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EDITORIAL



Professor Mark Tetley
Editor in chief

Welcome to the 18th Volume of the UGMS Research Newsletter. The year 2020 has been a challenging year with the COVID-19 pandemic, which succeeded in derailing the normal academic program of the Medical School. Notwithstanding the difficulties, the faculty was able to complete the academic year successfully. Research in the departments has also not been spared by the effect of the pandemic and we continue to encourage all departments in the School to capitalize on any opportunities during this period and step up their research output. This is the only way the School can be relevant and contribute significantly to improving patient care and also help to keep alive the goal of the University in research.

The images in clinical medicine from the department of child health feature a rare congenital abnormality of the finger and toe nails. Even though there is no known treatment for this condition, knowledge about the cause can help alleviate the anxiety in the parents and also prevent misdiagnosis by the physician. The research highlights features the Physiology Department with

a study on exercise tolerance in patients with sickle cell disease, Chemical Pathology Department with a study on prevalence of dysbetalipoproteinaemia in Ghana, Center for Tropical Clinical Pharmacology and therapeutics with a study on predictors of Tenofovir-induced renal tubular dysfunction and the Psychiatry Department on developing a mental health toolkit in Ghana.

The landmark case is on the use of minimally invasive method in treating kidney stones, a condition which is becoming increasingly common. The use of percutaneous nephrolithotomy is a welcome procedure that avoids open surgery with a better outcome. The education section features a study by the department of psychiatry on personhood and mental illness. The belief that mental illness leads to loss of personhood completely or partially, has influenced our attitude towards those who have recovered from it. We need to be educated on these issues so that we can have a healthy attitude that can help integrate this category of patients back in our society when they recover.

Samuel Ofosu-Armah, professor emeritus is the distinguished personality for this volume. He joined the Medical School in 1966 as a lecturer in the Department of Child Health and was the Vice Dean of the UGMS in 1977. The editorial team and the School are grateful for his contribution to the success of the UGMS. The students of the UGMS participated in the Yale Global Health Students United for Regional and Global Education in 2020. The meeting addressed the effects and impact of the COVID-19 pandemic on global health and education. The full account is featured in the students' corner.

The Dean of the UGMS deserves our appreciation for her encouragement and support for the editorial team and the research committee to continue to promote the research agenda of the University in the School. I sincerely thank the Newsletter editorial team for their selfless contribution to the success of the UGMS Newsletter and we look forward to more exciting issues in the year 2021. Happy New Year!

NEW YEAR MESSAGE FROM THE DEAN



Professor Margaret Lartey
Dean, UGMS

Let me start my message by wishing all our readers a very happy, prosperous and COVID free 2021 with long life and good health.

I also want to thank the Editor-in-chief, editorial board, research committee and newsletter members for working hard to publish another issue despite the unfavourable conditions we found ourselves in.

Yes, COVID-19 has been and continues to be a major disruptor, affecting all aspects of our personal, work, national and global life. We have come this far by the grace of God and we look forward to making the best of 2021.

The team producing this newsletter has worked hard over the past five years and it is about time to bring in some new hands. Hopefully this year, some others will get the opportunity to contribute their quota and bring new ideas on board. We will try to maintain publishing 3 issues in the year.

As Schools re-open for the 2021 academic year, we are faced with the challenge of bringing all our classes in at the same time. We will try to document our experiences and lessons learned as we run modified academic programmes amidst complying with COVID-19 preventive protocols across students, staff and faculty.

The experience of the Level 500 students at the Yale Regional and Global Education programme in 2020 is an example of using all opportunities available during the pandemic. I hope together we will see opportunities created by the pandemic and innovate to maintain high quality teaching, learning and research.

I look forward to an instructive 2021.
Happy new year again.

ON-GOING DEPARTMENTAL RESEARCH AND PUBLICATIONS

UNIVERSITY OF GHANA MEDICAL SCHOOL

Department of Anaesthesia

Departmental Publications

1. Antwi-Boasiako, C., KusiMensah, Y. A., Hayfron-Benjamin, C., Aryee, R., Dankwah, G. B., Kwawukume, L. A., & Darkwa, E. O., (2019). Total Serum Magnesium Levels and Calcium-To-Magnesium Ratio in Sickle Cell Disease. *Medicina* (Kaunas, Lithuania),55(9), 547. <http://doi.org/10.3390/medicina55090547>
2. Antwi-Boasiako, C., Kusi-Mensah, Y. A., Hayfron-Benjamin, C., Aryee, R., Dankwah, G. B., Abla, K. L., Owusu Darkwa, E., Botchway, F. A., & Sampene-Donkor, E. (2019). Serum Potassium, Sodium, and Chloride Levels in Sickle Cell Disease Patients and Healthy Controls: A Case-Control Study at Korle-Bu Teaching Hospital, Accra. *Bi-omarker insights*, 14, 1177271919873889. <https://doi.org/10.1177/1177271919873889>
3. Tettey, M., Edwin, F., Tamatey, M., Offei-Larbi, G., & Aniteye, E. (2020). Pharyngoplasty effectively relieves dysphagia from radiation-induced upper gastrointestinal tract strictures: A report of two cases. *Health Sciences Investigations (HSI) Journal*, 1(1), 64 - 67. <https://doi.org/10.46829/hsijournal.2020.6.1.1.64-67>

Department of Child Health

Departmental Publications

1. Antwi-Boasiako C., Andemariam B., Colombatti R., Asare E.V., Strunk C., Piccone C.M., Manwani D., Boruchov D., Farooq F., Urbonya R., Wilson S., Boatemaa G.D., Perrotta S., Sainati L., Rivers A., Rao S., Zempsky W., Ekem I., Sey F., Segbefia C., Inusa B., Tartaglione I., Campbell A.D. A study of the geographic distribution and associated risk factors of leg ulcers within an international cohort of sickle cell disease patients: the CASiRe group analysis. *Annals of Hematology* 2020;99(9)
2. Lartey B.L., Quaye O., Damanka S.A., Agbemabiese C.A., Armachie J., Dennis F.E., Enweronu-Laryea C., Armah G.E. Understanding Pediatric Norovirus Epidemiology: A Decade of Study among Ghanaian Children. *Viruses* 2020;12(11)
3. Boateng R., Renner L., Petricca K., Gupta S., Denburg A. Health system determinants of access to essential medicines for children with cancer in Ghana. *BMJ Global Health* 2020;5(9)
4. Takyi A., Tette E., Goka B., Insaidoo G., Alhassan Y., Nyarko M.Y., Stepniewska K. Treatment outcomes among children treated for uncomplicated severe acute malnutrition: A retrospective study in Accra, Ghana. *Public Health Nutrition* 2020

Department of Community Health

Departmental Publications

1. Tetteh J., Ekem-Ferguson G., Swaray S.M., Kugbey N., Quarshie E.N.-B., Yawson A.E. Marijuana use and repeated attempted suicide among senior high school students in Ghana: Evidence from the WHO Global School-Based Student Health Survey, 2012. *General Psychiatry* 2020;33(6)
2. Tetteh J., Nuerter B.D., Dwomoh D., Udofia E.A., Mohammed S., Adjei-Mensah E., Yawson A.E. Teenage pregnancy and experience of physical violence among women aged 15-19 years in five African countries: Analysis of complex survey data. *PLoS ONE* 2020;15(10)
3. Vandyck-Sey P., Amoh G., Essuman A., Lawson H. Incidental finding of COVID-19 infection amongst staff at a primary care facility in Ghana. *African Journal of Primary Health Care and Family Medicine* 2020;12(1)
5. Kwofie P., Tetteh J., Akakpo R.E., Sarfo B. Factors associated with malaria infection among head porters in Agbogbloshie market in the Greater Accra region of Ghana. *Journal of Parasitology Research* 2020;
6. Ayisi-Boateng N.K., Egblewogbe D., Owusu-Antwi R., Essuman A., Spangenberg K. Exploring the illness experiences amongst families living with 2019 coronavirus disease in Ghana: Three case reports. *African Journal of Primary Health Care and Family Medicine* 2020;12(1)

Department of Medicine and Therapeutics

Departmental Publications

1. Blankson P.K., Lartey M. Road traffic accidents in Ghana: Contributing factors and economic consequences. *Ghana Medical Journal* 2020;54(3)
2. Lartey M., Kenu E., Lassey A., Ntummy M., Ganu V., Sam M., Boamah I., Gilani F.S., Yang H., Burch G.M., Norman J., Peloquin C.A., Kwara A. Pharmacokinetics of Efavirenz 600 mg Once Daily During Pregnancy and Post Partum in Ghanaian Women Living With HIV. *Clinical Therapeutics* 2020;42(9)
3. Hayfron-Benjamin C.F., Maitland-Van Der Zee A.H., Van Den Born B.-J., Amoah A.G.B., Meeks K.A.C., Klipstein-Grobusch K., Schulze M.B., Spranger J., Danquah I., Smeeth L., Beune E.J.A.J., Mockenhaupt F., Agyemang C.O. Association between C reactive protein and microvascular and macrovascular dysfunction in sub-Saharan Africans with and without diabetes: The RODAM study. *BMJ Open Diabetes Research and Care* 2020;8(1)
4. Shah R., Dey D., Pietzonka T., Obeng P., Ashiru B., Schiestl M., Cavey A., Nkansah E., Radiere G., Spector J., Scott C. Determinants of Use of Biotherapeutics in sub-Saharan Africa. *Trends in Pharmacological Sciences* 2020;

Department of Medical Pharmacology

On-Going Research

Name of Researcher Dr. Kennedy Edem Kukuia
Title of Project *Mallotus oppositifolius* in basic neuropsychiatry research
Aim of Research To determine the effect of *Mallotus oppositifolius* extraction in basic neuropsychiatry.

Name of Researcher Dr. Seth Kwabena Amponsah
Title of Project Pharmacokinetic Evaluation of Pectin-Based Modified Release Formulation of Carbamazepine
Aim of Research The aim of this study is to formulate modified release capsules of carbamazepine from locally-made pectins and to evaluate the pharmacokinetic profile of this formulation using *in vitro* and *in vivo* models.

Departmental Publications

1. J.A Mensah, Kennedy K.E Kukuia, P. Amoateng, D. Osei-Safo, D.W. Adongo, E.O. Ameyaw, I.O. Ben, S.K. Amponsah, I.J. Asiedu-Gyekye, Monoaminergic and L-arginine-NO-cGMP pathways mediate the antidepressant-like action of alkaloids from the stem bark of *Trichilia monadelpha*, *Scientific African*, Volume 8, 2020, e00422, ISSN 2468-2276, <https://doi.org/10.1016/j.sciaf.2020.e0042>
2. Ogunleye OO, Basu D, Mueller D,.....Amponsah SK, *et al.* Response to the novel corona virus (COVID-19) pandemic across Africa: successes, challenges and implications for the future. *Frontiers in Pharmacology*, July 2020. doi: 10.3389/fphar.2020.01205.
3. Amponsah SK, N'guessan BB, Akandawen M, Aning A, Agboli SY, Danso EA, Opuni KFM, Asiedu-Gyekye IJ, Appiah-Opong R. Effect of Cellgevity® supplement on selected rat liver Cytochrome P450 enzyme activity and pharmacokinetic parameters of carbamazepine. *Evidence-Based Complementary and Alternative Medicine*, Volume 2020, Article ID 7956493, 8 pages.
4. Mensah JA, Kukuia KKE, Amoateng P, Osei-Safo D, Adongo DW, Ameyaw EO, Ben IO, Amponsah SK, Asiedu-Gyekye IJ. Monoaminergic and L-arginine-NO-cGMP pathways mediate the antidepressant-like action of alkaloids from the stem bark of *Trichilia monadelpha*. *Scientific African*, Volume 8, July 2020, e00422.
5. Allotey-Babington GL, Amponsah SK, Nettey T, Sasu C, Nettey H. Quinine sulphate microparticles as treatment for leishmaniasis. *Journal of Tropical Medicine*, Volume 2020, Article ID 5278518, 9 pages.
6. Sefah IA, Okatah A, Afriyie DK, Amponsah SK. Adherence to oral hypoglycemic drugs among Type 2 diabetic patients in a resource-poor setting. *International Journal of Applied and Basic Medical Research* 2020; 10: 102-109.
7. Tetteh-Quarcoo PB, Forson PO, Amponsah SK, Ahenkorah J, Opintan JA, Ocloo JEY, Okine EN, Aryee R, Afutu E, Anang AK, Ayeh-Kumi PF. Persistent urogenital schistosomiasis and its associated morbidity in endemic communities within southern Ghana: suspected praziquantel resistance or reinfection? *Medical Sciences* 2020; 8(1): E10.

Centre for Tropical Clinical Pharmacology and Therapeutics

On-Going Departmental research

Name of Researcher	Prof. Neils Ben Quashie
Title of Project	Prevalence of asymptomatic <i>Plasmodium falciparum</i> infection, anaemia and use of ITNs among pregnant women yet to receive IPTP in parts of Southern Ghana.
Aim of Research	To determine the prevalence of asymptomatic malaria and its association with anaemia among pregnant women who are yet to receive their first dose of Sulphadoxine-Pyrimethamine (SP) as intermittent preventive treatment of malaria in pregnancy (IPTp).

Departmental Publications

1. Nsaful, K.O., Paintsil, A.B., Dakubo, J.C.B., Nsaful, J., Appiah-Labi, K. and Nartey, E. (2020) Reliability of the Estimation of the Take of Split Thickness Graft by the Observation Method. Modern Plastic Surgery, 10, 62-74. <https://doi.org/10.4236/mps.2020.103008>
2. Nsaful J, Dakubo JC, Nartey ET, Clegg-Lamptey JN (2020). The effect of neutropenia on the delivery of chemotherapy in breast cancer patients at Korle bu teaching hospital in Accra, Ghana. Postgraduate Medical Journal of Ghana. Vol. 9 (1).
3. Ciuffreda L, Zoiku FK, Quashie NB, Ranford-cartwright LC (2020). Estimation of parasite age and synchrony status in *Plasmodium falciparum* infections. Sci Rep.10 (1):10925.
4. Afutu LL, Boampong JB, Quashie NB (2020). Prevalence of asymptomatic *Plasmodium falciparum* infection, anaemia and use of ITNs among pregnant women yet to receive IPTP in parts of Southern Ghana. HSI Journal 1 (1):36-42
5. Hodoamede P, Duah-Quashie NO, Hagan CO, Matrevi S, Abuaku B, Koram K, Quashie NB (2020). *Plasmodium falciparum* genetic factors rather than host factors are likely to drive resistance to ACT in Ghana. Malar J. 19 (1):255.

Department of Obstetrics and Gynaecology

On-Going Departmental Research

Name of Researcher	Dr. Mercy Anna Nuamah
Title of Project	Review of Obstructive Azoospermia Cases Treated With Testicular Sperm Extraction In Ghana- A Retrospective Analysis of Clinica L Practice (Title of Manuscript For BMC??)
Aim of Research	To evaluate treatment outcomes of cases of obstructive azoospermia treated with testicular sperm extraction in selected facilities in Ghana.

Name of Researcher	Dr. Alim Swarray-Deen
Title of Project	Level of Awareness on, and Attitude of Young Adult Female Tertiary Students and Health Care Professionals in Ghana Towards Fertility Preservation
Aim of Research	To assess the level of awareness on fertility preservation among female tertiary students and healthcare professionals in Ghana, and determine their attitude towards same.

Name of Researcher	Dr. Mercy Anna Nuamah
Title of Project	Ten Year Review Of Ectopic Pregnancies Managed In A Municipal Hospital In Ghana
Aim of Research	To conduct an epidemiological analysis of cases of ectopic pregnancies managed at the Lekma Hospital from 2010-2019 and assess for any peculiar risk factors in this setting.
Name of Researcher	Gabriel Y. K. Ganyaglo, MB ChB (PI)
Title of Project	Effectiveness and Acceptability of Two Models of an Insertable Vaginal Cup for Non-surgical Management of Obstetric Fistula in Ghana: A Hybrid Type I Randomized Crossover Trial
Aim of Research	The aim of the study is to test the effectiveness, acceptability, and cost-effectiveness of the vaginal menstrual cup to provide a temporizing alternative to managing urinary leakage from vesico-vaginal fistula.
Name of Researcher	Dr. Samuel A. Oppong
Title of Project	Limiting Adverse Birth Outcomes in Resource-Limited Settings -The LABOR Study
Aim of Research	To exhaustively document the course and outcomes of labor, delivery, and the immediate postpartum period in settings where the occurrence of adverse birth outcomes is high

Departmental Publications

1. Asiedu M.N., Agudogo J.S., Dotson M.E., Skerrett E., Krieger M.S., Lam C.T., Agyei D., Amewu J., Asah-Opoku K., Huchko M., Schmitt J.W., Samba A., Srofenyoh E., Ramanujam N. A novel speculum-free imaging strategy for visualization of the internal female lower reproductive system. *Scientific Reports* 2020;10(1)
2. Lawford H.L.S., Nuamah M.A., Liley H.G., Lee A.C., Kumar S., Adjei A.A., Bora S., Samba A., Badoe E.V., Botchway F., Gyasi R.K., Oppong S.A., IMPRINT Study Group. Neonatal neurological examination in a resource-limited setting: What defines normal? *Neurologic Assessment of the Newborn. European Journal of Paediatric Neurology* 2020;29
3. Swarray-Deen A., Nkyekyer K., Seffah J.D., Mumuni K., Mensah-Brown S.A., Tuuli M.G., Oppong S.A. Cerebro-placental ratio as a prognostic factor of fetal outcome in pregnancy complicated by maternal sickle cell disease. *International Journal of Gynecology and Obstetrics* 2020;150(2)

Department of Pathology

On-Going Departmental Research

Name of Researcher	Dr Afua Abrahams
Title of Project	Identification & Validation of a Biomarker Signature that can improve Predictability of Aggressive Disease in Men of African Descent with Prostate Cancer
Aim of Research	To identify and validate biomarker signatures that can improve predictability of aggressive disease in men of African descent with Prostate Cancer

Departmental Publications

1. Maxine Harlemon, Olabode Ajayi, Paidamoyo Kachambwa, Michelle S. Kim, Corinne N. Simonti, Melanie H. Quiver, Desiree C. Petersen, Anuradra Mittal, Pedro Fernandez, Ann Hsing, Shakuntala Baichoo, Ilir Agalliu, Mohamed Jalloh, Serigne M. Gueye, Nana Yaa Snyder, Ben Adusei, James E. Mensah, Afua O. D. Abrahams, Akindele O. Adebisi, Akin Orunmuyi, Oseremen I. Aisuodionoe-Shadrach, Maxwell M. Nwegbu, Maureen Joffe, Wenglong C. Chen, Hayley Irusen, Alfred I. Neugut, Yuri Quintana, Moleboheng Seutloali, Mayowa B Fadipe, Christopher Warren, Marcos H. Woehrmann, Peng Zhang, Chrissie M Ongaco, Michelle Mawhinney Jo McBride, Caroline V Andrews, Marcia Adams, Elizabeth Pugh, Timothy R. Rebbeck, Lindsay N Petersen, and Joseph Lachance. (2020). *A custom genotyping array reveals population-level heterogeneity for the genetic risks of prostate cancer and other cancers in Africa*. May 11, 2020 Cancer Res. doi: 10.1158/0008-5472.CAN-19-2165. PMID: 32393663

Department of Surgery

Departmental Publications

1. Bediako-Bowan A, Mølbak K, Kurtzhals JAL, Owusu E, Debrah S, Newman MJ. Risk factors for surgical site infection in abdominal surgeries in Ghana: emphasis on the impact of operating rooms door openings. *Epidemiol Infect.* 2020; 148:e147. doi:10.1017/S0950268820001454
2. Bediako-Bowan A, Owusu E, Debrah S, Kjerrulf A, Newman MJ, Kurtzhals JAL, Mølbak K. Surveillance of Surgical site infections in a teaching hospital in Ghana: A prospective cohort study. *J Hosp Infect.* 2020;104(3):321-327. doi:10.016/j.jhin.2020.01.004
3. Fenny A, Asante F A, Otioku E, Bediako-Bowan A, Enemark U. Attributable Cost and Extra Length of Stay of Surgical Site Infection at a Ghanaian Teaching Hospital. *Infect Prev Pract.* 2020;2(2):100045. doi:10.1016/j.infpip.2020.100045
4. Stauning M. T, Bediako-Bowan A, Bjerrum S, Andersen L. P, Andreu-Sánchez S, Appiah-Korang L, Kurtzhals JAL, Rasmus L. Marvig, Opintan J. A. Genetic relationship between bacteria isolated from intraoperative air samples and surgical site infections at a major teaching hospital in Ghana. *J Hosp Infect.* 2020;104(3):309-320. doi:10.1016/j.jhin.2019.11.007
5. Naomi Wright, Francis Abantanga, Michael Amoah, William Appeadu-Mensah, Zaitun Bokhary, Bruce Bvulani, Justine Davies, Sam Miti, Bip Nandi, Boateng Nimako, Dan Poenaru, Stephen Tabiri, Abiboye Yifeyeh, Niyi Ade-Ajayi, Nick Sevdalis, Andy Leather. Developing and implementing an interventional bundle to reduce mortality from gastroschisis in low-resource settings. *Wellcome Open Res* 2019 8; 4:46. Epub 2019 Mar 8.
6. Braimah IZ, Enweronu-Laryea C, Sackey AH, Kenu E, Agyabeng K, Ofori-Adjei I-OD-B, et al. Incidence and risk factors of retinopathy of prematurity in Korle-Bu Teaching Hospital: a baseline prospective study. *BMJ Open.* 2020;10(8):e035341.
7. Kyei MY, Adusei B, Klufio GO, Mensah JE, Gepi-Attee S, Asante E. Treatment of localized prostate cancer and use of nomograms among urologists in the West Africa sub-region- Pan African Medical Journal. 2020;36(251). 10.11604/pamj.2020.36.251.21419

8. Kyei MY, Djagbletey R, Abrahams AD, Mensah JE. Idiopathic Scrotal Calcinosis: A Case Report and Review of Postoperative Outcomes. *Case Reports in Urology* Volume 2020, Article ID 8877695, 5 pages <https://doi.org/10.1155/2020/8877695>
9. Essuman VA, Tagoe NN, Akpalu J, Essuman A, Sackey A, Hayfron-Benjamin C, Asare G, Abaidoo B, Amoah A, Ndanu T, Ofori-Adjei I, Barnes N, Appiah-Thompson B, Amoaku W. Morbidity and complications of diabetes mellitus in children and adolescents in Ghana: study design and rationale. *JMIR Preprints*. 15/06/2020:21440. DOI: 10.2196/preprints.21440 URL:
10. Braimah IZ, Enweronu-Laryea C, Sackey AH, et al. Incidence and risk factors of retinopathy of prematurity in Korle-Bu Teaching Hospital: a baseline prospective study. *BMJ Open* 2020;10:e035341. doi:10.1136/bmjopen-2019-035341
11. Essuman VA, Tagoe NN, Akpalu J, Essuman A, Sackey A, Hayfron-Benjamin C, Asare G, Abaidoo B, Amoah A, Ndanu T, Ofori-Adjei I, Barnes N, Appiah-Thompson B, Amoaku W. Morbidity and complications of diabetes mellitus in children and adolescents in Ghana: study design and rationale. [JMIR Preprints. 15/06/2020:21440. DOI:10.2196/preprints.21440](https://doi.org/10.2196/preprints.21440)
12. Tomar AS, Finger PT, Gallie B, et al. A Multicenter, International Collaborative Study for AJCC-Staging of Retinoblastoma: Treatment Success and Globe Salvage. *Ophthalmology*. 2020 Jun. DOI: 10.1016/j.ophtha.2020.05.051. (PI for Ghana)
13. Tomar AS, Finger PT, Gallie B, et al. A Multicenter, International Collaborative Study for AJCC-Staging of Retinoblastoma: Metastasis-Associated Mortality [published online ahead of print, 2020 Jun 5]. *Ophthalmology*. 2020; S0161-6420(20)30516-9. doi:10.1016/j.ophtha.2020.05.050 (PI for Ghana)
14. Global Retinoblastoma Study Group. Global Retinoblastoma Presentation and Analysis by National Income Level. *JAMA Oncol*. Published online February 27, 2020. doi:10.1001/jamaoncol.2019.6716 (PI for Ghana)
15. Bediako-Bowan A.A.A, Kurtzhals J.A.L, Mobak K., Labi A.K., Owusu E., Newman M.J. High rates of multi-drug resistant gram-negative organisms associated with surgical site infections in a teaching hospital in Ghana. *BMC Infectious Diseases* 2020;20(1)
16. Tagoe E.A. Dwamena-Akoto E. Nsaful J., Aikins A. R., Clegg-Lampitey J.N., Quaye O. High atherogenic index of plasma and cardiovascular risk factors among Ghanaian breast cancer patients. *Experimental Biology and Medicine* 2020;245(18)
16. Nsaful J., Vanderpuye V., Scott A.A., Dedey F., Oppong S.A., Appiah-Danquah R., Damale N., Fenu B., Wordui T., Yamey J., Clegg-Lampitey J.N. Experiences and challenges in the management of pregnancy-associated breast cancer at the Korle Bu Teaching Hospital: A review of four cases. *Ecancermedicalscience* 2020;14

IMAGES IN CLINICAL MEDICINE

DEPARTMENT OF CHILD HEALTH, UGMS PACHONYCHIA CONGENITA SYNDROME



Prof. E. V. Badoe,
*Department of Child Health,
University of Ghana Medical
School.*

Pachonychia congenita is a very rare disorder. It is one of the many ectodermal dysplasia syndromes all sharing common anomalies of the skin, hair, nails, teeth and sweat glands. This is a case that makes a compelling argument for increased knowledge in genetic diseases for doctors.

A two-year old boy was admitted to a Paediatric ward at the Korle Bu Teaching Hospital with a provisional diagnosis of failure to thrive and the cause was not known initially. He had a history of prominent nails as a neonate. Examination at the Emergency room revealed very unusual overgrowth of both finger and toe nails and whitish patches on the tongue presumed to be oral candidiasis.

A clinical diagnosis of Pachonychia congenital (PC) was made. Consent was sought and clinical photographs were taken. The nail changes were symmetrical with a golden-brown discolouration. Detailed images showed the finger nails to be at full length with an upward slant and hypercurvature (.fig 1 and 2). The mouth showed whitish lesions on the roof of the mouth as well as the sides misdiagnosed as oral candidiasis.

There was angular cheilitis (inflammation and fissuring at the angles of the mouth) fig 3 which originally added to the clinical impression of acute malnutrition but apparently a feature of PC. Genetic counselling was

offered to the mother. The parents did not have any features of the disease. A three generational family tree did not reveal any previous cases.



Fig 1. Finger nails showing thickened nail plate and upward growth of the distal nail with hypercurvature. Nail changes present from birth.



Fig 2. Note the golden brown discolouration of the toe nails which are symmetrically thickened



Fig 3. Angular cheilitis- inflammation and fissuring at the angles of the mouth.

RESEARCH HIGHLIGHTS



Rev. Dr. Charles Antwi-Boasiako

EXERCISE TOLERANCE IN ADULT PATIENTS WITH SICKLE CELL DISEASE

Principal Investigator: Rev. Dr. Charles Antwi-Boasiako¹,

Co-investigators: Isaac Nuako², Alfred Doku³, Kevin Adutwum-Ofosu⁴, Charles Hayfron-Benjamin^{1,5}, Chamila P. Asare^{1,6}, Robert Aryee¹, Eric Sampene-Donkor⁷, John Ahenkorah⁴

¹Department of Physiology, University of Ghana Medical School, University of Ghana, Accra, Ghana.

²Department of Physiotherapy Tema General Hospital Accra, Ghana.

³Department of Medicine and therapeutics, University of Ghana Medical School, University of Ghana, Accra, Ghana.

⁴Department of Anatomy, University of Ghana Medical School, University of Ghana, Accra, Ghana.

⁵Department of Anaesthesia, Lekma Hospital

⁶Department of Anaesthesia, Korle-Bu Teaching Hospital

⁷Department of Medical Microbiology, University of Ghana Medical School, University of Ghana, Accra, Ghana.

Patients with sickle cell disease (SCD) have been linked with increased haemoglobin desaturation which affects their tolerance to exercise. Supervised regular physical exercise has a positive effect on SCD individuals in their ability to efficiently perform daily activities. A person's ability to effectively perform physical activities or exercises within a specified period is known as the functional capacity or 'functional ability' of the individual to exercise (functional exercise capacity). One of the effective methods of evaluating the functional capacity (FC) is to use the six minute walk test (6MWT) which provides information about exercise tolerance, physiological status (cardiopulmonary) and the patient's survival according to test performance. Studies concerning the use of 6MWT in SCD population usually involved children and adolescents; these studies showed reduced capacity to exercise in SCD children and this was attributed to factors such as low haemoglobin levels.

Although the burden of SCD on affected individuals is significant, few studies have examined the exercise tolerance of these patients. Moreover, the physiologic basis of poor physical functioning in SCD patients is unknown and has not been studied extensively. Furthermore, outcome measures such as how far SCD patients can walk within 6 minutes (exercise capacity), whether they develop cardiovascular complications during exercise and the normal reference value of 6MWT in healthy Ghanaians is unknown. The current study assessed pulmonary changes (using the peak expiratory flow rate) and

exercise tolerance in patients with SCD.

This is a case-control cross-sectional study being conducted at the Korle-Bu Teaching Hospital and Tema general hospital on 150 HbSS and 100 HbSC SCD patients with 250 HbAA controls. Data on socio-demography and clinical characteristics will be gathered from all the study subjects. The peak expiratory flow rate (PEFR) will be used to group patients into those with normal airways and those with narrowing airways. All the study subjects will be also taken through a six-minute walk test (6MWT) and parameters assessed before commencement of the test and after the 6MWT.

Other parameters to be measured include haemoglobin, BMI, Blood pressure (BP), Heart Rate (HR) and peripheral oxygen saturation (SPO_2), The peak expiratory flow rate (PEFR) Measurements concerning dyspnoea, fatigue level and chest pain will be assessed subjectively using modified Borg Scale dyspnoea scale. Six-minute walk test (6MWT) will be conducted according to the guidelines of the American Thoracic Society (ATS 2002). The oxygen consumption (VO_2) and metabolic equivalents (MET) will be estimated after the 6MWD using the standard formula

Prevalence of Dysbetalipoproteinaemia (Dys β) in Ghana



Dr. Richmond Owusu Ateko,

Department of Chemical Pathology, UGMS

Principal Investigator

Richmond Owusu Ateko, *Department of Chemical Pathology, UGMS; Division of Chemical Pathology, UCT.*

Co-Investigators

Dr Dee Blackhurst, *Division of Chemical Pathology, UCT.*

Professor Adrian David Marais, *Division of Chemical Pathology, UCT.*

Professor Dirk Jacobus Blom, *Head of Division of Lipidology, Dept. of Medicine, UCT*

Clinical collaborator

Dr Josephine Akpalu, *Department of Medicine and Therapeutics, UGMS.*

Background

Dysbetalipoproteinaemia (dys β) is a disorder characterised by elevated levels of triglyceride-rich lipoprotein remnants leading to increased plasma levels of total cholesterol and triglyceride. Dysbetalipoproteinaemia

is positively associated with premature cardiovascular disease. In several places around the world, especially in sub-Saharan Africa countries like Ghana, clinicians often miss the diagnosis of dys β due to lack of awareness of the disorder and its manifestations.

The gold standard phenotypic test for diagnosing dys β is the determination of very-low-density-lipoprotein-cholesterol to triglyceride (VLDL-cholesterol/VLDL-triglyceride) ratio using ultracentrifugation. However, this method is seldom used in routine diagnosis, mostly because it is time-consuming and expensive. Phenotypically, dys β is suspected when both cholesterol and triglycerides levels are high with the molar ratio of total

cholesterol to triglyceride around 2: 1. However, studies show that non-denaturing gradient gel electrophoresis (GGE) could identify dysβ with a specificity of 100% and a sensitivity of 89%. This technique is cost-effective and can detect the prevalence of dysβ within the population.

Most studies of dysβ are from Western, industrialised countries like the United States, Japan, Germany, Netherlands, and Canada, with a few studies conducted in Southern Africa. However, studies showing the prevalence of dysβ in sub-Saharan countries; for example, Ghana is lacking. Thus, this study seeks to investigate the prevalence of dysβ, its clinical manifestations and genetic causes in Ghanaians, living in Accra.

This is a cross-sectional study that will recruit human participants followed by once-off measurements of laboratory parameters and the collection of descriptive data through a standard questionnaire. The research will be carried out at the Korle-Bu Teaching Hospital and selected areas within the Accra metropolis. Approximately 1000 people will be recruited into the study, comprising about 700 healthy controls and approximately 300 patients attending the National Diabetic and Cardiothoracic clinics. The healthy controls will be recruited from churches, mosques and other community centres in the

Accra Metropolis. An equal number of males and females will be included.

Globally, the prevalence of dysβ is 1 in 1000; however, its prevalence in Ghana, and its contribution to atherosclerotic CVD, has not been studied. This study has the potential to determine the prevalence of dysβ within the Ghanaian populace. The successful completion of the research will inform policymakers of the need for routine investigation of dyslipidaemia which is currently not done in Ghanaian health centres. Gradient gel electrophoresis (GGE) is a rapid, efficient and cost-effective technique of diagnosing various lipid disorders like dyslipoproteinaemias. Hence, the findings from this study will show the need to incorporate GGE into routine medical laboratory investigations, especially for patients visiting the cardiothoracic and diabetic clinics. My collaboration with Groote Schuur Hospital Lipid Clinic at the University of Cape Town will serve as an opportunity to train health personnel from Ghana. Also, this collaboration will foster the establishment of a vibrant Lipid Clinic to serve the medical

Predictors of Tenofovir-Induced Renal Tubular Dysfunction: A Pharmaco-Epidemiology and Pharmaco-Genetic Study of Patients Attending HIV Clinic at Korle-Bu Teaching Hospital



Dr. Edmund Tetteh Nartey
C.T.C.P.T.

Principal Investigator

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Co-Investigators

Dr William Kudzi, C.T.C.P.T, UGMS

Dr Vincent Boima, Department of Medicine, UGMS

Dr Peter Puplampu, Department of Medicine, UGMS

Dr Raymond Tetteh, SoP, Central University

SMMARY

Background

HIV infection is a chronic disease and therefore requires a lifelong uninterrupted adherence to therapy for an improved quality of life. However, one of the barriers to treatment adherence with antiretroviral drugs is untoward side effects of antiretroviral therapy (ART). Tenofovir disoproxil fumarate (TDF) is a pro-drug of tenofovir (TFV), a nucleotide reverse transcriptase inhibitor widely used for treating and preventing HIV and hepatitis B virus. TFV, which is currently a 1st line antiretroviral drug and a component of Truvada, a drug approved for pre-exposure prophylaxis (PrEP) has been shown to induce renal toxicity including Fanconi syndrome and nephrogenic diabetes insipidus in some patients. This could be a problem, especially for people of African descent due to an increased risk of chronic kidney disease and HIV-associated nephropathy in reported studies in such populations. Tenofovir is excreted by mainly glomerular filtration and active tubular secretion. Genetic polymorphisms of some renal transporter genes including ABCC2 (MRP2), ABCC4 (MRP4), ABCC10 (MRP10), ABCB1, SLC22A6 and SLC22A11 have been implicated in tenofovir-associated renal dysfunction. This study seeks to identify genetic polymorphisms in transporter genes (ABCC2, ABCC4, ABCC10, ABCB1, SLC22A6 and SLC22A11) and their association with TFV-induced renal tubular dysfunction in patients initiating TDF-based ART at the Korle-bu Teaching Hospital in Accra, Ghana.

Methods

Blood sample (5 mL) will be collected from 440 study participants initiating a TDF-based ART and the incidence of TFV-induced renal tubular dysfunction determined over a 48 week period at 12 weeks follow-up intervals. Clinical and related epidemiological factors associated with renal tubular dysfunction will be determined. For the pharmacogenetic study, genomic DNA will be extracted from peripheral blood mononuclear cells and the following single nucleotide polymorphisms (SNPs) will be analyzed: ABCB1 3435 C4T (rs1045642) (encoding for PgP), ABCC2-24 G4A (rs717620) and 1249 G4A (rs2273697) (encoding for MRP-2), ABCC4*879T4C (rs1059751) and 3348T4C (rs1751034) (encoding for MRP-4), ABCC10 1791+526 G4A (rs9349256) (encoding for MRP-7), SLC22A6 453 G4A (rs4149170) (encoding for OAT1) and SLC22A11 T>A (rs11231809) (encoding for OAT4).

Expected outcomes

Data to be generated on the prevalence of these SNPs in the transporter genes and their association with renal tubular dysfunction will guide policy formulation on the need for individualized genetic screening and renal monitoring in patients administered TDF-based ART and its use in HIV Pre-exposure Prophylaxis. Findings from the study will be published in peer reviewed journals and also submitted as a Policy Draft to the National AIDS Control Programme and the Ghana AIDS Commission.

Developing a mobile mental health toolkit in Ghana



Professor Angela L. Ofori-Atta

Dror Ben-Zeev², Angela L. Ofori-Atta¹, Pamela.
Y. Collins², Jaime Snyder², Dzifa Attah¹, Suzanne
Mellor², Seth Mawusi Asafo¹, Liam B. Albright²
University of Ghana, Legon¹
University of Washington²

Washington Team

PI - Dror Ben-Zeev

Ghana team

PI - Angela L. Ofori-Atta
Co Investigators Dzifa Attah and Seth Mawusi
Asafo

The purpose of this research was to develop a mobile application to use to help people with behavioral issues. Working with human-centered design engineers and digital animators at the University of Washington's iSchool and with clinical faculty and linguists at the University of Ghana and University of Ibadan Nigeria, our team developed the M-Healer treatment support software for smartphones.

We conducted internal testing using UW's sequenced mHealth for Mental Health Program's app testing pipeline. Lingering "bugs" (e.g., visual display problems, animation sequencing errors, audio file fragmentation) were identified and resolved. In 2020 the adapted M-Healer technology was tested in usability field tests with healers in four prayer camps (N=12). The study results indicate that all study participants were able to navigate M-Healer independently and no adverse events were reported.

Their System Usability Scale (SUS) ratings indicated the technology was usable and acceptable (average score=75.2). Their qualitative feedback in debriefings was used to further optimize the M-Healer system and training materials for use.

LANDMARK CASE

TREATING KIDNEY STONES USING SUPINE PERCUTANEOUS NEPHROLITHOTOMY (PCNL)



Dr Evans Akpakli

Authors- Evans Akpakli, James Edward Mensah, Mathew Yamoah Kyei, Urology Unit, Department of Surgery

Introduction

Kidney stone disease, also termed nephrolithiasis, is a debilitating, chronic condition, which has affected people since antiquity. It results in great morbidity such as severe colicky flank pain, haematuria (blood in the urine), urinary tract infection and loss of kidney function especially when the kidney is obstructed by the stone. Due to the high recurrence rate of kidney stone disease, patients are likely to have repeated visits to the emergency unit and urologist for consultations and treatment. As a result, it leads to loss of working hours and productivity. Kidney stones are more common in males with majority of patients being between the ages of 20 to 60 years which represents the working population of any country.

The risk of kidney stone formation is associated with some metabolic anomalies, such as hypercalciuria, hyperuricosuria, hyperoxaluria, cystinuria and hypocitraturia as well as inappropriate dietary habits like increased animal protein ingestion, salty diet, Carbonated drinks that contain phosphoric acid and low fluid intake. The single most common cause of kidney stone is dehydration. Disease states such as Diabetes mellitus, hypertension, obesity, hyperparathyroidism may be associated with increased risk of kidney stone formation. Similarly, conditions such as recurrent urinary tract infection, sedentary lifestyle and medications (high doses of Vitamin C, protease inhibitors etc.) also increase one's risk of stone formation. On the contrary, diet rich in fruits and vegetables, vitamin C, calcium, potassium, magnesium and some inhibiting substances in the urine are associated with reduced kidney stone formation and their recurrence.

An imbalance between excretion of stone forming solutes and the inhibitors will promote stone formation with the process starting from crystal nucleation, crystal growth, crystal aggregation and eventual stone formation.

In the management of kidney stones, while medications are used to manage symptoms such as pain and fever from infection, with extra corporeal shockwave lithotripsy for small stones (less than 2cm in size), clearance of a large stone is largely surgical. This can be in the form of endoscopy/ureterorenoscopy and fragmentation of the stone using mechanical means ultrasound energy or laser for relatively small symptomatic stones while surgery either as PCNL, laparoscopic surgery or open surgery is needed for larger and complex stones and those in the lower pole of the kidney.

Percutaneous nephrolithotomy, offer a relatively minimally invasive technique for extraction of

kidney stones and was first described in 1976. This procedure has traditionally been done with the patient in the prone (patient positioned facing down) position. The use of the supine position (patient facing up) has come on stream. Ultimately the position adopted depends on the surgeon's preference and experience.

Case Report

This report is on the use of PCNL in a patient with complex staghorn calculus that we would have used open surgery (open nephrolithotomy). The patient was a 56-year-old man, a known diabetic and hypertensive and obese with a BMI of over 40kg/m². He had a long-standing history of recurrent urinary tract infections (UTI) (over 20 years) and occasional left flank pain. The recurrent UTIs had resulted in repeated hospital admissions and antibiotic administrations in peripheral facilities. He has no family history of kidney stone disease but admits consuming high protein diet. Patient was referred with an abdomen pelvic CT scan diagnosis of bilateral kidney stones. *Fig 1.*



*Fig1. CT scan showing bilateral kidney stones
Red arrow head*

He was clinically stable and his blood investigations (BUE and creatinine and clotting profile) and urine studies- (urinalysis, culture and sensitivity) were essentially normal. The patient was counseled and had left PCNL.

Under general anaesthesia a ureteric catheter was passed and patient positioned supine *Fig 2.*



Fig 2. Patient positioned supine for PCNL

An ultrasound guided puncture was made with 18G Chiba needle at the left flank and a guidewire passed into the renal pelvis. A 1cm skin incision was made and the tract was dilated with fascial dilators over the guidewire from 8 – 10Fr, after which a second guidewire was passed to serve as a safety wire. The tract was eventually dilated serially over the guidewire with Amplatz kidney dilators to 24Fr under fluoroscopic guidance. A 24Fr sheath was passed over the Amplatz dilator into the renal pelvis. (*Fig. 3*)

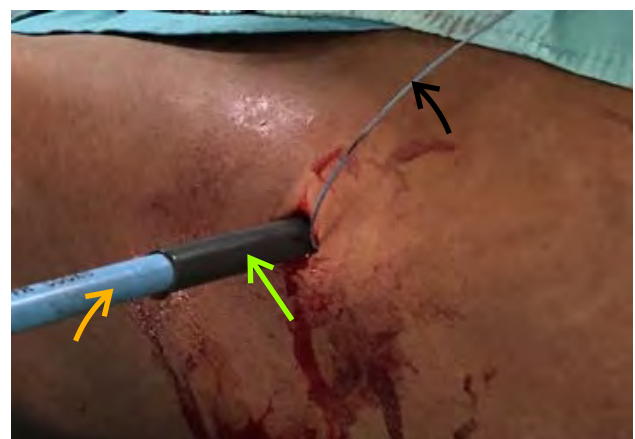


Fig 3. Puncture tract dilated to 24Fr, Amplatz dilator -orange, Amplatz sheath-green, safety wire-black

After which the Amplatz dilator and guidewire were removed leaving the sheath for the insertion of the nephroscope to locate the stone for fragmentation *Fig4.*



Fig 4. Identification and fragmentation of stones

The stone was fragmented using a pneumatic lithotripter (mechanical) probe and the stone fragments retrieved with nephroscope grasping forceps. Fig 5.



Fig 5. Renal pelvic stones from patient -blue arrow

Post procedure a 20Fr latex catheter was placed in the renal pelvis to serve as a nephrostomy tube to decompress the kidney and also to monitor the effluent for bleeding.

Patient's recovery was uneventful, the nephrostomy tube was removed 24 hours post procedure and patient was discharged home on post-operative day 3. The patient is currently doing well and on a low-risk stone regimen; a diet sheet, liberal oral fluid intake (> 3L/day) and potassium citrate. We are working him up for the fragmentation of the right renal stone.

The stone analysis result revealed a stone composition of Calcium oxalate monohydrate 79% and Brushite 21%.

Although, supine PCNL technique for treating kidney stone started barely a year ago in the country, most patients with kidneys stones have benefitted from it with its application in complex large staghorn calculus as reported. It had reduced the number of open surgeries for kidney stones and its attendant morbidity and prolonged convalesce and also the number of patients who had to travel to foreign countries for this procedure. It is hoped training more urologist in this procedure will make supine PCNL widely available in the country.

EDUCATION

Personhood and mental illness: implications for practice and stigma reduction

Mr. Seth Mawusi Asafo,

Department of Psychiatry, University of Ghana Medical School
Funded by Andrew Melon Foundation

Personhood is generally considered as the status of being a person. Researchers in the field of personhood are inconclusive on the exact nature of personhood. They however agree that personhood is not a static term but one that is dynamic and varies across cultures. For example, Afrocentric conceptions of personhood explore personhood status in social or communal terms -personhood is conferred by society. Most theories on personhood are underpinned by Eurocentric conceptions which consider personhood in individualistic terms.

The field of mental health, is shrouded in mystery which is a central factor in the stigma and discrimination that professionals and people suffering from mental health challenges experience. Additionally, supernatural and existential perceptions of the causes of mental illness cannot be underemphasized. Invariably, the treatment modalities for mental illness in many low and middle income countries have raised human rights concerns. It is not uncommon for people suffering from mental illness to be chained, forced to fast, flogged and marked.

The current study investigated the relationship between personhood and mental illness as a means to explain why human rights abuses against the mentally ill seemed to be normalized. The study assumed that, perhaps, people with mental illness are not considered "persons" because they had lost their personhood as a result of mental illness. The study used focus group discussions to collect the views of Akans and Ewes on what constitutes personhood in the Ghanaian sense, how individuals could lose their personhood and also perceptions around whether personhood status could be regained once lost. Analysis of the data using thematic content analysis revealed that personhood status was lost once an individual suffered mental illness, analysis also showed that once someone suffered mental illness, even if they were cured, there was some aspect of liminality in the fact that they regain partial personhood and not complete personhood.

Analysis also revealed that notions of mental illness depend on genealogical implications, diabolical manipulation, normative violations, and organic malfunctions, which also have



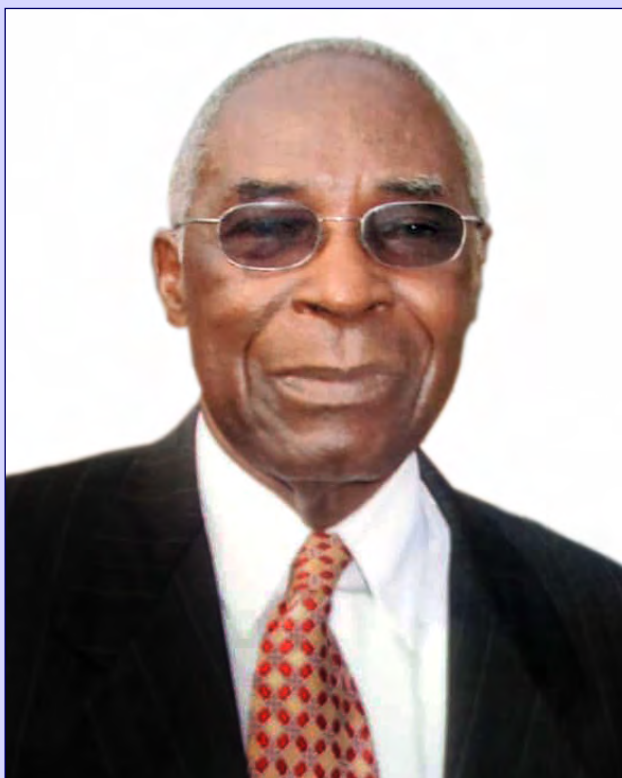
Mr Seth Mawusi Asafo
Clinical Psychologist

implications for performance of normative duties. In addition, personhood status could be regained if an individual was able to do the things that they used to do prior to the illness.

Analysis further revealed that, the etiology of mental health challenges from the point of research participants was predominantly spiritual. In a sense, human rights abuses against the mentally ill was "justified" since they were no longer considered as persons.

Conclusively, the perception of mental illness having a spiritual connotation coupled with a loss of personhood may be an explanation for the stigma and discrimination against the mentally ill. Anti- stigma campaigns must be aimed at restoring the communal agency of the sufferer. Occupational therapy therefore becomes an essential resource in achieving this.

DISTINGUISHED PERSONALITY



PROFESSOR SAMUEL OFOSU-AMAAH

Professor Ofosu-Amaah joined the University of Ghana Medical School in 1966 as a lecturer in Child Health. In 1972, he transferred to the Department of Community Health, becoming Professor and Head from 1974 to 1984. He was vice-Dean from 1977 to 1979, and Acting Director, Noguchi Memorial Institute for Medical Research from 1982 to 1984. After a stint as Senior Advisor in health with UNICEF from 1984 to 1992, he returned as Professor and Dean at the University of Ghana School of Public Health from 1994 to 2000. He has been professor emeritus since 2003.

Professor Ofosu-Amaah was born in Accra in 1931. He attended the Government Boys School, Achimota School, the University College of the Gold Coast, Legon, and then the Glasgow

University Medical, Scotland, from which he graduated MB ChB in 1959. He obtained the Diploma in Child Health in 1962, MRCP in 1964, and MPH from Harvard in 1970.

Professor Ofosu-Amaah has won many awards including Harvard University School of Public Health Alumni Award of Merit; Doctor of Science, University of Developmental Studies, Tamale and Doctor of Science, University of Ghana. He was elected a Fellow of the Ghana Academy of Arts and Sciences; FRCP Glasgow; Foundation FWACP, Foundation FGCPs and Fellow of the American College of Physicians (FACP). He was Chairman of Korle Bu Teaching Hospital Board from 2002, Chairman of Accra Metropolitan Assembly Health Committee, and from 2003 Inaugural President of the Ghana College of Physicians. He also received the Medical and Dental Council Lifetime Achievement Award (2006); the National Award - Member of the Order of the Volta (2008); Certificate of Honour, Ghana College of Physicians and Surgeons for Dedicated Service (2010), and Fellow of the Ghana Medical Association for Lifetime Contributions (2014).

Professor Ofosu-Amaah's extensive research activities include: Growth & development studies of children in Ghana from 1966-1974; Danfa Comprehensive Rural Health & Family Planning Project (1969 – 1979) researching the epidemiology of childhood diseases especially poliomyelitis, immunization and malaria in a rural community, in collaboration with UCLA; and research on primary health care evaluation in collaboration with University of Sussex.

Clinical services in Ghana included work as a medical officer, KBTH 1960-1961, staff Paediatrician Princess Marie Louise Hospital 1965, and Staff Paediatrician KBTH 1965-1984.

As a teacher, from 1968 he delivered numerous local and international lectures and presentations at the University of Development Studies, Tamale, Kwame Nkrumah University of Science and Technology, School of Medical Sciences, Ghana Institute of Management and Public Administration, and various universities in the United States and South Africa. He was an external examiner for universities in Kumasi & Nigeria.

Professor Ofosu-Amaah was a member of numerous high level committees including Ministry of Health Task Forces and Committees from 1965; Ghana Medical and Dental Council; Ghana National Constituent Assembly; Ghana National Commission on Children; Council for Scientific and Industrial Research, Volta River Authority; Ghana National Family Planning Council, Accra Metropolitan Assembly and UDS

Council. He was a member of various International Committees including the WHO.

Professor Ofosu-Amaah decided to be a paediatrician whilst in medical school, and wished he had spent more time in clinical medicine, especially neonatology.

Advice he has for younger colleagues is that they should work hard in whatever field they find themselves, and remember that there are lots of fantastic findings awaiting discovery!

Professor Ofosu-Amaah is married to Virginia, and they have 3 adult children, Sophia, William and Frances. His interests outside medicine include astronomy and medical history.

Eyi wala donn (Ga phrase for "we are grateful")

The UGMS is truly grateful for his invaluable contributions over the years.

By Dr Adziri Sackey, Department of Child Health, in consultation with Mrs Virginia Ofosu-Amaah and Prof. Samuel Ofosu-Amaah.



Professor Ofosu-Amaah with colleagues at the College of Physicians, from left to right: Prof. Ofosu Ammah, Prof. Bruce Tagoe, Prof. J.T. Anim

STUDENTS' CORNER

UGMS PARTICIPATES IN THE YALE GLOBAL HEALTH S.U.R.G.E

The COVID-19 pandemic has highlighted the increasing need for global partnerships and co-operations to address the effects and impact of this pandemic on global public health and education. In line with this demand, the University of Ghana Medical School responded to the call to participate in the Yale Global Health Students United for Regional and Global Education (YGH SURGE). The program consisted of series of weekly online educational forums coordinated by Autumn Nobles and Hanya Qureshi (Second year MD students, Yale School of Medicine) that lasted from 18th July to 10th October.

The University of Ghana Medical School represented by Emenyo Akpaloo (Class of 2021) and Nana Adwoa Baiwa Baiden (Class of 2024), joined participants from institutions across 15 different countries to discuss the impact of the COVID-19 pandemic on the different regions of the world and how to enhance cross-collaborative learning in spite of it. Emenyo describes the initiative as "fun, interactive, thought-provoking and very relevant to the health and educational sector".

Participants were paired into teams of two countries and each week, a team was asked to share a case study with the rest of the forum before the interactive sessions began. These succinct presentations were on a variety of topics of global health concern including mental health and the psycho-social impacts of the pandemic. Nana Adwoa said, "our team comprised of students from Ghana and Uganda and we presented on Infectious Diseases and Climate Change."

Like every good project, working on the case study was a bit tough. The Ghana-Uganda team had some challenges sifting through the diverse ideas they came up with, mobilizing team members to practice the delivery of their presentation and navigating the different time zones that made scheduling meetings a tough nut to crack. In spite of the difficulties, the team pushed through, worked hard and delivered a presentation that could only be described as a success.

Later on in the program, a new session dubbed "Social calls" was introduced. These social calls were held an hour after the main sessions. According to Nana Adwoa, "it was fascinating to hear stories from different part of the world". Listening to people's experiences made me want to try a lot of new things. I was encouraged to read more and learn about people's cultures." These social calls also involved cross-cultural sharing of music play-lists, books and playing games.

These zoom social interactions were the highlights of the program for Emefa as well. "It was an exciting way to meet medical students from all over the globe and talk about our shared non-medical interests" she says.

For the final sessions, the participants had the privilege to learn from three faculty staff of the Yale Medical School on how to write an op-ed, why they are useful and how to pitch op-eds to publications. An op-ed is a piece of writing expressing a personal opinion and often printed in a newspaper opposite the page on which the

editorial is published. The facilitators were; Dr. Anna Reisman (Internal Medicine Specialist), Dr Christine Ngaruiya (Assistant Professor in the Department of Emergency Medicine (DEM) at Yale University) and Dr. Joan Cook (Associate Professor in the Yale School of Medicine Department of Psychiatry).

These sessions with the Yale Medical School faculty members were very informative and inspiring and according to Nana they were “a reminder that there is no limit to excellence and we can achieve great things when we put our minds to them and work hard.”

At the end of the series, participants were able to draft recommendations and op-ed pieces from the global professional student perspective on COVID-19. This program has been a striking collaborative academic project about the

pandemic. In the long run, the coordinators, Nobles and Qureshi hope to use this framework to model and develop an ongoing interactive global health online learning curriculum for professional students that would expand beyond COVID-19 to address major shared global health topics and concerns.

The UGMS is excited to be a part of the institutions involved in the premiere edition of this global initiative. Both representatives express their profound gratitude to Prof. Margaret Lartey (Dean, UGMS) for the honor to represent the UGMS at this innovative program.

These international exposures and interactions contribute immensely in the grooming well-rounded health professionals who are globally minded.

By Jane Thomas

Level 400 Medical Student



*Students at the UGMS who participated in the program,
Nana Adwoa Baiwa Baiden, Emenyo Akpaloo (right)*

ALUMINI NEWS

Professor Rexford Ahima elected a new member of the United States National Academy of Medicine.



Professor Rexford Sefah Ahima MD. PHD.

Professor Ahima, an alumnus of the UGMS, 1986-year group, was elected as a new member of the United States National Academy of Medicine for the year 2020.

Election to the Academy is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Dr. Ahima is the Director of the Division of Endocrinology, Diabetes and Metabolism, Bloomberg Distinguished Professor of Diabetes in the Schools of Medicine, Public Health and Nursing, and the leader of the Johns Hopkins Diabetes Initiative.

Dr. Ahima received his intercalated BSc research training in Endocrinology in the Middlesex Hospital Medical School, University of London, MB CHB from the University of Ghana, and PhD from Tulane University in New Orleans, Louisiana. After completing his internship and residency training in Internal Medicine at the Albert Einstein College of Medicine, Jack D. Weiler Hospital and Jacobi Medical Center in New York, Dr. Ahima did his clinical and research fellowship training in Endocrinology, Diabetes and Metabolism at the Beth Israel Deaconess Medical Center and Harvard Medical School in Boston.

ANNOUNCEMENTS

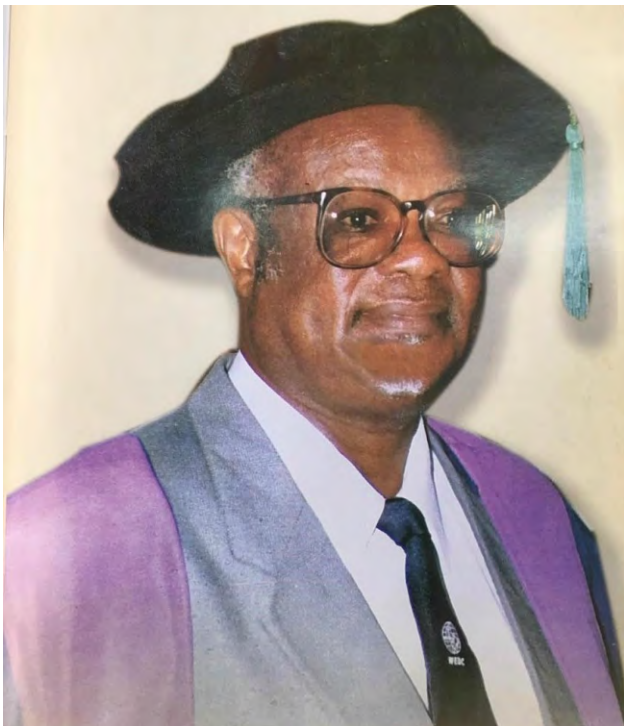
APPROVED PROTOCOLS BY THE ETHICAL AND PROTOCOL REVIEW COMMITTEE

NO.	TITLE	AUTHOR	DEPARTMENT
1.	Sibs Genomics-Genetics Counselling (Sibs-Gen-Gen) Study.	Dr. Albert Akpalu	Medicine and Therapeutics
2.	Taking a Rapid Pulse on COVID19 Stigma through a SMS Survey	Dr. Laura Nyblade	RTI International Global Health Division
3.	Epidemiology of Non-Alcoholic Fatty Liver Disease (NAFLD) in Africa: A Pilot Study within MADCAP	Dr. J. E. Mensah	Surgery
4.	Bacteria Etiology and Risk Factors Associated with Childhood Otitis Media in Accra	Vida Bannah	Medical Microbiology
5.	Correlation Between Cranial Molding and Prevalence of Developmental Delays, Deformational Plagiocephaly and Brachycephaly (DPB) in Children Aged 0-4 Years	Dr. Francis Tanam Djankpa	Physiology
6.	Public Perception of COVID 19 in Ghana: A Study of Five Communities in the Greater Accra Region	Dr. Vincent Boima	Medicine and Therapeutics
7.	Pathophysiological Mechanisms of Maternal Pro-Inflammatory Mediators in Spontaneous Preterm Labour	Mr. Bayor Fidelis	Physiology
8.	Impact of Circulating Ceramide on Insulin Resistance and Body Adiposity	Alfred Buabeng	Chemical Pathology
9.	Meconium Stained Amniotic Fluid-Obstetric and Neonatal implications at the Korle-Bu Teaching Hospital	Dr. Evelyn Amoah	Child Health
10.	African Neurobiobank for Precision Stroke Medicine: ELSI Project	Dr. Albert Akpalu	Medicine and Therapeutics
11.	Factors Associated with Low Adherence to the Treatment of Tuberculosis at the Chest Clinic in the Korle Bu Teaching Hospital	Edith Appiah Lawson	Epidemiology and Disease Control
12.	Effects of Access to Water, Sanitation and Hygiene (WASH) on Home- Based Lymphedema Management in Lymphatic Filariasis Endemic Areas in Ghana: A Case of Sunyani Municipal, Bono Region	Miss Irene Dede Teiko Sawerteh	Social and Behavioural Sciences
13.	Level of Awareness on, And Attitude of Young Adult Female Tertiary Student and Health Care Professionals in Ghana towards Fertility Preservation	Dr. Alim Swarray-Deen	Obstetrics and Gynaecology
14.	Vaginal Microbiome of Women Seeking Fertility Treatment versus Women Seeking Contraception – A Comparative Study	Dr. Alim Swarray-Deen	Obstetrics and Gynaecology
15.	Ten Year Review of Ectopic Pregnancies Managed in a Municipal Hospital in Ghana	Dr. Mercy A. Nuamah	Obstetrics and Gynaecology
16.	Randomizes Study of the Traditional WHO Partograph and a Korle-Bu Modified WHO Partograph for Uncomplicated Labour	Dr. Kareem Mumuni	Obstetrics and Gynaecology
17.	Induction of Labour: Prediction of Maternal and Fetal Outcomes at Tertiary Hospital in Ghana	Dr. Kwame Adu-Bonsaffoh	Obstetrics and Gynaecology
18.	Health and Nutrition Literacy for Women in the Agriculture Value Chain using Mobile Technology: A Formative Study	Dr. Frances Baaba Da-Costa Vroom	Biostatistics

OBITUARY

PROFESSOR GILFORD ARMAH ASHITEY

A DISTINGUISHED EPIDEMIOLOGIST



Prof. Gilford Ashitey was the third professor to head the Department of Community Health of the University of Ghana Medical School, and this he did full time for thirteen (13) years (1984-1997) making him the longest ever Head of Department of the largest Department then. It had the facilities at Korle Bu and 7 field stations.

Prof. Ashitey was appointed a lecturer in 1970, promoted to Senior lecturer in 1975, associate professor in 1980 and full professor in 1988. He retired from the Medical School in 1997 but continued to support the Department of Community health and the School of Public Health in Legon, which he helped found.

As an epidemiologist, he was pivotal in the control of Cholera when it first occurred as an epidemic in Ghana in 1970. He was also the epidemiologist in charge of the Volta Lake

Research and Development project, taking over from the WHO consultant. Professor Ashitey added other specialties to his main field of epidemiology and took primary health care to the field and managed to set up centers in many parts of the Country for health care delivery. He challenged students to be angry about the low standard of health service delivery and refuse to accept mediocrity. He was the Professor who introduced "Public Health Advocacy" into the final year programme where students are given topics of Public Health importance to prepare, research into and to present in front of their colleagues and teachers for assessment. This was a key component in preparing young doctors for public speaking and as advocates for the sick and the community they served. He was indeed a great teacher.

His administration was unique, firm, direct, straight and fair. The Department was so strong under his leadership. He added Health Services Management to his specialty, introduced and run Masters in Public Health (MPH) programmes at KBTH from which several eminent public health officers were produced for the Country.

Professor Ashitey served the Department and the Medical School very well. He was a consistent source of positive pressure to the Medical School. From 1994-1996, he was the Vice Dean of the Medical School. By the end of his tenure, he had served on all committees and boards of the Medical School, a feat very few people have achieved. The School recognized him during its silver Jubilee celebrations for 17 years of loyal,

dedicated and uninterrupted service. Prof. was the Keynote speaker at the 40 years anniversary of the Medical School and urged the School to become a five-star University, something we are all waiting for.

Professor Ashitey served the country as a member of the Health Council of the Ministry of Health and was also a member of the team that nurtured the School of Public Health, University of Ghana. He projected the aspiration of the Medical School in several universities where he worked as a research fellow and visiting professor. He received multiple awards, some of which are the Drefus Foundation (NY) award in 1997 for his outstanding contributions towards improving the health of the people of Ghana and the world. He was elected a fellow of the Ghana medical Association for his dedicated service. He was a visiting Fellow at Kobe University, Japan

(1978), London School of Tropical Medicine and Hygiene (1981), Liverpool School of Tropical Medicine (1990), University of Nairobi (1992) and University of Louisville, Kentucky, USA.

Prof. Ashitey was a true academician: he trained students, carried out relevant research and promoted the health of the country on all fronts.

Prof. Ashitey, rest peacefully from your labours and we pray our Good Lord grants you eternal rest. The Dean, staff and students of the University of Ghana Medical School are grateful for your contribution in building of the Medical School and hopefully to the five-star Medical University you challenged us to build.

**Our Eminent Professor,
Wɔ jogban ye Nuntsɔ le kpokɔn
(Rest thee well)**

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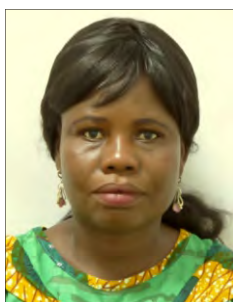
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