

**بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ**

**قال الله 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 1-5**

# **Dedication**

I dedicate this research to my loving and supportive parents who are always there along my educational period and lead us to the right way, to my loving brother and sisters.

# **Acknowledgment**

Thanks should be given to the supervisor and other staff of Sudan University for Science and Technology & Central Blood Bank of Port Sudan for their great help during this study.

# Abstract

This is a descriptive cross sectional study conducted to obtain information about the incidence of Hepatitis B, Hepatitis C, HIV and syphilis among the blood donors attending Central Blood Bank in Port Sudan throughout the period between October 2009 till March 2010. Blood donors were informed about the study, expected outcome and agreement of participation was obtained, questionnaire was used to collect the information about patients age, history of blood transfusion and past medical history.

Blood samples were collected, they were used to investigate the HBsAg, HCV, HIV and syphilis by SD BIOLINE rapid tests. Computerized statistical package for social sciences version 11.5 were used to determine the sample size, and in subsequent data processing. The results showed that the frequency of HBsAg, HIV, Syphilis, HCV are 17%, 4%, 4%, 0%.

The percentages were compared with other centers.

The relation between positivity to these diseases with history of blood transfusion was also assessed.

## □□□□□ □□□□□□

هذه دراسته تحليليه تم اجرائها لتحديد نسبة انتشار التهاب الكبد الوبائي (ب،ج) والايديز والزهري لدي السودانيين المتبرعين المترددين على بنك الدم المركزي في مدينة بورتسودان . تم اخطار المتبرعين بالدم عن الدرسته واغراضها ,وبعد ذلك تم اخذ الموافقه .

بعد ذلك جمعت المعلومات من المرضي بواسطه الاستبيان عن العمر وحصول او عدم حصول نقل دم سابقا وبعض الأمراض في التاريخ المرضي .

تم جمع الدم من المتبرعين وتم استخدام طريقة الفحص السريع (SD BIOLINE) لفحص العينات , كما تم استخدام برنامج الحزم الاحصائيه للعلوم الاجتماعيه نسخته رقم 11.5 لاجراء التحليل الإحصائي .

وقد اظهرت نتائج التحليل الحصائي ان النسبة المئويه لكل من إلتهاب الكبد الوبائي من نوع (ب)، والأيديز، والزهري، وإلتهاب الكبد الوبائي من نوع (ج) هي 17%، 4%، 4%، 0%.

تمت مقارنة النسب النهائية مع مثيلاتها من النتائج والدراسات في بعض المراكز.

تمت أيضا دراسة العلاقة ما بين ظهور المرض والتعرض السابق لنقل الدم .

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## List of abbreviation:

<b>AHG</b>	Antihuman globulin
<b>AIDS</b>	<a href="#"><u>acquired immunodeficiency syndrome</u></a>
<b>ARDS</b>	adult respiratory distress syndrome
<b>ATP</b>	Adenosine Triphosphate
<b>CNS</b>	Central Nervous System
<b>CPE</b>	Cytopathic effect
<b>CPD-A</b>	Citrate–Phosphate–Dextrose– Adenine
<b>CTLs</b>	<a href="#"><u>Cytotoxic T lymphocytes</u></a>
<b>DAT</b>	direct antiglobulin
<b>FFP</b>	Fresh-Frozen Plasma
<b>FTA-ABS</b>	Fluorescent Treponemal Antibody Absorption
<b>G-CSF</b>	Granulocyte Colony Stimulating factor
<b>HBsAg</b>	Hepatitis B surface Antigen



<b>HIV</b>	Human Immuno Deficiency Virus
<b>IAT</b>	Indirect antiglobulin test
<b>Ig</b>	Immunoglobulin
<b>LISS</b>	Low Ionic Strength Saline
<b>RPR</b>	<a href="#"><u>Rapid Plasma Reagin</u></a>
<b>SIV</b>	<a href="#"><u>Simian Immunodeficiency Virus</u></a>
<b>TPHA</b>	Treponema pallidum hemagglutination assay
<b>TTD</b>	Transfusion-Transmissible diseases
<b>VDRL</b>	<a href="#"><u>Venereal Disease Research Laboratory</u></a>
<b>DPG-2,3</b>	diphosphoglycerate-2,3

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