DCL
LABORATORY PRODUCTS LTD

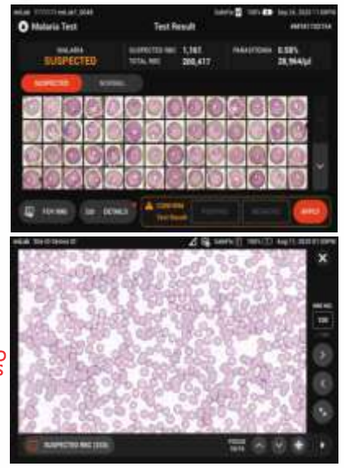
miLab™ :MALARIA DIAGNOSIS

IN A COMPACT, AUTOMATED, ALL-IN-ONE DIAGNOSTIC PLATFORM

The New Gold Standard in Malaria Diagnostics

Automated Workflow, Quick Diagnosis and Increased Accuracy

miLab Malaria Diagnostics Platform dramatically improves the gold standard malaria testing by combining the diagnostic prowess of artificial intelligence (AI) analytics, automated blood smearing and staining, and powerful digital microscope – a in a compact, point-of-care testing platform.



Captured Image from miLab™ malaria module

FEATURES

- AI driven on site diagnostics platform
- Automated sample slide-prep and imaging to diagnosis
- 5 uL blood per test
- Liquid and washing free
- 12 to 15 minutes run time per sample
- 7.5-inch touch screen
- 3 analyzing modes : Quick, Full, Deep modes
- High Specificity (100%) and Sensitivity (94.4%)
- Malaria Quantification
- % of RBC Infected
- Species Identification

HEAD OFFICE: DCL HOUSE Plot 1299, Funmilayo Ransome Kuti Road, Area 3 Garki, Abuja-Nigeria

Tel: +234 810 405 8581, +234 909 999 5259, +234 704 555 1222, PMB 690, Garki Abuja

Email: sales@dcllabx.com, dcllabx.com

Regional Offices in West Africa:

DCL Ghana | DCL Sierra-Leone | DCL Liberia | DCL Gambia

NSHBT

THE NIGERIAN SOCIETY FOR HAEMATOLOGY AND BLOOD TRANSFUSION

50th ANNIVERSARY 1972-2022

GOLDEN JUBILEE

2023 ANNUAL SCIENTIFIC CONFERENCE

Theme:

50 years of the Nigerian Society for Haematology & Blood Transfusion:

OUR PAST PRESENT FUTURE

23rd - 25th August, 2023 @ Nicon Luxury Hotel Abuja.

PROGRAMME OF EVENTS

albunorm®
Human albumin

Complex function designed by nature

Octapharma is specialised in the development and production of high-quality human proteins derived from human plasma and human cell lines. Using cutting- edge purification and viral inactivation techniques we live by our mission "for the safe and optimal use of human proteins". Headquartered in Lachen, Switzerland, Octapharma is one of the largest human protein products manufacturers in the world and has been committed to patient care and medical innovation since 1983. Octapharma employs approximately 6,000 people worldwide to support the treatment of patients in over 100 countries with products across the following therapeutic areas:

- Haematology (coagulation disorders)
- Immunotherapy (immune disorders)
- Critical Care

Octapharma owns five state-of-the-art production facilities in Austria, France, Germany, Sweden and Mexico.

We work to the highest standards of quality and safety set by physicians, patients and regulatory authorities.

For more information visit
www.octapharma.com

ALPHA PHARMA
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08134041020, 01-2951804, 01-2951801
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octapharma

Zenith Medical & Kidney Centre

Our Mission

To provide sustainable first class specialty care, robust research data and deliver top notch, standardized laboratory and diagnostics results which would lead to the best patient outcomes.

Our Vision

To be the leading renal centre in sub-saharan Africa that provides excellent multi-specialty health care service, champion renal research, renal transplant training and special skill acquisition with multi-renal centers across the 6 geo-political zones in Nigeria.

Our Values

- Excellent care & Empathy
- Commitment & Compassion
- Effective communication & customer service etiquette
- Professionalism, integrity & teamwork

Core Competencies

- 24 hours Hemodialysis & Hemodiafiltration Nephrology Consult
- 24hour dialysis: (Intermittent Hemodialysis), (Intermittent Hemodiafiltration), (Continous Renal Replacement Therapy),
- Monthly Kidney Transplant
- Plasmapheresis
- Intensivist Care[ICU & HDU]
- Urology Surgery & Consult
- Cardiology Consult
- Gastro-enterology Consult
- General Medicine Consult
- Nutritionist Consult
- General Surgery
- Gynaecology Surgery
- Orthopaedic Surgery
- Physiotherapy Services
- Dental services
- Maternity Services.
- Interventional Radiology
- Radio-Diagnostics.
- General Paediatrics & Paediatric Nephrology
- Pain Management
- ENT services
- Cardiothoracic Service
- In-Patient and Out-Patient Services

Additional Competencies

24 hour Laboratory Services
- *General Lab Service,*
Technically Advanced Lab service.
Molecular Biology Laboratory Service.
24hours Ambulance services
32 slice GE CT Scan
Digital X-Ray; 3D Ultrasound Scan;
Doppler Scan and Echo scan
Mobile Pop-Up Clinics
Blood Drive
(Blood donation and blood component)
VIP Services
Availability of various health care packages
Patient Guest house services with free transportation

Dialysis Access Creation

Temporary Catheterization
- Femoral Catheterization
Semi permanent Access
- Simple Internal jugular Catheterization.
Permanent Acces
A-V Fistula
A-V graft
Peritoneal Dialysis Catheterization

No 8 Atom Kpera Close, off Joseph Gomwalk Street, Gudu District, Abuja. **0706 887 3402, 0816 771 9600**
www.zenithmedical.ng **info@zenithmedical.ng; zmkcinfo@gmail.com**

NSHBT

GOLDEN JUBILEE

National Anthem

Arise, O Compatriots
Nigeria's call obey
To serve our fatherland
With love and strength and faith
The labour of our heroes past,
shall never be in vain
To serve with heart and might,
One nation bound in freedom, peace and unity.

Oh God of creation,
Direct our noble cause
Guide thou our leaders right
Help our youth the truth to know
In love and honesty to grow
And living just and true
Great lofty heights attain
To build a nation where peace and justice shall reign.

National Pledge

I pledge to Nigeria, my country
To be faithful, loyal and honest
To serve Nigeria with all my strength
To defend her unity and uphold her honour and glory
So help me, God.

His Excellency

BOLA AHMED TINUBU GCFR

PRESIDENT, COMMANDER-IN-CHIEF OF THE ARMED FORCES
FEDERAL REPUBLIC OF NIGERIA

DR. MOHAMMED ALI PATE

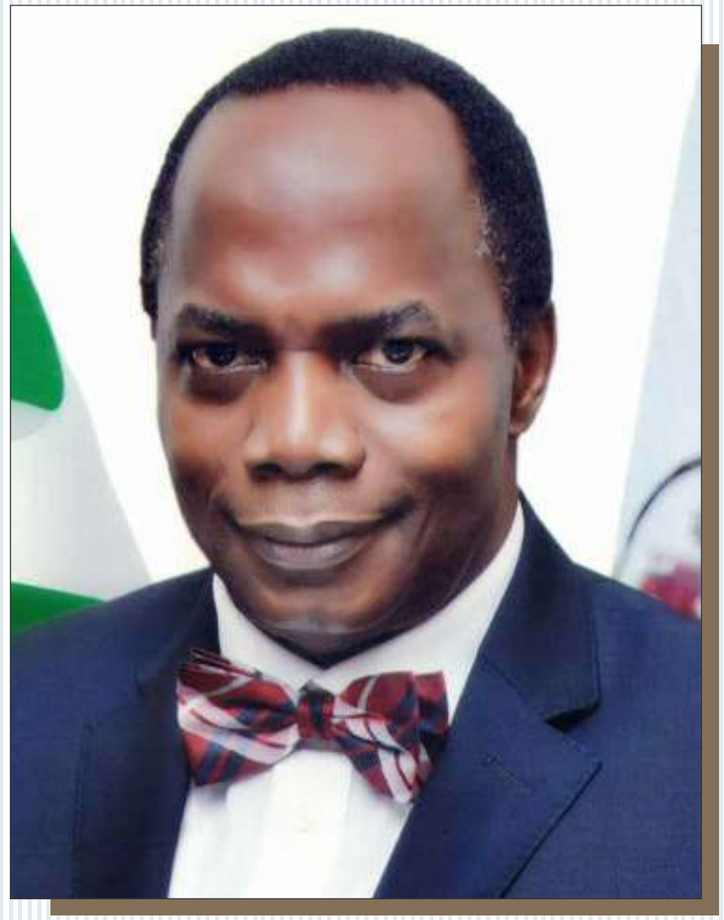
Minister of Health
Distinguished Guest of Honour

PROF. G.J.F. ESAN

Foundation General Secretary

Chairman of the Occasion

NSHBT GOLDEN JUBILEE



DR. JAF. MOMOH

Former CMD. NHA

Co-Chairman

PROF. LUCIO LUZZATTO

Foundation President
Keynote Speaker

PROF. ANAEZOEZE J. MADU

President, Nigerian Society for Haematology
and Blood Transfusion (NSHBT)

DR. A. G. OKUKU
LOC Chairman

NSHBT GOLDEN JUBILEE

About Us

Nigerian Society for Haematology and Blood transfusion was formally launched in Ibadan. In August 15, 1972. This noble society has indeed come a long way to become an established association that is poised to contribute both meaningfully and effectively in healthcare delivery not only in Nigeria but worldwide.

The mission and objectives of the society focusing on the needs of Nigeria, are to promote knowledge of blood and blood forming tissues. To provide a forum for the discussion and scientific investigation of Haematological and Blood transfusion problem; to encourage the setting up of blood banks and blood transfusion services throughout Nigeria and to determine minimum standards for such banks and services; to cooperate with organisations, whether national or international, having similar aims and objectives.

The NSHBT aims to achieve its goals by promoting the exchange of information between its members, other scientific organisations, public and private health institutions; by advocacy at national, regional and international level for the support of safe blood programs in Nigeria; presenting professional opinion at consultative meetings on matter haematological practice and policies in blood transfusion; contributing to the advancement of knowledge in the field of Haematology and Blood transfusion and encouraging research and collaborative programs in manpower development, donor recruitment and general haematology and transfusion practice.

It is recognised that the discipline of Haematology and Blood transfusion in Nigeria faces unique challenges. Inadequate diagnostic facilities, transfusion transmissible infections have impacted not on blood safety but blood donors, lack of infrastructure for blood component therapy and Blood transfusion systems that are often not sustainable because of lack of political will. Others are limited government support, and the absence of effective policy making and an appropriate regulatory framework.

NATIONAL EXCOS

Prof. Omolade Awodu
Vice President

Prof. Anazoeze Madu
President

Prof. Kala-Dada Korubo
General Secretary

Dr. Saleh Yuguda
Assistant Secretary

Dr. Ngozi Ugwu
Treasurer

Dr. Chi-kadibia Ukoma
Financial Secretary

Dr. Taiwo Kotila
S.W Zonal Coordinator

Prof. Aisha Kuliya-Gwazo
Ex-Officio 1

Prof. Abdulaziz Hassan
Ex-Officio 2

Prof. Nora Akiola
Editor-in-chief

LOCAL ORGANIZING COMMITTEE/ SUB-COMMITTEE

Dr. A. G. Okuku
LOC Chairman

Dr. T. T. Wakama
Vice Chairman

Dr. Ojetunde Bola
Ass. Secretary

Dr. C.E Udo
Secretary

Dr. C. Nwankwo
Treasurer

FINANCE COMMITTEE

Dr. Ukoma Chikadibia Theophilus - Chairman

Dr. Chukwuka-Odinaka Nwakeago -Secretary

Dr. Otu Theresa Member

Dr. Nwokwu Uchechukwu Emmanuel - Member

SCIENTIFIC COMMITTEE

Prof. O.E Nnodu Chairman

Dr. Ojika Blessing Secretary

Dr. Ogbe O. P. Member

Dr. Olufemi Adebayo Member

Dr. Ukoma Chi-kadibia Theophilus - Member

WELFARE COMMITTEE

Dr. E.I David Chairman

Dr. Madueke Nneka Secretary

Dr. Ojo Olushola Member

Dr. Obue Ezinma Member

ACCOMMODATION COMMITTEE

Dr. Ado Theophilus Chairman

Dr. Bello Umar Secretary

Dr. Alao Marufu Member

PUBLICITY/LOGISTICS COMMITTEE

Dr. C .Nwankwo Chairman

Dr. Okwu Adaeze Secretary

Dr. Ejikeme Uchenna Member

Dr. Agwu Paul Member

REGISTRATION COMMITTEE

Dr Isa Hezekiah
Chairman

Dr Adai Ugochi S
Secretary

Dr Ewuga ovye

Dr Amina Jaiyeola
Member

SECURITY COMMITTEE

Dr. O. Ayemoba
Chairman

Dr. Sanni Emmanuel
Secretary

Dr. Ugwedu Emeka
Member

HAEMATOLOGICAL RESEARCH IN AFRICA

First Meeting held at UCH, Ibadan, NIGERIA, August 15, 1972

PRESIDENTS OF NSHBT


Prof. L. Luzzatto
1972 - 1974


Prof. O. Isaac-Sodeye
1974 - 1976


Prof. O. O. Akinyanju
1976 - 1980


Prof. G. J. F. Esan
1980 - 1982

Prof. O. A. Oluboyede
1982 - 1985


Prof. E. M. Essien
1985 - 1989


Prof. Aba Sagoe
1989 - 1995


Prof. I. Akinsete
1995 - 1999


Prof. J. O. Adewuyi
1999 - 2003


Maj. Gen.(Dr) O. S. Njoku
2003 - 2007


Prof. M. A. Durosinmi
2007 - 2009


Prof. W. A. Shokunbi
2009 - 2013


Prof. W. A. Shokunbi
2009 - 2013


Prof. M. Enosolease
2017 - 2019


Prof. A. Kuliya-Gwarzo
2019 – 2021


Prof. A. J. Madu
2021 - 2023

NSHBT SECRETARY FROM 1972


Prof. G.J.F. Esan
1972 -1974

Dr. A. Boyo
1980 -1982

Prof. O.M. Jeje
1982 -1985


Prof. P.O. Olatunji
1995 -1999


Prof. N.O. Akinola
1999 -2003


Maj. Gen. (Dr). O.A. Amusu
2003 -2007


Prof. M.E. Enosolease
2007 -2009


Prof. C.A. Nwauche
2009 -2013


Prof. M.A. Inyama
2013 -2017


Prof. A. Hassan
2017 -2021


Prof. Dada Korubo
2021 -2023

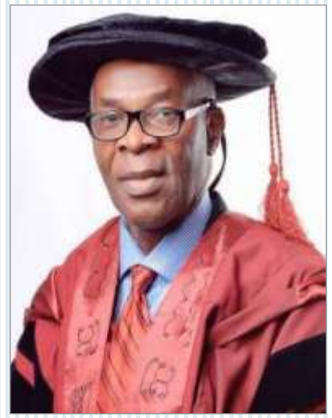
NSHBT PIONEER MEMBERS

1. Prof. L. Luzzatto
2. Prof. G.J.F. Esan
3. Prof. I. Akinsete
4. Prof. J.O. Adewuyi
5. Prof. P.O. Olatunji
6. Mr. Idris Saliu
7. Prof. Y.A. Aken'ova
8. Prof. O.A. Ejele
9. Maj. Gen. (Dr) O.S. Njoku
10. Maj. Gen (Dr). O.A. Amusu
11. Prof. Abba Sagoe
12. Prof. W.A. Shokunbi
13. Prof. G.B. Ogunmola

NIGERIAN SOCIETY FOR HAEMATOLOGY AND BLOOD TRANSFUSION (NSHBT)

AWARD RECIPIENTS

Prof. Obiageli E. Nnodu
HAEMOGLOBINOPATHY
WORKING GROUP



Prof. M. A. Durosinmi
HAEMATO-ONCOLOGY
WORKING GROUP

Prof. Omolade Awodu
HAEMOSTASIS
WORKING GROUP

Prof. Philip Olusola Olatunji
BLOOD TRANSFUSION
WORKING GROUP

Prof. N.O. Akinola
PIONEER EDITOR-IN-CHIEF (NJH)

Prof. Andreas Greinacher
Universitätsmedizin
Greifswald, Germany.

NSHBT GOLDEN JUBILEE

PRE-CONFERENCE WORK

DAY ONE

Prof. O.E Nnodu

POINT OF CARE TESTING IN SCD

Prof Maxwell M. Nwegbu

INTERPRET AN ISOELECTRIC FOCUSING GEL

FLOW-CYTOMETRY

Oluwaseunfunmi Adeeko

Grace F. Oni

ANTIBODY IDENTIFICATION

Oyetunde B. Akinloye

Mr Chinedu Okeke

21ST - 22ND AUGUST, 2023 https://nshbtabuja2023.org

NSHBT GOLDEN JUBILEE

PRE-CONFERENCE WORK

DAY TWO

COAGULATION STUDIES: LECTURES & HANDS ON

Prof. Theresa Nwagha

MORPHOLOGY

(Bone marrow and peripheral blood films)

Prof. Philip Olusola Olatunji

NSHBT GOLDEN JUBILEE

NIGERIA SOCIETY OF HAEMATOLOGY AND BLOOD TRANSFUSION (NSHBT) ANNUAL SCIENTIFIC CONFERENCE & GENERAL MEETING. ABUJA 2023

PROGRAM OF EVENTS

PRE-CONFERENCE WORKSHOP

DAY 1	MONDAY	21/8/2023	
TIME	ACTIVITY	PRESENTER	CHAIRMAN/MODERATOR
7:05-8:00AM	ARRIVAL AND REGISTRATION	Registration team	
8:00 – 9:00am	POINT OF CARE TESTING		
8:00 - 8: 15am	Sickle Scan	BIOMEDEMICS	Dr Hezekiah Isa/Nnodu
8:15 - 8:30am	Gazelle Hb variant diagnostic device	Pinecrest	
8:30 - 8:45am	Hemo Type SC	*Bitrus Badong* (SYSMEX)	
8:45 - 9:30am	How to read/interpret an isoelectric focusing gel	Prof. Nwegbu/ Chinedu Okeke	
9:30 - 10:00am	TEA – BREAK	WELFARE TEAM	
10.00 - 1.00pm	FLOW-CYTOMETRY		Dr. Chikadibia
	1. Principles of Immunophenotyping 2. Demonstration and interpretation of results	Oluwaseunfunmi Adeeko Grace F. Oni	
1:00 - 2:00pm	Demonstration of Intermittent Pneumatic Compression Device	ARJO/JNCI	
2.00pm - 3.00pm	LUNCH	WELFARE TEAM	
3.00pm - 5.00pm	ANTIBODY IDENTIFICATION	Oyetunde Akinloye SBFAF Mr Chinedu Okeke	Dr Ugochi
DAY 2	**TUESDAY**	**22/8/2023**	
7:00 - 7:45am	ARRIVAL AND REGISTRATION	REGISTRATION TEAM	
7:45 - 9:40am	LECTURE ON COAGULATION	Prof. Theresa Nwagha	Dr. C. Udo
9:40 - 10:10am	TEA BREAK	WELFARE TEAM	
10:10 - 1:10pm	HANDS-ON IN COAGULATION	Prof. Theresa Nwagha	Dr. C. Udo
	1. PT/APTT…… 2. Mixing experiments and inhibitor screening 3. Factor assay		
1:10 - 2:10pm	LUNCH	WELFARE TEAM	
2:10 - 3:30pm	COAGULATION HANDS-ON CONTINUES	Prof. Theresa Nwagha	Dr. C Udo
	1. Plotting the graph 2. Results feedback discussion		
3:30 - 5:30pm	MORPHOLOGY (Bone marrow and peripheral blood films)	Prof. Philip Olatunji	Dr. B. Ojika
6:30 – 7:30pm	WELCOME COCKTAIL Venue: Trauma Centre Auditorium, 3rd Floor, Trauma Centre. NHA	LOC CHAIRMAN	

NSHBT GOLDEN JUBILEE

NSHBT MAIN CONFERENCE ACTIVITIES

DAY 1	WEDNESDAY	23/8/2023	
7:00 - 8:30am	ARRIVAL AND REGISTRATION	REGISTRATION TEAM	
8:30am - 9:20am	ABSTRACT PRESENTATION 10ms each		Prof. Nnodu/Prof. Mamman
	1. Multicenter data on cerebral artery conditional blood velocity in SCD	Prof. Iheanyi Okpala	
	2. Using Dried Blood Spot on HemoTypeSCTM, a New Frontier for Newborn Screening for Sickle Cell Disease in Nigeria. 3. Benefits of blood components and challenges of availability using apheresis technology in Nigerian health institutions 4. Frequency and diagnosis of prekallikrein and high molecular weight kininogen Deficiency in African countries.	Chinwe Okeke Dr. N.I. Ugwu Dr. Eyiuche D. Ezigbo	
9:20 – 10:40am	PLENARY SESSION 1:		
	Building Capacity for Clinical Trials in Haematology in Nigeria.	1.Prof. Ifeoma Okoye(20mins) 2.Dr. Ifeyinwa Osunkwo (30mins) 3. Dr. Katy Graf (20mins)	Prof. Madu/Prof. Nwagha
10:40 - 11:10am	TEA BREAK	WELFARE TEAM	
11:10 – 12:00pm	INDUSTRY PRESENTATION	1.PINECREST: (20mins)	
		2.Novo-Nordisk(30mins)	
12:00pm - 1:15pm	SYMPOSIUM ON SICKLE CELL DISEASE	Prof. Obiageli Nnodu Prof. Iheanyi Okpala	Prof. Hassan & Dr Wakama
	1.Newborn Screening for Sickle cell disease 2.Recent developments in the treatment of sickle cell treatment		
1:15-1:55pm	Industry presentation	1. AGIOS (30mins) 2. Innotek International(10mins)	
1:55pm – 2:55pm	LUNCH	Welfare team	

2:55 - 4:15pm	PLENARY SESSION 2: Building Capacity for Genomic Research in Haematology in Nigeria 1. The genetic dissection of foetal haemoglobin in Nigerian patients with sickle cell disease 2. The International Hemoglobinopathy Research Network	1. Dr Stephan Menzel 2. Petros KOUNTOURIS	Prof Solomon Ofori-Acquah
4.15 – 4.45pm	Enabling Implementation of Genomic Medicine in Africa: The West African Genetic Medicine Centre	Prof Solomon Ofori-Acquah	
4:45 – 5:30pm	Industry Presentation	Pfizer	
5:30 – 6:30pm	RECESS		
6:30 – 8:30PM	SPONSORED WORKING GROUP MENTORSHIP DINNER MEETINGS: 2 parallel meetings		
	Heamoglobinopathy & Oncology Groups	Novo-Nodisk Dr Rony Dev MD (Anderson Cancer center, TX)	Prof Nnodu/ Dr Inyama
	Hemostasis and Blood Transfusion Groups	Prof. Andreas Greinacher Dr. Kathleen Selleng	Prof Awodu/ Prof Olatunji

DAY 2 THURSDAY 24 /8/2023

7:00 - 8:00am	ARRIVAL AND REGISTRATION	REGISTRATION TEAM	
8:00am - 8:40am	ABSTRACT PRESENTATION 2		Dr Ogbenna/ Dr Yuguda
	1. Fifty years activities of Haematopoietic Stem Cell Transplantation (HSCT) in a low resource country Nigeria. A single center report (10mins) 2. Analysis of an occurrence management system in a private tertiary hospital laboratory in Lagos Nigeria – Efforts towards continual laboratory improvement (10mins) 3. Characterization of Lymphoproliferative Malignances using Fluorescence in-situ Hybridization in SW Nigeria (10mins)	Prof. B.N. Bazuaye Dr. Ademola Adewoyin Prof. N.O. Akinola	

8:40 - 9.30am	PLENARY SESSION 3: Quality Assurance in Haematology 1. UK National External Quality Assessment Service (NEQAS) 2. Laboratory manager ASH CONSA at CESRTA	Dr.Babara Delasalle Prof. Maxwell Nwegbu	Dr(Gen) Amusu/ Dr Akaba
9:30-9.50am	Industry Presentation	Africure Healthcare	
9:50 - 10:20am	TEA BREAK		
10.20 - 11:50am	Industry Presentation	Roche Pharmaceuticals Pfizer	
12:00 – 1.30pm	OPENING CEREMONY/AWARDS		
	Keynote speaker: PROGRESS AND CHALLENGES IN AFRICA AT THE TIME OF MOLECULAR HAEMATOLOGY	Prof. Lucio Luzzatto	
	EXHIBITION TOUR		
2:00 – 3:00pm	NSHBT'S JUBILEE SYMPOSIUM THEME: 50 YEARS OF THE NIGERIAN SOCIETY FOR HAEMATOLOGY AND BLOOD TRANSFUSION- Our past, our present and our future.		Chair: Prof. S. Akanmu
	- Our past - Our present - Our future	Prof. Ibironke Akinsete Prof. Anazoeze Madu Prof. Aisha Mamman	
3:00 - 3:45pm	LUNCH	Welfare team	
3:45 – 4:15pm	Industry Presentation	1. ISN/Beckman Coulter 2. Codix Pharma	
4:15 – 4:50pm	Haematologist Participation in National Grants An overview of the TETFUND National Research Fund (NRF)	Prof. A.M Kundiri, FSSN (Chairman NRFS&M Committee)	Prof. Nora Akinola
4:50-5:10pm	Industry presentation	ARJO/JNCI	
6:00 - 8:30pm	Dinner/Award night	President/LOC Chairman	

DAY 3	FRIDAY	25/8/2023	
6:30 - 8:00am	Walk to the park and De-stress session	ALL	
8:30-9:00am	TEA-BREAK	Welfare Team	
9:00-9:30am	**Panel Discussion** Immunohistochemistry uptake for the management of lymphoma in Nigeria	Dr. Marcus Inyama Dr. Saleh Yuguda Dianne Eyisi	Roche Pharmaceuticals
	Parallel sessions **Parallel sessions**	**Parallel sessions**	
9:30-11:30am	A. HAEMATO-ONCOLOGY	Rapporteur: Dr. Ogochukwu. I.	Prof. M. Durosinmi
	1. The National Cancer Control Plan and Its Bearing on Haematological Malignancies -Progress So Far (20mins)	Dr. Uche Nwokwu	
	2. Nutritional support for haematological cancer patients 1(25Mins)	Egidio Del Fabbro MD.	
	3. Nutritional support for haematological cancer patients 2(25mins)	Dr Rony Dev MD (Anderson Cancer center, TX)	
	4. Nutrition and oncology (20mins)	mDOC	
	5. Industry Presentation (20mins)	ThermoFisher presentation	
11:30am – 12:00pm	JOINT SESSION International Working Group on CLL (iwCLL) presentation	PROF. Anna Schuh (University of Oxford)	Prof. Madu/Prof Akinola
9:30-11:30am	**B. Thrombosis & Haemostasis**	Rapporteur: Dr. S. Yuguda	Prof. Awodu
	1.Bleeding Disorders in women (25mins)	Dr Helen Okoye	
	2. Perioperative management of DOAC (30mins)	Prof Andreas Greinacher	
	3. Diagnostic Challenges in the Haemostatic Laboratory: The way forward (25mins)	Dr Kingsley Akaba	
	4. Management of DOAC induced menorrhagia (20mins)	Prof Andreas Greinacher	
	5. Q & A (10mins)		
11:30am – 12:00pm	JOINT SESSION International Working Group on CLL (iwCLL) presentation	PROF. Anna Schuh (University of Oxford)	Prof. Madu/Prof Akinola

12:00 -2:00Pm	Parallel sessions C: Blood Transfusion	Rapporteur: Dr. A. Ugwu	Prof. Olatunji
	1. Welcome and Introductions	Chairman	
	2. Blood transfusion in sensitized transfusion dependent patients (25mins)	Dr. Kathleen Selleng	
	3. Population Screening for Haemochromatosis Gene: A panacea for perennial shortage of donor blood in Nigeria.	Prof. S. Akanmu	
	4. The Importance of AfSBT Accreditation in Blood Service the experience in Nigeria (20mins)	Mr. I. Saliu	
	5. The Use of Microtiter Plate for Extended Rh Typing in a Resource-Limited Setting: Prospects and Challenges (15mins)	Dr. H.Ismail	
	6. Evaluation of Minor Red Cell antigen Compatibility between Blood Donors and Recipients in Olabisi Onabanjo University Teaching Hospital, Sagamu (15mins)	Prof. Olatunji	
	7. Questions/Closing announcements (10mins)	Chairman	
12:00 -2:00pm	Parallel sessions D: Haemoglobinopathy	Rapporteur: Dr. N. Ugwu	Prof. Madu
	1.Welcome and Introduction (5mins)	Chairman	
	2. International Studies in SCD in Nigeria (30mins)	Dr Ibrahim Musa	
	3. Apheresis Activities In A Low Resource Country Nigeria: A Five Years Report Of A Single Center.(20in)	Dr. G.N. Bazuaye	
	4. A Study of Serum levels of Antiphospholipid Antibodies in patients with Sickle Cell Anaemia in Zaria, Nigeria. (15mins)	Medlyn O. C.	
	5. Prevalence of stigma and perceived control measures among persons living with sickle cell disease in zaria metropolis (15mins)	Dr. A. Hassan	
2:00-2:55pm	Industry Presentation	GEM (20mins) BAYER Healthcare (20mins) Inter-Trade Ltd/ HaierBiomedical (15mins)	
2:55 – 3:30pm	Presidential symposium (current and 2 past presidents)		Prof. Dada Korubo
3:30 – 4:00pm	LUNCH-BREAK	Welfare Team	
4:00 - 6:00pm	AGM	ALL	President
6:00pm	HANG-OUT // FAREWELL	ALL	LOC Chairman

List of NSHBT Past Presidents to be honoured

1. Prof. L Luzzatto
2. Prof. O Akinyanju
3. Prof. GIF Esan
4. Prof. Aba Sagoe
5. Prof. I Akinsete
6. Prof. JO Adewuyi
7. Major Gen. OS Njoku
8. Prof. MA Durosinmi
9. Prof. WA Shokunbi
10. Prof. AS Akanmu
11. Prof. M Enosolease
12. Prof. A Kuliya-Gwarzo

List of NSHBT Past Sectaries to be honoured

1. Prof. GJE Esan
2. A Boyo
3. OM Jeje
4. Prof. PO Olatunji
5. Prof. NO Akinola
6. Major Gen. OA Amusu
7. Prof. M Enosealease
8. Prof. CA Nwauche
9. Prof. MA Inyama
10. Prof. A Hassan

OTHER CATEGORIES

Pioneer Editor of NJH
1. Prof. NO Akinola

Pioneer Members / Distinguished Retirees

1. Mr. Idris Saliu
2. Prof. Aken'ova
3. Prof. PO Olatunji
4. Prof. OA Ejele

Chairperson Working Groups

1. Prof O. Nnodu (Hemoglobinopathies)
2. Prof O. Awodu (Haemostasis)
3. Prof P.O. Olatunji (BloodTransfusion)
4. Prof MA Durosinmi (Haem-Oncology)

Welcome Address

by the Chairman, NSHBTabuja2023-LOC

It gives me great pleasure to welcome you all to this 48th conference of our prestigious Society holding this week here in Abuja. As you are already aware this year's conference is also featuring the Society's 50th year Anniversary Celebrations which was originally to have held last year but for the unforeseen security challenges encountered here in Abuja last year. I wish to specifically thank the entire society on behalf of the entire Local Organizing Committee for re-nominating Abuja to host this 2023 edition of the conference. I should however, quickly note that whereas last year's conference was heavily impacted by the Security situation in Nigeria, this Year, the precipitous Austere economic situation that has gripped the nation in the past two months has taken an immeasurable toll on the preparations for this conference.

This conference which is hybrid in nature is packed with mind blowing insightful scientific presentations that will be delivered by local and international scholars including Nigerian haematologists practicing both at home and abroad. The pack of knowledge you expect shall earn each participant a tangible amount of CME points at the end of the Conference. In addition to the academic activities, a good number of leisure and social activities have been arranged to give you all a great experience in Abuja with its unequalled beauty and ambience.

On behalf of myself and the entire members of the LOC we want to thank our God almighty for the life and peace that reigning now in Abuja. We thank the President Prof. ANAZOEZE Madu, the Secretary Prof. KALADADA KORUBO and the entire executive council of the Society for for the privilege the Society extended to us to facilitate and We thank the President Dr ANAZOEZE Madu, the Secretary Prof. KALADADA KORUBO and the entire executive council of the Society for for the privilege the Society extended to us loaded with the 50th year Anniversary Celebrations.

I will also seize this opportunity to thank our sponsors and partner especially those of you who have taken responsibility with us beyond the postponement of the glamorous physical meeting to see to it that this day's meeting is a reality. I thank you - Xavier Communications, Roche group, Novartis, the Pincrest, Zenith Medicals, Beckman Coulter, Bond Chemicals, Pfizer, Alpha Pharmacy, DCL Labs, Innotek Labs, Novo Nordisk, Codix Pharma, Africure Healthcare, International Working group - CLL, GEM investment, Bayer Healthcare and the host of others. I specially thank all our resource persons both local and international. My fellow LOC members I cannot thank you enough. I henceforth sincerely welcome everyone of us to this week long conference which has been carefully packaged to give you a memorable learning and social interaction for our Society's development. I also wish everyone an exciting Annual General meeting at the end of the educational sessions.

Thank you all and welcome.

DR. OKUKU ALABA GEORGE. FMCPath.
CHAIRMAN, NSHBTabuja2023-LOC

Welcome Address

from the office of the President.

Dear Teachers and colleagues,

I on behalf of the entire members of the Nigerian Society for Haematology and Blood Transfusion, welcome you to this landmark event - the 50th Anniversary and Annual general meeting and Scientific conference of the Society. We have witnessed the immense growth and evolution of Haematology practice in our great Nation. We are blessed with the opportunity to witness this great event. The LOC and other stakeholders have very worked hard to make this a grand and worthy platform for crossbreeding of ideas and information. We hope we will all engage in a robust exchange while honouring all those who have worked assiduously hard to bring us where we are today.

Welcome and happy deliberations!

PROF. ANAEZOEZE J. MADU

President, Nigerian Society for Haematology
and Blood Transfusion (NSHBT)

MEET OUR SPEAKERS AND FACULTIES

Prof. Lucio Luzzatto
Keynote Speaker

Professor of Haematology, Muhimbili University College of Health and Allied Sciences (MUHAS), Dar-es-Salaam, TANZANIA; Honorary professor, University of Florence, Firenze, ITALY.

Prof Lucio Luzzatto's research and teaching has been the understanding of human disease at the molecular level; particularly in the area of blood diseases, for the ultimate purpose to improve their management. LL and colleagues cloned the human *G6PD* gene in the early eighties, thus laying foundations for the molecular pathophysiology and population genetics of G6PD and G6PD deficiency. In the area of malaria, beyond pioneering the work that indicated that heterozygotes for G6PD deficiency are protected against mortality for *P falciparum*, LL has opened insights on the mechanism of malaria selection with respect to both the sickle cell trait and G6PD deficiency. LL first provided evidence that paroxysmal nocturnal haemoglobinuria (PNH) is a clonal disorder, introduced the concept of conditional clonal selection and provided supporting evidence: thus rationalising the relationship of clonal expansion with bone marrow failure, and with the treatment of PNH. In summary, LL has devoted his research to contemporary molecular medicine.

Dr. Andreas Greinacher, specialized for transfusion medicine, immunohematology and hemostasis, is full professor and head of the department of transfusion medicine and the thrombosis and hemostasis service at the Universitätsmedizin Greifswald, Germany.

His research interests are hereditary and immune mediated thrombocytopenias, especially heparin-induced thrombocytopenia and application of biophysics to understand molecular mechanisms of antigenicity of endogenous proteins. He has identified the genetic basis of the HNA-3a antigen, an important cause of TRALI, developed a new treatment approach during the EHEC outbreak in Germany in 2011, and contributed to better understanding of heparin-induced thrombocytopenia. He was the principal investigator of the studies leading to approval of recombinant hirudin as the first non-heparin/warfarin anticoagulant. During the last years, his work on vaccine-induced immune thrombotic thrombocytopenia (VITT) received major attention by the scientific community and the general public. He has published more than 500 papers on these topics and has received several national and international awards.

Prof. (Mrs.) Ibironke Akinsete

Professor Akinsete is a Haematologist and an expert in women's health. She graduated from the University of Lagos, College of Medicine with a specialization in Haematology and Blood transfusion. Her academic and professional qualifications include: M. A.C.H.B (Aberdeen, 1963), M.D (Aberdeen, 1972), F.M.C (Path 1978), FWACP (1986) and FAS (2006). Professor of Haematology and Transfusion at the College of Medicine, University of Lagos from 1989 until 2003. She served as Pioneer Chairman of the National Action Committee on AIDS (NACA).

Prof. Obiageli E. Nnodu
Director of the Centre for Sickle Cell Disease Research and Training University of Abuja

Prof Nnodu is Professor of Haematology and Blood Transfusion, Director, Centre of Excellence for Sickle Cell Disease Research and Training at University of Abuja (CESRTA), the National Coordinator of the American Society of Hematology Consortium for Newborn Screening in Africa (CONSA), the Nigerian Principal Investigator for SPARCO, Abuja Coordinator for SickleGenAfrica and Co-PI for the UK NIHR Patient centred management of sickle cell disease in Sub Saharan Africa.
Prof Nnodu is a UK Foreign Office Chevening Scholar who has carried out many multi-institutional, multi-national research projects including a multilateral DFID DeLPHE Project. She serves as expert on technical committees on non-communicable diseases with the Nigerian government and as consultant for international agencies including the WHO AFRO. Between 2018-2019, she carried out an assessment of the level of implementation of the WHO AFRO Strategy in SCD in sub-Saharan Africa high burden countries and the findings highlighted the need for increased global funding for SCD. In 2019, she led a successful application for the inclusion of point of care tests for sickle cell disease in the essential diagnostics list of the WHO - EDL3.
In 2019 she was featured in the Faces of Sickle Cell Disease by the US NIH National Heart Blood and Lung Institute. Prof Nnodu is a Fellow of the Nigerian Academy of Medicine and Chairs the largest sickle cell disease network in Africa i.e., the Sickle Cell Support Society of Nigeria. She led the section on Screening and Prevention in the Lancet Haematology Commission on Sickle Cell Disease.

Katy M. Graef, PhD
Vice President, Programs | BIO Ventures for Global Health
Katy Graef, Vice President, Programs, develops new program strategies and leads the African Access Initiative (AAI) and African Consortium for Cancer Clinical Trials (AC^{3}T) programs. Prior to joining BVGH, Katy completed post-doctoral training at the Rocky Mountain Laboratories in Montana where she studied tick-borne flavi viruses. She taught an undergraduate microbiology course and mentored numerous laboratory students during her undergraduate and graduate studies. Katy obtained her BS, Microbiology, honors, magna cum laude, from the University of Washington. She completed her PhD, Virology, at the University of Oxford through the NIH Oxford Cambridge Scholars Program. She serves as the Secretary of the BVGH Board of Directors.

Prof. Aisha Indo Mamman
Professor of Haematology and Blood Transfusion, ABUTH Zaria

Prof. Aisha Indo Mamman is a pacesetter, a renowned medical personnel, illustrious daughter of Nigeria, and a distinguish Abusite. She is the first female Hematologist as well as the first female professor of Hematology and blood transfusion in Northern Nigeria.

Prof. Theresa Nwagha
Prof Theresa Ukamaka Nwagha,*(MBBS, MD MPH, FMCPath, MSc, Pdg Clinical trials (admin)* is a Professor of Haematology and consultant Haematologist at the department of Haematology and Immunology, College of medicine/University of Nigeria Teaching hospital Ituku Ozalla. She is an examiner of the National Postgraduate medical college and has supervised and is currently fellowship dissertations, MSc projects and PhD thesis. As the deputy chairman medical advisory committee for diagnostics, she directs all the activities in the clinical laboratory and diagnostic radiology.
Her research bias is in Haemostasis; bleeding disorders (inherited and acquired) and Risk assessment and prevention of venous thromboembolism in different disease conditions e.g., cancer associated thrombosis, among others.
She has authored over 80 peer reviews publication and has contributed to chapters in areas of obstetrics and emergency medicine and guidelines in the management of haemophilia and other bleeding disorders in Nigeria. Prof Theresa Nwagha is a member Nigeria Society of Haematology and blood transfusion (NSHBT), Nigeria Cancer society (NCS) British Society of Haematology (BSH), International society of Thrombosis and Hemostasis among other professional bodies. She was the former Head of Department of Haematology &Immunology, Faculty of Medical Sciences, College of medicine, Ituku Ozalla Enugu state, Nigeria.

Dr. Kathleen Selleng,

Dr. Kathleen Selleng, specialized for transfusion medicine, immunohematology and hemostasis, is the head of the immunohematology laboratory of the institute of transfusion medicine, quality management officer for hemotherapy and senior consultant of the thrombosis and hemostasis service at the Universitätsmedizin Greifswald, Germany. Her main interest is the improvement of processes for patient care in major bleeding emergencies and immunohematology diagnostics. She is involved in research for PF4 dependent immunothrombotic diseases like heparin-induced thrombocytopenia and Covid-19 vaccine induced thrombocytopenia as well as in the development of new blood products for transfusion.

Rony Dev
The University of Texas MD Anderson Cancer Center

Dr. Rony Dev is board certified in Internal Medicine and Palliative Care. Currently he is an Associate Professor in the Department of Palliative Medicine and is the Director of the Cachexia Clinic at MD Anderson Cancer Center. He has published in numerous journals regarding treatments for cancer cachexia, communication in family meetings, and risk factors for chemical coping and addiction in patients with cancer. He provides palliative care consultations regarding pain and symptom management for patients with cancer.

Dr. Egidio Del Fabbro
Augusta University from Virginia Commonwealth University

Egidio Del Fabbro joins Augusta University from Virginia Commonwealth University where he served as the Endowed Chair for Palliative Medicine. He received his medical degree from the University of the Witwatersrand in Johannesburg, South Africa in 1990 and completed his residency in Internal Medicine at Barnes-Jewish Hospital, Washington University, St. Louis. After a Palliative Medicine fellowship at MD Anderson Cancer Center in Houston, he joined the Department of Palliative Care and Rehabilitation for 8 years, and co-founded the Cachexia clinic at MD Anderson. He was appointed VCU Program Director for Palliative Medicine in 2012, establishing a comprehensive clinical program that included a Palliative Care Unit, Consult service and the creation of a Supportive Care Clinic. This interdisciplinary team approach to patients with serious illness and physical, psychological and spiritual distress, delivered palliative care throughout the health system.

Stephan Menzel graduated as an MD/PhD from the University of Greifswald, Germany, in 1993 and subsequently worked at the Howard Hughes Medical Institute and the University of Chicago, USA, as a Research Associate for 4 years in a team that discovered the first genes known to cause diabetes. He continued his investigation of the genetic causes of diabetes as a Research Fellow at the University of Oxford until 2003, when he switched fields from diabetes to haematology to work as a Senior Lecturer at King's College London, studying sickle cell disease and the genetics of red blood cell biology in humans.Studying a large cohort of healthy twins, the team (led by Swee Lay Thein) discovered MYB and BCL11A as genetic modifiers of fetal-haemoglobin persistence in adults. The latter has recently undergone successful gene editing trials in sickle cell disease, with curative effects. Dr Menzel is working closely with colleagues in Nigeria and Tanzania to study sickle patient cohorts in both countries to discover genetic factors that make the disease milder in some patients. He is especially keen to support young African researchers to become leaders in their field.Stephan Menzel, MD

Professor Anna Schuh completed academic and clinical haematology training in Oxford, United Kingdom. From 2006 to 2014, she acted as the clinical director of the haematology laboratories including molecular diagnostics of Oxford University NHS Hospital Trust, one of the largest NHS trusts in the UK.

Since 2006, she has led over 50 early and late phase clinical trials in chronic lymphocytic leukaemia as a principle or chief investigator. A number of these have changed clinical practice for patients in the UK and worldwide. She served as chair of the UK CLL forum from 2015 to 2018, and as chair of the National Cancer Research Institute Collaborative Group for Chronic Lymphocytic Leukaemia from 2018 to 2022, and was asked to join the board of the iwCLL in 2019 where she established the Global Partnership Committee.

Her main laboratory research interest is with the development, evaluation and implementation of new technologies for Precision Diagnostics. Her research group published the first genome-wide longitudinal study of the changes in the genomic landscape of patients undergoing treatment for leukaemia (Schuh A et al, Blood 2012) and subsequently led pivotal whole genome sequencing studies in collaboration with Genomics England (Klintman J et al, Blood 2021; Robbe P et al, Nat Genetics 2022).

In the last five years, her group has focussed on evaluating whole genome sequencing of liquid biopsies for early cancer detection. She published the first ever deep whole genome analysis of circulating tumour DNA in solid tumours (Cutts A et al, Genomic Medicine 2017) and now oversees research programmes evaluating the clinical utility of liquid biopsies for early cancer diagnosis in the UK, Uganda and Tanzania.

Prof. Solomon Fiifi Ofori-Acquah
President and CEO of the Sickle cell Foundation of Ghana (SCFG).
Founding Director of the West African Genetic Medicine Centre (WAGMC), University of Ghana

Professor Solomon Fiifi Ofori- Acquah is the founding Director of the West African Genetic Medicine Centre (WAGMC), University of Ghana and the President and CEO of the Sickle cell Foundation of Ghana (SCFG).

His research is focused on pathogenesis, genomics and innovative therapy in sickle cell disease. His seminal work identified extracellular heme as the danger molecule that drives sterile inflammation in sickle cell disease to promote the development of acute chest syndrome; this work established the first mouse model of the acute chest syndrome. Professor Ofori-Acquah's research has consistently received funding from the NIH and other funding agencies since 2004. He serves as an Expert NIH Reviewer and contributes to multiple committees focused on Respiratory Biology, Haematology, and Genomics. He has authored over 80 research papers, reviews, and book chapters and has made significant contributions to the scientific community and continues to drive innovation in the understanding and treatment of SCD.

As the Director of WAGMC, he is leading the efforts to train the first group of professional genetic counsellors and medical genetics scientists in West Africa. These initiatives reflect his continuous commitment to promoting all aspects of genetic medicine within the region.

Dr. Barbara De la Selle
Scheme Director UK NEQAS Haematology

Director of the WHO Collaborative Centre for Quality Assurance in Haematology

UK NEQAS Board Divisional Representative Haematology Division

Dr. Ukoma, Chi-kadibia Theophilus
Consultant Haematologist/HOD Haematology and Blood Transfusion, Federal Medical Centre, Keffi

Professor Philip Olusola Olatunji

Objective: To teach, research and practice clinically, for the advancement of Haematology and Blood Transfusion and overcome therapeutic challenges in resource-limited setting.

Following my (MB, BS) degree from the University of Lagos, I pursued the Haematology residency training program and obtained the FMCPath and FWACP (Lab. Medicine) from the NPMCN and WACP, respectively. I undertook an 18-month Commonwealth Medical Fellowship in 1993/94, on clinical and molecular biology research into sickle cell disease at the Central Middlesex Hospital and Oxford University in the United Kingdom. I was a university lecturer and Consultant Haematologist for over 30 years, with 17 years as Professor of Haematology. I was obtained the MD (Doctor of Medicine) degree by the NPMCN, and have MPA from OOU, Agoiwoye. I am a Fellow of the National Academy of Medicine.

My major clinical and laboratory research had been on clinical and molecular aspects of sickle cell disease making up about 40% of over 70 publications in books and research journals and two Dissertations. I also undertook research in clinical and laboratory aspects of Blood Transfusion and Haemato-oncology. I was an advocate of legislative backing for the National Blood Transfusion Service and currently a member to the Technical Committee of the National Blood Service Commission.

I was Project Coordinator of the HIV/AIDS Care and Support Programs and Chair of Bioethics Committees in two tertiary hospitals. I supervised a number of dissertations leading to award of Postgraduate Medical Fellowships and journal publications.

I was the immediate past Vice President of Africa Society for Blood Transfusion for ECOWAS Region and current President, College of Nigerian Pathologists. I am married with 3 children.

I am married with children.

Petros Kountouris, BSc, PhD
Cyprus Institute of Neurology and Genetics, Nicosia

Prof. Anaezoeze J. Madu
President, Nigerian Society for Haematology and Blood Transfusion (NSHBT)

BOOK OF ABSTRACTS

FOR PRESENTATION AS ORAL (OP) AND AS POSTER (PP)

HAEMOGLOBINOPATHY

AbjCo. OP.01. Title: Multicentre Data on Cerebral Artery Conditional Blood Velocity in Sickle Cell Disease: Need to Consider Pro-Active Management

Authors: Iheanyi Okpala[1], Emmanuel Modebe[2], Charles Nonyelu[1], Augustine Duru[1], Osita Ezenwosu[3], Barth Chukwu[3], Anazoeze Madu[1], Chinedu Ezekekwu[1], John Aneke[4], Mildred Izuka[5], Chisom Nri-Ezedi[6], Oluomachi Nnachi[7], Alozie Eze[8], Ifeoma Ajuba[4], Emeka Okwummuo[4], Jane Chilaka[4], Chinenye Onodugo[9], Uwaoma Fidelis-Ewa[9], Obineche Agwu[8], Ikechukwu Anigbogu[1], Ebele Muoghalu[1], Helen Okoye[1], Chilota Efobi[4], Obiora Ejiofor[10], Ngozi Ugwu[7], Collins Maduka[8], Nneka Iloanusi[2], Angela Ugwu[1], Chide Okocha[4], Thomas Ulasi[6]

Affiliations: Haematology[1], Radiation Medicine[2], Paediatrics[3]and Pharmacy[9], University of Nigeria Teaching Hospital, Enugu. Haematology[4]and Paediatrics[6], Nnamdi Azikiwe University Teaching Hospital, Nnewi. Paediatrics[5]and Haematology[8], Federal Medical Centre, Umuahia. Haematology and Blood Transfusion[7], Alex Ekwueme Federal University Teaching Hospital, Abakaliki. Paediatrics[10], Chukwuemeka Odumegwu Ojukwu University Teaching Hospital, Awka.

ABSTRACT

Objective: To obtain multicentre data on the prevalence of conditional, abnormal and normal blood velocity in the cerebral arteries of children with sickle cell disease (SCD) in Nigeria.

Methods: This was a prospective study of 308 children (126 girls and 182 boys, age 2-16 years) in five tertiary healthcare institutions. Transcranial Doppler ultrasonography (TCD) was used to determine cerebral artery peak systolic blood velocity (PSV) in 193 children with SCD; and time averaged mean of the maximum blood velocity (TAMMV) in a different cohort of 115. This design was to make the research findings relevant to hospitals with TCD equipment that measure either PSV or TAMMV.

Results: In the cohort of 115 children, TAMMV was normal in 96 (84%), abnormal in 7 (6%), and conditional in 12 (10%). In the other cohort of 193 children, PSV was normal in 150 (77.7%), abnormal in 7 (3.6%) and conditional in 36 (18.7%). The frequency distribution of TAMMV in the middle cerebral arteries is shown in Figure 1, and of PSV in Figure 2. There were no significant differences in gender or age distribution between the PSV and TAMMV cohorts. Altogether, cerebral artery blood velocity was normal in 246/308 children (80%), abnormal in 14 (4.5%) and conditional in 48 (15.5%).

Conclusion In this multi-center study, a significant proportion (15.5%) of children with SCD had cerebral artery conditional blood velocity that carries a clinically overt stroke risk of 3-4% per year[1,2]. This could worsen in 14% of untreated children to abnormal velocity with a higher stroke risk of 10% per year[2,3]. The data suggest that there is need to consider the option of proactive treatment for conditional TCD velocity in SCD.

NSHBT GOLDEN JUBILEE

Abjco. OP.02 Title: Using Dried Blood Spot on HemoTypeSC™, a New Frontier for Newborn Screening for Sickle cell Disease in Nigeria.

Authors: Chinwe O. Okeke[1&4*], Reuben I. Chianumba[1], Hezekiah Isa[1&2], Samuel Asala[1&3], Obiageli E. Nnodu[1&2]

Affiliations: [1]Center of Excellence for Sickle Cell Research and Training, University of Abuja, Nigeria, Nigeria.
[2]Department of Haematology and Blood Transfusion, college of Health Sciences, University of Abuja, Abuja, Nigeria
[3]Department of Anatomical Sciences, College of Health Sciences, University of Abuja, Abuja, Nigeria
[4]University of Nigeria Nsukka.

ABSTRACT

Background: HemoTypeSC is a rapid, point-of-care testing (POCT) device for sickle haemoglobin. Traditionally it uses the capillary blood from heel stick collected at the point of testing, a procedure that makes mass screening cumbersome and less cost-effective. Using dried blood spots (DBS) on HemoTypeSC could mitigate this challenge. Therefore, the aim of this study was to determine the feasibility of eluting blood from DBS to read on HemoTypeSC.

Methods: DBS and fresh samples from heel sticks were collected from 511 newborns at the immunization clinics of six Primary Health Centers in Abuja, Nigeria. The two samples from each newborn were analyzed using HemoType SC and then compared with the result of the isoelectric focusing (IEF) test.

Results: Of the 511 newborns, 241 were males and 270 were females. Standard HemoTypeSC (using fresh samples collected from heel sticks) and HemoTypeSC using DBS identified 404 (79.0%) HbAA, 100 (19.6%) HbAS, 6 (1.2%) HbSS, and 1 (0.2%) HbAC phenotypes. The IEF tests identified 370 (72.4%) HbAA, 133 (26.0%) HbAS, 5 (1.0%) HbSS, and 3 (0.6%) HbAC phenotypes. The sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and overall accuracy of HemoTypeSC using DBS, compared to standard HemoTypeSC POCT was 100%. IEF method showed for AA, AS, AC phenotypes; sensitivity; 84.7%, 67%,100% respectively, specificity; 67.6%, 86%, 99% respectively, PPV; 91.2%, 53%, 50% respectively, NPV; 52.7%, 91%, 100% respectively. For SS phenotype, IEF showed 100% specificity, sensitivity, PPV and NPV. Discordant results were found for a total of 84 samples. These 84 discordant samples were run with HPLC and the following results were obtained: 57 (AA), 21 (AS),1 (SS),1 (A3), 2 (ACS), 2 (DA).The results obtained by HPLC agreed more with HemotypeSC testing than with the IEF.

Conclusion: HemoTypeSC test using dried blood spot is as accurate as the standard point-of-care HemoTypeSC test. The use of DBS on HemoTypeSC could ensure better efficiency and cost-effectiveness in mass newborn screening for SCD.

Abjco. OP.03. **Title**: **A Study of Serum levels of Antiphospholipid Antibodies in patients with Sickle Cell Anaemia in Zaria, Nigeria**

Authors: Medlyn CO[1], Babadoko A.A[2], Umar A[3], Musa B.O.P[3]
Affiliations: Departments of 1Public Health, National Open University of Nigeria, Abuja, 2Haematology and Blood Transfusion and 3Medicine, Ahmadu Bello University, Zaria.

ABSTRACT

Background: Antiphospholipid antibody (APLA) is rarely reported in patients with Sickle Cell Anaemia (SCA). APLA is an autoimmune response to phospholipid due to structural disruption of red cell membrane in SCA due to recurrent vaso-occlusion. Exposure of negatively charged phosphatidyl serine results in induction of antibodies leading to fetal loss, arterial-venous thrombosis and thrombocytopenia. This study aims to determine the serum levels of APL antibodies in patients with SCA in Ahmadu Bello University Teaching Hospital (ABUTH), Zaria Nigeria.

Methods: A comparative cross-sectional study of patients with SCA (HbSS) and prospective blood donors (HbAA) as controls (ages 18 years and above) and 118 participants were enrolled; 79 HbSS and 39 HbAA. Serum levels of Anti-cardiolipin (aCL) antibody and β2 glycoprotein 1 (β2GPI) IgM/IgG were evaluated (ELISA technique).

Results: Median (IQR) of aCL antibody IgG/M and β2GP1 IgG/M of the patients were; 48 (16.00)u/ml, 22(9.00)u/ml and 548(100.00)ug/L, 113(88.00)ug/L respectively, and these were significantly higher than that of the controls: aCL antibody IgG/M and β2GP1 IgG/M; 41(5.00)U/ml, 16(6,00)U/ml and 521(42.00)ug/L, 54(48.00)ug/L) respectively ($p<0.0001$). Prevalence of aCL antibodies in these patients was 2.5% IgG and 5.1% IgM while 5.3% IgG and 3.8% IgM for ß2-GP1.

Conclusion: Antiphospholipid antibodies are elevated in patients with SCA, early detection provides a treatment and prognostic guide.

Abjco. PP.04. **Title**: **Prevalence of Stigma and Perceived Control Measures among Persons Living with Sickle Cell Disease in Zaria Metropolis.**

Authors: Hassan A[1], Umar AA[2], Awwalu S[1], Saleh M[1], Nmadu JN[1], Ibrahim IN[1], Danbala R[3]
Affiliations: [1]Department of Haematology & Blood Transfusion ABU/ABUTH Zaria [2]Department of Community Medicine ABU/ABUTH Zaria [3]Sickle Cell Warriors Support Organisation.

ABSTRACT

Background: Persons with SCD face numerous challenges including recurrent painful bone crises, recurrent hospital admission, and blood transfusion. However, the greatest challenge they face is stigmatisation from family members, the public, and sometimes healthcare workers. Stigma leads to poor self-care, poor access to healthcare, and ultimately poor physical and mental health.

Methods: This was a cross-sectional study using questionnaire based on the 8-item Stigma Scale for Chronic Illnesses (SSCI). Sociodemographic, clinical variables, source of stigma, coping mechanism and control measures for stigma were assessed. Data were analysed using Jeffreys Amazing Statistical package (JASP 0.16.4.0).

Results: There were 223 participants, 65% were female and majority (81.6%) lived in the urban areas, only 34.1% have tertiary education. 87.7% of were of the low socioeconomic class, 50.2% have history of complication(s), 72.2% had received a blood transfusion. The prevalence of Stigma was 86%, feeling of being left out of things is the commonest indicator of stigmatization. Source of stigma from the public (42%), family members (31%) and healthcare workers (27%). Coping mechanisms of non-disclosure of SCD status (20%) and self-medication (19%). The respondents opined that stigma can be reduced through public health education and subsidized care.

Conclusion: There is a high perception of stigmatisation mainly from the public. Non-disclosure of SCD status and self-medication were adopted coping mechanisms. The suggested measures to control stigma include increased health awareness and inclusion of SCD education in schools.

Abjco. PP.05. Title: **Determinants of Teachers' Perception of Sickle Cell Disease and Care of School Children Living with Sickle Cell Disease in Anambra State ,Nigeria**

Authors: Chilota Efobi [1], Ifeoma Ajuba IC[1], Chioma Ajator,[2] Ugochinyere Chilaka,[1] Chisom Nri-ezedi[3]

Affiliations: 1. Department of Haematology and Blood transfusion, Faculty of Basic Clinical Sciences, Nnamdi Azikiwe University, Nnewi Campus. 2. Department of Community Medicine, Faculty of Medicine, Nnamdi Azikiwe University, Nnewi Campus. 3. Department of Paediatrics, Faculty of Medicine, Nnamdi Azikiwe University, Nnewi Campus.

ABSTRACT

Background*:* In Western nations, sickle cell disease (SCD) survival rates have increased steadily over the years, whereas in Africa, less than half of all affected children live till the age of five. SCD-related complications lead to school absenteeism and poor academic performance. Educators must be well-versed in the prevalent SCD signs and symptoms, including first aid care and associated psychosocial factors to curb this trend. Aim: To determine teacher's knowledge of SCD and factors that affect this knowledge and care of children with SCD.

Methods: This was a descriptive survey of all Anambra State teachers invited to a health seminar at the State Education Ministry. A pre-tested questionnaire was administered with information on socio demographics, school cadre of employment, marital status, and perception and care of SCD schoolchildren retrieved. The correct responses were scored on a scale of 100 percent. Collated data were cleaned and analysed using Python 3.10.0. p values of less than 0.05 were considered statistically significant.

Results: The average age of the 182 responders was 44.2 ± 7.14 years. The majority (90.7%) of teachers were women with post-secondary academic degrees (76.4%). Approximately 57.1% of responders were elementary school teachers. Despite the fact that only 23 (12.6%) of the teachers had attended SCD courses in the past, a good number possessed a reasonable knowledge on SCD. Although the male instructors had less knowledge than females, this difference was not statistically significant. (p= 0.142). The highest educational level, prior exposure to SCD seminars, and the type of class the teacher teaches (primary or secondary) were found to impact their awareness and care of SCD patients (P= 0.003, 0.025, and 0.04 respectively).

Conclusion: More seminars and health conversations on SCD should be held for teachers, with special attention to teachers who work in public schools, male teachers, and those with less than a bachelor's degree.

NSHBT GOLDEN JUBILEE

Abjco. PP.06. Title: The Prevalence of Narcotic Abuse among Adult Sickle Cell Anaemia Patients at Aminu Kano Teaching Hospital, Northeastern Nigeria.

Authors: Mustapha FG[1], Ya'u NA[2], Dachi RA[1], Mahdi M[1], Kuliya AG[3], Musa I[3], Mukhtar SM[1], Muhammad K[1], Magaji FM[1]

Affiliations: 1. Department of Haematology, Abubakar Tafawa Balewa University Teaching Hospital Bauchi, Bauchi State. 2. Department of haematology, Faculty of Clinical Sciences, College of Medicine and Allied Medical Sciences, Federal University Dutse, Jigawa State. 3. Department of Haematology, Aminu Kano Teaching Hospital, Kano State.

ABSTRACT

Background: Painful crisis is the most common manifestation of sickle cell disease. Crises are episodes of pain that occur with varying frequency and severity in different patient for which various therapeutic regimens involving both narcotic and non-narcotic analgesics are being used. Narcotics remain the drug of choice in the management of severe pain by many physicians for rapid pain control. Objective: The aim of the study was to determine the prevalence of narcotic abuse among adults with sickle cell disease (SCD).

Methods: It was a descriptive study were 244 adults with SCD at steady state attending haematology clinic were recruited. The participants had their socio-demographic and other informations obtained through a questionnaire.

Results: The result showed that 44 patients were found to be abusing narcotics giving an overall prevalence of 17.7%. Among those affected, 34(77.3%), 4(9.1%), 3(6.8%) and 3(6.8%) patients were found to be abusing pentazocine, tramadol, DF 118 and a combination of pentazocine and codeine respectively.

Conclusion: Standard guidelines should be made available for health care providers on the management of chronic pain. Mild forms of analgesics such as paracetamol, ibuprofen etc. should be considered first before considering stronger analgesics such as narcotics and thus there is a need for a strict opiate control at both prescription and dispensing levels so as to minimize the occurrence of abuse among patients.

Abjco. PP.07. Title: The Isoelectric Focusing (IEF) Method for Screening Sickle Cell Disease: Experience at a Tertiary Institution in Nigeria

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ABSTRACT

Background: The Comprehensive Newborn Screening Programme in SW Nigeria (CNBSPSW) has a reference laboratory for the diagnosis of sickle cell disease (SCD) at Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile Ife Unit, Osun State.

Methods: Isoelectric focusing (IEF), an electrophoretic technique, was employed to separate different haemoglobin molecules into bands by their isoelectric point (PI) from dried blood spots (DBS). Haemoglobin variants may be visualized using the JB-2 staining system containing O-dianisidine.

Results: The Laboratory has tested a total of 2614 samples from all ages in 16 months (February 2022 to June 2023). From birth to 30 days 603 (23.1%) samples, from 30 days to 1 year 788 (30.1%) samples, from 1 year to 5 years 671 (25.7%) samples, from 5 years to 18 years 360 (13.8%) samples and from 18 years above 192 (7.3%) samples. The detected patterns of separation include: A only-1,243 (47.6%), AF/FA-658 (25.2%), FAS/AS/ASF-422 (15.1%), AC-106 (4.06%), FAC/ACF-15 (0.57%), SF/FS/S only-55 (2.10), FSA-20 (0.77%), SAF/SA-13 (0.50%), FSC/SCF/SC-41 (1.57%), FC/C only-10 (3.83%), F only-13 (0.50%), FCA-2 (0.08%), Hb with A_2-9 (0.34%), and SE-1 (0.04%).

Conclusion: The prevalence of sickle cell disease in SW Nigeria, is still high, therefore there is a need to continue community awareness campaigns to increase the relatively lower uptake of screening in the neonatal period. This may increase early detection and prompt referral into care for the prevention and treatment of complications, if necessary, thus improving the quality of life of the affected.

BLOOD TRANSFUSION

Abjco. OP.08: Fifty years activities of Haematopoietic Stem cell Transplantation in a low resource country Nigeria.: A single center report.

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Introduction: Nigeria has one of the highest incidence of sickle cell disease in the world (2-3% of a population of over 200 million). Also common are other non –malignant and malignant diseases that require HSCT. Activities of HSCT is low in Africa/East Mediterranean accounting for only 3.3% of global HSCT (over 1.5 million in 2017). Despites documented challenges, the first successful HSCT in Nigeria was performed by Bazuaye et al in 2011 at the Federal University of Benin Teaching Hospital (UBTH). However during the past fifty years only one HSCT center is Benin City is available in Nigeria but several patients who had transplant outside the country has been managed with post – transplant care by various centers across the country.

Methods: Sixteen of the patients with Sickle cell disease had HLA matched sibling donors (12/12 match), six were Haplo transplant (HLA > 6/12) and stem cell source used was bone marrow in nineteen patients and peripheral stem cells in three patients for those with ABO mismatch. The transplant protocol for matched sibling donor consists of reduced intensity conditioning (RIC) with Anti-thymocyte globulin (ATG), Fludarabine and oral Busulphan. Immunosuppression was with cyclosporine and Mycophenolate Mofetil. Haplo protocol was with Fludarabin, dexamethasone, Busulphan and post-transplant day +3 and +4 cyclosphosphamide. Immunosuppression was with Tarcolimus and Mycophenolate Mofetil (MMF). All patients with multiple Myeloma had autologous peripheral stem cell transplantation.

Results: Total HSCT was twenty seven, twenty one (77.8%) with Sickle cell disease, five (18.5%) with Multiple myeloma and one (3.7%) with Aplastic Anaemia. Transplant activities in UBTH was 3 (11%) while in public private collaboration with celltek healthcare medical center it was 24 (99%) The average age for patients with sickle cells disease was 12.1 years (04 – 19 years), Multiple Myeloma 52 years (45-59 years) and Aplastic Anaemia 25yrs. Donors Hb phynotype for sickle cell disease patients was HbAS (38%) and HbAA (62%). Neutrophil and platelet engraftments occurred within 12 – 19 days (mean 15.2days) and 14 – 23 days (mean 19.1 days) respectively. Overall survival (OS) was 22 (81 %) and 2(7.4%) rejection with high persistent fetal haemoglobin and has been stable with clinical cure.

Conclusions: There is need for collaboration of Private public partnership in Nigeria to increase the number of HSCT centers. Haplo HSCT may become a possible source of donors and the use of single peripheral non cryopreserved stem cell dose in place of double tandem has made it possible for many developing countries to perform autologous HSCT for Multiple Myeloma patients. Overall survival is comparable to data from other centers.

Key words: Haematopoietic stem cell transplantation, Haplo stem cell transplant, public private collaboration.

Abjco. OP.09. Title: The Use of Microtiter Plate for Extended Rh Typing in a Resource-Limited Setting: Prospects and Challenges.

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ABSTRACT

Background: The Rh antigens are highly immunogenic antigens that are associated with 70%-80% of red cell alloimmunization in multiply transfused patients. They rank second in clinical significance, following ABO antigens. In Nigeria, there is a high burden of patients requiring repeated blood transfusions including those with sickle cell disease (SCD), chronic kidney disease (CKD), haematological malignancies, and various other chronic anaemias. Red cell alloimmunization will naturally become prominent among these patients and it often makes it difficult to provide prompt, safe, and compatible blood for transfusion. Extended Rh typing helps in reducing the incidence of alloimmunization among these patients.

Methods: In Nigeria, most transfusion centers only perform ABO/Rh D blood grouping without typing for other Rh antigens (C, c, E, e) because it is expensive and unaffordable to an average Nigerian. However, with the introduction of the microtiter plate (MTP) technique which requires only 1-2% of the typing anti-sera, relative to the standard tube method, extended Rh typing will potentially become more affordable.

Results: The use of MTP for extended Rh typing started in AKTH in 2018 and the process was fully implemented in August 2022. So far, a total of 95 voluntary blood donors and hospital staff have been typed. Equally, we have typed 10 multiply transfused patients with alloantibodies and the offending antigens were identified and this allowed the provision of matched blood units. The most frequently occurring antigens were c and e (99%), followed by D (88.6%), C (20%), and E (16.2%). Phenotypically, Dccee was the most prevalent phenotype (56.2%), followed by DCcee (16.2%), while ddccee is the most prevalent among Rh D-negative individuals.

Conclusion: We hope to use these typed blood donors to form “mini-panels of cells” for antibody identification and to periodically conduct training for hospitals within the country. Our major challenges are the availability and high cost of reagents. However, with other centers hopefully coming on board, the advantage of economy of scale may help in reducing the cost.

Abjco. OP.10. Title: Sociodemographic and Haematological Profile of voluntary Blood Donors in Abakaliki , South-East Nigeria: Implications on Quality of Blood and its Components.

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ABSTRACT

Background: Donor characteristics could have significant impact on the quality of the blood products.
Objective: This study aims to examine the sociodemographic and hematological profile of voluntary blood donors in Abakaliki and their suitability for whole blood and component donation.

Methods: This was a cross-sectional study of 103 prospective donors at AEFUTHA. Sociodemographic characteristics were obtained using structured questionnaires, Complete blood count was determined by hematology autoanalyzer Mindray BC 5300 , while Hb phenotype was done by Hb electrophoresis. Descriptive and inferential statistics were used to analyze the data obtained.

Results: Males were in slight majority of the volunteers (56; 54.4%) and mostly undergraduate students between the age range of 18-25years. The blood donors' mean haematocrit level and platelet count were 36.3 ± 5.3% and 162.1 ± 62.8 respectively. The mean MCV was 78.9 ± 5.7 fl while 65% and 35% of the donors had HbAA and HbAS haemoglobin phenotype respectively. Thirty-two percent were repeat donors.

Conclusion: Almost half of the voluntary donors were females and the haematocrit level of the donor's population was below the recommended NBTS guideline of 38% and their MCV was low. Their platelet count was compatible with WHO threshold for apheresis platelet donation albeit, undesirably low for optimal platelet yield. A significant proportion of the voluntary donors are hemoglobin AS phenotype. Strategic donor selection, nutritional counseling and supplementation may be employed to improve the quality of blood and its components.
Declaration of interest: None to Declare

Abjco. PP.11. Title: Benefits of Blood Components and Challenges of Availability Using Apheresis Technology in Nigerian Health Institutions.

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ABSTRACT

Background: Blood component therapy reduces blood wastage and other complications associated with unnecessary whole blood transfusion, yet they are not readily available in most health institutions in Nigeria. This study aimed to determine the benefits of blood components use and challenges affecting blood components availability using apheresis technology in Nigeria.

Methods: This was a cross sectional study among health workers of facilities that participated in capacity building training on Apheresis technology organised by Terumo Blood and Cell Technologies, and Celltek Healthcare Medical Centre at Benin City Nigeria in November 2021. Pre-tested self-administered semi-structured questionnaire was used to collect data and statistical analysis was done with SPSS software, version 26.

Results: Twenty-three health workers from the participated health institutions were recruited for the study and were made up of 15 (65.2%) doctors and 8 (34.8%) nurses with age range 28 to 60 years. Fifteen (65.2%) have over ten years working experience. Benefits of blood components use as reported by the participants was that it reduces blood wastage (100%), reduces risk of alloimmunization (94.4%), reduces the risk of transfusion overload (77.8%), improve blood availability (77.8%), useful in management of some medical conditions like Guillain Barre syndrome and improves patients' outcome (77.8% each). Some challenges militating against availability of blood components in Nigerian health institutions included cost of consumables such as apheresis kit (94.4%), little knowledge of the benefits of blood components among stakeholders (50%), machine looks complicated and requires much technicality (11.1%), fear of donor acceptability (5.6%), problems of power supply (61.1%), need for special training of manpower (55.6%).

Conclusion: Use of blood component is beneficial in patient management. However, availability is hampered due to high cost of apheresis kit, in addition to other reasons. Cost of apharesis technology should be reduced to make blood components affordable.

Abjco. OP.12. Apheresis activities in a low resource country Nigeria: a five years report of a single center.

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Introduction: Apheresis which provides blood components therapy and therapeutic clinical intervention is very important in modern supportive care of patients. However there are very few centers with apheresis units in low resource countries like Nigeria leading to avoidable mortalities from the complications of use of whole blood. We present a five years report of apheresis activities in a private stem cell transplant medical center from July 2017 to June 2022 despite several documented challenges.

Methodology: A private Apheresis unit was set up in a stem cell transplant center with two apheresis machines (initially COBE SPECTRA then OPTIA with Hemonetics). Irradiation of collected leucodepleted single donated platelet concentrates was done using linear accelerator radiotherapy machines .Fresh frozen plasma was collected during most sessions of platelet collection and stored at –20^{0}C while platelets were stored vibrating at 25^{o}C .

Results: A total of 324 apheresis sessions (Optia 288 (89.2 %) Hemonetics 36(10.8 %) and was performed over a 5 years period. Single donor platelet concentrates was 209 (64.5 %), automated red cell exchange with 81 (24.9 %), plasmapheresis 21 (6.6 %), Peripheral stem cell collection 13(4.0 %). Also a total of 186 fresh frozen plasma was collected during sessions of platelet collections. Red cell exchange sessions was mainly for Sickle cell disease patients with 58(71.6 %) as males and most common indications was recurrent/refractory Vaso occlusive crises 32(39.5 %), others were priapism 13 (16.0 %), chronic leg ulcers 11 (13.6 %), post hip replacement 10 (12.3 %), acute chest syndrome 9 (11.1 %), and pre-stem transplant 6 (7.5 %). Donors for platelets was mainly males 152 (72.8 %), irradiated platelet concentrates for stem cell transplant patients and other indications was 118 (56.6 % of the total platelet collected). Peripheral stem cells collection was a total of 13 sessions, 8(61.4 %) sessions for four patients with Multiple myeloma and donors for sickle cell disease patients undergoing stem cell transplantation 5(38.6%). Indications for therapeutic plasmapheresis was Guillain-Barre syndrome 19(90.5 %) and bleeding dyscrasia in Multiple myeloma 2(9.5 %).

Conclusions: Apheresis activities in low resource countries like Nigeria is still very low due to several documented challenges. There is need for private public partnership to improve supportive and therapeutic care which will reduce mortality and morbidity in Nigerian Hospitals.

Key words: Apheresis, low income countries, public private partnership

Abjco. OP.13 Title: Evaluation of Minor Red Cell antigen Compatibility Between Blood Donors and Recipients in Olabisi Onabanjo University Teaching Hospital, Sagamu.

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Background: The provision of blood for transfusion is solely based on ABO blood grouping and regular antibody screening. In blood transfusion reaction, the role of minor red cell antigens has been well documented. Despite this fact, they are not considered during routine blood unit selection and typing.

Aim: This study therefore aims to assess the prevalence of minor red cell antigens- Rh, Duffy, Kidd and MNSs among blood donors and their corresponding blood transfusion recipients.

Patients and Methods: One hundred and sixty participants- donors and their corresponding recipients were recruited for the study. Donors were recruited from the blood bank while their corresponding recipients were traced to the ward/ day care unit. EDTA anticoagulated venous blood samples was collected from each participant and grouped for RhC, Rhc, RhE, Rhe, Fya, Fyb, Jka, Jkb, M, N, S and s by test tube method. Samples were analysed at room temperature, 370C, with AHG and with Coomb's reagent. The blood group of donors was then compared with corresponding recipients to identify disparity in antigen.
Approval was obtained from OOUTH, Sagamu Health Research Ethics Committee. Informed consent was obtained from participants before the administration of questionnaire and sample collection. Data analysis was with SPSS 22.0.

Results: This study highlights Rhc, Rhe, Fya, Jka, and MN antigens as the most prevalent among participants. Antigenic incompatibility was recorded in 65 out of the total 80 transfusions that were considered. Incompatibilities were most frequent with Jkb, e, S, s, M and N antigens, while there is no incompatibility with Fyb antigen. Between 1 and 6 minor antigen incompatibility was recorded in 81.3% of blood transfusions. Transfusion of ABO group compatible (27.5%) rather than group specific blood units, younger age of blood donors and male dominated (86.3%) blood donation influenced incompatibility.

Conclusion: Minor red cell antigen component differs among individuals despite the same ancestral origin. The level of incompatibility is significant and cannot be ignored because of the complications particularly among the multiple transfusion recipients and women of child bearing potentials. The study highlights the need for full genotyping of donor blood and patients to avoid the risk of alloimmunization and facilitate the provision of safe blood for the potential recipients.

Key Words: Blood Transfusion, Donors, Antigens, Incompatibility.

THROMBOSIS AND HAEMOSTASIS

AbjCo. OP.14. Title: **Frequency and Diagnosis of Prekallikrein and High Molecular Weight Kininogen Deficiency in African Countries.**

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ABSTRACT

Background: Prekallikrein (PK) and high-molecular-weight-kininogen (HK) deficiency are contact system defects caused by mutations in KLKB1/KNG1. Because of their perceived rarity and limited overt clinical consequence, PK/HK-deficiency has received limited interest. Recently, using a Nigerian cohort and databases, we demonstrated that PK-deficiency is not rare but widespread in several African countries (prevalence: ~1/7000). Aim: To study the clinical impact and frequency of HK-deficiency.

Methods: A literature review of HK deficiency was performed, analyzing the clinical course and diagnostic criteria. The frequency of HK-deficiency was estimated with GnomAD using features of known HK-deficiency-causing variants. **Results**: Forty-seven cases of HK-deficiency have been identified worldwide to date. All 10 HK-deficiency-causing variants discovered are truncating. Conservative prevalence estimates based on the putative HK-deficiency-causing variants from GnomAD revealed a frequency of 1 HK-deficiency case/~8 million worldwide. Similar to PK-deficiency, HK-deficiency is more common in Africans (~1/2 million), but the number of cases detected to date is too small for phenotype analysis.

Conclusion: Therefore, diagnostic algorithms for isolated aPTT prolongations should include screening for HK/PK-deficiencies to avoid surgery delays, especially for African descendants, and to facilitate future evaluation of the clinical significance of these defects. Because commercial kits are expensive and often unavailable in resource-poor countries, we started to establish an ISTH-sponsored global registry. It will serve to establish a systematic cohort to evaluate the potential clinical consequences of HK/PK-deficiency, confirm the calculated frequencies of HK/PK-deficiency, and assist laboratories that are unable to analyze HK/PK and enable them to do so in the future.

HAEMATO-ONCOLOGY

Abjco. PP.15. Title: **Characterisation of Lymphoproliferative Malignancies using Fluorescence *in-situ* Hybridization in SW Nigeria**

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ABSTRACT

Background: Fluorescence *in-situ* hybridization (FISH) technique was used to characterise certain malignancies in South West Nigeria, including lymphoproliferative malignancies such as chronic lymphocytic leukaemia (CLL) and malignant lymphomas.

Methods: Locus-specific single fusion FISH probes, TP53 (17p13.1 red; control probe for the 17 centromere D17Z1 green), BCL2 (18q21.33-q22.1) and MYC (8q24.21), from Cytocell, Oxford, UK, were used following standard operating procedures. Patients recruited were from four (4) Federal Government tertiary hospitals in SW Nigeria, between February 2022 and June 2023. Forty (40) patients were enrolled, but 35 (87.5%) were tested using the stated FISH probes.

Results: All tests had a normal fluorescence pattern except 5 (14.3%) for TP53 and 3 (8.57%) for MYC that were positive; and one (2.86%) TP53, 3 (8.57%) BCL2 and two (5.71%) MYC that failed (no cells seen/no signal). The positive TP53 were from patients with CLL (3/16; 18.7%); HL (1/6; 16.7%); and NHL/BL (1/13; 7.69%); while the three patients positive for MYC had BL (100%), NHL (8.33%) and CLL (6.25%) respectively.

Conclusion: The cost of probes was a limiting factor in this study. This is the first report of the use of FISH probes in characterizing lymphoproliferative malignancies in a laboratory in Nigeria. The results indicate that about one in five patients with CLL have TP53 mutation, which may determine their treatment options and possible outcomes. The probe for MYC was consistent with BL, but variable for other lymphoproliferative malignancies, while the BCL2 probe was generally negative in this study. Results of larger studies are anticipated in the near future.

MISCELLENOUS

AbjCo. OP.16. Analysis of an occurrence management system in a private tertiary hospital laboratory in Lagos Nigeria – Efforts towards continual laboratory improvement

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INTRODUCTION

Authors reckon that clinically significant errors occur in laboratory practice. If not mitigated, laboratory errors can lead to missed/delayed diagnosis, improper monitoring of patients and poor clinical outcomes. There is a continual need to report and manage all forms of error to reduce them to nil or negligible levels through effective root cause analysis, corrective/preventive actions, and process improvement strategies. The objective of index study is to evaluate the occurrence management system in a private tertiary hospital in Lagos Nigeria. Types of incidences, individuals affected, laboratory phases/elements affected, root causes and incidence closure will be described.

METHODS

Index study was conducted at a 165-bed private tertiary care hospital in Lagos, Nigeria. The hospital laboratory units include phlebotomy rooms, blood donor clinic, haematology, clinical chemistry, microbiology, histopathology, PCR laboratory and blood bank. Electronic reports of laboratory incidents submitted over a period of 18 months between April 2021 and September 2022 were retrieved from the logs, collated, and analyzed. Data collected included types of incidences, location of incidence, individual affected, incidence summary, laboratory phase/element involved, reporting personnel, root causes, incidence closure and reasons for non-closure, if any. Descriptive data are presented as frequencies and proportions.

RESULTS

Of the 81 reported occurrences, there are 72 (88.9%) actual errors (adverse events, no harm events, and sentinel events), others were near misses (12.3%). Ten (12.3%) occurred outside the laboratory. In terms of potential for harm, patients (77.8%) and staff (8.6%) were largely affected. Most errors involved the extra-analytic phases (43.2% pre-analytic and 19.8% post-analytic). Other errors were 13.6% intra-analytic, 11.1% safety events and 6.2% related to external examination (test referrals). Eight different categories of laboratory staff were involved in reporting incidences, with most reports generated by medical laboratory scientists (40.7%), phlebotomists (34.6%) and pathologists (7.4%). Root cause analysis revealed employee performance issue (64.2%) and lack of effective communication (11.1%) as the most important. Reported incidences were fully closed out (90.1%) of the time with implementation of CAPA. Overall, 97.5% of the reported errors are considered preventable.

CONCLUSION

Perhaps, there is no such thing as an error-proof clinical laboratory. All clinical laboratories should ensure functional occurrence management system to capture, report, correct and prevent laboratory errors. Effective error management processes coupled with continual training for all laboratory users, automation of processes and continual vigilance will prevent large number of laboratory errors and promote better outcomes for the laboratory.