Editorial

Outstanding contribution of British medicine to child health in Sudan

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In the Current Issue of the Sudanese Journal of Paediatrics (SJP) we reflect on the University of Khartoum (U of K) playing host to the first MRCPCH Clinical Examination, set to be on Monday and Tuesday 20th and 21st March, 2017 in Khartoum [1, 2]. Graciously, U of K has hosted the first MRCPCH Examiner Elect Course and the first MRCPCH Mock Clinical Exam at Soba Education, Training& Examinations Centre (SETEC) [3], Soba University Hospital on the 27th and 28th of September, 2016 [1]. This followed the signature of the Memorandum of Understanding when Dr Bruce McLain (RCPCH Middle East Advisor) visited Khartoum, in April 2016, as an External Examiner for the MBBS exams at the Faculty of Medicine, U of K. Having the clinical MRCPCH exam in Khartoum was a long awaited step since hosting of the MRCPCH Part 1 exam by the Postgraduate Medical Studies of the U of K Faculty of Medicine. It's noteworthy that Part-1 MRCP exam (Edinburg) was available in Khartoum since the 1970s. A great logistic support has now been offered to the candidates who used to travel abroad to neighboring countries or the UK to take the clinical MRCPCH exam.

This historic step adds to the outstanding contribution of British medicine to child health in Sudan. The pioneering Sudanese paeditricians had their training and certification in the UK. These included Professor Mahmoud Mohamed Hassan [4] and Professor Salah Abelrahman Ali Taha [5]. Professor Mahmoud

Mohamed Hassan [4] was the first qualified Sudanese paediatrician heading the Paediatric Unit at Khartoum Civil Hospital (renamed Khartoum Teaching Hospital) in 1958, and the first Chief Paediatrician for the Sudan Ministry of Health. He was also the first President of the Sudan Association of Paediatricians (SAP), and first Chief Editor of the Sudanese Journal of Paediatrics (SJP). He contributed remarkably to research and teaching of both the undergraduates and postgraduate students. Later in his life he became Head of the Department of Pediatrics at King Abdul Aziz University, Jeddah, Saudi Arabia before his retirement. Professor Salah Abelrahman Ali Taha [5] had also remarkable impact in establishing child health services in Sudan and Saudi Arabia, and in laying the foundation of the Department of Pediatrics, College of Medicine, King Saud University, Riyadh. He was elected Member of Sudan Parliament from his rural district in Gezira State after returning from Saudi Arabia, and became the Speaker of the House of Parliament in 1986.

Both of these pioneers were dedicated advocates for Sudanese children. Prof Salah A Taha was able to hold an International Sudanese Paediatric Conference at Wad Medani in 1967. The Conference was addressed by The Sudan President, Ismail Alazhari and attended by the Minister of Health (Dr Abdelhameed Salih) [5]. On the other hand, Prof Mahmoud Mohamed Hassan emphasized in his introductory presentation to the Forth Conference of the Sudan Association



of Paediatricians (SAP) [6], which was held in Port Sudan (15th-16th February 1975), and in the President Speech (in Arabic) [7], the importance of investing on child welfare if prosperity is to be achieved for the Nation. The Conference was attended by the Sudan Minister of Health and paediatricians from the United Kingdom including Professor John Forfar [8] and Professor David Morley [9], both inspired and mentored generations of Sudanese pediatricians. Attending also was Dr E A Shinebourne [10,11], the renown pediatric cardiologist and mentor of Professor Abdelmoneim Elseed (Ex- President of SAP and Editor-in-Chief of SJP), who pioneered pediatric cardiology in Sudan and Saudi Arabia [12].

Professor F S W Brimblecombe (1919-1992) came to Sudan with his family (1968-69) as WHO Professor of Child Health in the University of Khartoum (U of K) and, with his visionary, organizational and charming abilities, established the first Department of Paediatrics and Child Health (DPCH) in the university. Over the years, he was subsequently invited back as adviser or examiner on 18 occasions (Figure 1) [13,14]. In 1990, one of us (MAMS, then Head of DPCH, Faculty of Medicine, U of K) invited him for the final exam of the U of K Master in Paediatrics and Child Health (MPCH, which started in 1977 and was later renamed Clinical MD in Paediatrics and Child Health). The invitation was on short notice, because of the apology of the previously nominated external examiner; and he had first to travel from Exeter to collect his airway ticket at London Heathrow Airport. During the dinner held in his honor, an apology was expressed regarding the short notice and the accompanying inconvenience. He replied, "I will always come, if you invite me, even on a stretcher!". In UK, he convinced several Sudanese doctors whom he met to take paediatrics as a specialty, and invited them to come to Exeter where he trained, mentored and motivated them to be accomplished paediatricians.

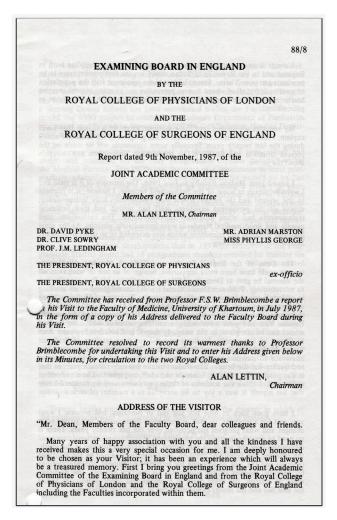


Figure 1 – Report of Professor F S W Brimblecombe to the Joint Academic Committee, The Royal College of Physicians of London and The Royal College of Surgeons of England following a visit to the Faculty of Medicine, University of Khartoum, in July 1987.

Professor V Neale (1899-1970)[15] is also one of the founders of the DPCH, U of K. As WHO Professor of Child Health in Khartoum, and with great enthusiasm and drive, he established a reputable department on the same successful model that he accomplished in Bristol. He had brainstorming interactions during medical meetings with his colleagues, both Sudanese and expatriate. In one of these, he addressed the Late

Prof Tigani El Mahi (former Professor of Psychiatric Medicine, U of K), after a series of discussions by saying; "You could not have acquired all this in your lifetime....you must have lived twice to do so"[16]. Known as the "the father of psychiatry in Africa", Prof Tigani El Mahi was a man of varied talents and interests. He was an Egyptologist with encyclopedic knowledge of history, sciences, literature and poetry. He was the President of Sudan (Head of The Supreme Council of State) during the historic visit of Queen Elizabeth II to Sudan (February1965)[17].

Other visiting professors of child health included Dr B W Webb (Consultant Paediatrician in Taunton, UK) and Dr Gerald A Neligan (1918-1976), from the University of Newcastle upon Tyne, who was best known for neonatal medicine [18]. Dr Neligan was the mentor of Professor Mohamed Ibrahim A Omer [19] who pioneered Neonatology in Sudan, established the first neonatal unit at Khartoum Teaching Hospital, and became the first Convenor of Postgraduate Board of Paediatrics and later the Director of Postgraduate Medical Studies Board, U of K. He also served as Editor-in-Chief for SJP and as President of SAP. When he moved (in 1990) to the Faculty of Medical Sciences at Sana'a University in Yemen, he headed and enriched the Department of Paediatrics. In 1993 he also headed the Department of Paediatrics in Buraydah (the capital of Al-Qassim Province in Saudi Arabia), and initiated a commendable postgraduate training. Since 1999 he works at the Unit of Child Health, Faculty of Medical Sciences, Trinidad and Tobago in West Indies, contributing effectively to teaching and child health care.

Professor John A Dodge [20] came with his family to Sudan in 1973, as WHO Visiting Professor, and stayed for 4 months. With his special clinical and research interests in children's gastrointestinal and nutritional disorders, particularly cystic fibrosis [21], he collaborated with, mentored and guided several Sudanese scientists and paediatricians who

were interested in the field. In 1977 he was External Examiner to the first Part I exam of the U of K Master in Paediatrics and Child Health (MPCH, which was later renamed Clinical MD in Paediatrics and Child Health). He also later contributed effectively to Part II of MPCH examinations.

Professor James H Hutchison (1912 – 1987, President of the Royal College of Physicians and Surgeons of Glasgow from 1966 to 1968 and of the British Paediatric Association, 1969 to 1970) [22] also had his role in Sudanese child health. His single author textbook Practical Paediatric Problems, first published in 1964, was one of the standard texts in the U of K Department of Paediatrics and Child Health. In January 1973 he visited, together with Prof Mohamed Ibrahim A Omer, Jebel Marra, a mountainous region of Darfur Province in western Sudan where goitre is endemic [23]. Travel to this region is both difficult and hazardous; yet they managed to examine many children and adults with goitre in the market places of several villages. Serum was obtained in May 1975 from children and adults with goiter (for the assay of thyroid functions), separated by hand centrifuge and stored in liquid nitrogen. The liquid nitrogen container was dispatched to Khartoum from Nyala (the nearest town) by air and from there flown to Glasgow, UK! Professor Robert L Broadhead had commendable impact on Sudanese child health and worked at the U of K Department of Paediatrics and Child Health, with remarkable contributions to research [24] and teaching of both undergraduates and students of the MPCH. He was also member of the Editorial Board of SJP. Later, he left to Malawi where he was instrumental in creating a medical school for Malawi [25].He was the first Head of the Department of Paediatrics and Child Health, and became the Principal of the medical school.

The Department of Tropical Paediatrics and International Child Health (DTPICH) at the Liverpool School of Tropical Medicine (LSTM), University of



Liverpool, established by Professor Ralph George Hendrickse (1926-2010) [26], had major impacts on child health in Sudan. Many accomplished Sudanese paediatricians studied in Liverpool and obtained the Diploma in Tropical Child Health (DTCH), which had also been developed by Prof Hendrickse, and two are recipients of Cicely Williams Gold Medal of the Best Candidate in the DTCH, Liverpool University. These are Dr Mohamed Sir K Hashim (Ex-President SAP, Ex-Head, DPCH, U of K) and Prof Mohammed Ahmed Abdullah (Ex-President SAP). In 1980, Prof Hendrickse was one of the two External Examiners to the first final exam of the U of K Master in Paediatrics and Child Health (MPCH, which was later renamed Clinical MD in Paediatrics and Child Health)[4].

Prof Hendrickse also established a centre for the study of mycotoxins, particularly aflatoxins, following an initial study in the Sudan which resulted in seminal publications [27], to be followed by similar ones in other African countries and in Latin America [28]. Dr J B S Coulter, member of the DTPICH, University of Liverpool, came with his family in 1981 and stayed for 2 years in Khartoum to carry the aflatoxins study at Gaafar Ibnauf Children's Hospital [29] and Soba University Hospital. Seconded from Liverpool, he joined the U of K Department of Paediatrics and Child Health, and had his memorable impact on teaching and research.

Professor R G Hendrickse also established Annals of Tropical Paediatrics (currently named Paediatrics and International Child Health) and the first issue was published in 1981 to provide paediatricians in low-resource countries a venue to publish their research. One of us (MAMS) had the privilege to have two articles published in its first volume [30,31] followed by an invited review on "Childhood muscular dystrophy: An African review" in Volume 5 [32]. One of these articles [30] constituted his first international publication. Prof Hendrickse continued as Editorin-Chief until 2004. Dr J B S Coulter is the current

Editor-in Chief of Paediatrics and International Child Health which still provides valuable support for paediatricians in low-resource countries, although the journal now publishes studies from around the globe. The Institute of Child Health (ICH) at University of London and its pillars Professor David Morley [9] and Prof G J Ebrahim [33] provided invaluable contribution to child heath in Sudan. The Senior Teachers Training Course, organized by the ICH, offered mentorship and guidance to several Sudanese paediatricians. These included Prof Hafiz Elshazali (First Sudanese Head of the DPCH, U of K; Ex-President, SAP and current Member, Editorial Board, SJP), Prof Mohamed Ibrahim A Omer [19], Dr Hassan Osman Omar, and Prof Zain A Karrar (President of the Sudan Medical Council, Ex-President SAP; Ex-Head, DPCH, U of K). The Course included visits to training sites outside UK. One of these was Omdurman Maternity Hospital (founded in 1957), in metropolitan Khartoum, which is the largest maternity hospital in Sudan and one of the most reputable in Africa [34]. It is noteworthy that a Sudanese paediatrician, Prof Hassan Bella, worked as Lecturer (Hon) at the ICH, as well as Tutor [9]. He contributed several publications on maternity and child health in Sudan [35,36]. He was also Editor of The Journal of Family and Community Medicine (2001–2010) [37]. Currently he serves as Expert Consultant for the Bill & Melinda Gates Foundation [38] and is a member of the International Editorial Board of SJP. The bilateral link, sponsored by the British Council, between the University of Khartoum (U of K), and the Department of Child Health in Newcastle upon Tyne had tremendous impact on Sudanese child health and postgraduate teaching [39]. Teachers would go out to the Sudan from Northern regional centres of UK for two to three weeks every year. Addressing mainly areas of weakness, the aim was to strengthen teaching and research for future Sudanese paediatricians. On the other hand, trainees would come to Newcastle from Sudan to improve their skills in specific subspecialties and stay in Newcastle for several months. Professor Michael Parkin (1935-1990)[39] was the driving force behind this link program, and visited Khartoum several times. He was accompanied by his family in a few of these visits, which strengthened the social ties between members of both departments, and kept the humane dimension of the link viable over generations. Other teachers from Newcastle upon Tyne who visited Khartoum with members of their families included Dr Nigel Speight and Professor Sir Alan Craft (Ex- President, RCPCH), the renown trailblazer in paediatric oncology [40].

Dr J Paget Stanfield, Director of the International Child Health Unit at Newcastle upon Tyne University Medical School, also contributed effectively to the teaching in Khartoum, and provided warm reception and logistics for Sudanese paeditricians who came to Newcastle upon Tyne. With his wisdom, experience in Africa, and as a Co-Editor of the textbook "Diseases of Children in the Subtropics and Tropics", he was an invaluable asset for all.

Professor John K G Webb [41](James Spence [42] Professor of Child Health, and Head, Department of Child Health) personally supervised and fostered this bilateral link program, and offered great and tender care to the Sudanese paeditricians who visited Newcastle upon Tyne. He was one of the two External Examiners to the first final exam of the U of K Master in Paediatrics and Child Health (MPCH, which was later renamed Clinical MD in Paediatrics and Child Health)[4]; and was also invited as External Examiner for an MD thesis at the Department of Medicine, U of K.

As part of the link program and to improve skills in specific subspecialties, Dr Nicholas P Cavanagh, Department of Neurology, The Hospital for Sick Children, London conducted a clinical paediatric neurology course in Khartoum for the MPCH students, leaving an everlasting impression. This encouraged

one of us (MAMS) to take paediatric neurology as subspecialty. During his stay in Newcastle (1980-82), he was Fellow to the Department of Child Health, University of Newcastle upon Tyne. He also worked as Clinical Research Fellow, Regional Neurological Centre, Newcastle General Hospital (NGH) to get training in pediatric neurology with Dr David Gardner-Medwin [43] and neuromuscular disorders with Lord Walton [44]. Another objective was to develop an MD thesis, registered at the University of Khartoum, on severe childhood autosomal recessive muscular dystrophy, for which Dr David Gardner-Medwin was the External Supervisor. The muscle biopsy, which was sent in liquid nitrogen from Khartoum, is still stored in Newcastle. Returning back from Newcastle upon Tyne, an intensive paediatric neurology course (February 1983) was organized for postgraduate students in paediatrics and medicine. Dr David Gardner-Medwin gracefully accepted an invitation by the Postgraduate Medical Studies Board, U of K to visit Khartoum and conduct the course which included a symposium on muscular dystrophy [43]. In 1986 MAMS returned to UK as Fellow and Clinical Assistant, Department of Neurophysiology, Regional Neurological Centre, NGH and Fellow to the Department of Child Health, University of Newcastle Upon Tyne, UK (6 months). Another postgraduate course in clinical paediatrics, was conducted in July 1987 at the Faculty of Medicine, U of K by Dr Fraser W Alexander, NGH, Newcastle Upon Tyne, UK.

Lastly, one of those who enjoyed the privilege of the Newcastle-Khartoum link program is Professor Salah Ahmed Ibrahim, the Local Host for the MRCPCH Clinical Examination which is the theme of the present Editorial. Prof Salah A Ibrahim is currently Dean, The Graduate College, U of K, and Chairman, Council of Paediatric Specialization, The Arab Board of Health Specialization.



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