), Zaria, Nigeria. He is the Head of Clinical Haematology Unit, ABUTH. He has published 12 papers in reputed journals and he is currently acting Postgraduate Coordinator, Department of Medicine, Ahmadu Bello University, Zaria, Nigeria.

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