

Sudan University of Science and Technology

College of Graduate Studies

**Frequency of Human Immunodeficiency
Virus, Hepatitis B, Hepatitis C, Syphilis and
Malaria
among Blood Donors in Kosti Teaching
Hospital**

نسبة تكرار فيروس نقص المناعة المكتسبة و التهاب الكبد
الوبائي (ب, ج) والزهري و الملاريا عند المتبرعين بالدم في
مستشفى كوستي التعليمي

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***A study submitted in partial fulfillment of the
requirements
for Master degree in Medical Laboratory Sciences***

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قال تعالى :

(اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ [1] خَلَقَ
الْإِنْسَانَ مِنْ عَلَقٍ [2] اقْرَأْ وَرَبُّكَ الْأَكْرَمُ [3]
الَّذِي عَلَّمَ بِالْقَلَمِ [4] عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ
[5]

صدق الله العظيم

سورة العلق الآيات مِنْ 1 - 5

DEDICATION

*To my husband,
To my beloved parents
To brothers and sisters
To my children*

Nada

ACKNOWLEDGEMENT

Firstly I thank god for every things, special thank are extended to my supervisor *Dr. Sana El Tahiar* for advices and helping to make this research.

Also grateful to all my friends which help me in this research.

Appreciation and thanks to Yahya and all the staff of Kosti Teaching Hospital for un-ended co-operation and kind help. I would also like to express my appreciations and gratitude's to my parents and my husband MOTAZ who carried some responsibilities during the study period.

Abstract

This study was descriptive study for frequencies HIV, HBV, HCV, Syphilis and Malaria among blood donors in Kosti Teaching Hospital. One hundred Sudanese healthy people (both sexes male and female, Age range between 18-50 years) were selected for this study during the period between 01/02/2010 up to 17/02/2010.

Venous blood sample were drawn from each blood donor under study and was use serum protein. The samples were tested by Immuno – Chromatography Test (ICT). The data were analyzed by SPSS Computer Program.

The results showed that (4%) of samples have positive HIV , (8%) have positive HBsAg, (3%) have positive HCV, (12%) have positive Syphilis and (1%) have positive Malaria .

Donors within the age group (26-35 years) infected more than the other age group. The correlation between a donation and frequencies of HIV, HBV, HCV, Syphilis and Malaria were found to be significant ($P > 0.05$).

مستخلص الدراسة

هذه دراسة وصفية تهتم بدراسة نسبة إنتشار فيروس نقص المناعة المكتسبة وفيروس إلتهاب الكبد الوبائي (ب ، ج) والزُّهري والمalaria عند المتبرِّعين في مستشفى كوستي التعليمي . تمَّ إختبار مائة متبرِّعاً لإجراء هذه الدراسة وكانت في الفترة مِنْ 1/2/2010م إلى 17/2/2010م .

وأُخِذَت العينات مِنْ الدم الوريدي وتمَّ فصلها إلى السيرم وتمَّ فحصها بإستخدام (ICT) وحُلِّلَت النتائج بواسطة نظام الحِزَم الإحصائية في المجتمع SPSS.

حيث وُجِدَ أَنَّ نسبة فيروس المناعة المكتسبة (4%) ، فيروس إلتهاب الكبد الوبائي (ب) (8%) ، فيروس إلتهاب الكبد الوبائي (ج) (3%) ، الزهري (12%) والمalaria (1%).

أوضحت الدراسة أن المتبرعين في الفئة العمرية (26-35 سنة) كانت أكثر عرضة للإصابة بالمرض من الفئات العمرية الأخرى. حيث وجد أن العلاقة بين عدد مرات التبرع وتكرار فيروس نقص المناعة المكتسبة وإلتهاب الكبد الوبائي (ب) و(ج) والزهري والمalaria ليس لها تأثير ذات دلالة إحصائية ($P > 0.05$).

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X Abbreviations List

Ab	Antibody
Ag	Antigen
AIDS	<u>Acquired Immune Deficiency Syndrome</u>
CD	Cluster differentiation
DIC	Disseminated Intravascular Coagulation
DNA	Deoxyribo Nucleic Acid
ELISA	Enzyme- Linked Immuno Sorbant Assay
FFP	Fresh Frozen Plasma
HBV	Hepatitis B Virus
HBsAg	Hepatitis B Surface Antigen

HCV	Hepatitis C Virus
HDN	Hemolytic disease of newborn
HIV	Human Immunodeficiency Virus
ICT	Immunochromatography Test
IgG	Immunoglobulin Gamma
IgM	Immunoglobulin M
PCR	Polymerase Chain Reaction
RNA	Ribo Nucleci Acid
RPR	Rapid Plasma Regain Test
RT.PCR	Real Time-polymerase chain reaction
SPSS	Statistical Package for Social Science
VDRL	Venereal Disease Research Laboratory Test

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