

Dedication

to my familys

to all of my friends

*to everyone supportED me until I finished this work let me
EXPRESS my DEEP thanks to all of you*

Acknowledgement

First of all my prayers and thanks to our Almighty God Most Gracious and Most Merciful..who gave me the serenity, means of strength and patience to finish this work. Iam deeply indebted to my great and gentle supervisor **Dr/ Sana Eltahir** for here valuable , appreciated, help, support, and guidance during this study . Iam also .respect and highly consider here patient assistance and invaluable advices

My appreciation and thanks are extended to all blood donors and to all medical .staff in and **laboratory Unit** of Alsaudi Hospital

My special thanks to all teaching staff at Sudan University Of Science& .Technology , Faculty of **Medical laboratory sciences**

Abstract

This study was conducted to obtain a clear information about the incidence of HIV, Hepatitis B and Hepatitis C viruses among the blood donors at Alsaudi hospital(khartoum state) throughout the period between October 2009 till March 2010.

300 blood sampels were informed about the study ,expected outcome and concents of participation were obtained , questionnaire was used to collect the information about patients age and history of blood transfusion .

5 mls of blood from each donor were collected in plain containers to obtain serum and it was used to investigate the HBV,HCV and HIV by ELISA technique

Computerized statistical package for social sciences version 11.5 were used to determine the samples size, and in subsequent data processing. the results showed that total of 100 % frequency of (HBV, HCV, HIV) 100% of study population were negative for HIV , 2% of study population were positive for HBV and lastly the frequency of HCV among the study population 1 % were positive.

النتائج

هذه دراسته تحليلية تم اجرائها لتحديد نسبة انتشار فيروسات التهاب الكبد الوبائي ونقص المناعة المكتسب لدي السودانيين المتبرعين بالدم بالمستشفى السعوى امدرمان في الفترة من اكتوبر 2009م حتي مارس 2010م..

تم اخطار 300 متبرع بالدم عن الدراسة واغراضها ,وبعد ذلك تم اخذ الموافقه منهم .
بعد ذلك جمعت المعلومات من المرضى بواسطة الاستبيان عن , العمر , وعما كان قد ن قل لهم دم سابقا .

ايضا اخذت من المرضى 5مليلتر من الدم في انبويه اختبار لاحتوي علي مانع التجلط, و قد استعملت لاستخلاص المصل لاستخدامه للفحص عن الفيروسات (نقص المناعة المكتسب والتهاب الكبد الوبائي ب,ج)

تم استخدام جهاز ELISA يعمل اوتوماتكيا لاجراء الفحص , كما تم استخدام برنامج الحزم الاحصائية للعلوم الجتماعيه نسخه رقم 11.5 لاجراء التحليل الاحصائي .

وقد اظهرت نتائج التحليل الحصائي ان النسبة المئوية لانتشار فيروسات التهاب الكبد الوبائي ب ,ج و نقص المناعة المكتسب كالاتى

100% غير مصابين بفيروس نقص المناعة المكتسب , 2% مصابين بفيروس التهاب الكبد (ب) واخيرا 1% مصابين بالتهاب الكبد (ج) .

List of figures

| No | Name of figures | Page |
|-------------------|--|-------------|
| (Figure (1 | relation between age and HIV in the study population | 32 |
| (Figure (2 | Relation between age and HCV in the study population | 33 |
| (Figure (3 | relation between age and HBV in the study population | 34 |
| (Figure (4 | Frequancy of HIV ,HBV and HCV in the study Population | 35 |

List of Abbreviations

| | |
|--|--------|
| Granulocyte colony stimulating factor..... | G-CSF |
| Fresh-frozen plasma..... | FFP |
| Antibody..... | Ab |
| Antigen..... | Ag |
| Citrate-phosphate dextrose-adenine..... | CPD-A |
| Adenosine tri-phosphate..... | ATP |
| Citrate phosphate dextrose-adenosine..... | CPD-AI |
| Saline-adenine-glucose-mannitol..... | SAGM |
| Citrate phosphate dextrose..... | CPD |
| Diphosphoglycerate..... | DPG |
| Hepatitis C virus..... | HCV |
| Hepatitis B virus..... | HBV |
| Hepatitis B surface antigen..... | HBsAg |
| Human immunodeficiency virus..... | HIV |
| Ribonucleic acid..... | RNA |
| Hemolytic disease of newborn..... | HDN |
| Transfusion transmitted disease..... | TTD |
| Human T-cell lymphotropic virus..... | HTLV |
| Immunoglobulin alpha..... | IgA |
| Immunoglobulin mue..... | IgM |

