



UNIVERSITY OF THE WEST INDIES SCHOOL OF
CLINICAL MEDICINE AND RESEARCH,
THE BAHAMAS

presents the
8TH Annual
RESEARCH DAY

SEPTEMBER 18 - 19TH, 2014

THEME
**HYPERTENSION: BETTERING PREVENTION
AND TREATMENT IN THE BAHAMAS**

VENUE:
COB SCHOOL OF NURSING AUDITORIUM,
GROSVENOR CLOSE
NASSAU, BAHAMAS



The University of The West Indies

The University of the West Indies is the region's flagship institution of higher learning, serving sixteen countries of the English-speaking Caribbean. There are three main campuses situated on the islands of Jamaica, Trinidad and Barbados respectively, and a fourth campus, the Open/Virtual Campus servicing the 13 non-campus based countries.

From its humble beginnings in 1948 with one medical faculty and 33 students enrolled, UWI has grown to include seven faculties, 4 campuses and 12 centres spread throughout the Caribbean. Student enrolment currently averages over 46,000 students.

UWI offers over 800 programmes of study. Each year the University produces approximately 5,800 graduates at undergraduate, graduate and diploma levels.

UWI's network of over 75,000 graduates continues to be at the forefront of Caribbean and global thought, imagination and action.

UWI consistently provides the Caribbean region with its leaders in government, business, education, law, engineering, medicine and other key sectors.

UWI is internationally known for its academic and research excellence with a showcase of over 75 Rhode scholars. Within the region, UWI stands proudly as an icon of Caribbean integration and culture. It maintains a UWI Centre in Nassau through which Bahamian students may seek admission to any of the campuses and access programmes of the new Open Campus. The Bahamas has been the site of programmes of the UWI since 1964 and currently has four distinct programmes:

- o UWI Open Campus, The Bahamas formerly the School of Continuing Studies (SCS);
- o Centre for Hotel and Tourism Management (CHTM);
- o School of Clinical Medicine and Research, The Bahamas (SCMR);
- o Law Programme in association with College of The Bahamas

THE UNIVERSITY OF THE WEST INDIES
SCHOOL OF CLINICAL MEDICINE AND RESEARCH, THE BAHAMAS

The 8th
Annual Research Day 2014

*Hypertension: Bettering Prevention and
Treatment in The Bahamas*

THURSDAY 18TH SEPTEMBER 2014

6:00PM – 6:30PM
REFRESHMENTS

OFFICIAL OPENING CEREMONY AND SESSION: 6:30PM – 9:00PM

WELCOME
REMARKS: RBC SPONSOR
REMARKS: MINISTER OF EDUCATION
REMARKS: MINISTER OF HEALTH
RESEARCH REPORT: DIRECTOR

RBC LECTURE:

HYPERTENSION RESEARCH IN THE BAHAMAS—A GLOBAL LEADER IN THE 20TH CENTURY

- DR. JOHN LUNN

**EARLY LIFE DETERMINANTS OF HYPERTENSION: OPPORTUNITIES FOR PRIMARY AND
PRIMORDIAL PREVENTION**

- DR. TREVOR S. FERGUSON

**THE PREVALENCE OF RAISED BLOOD PRESSURE AND SELF-REPORTED HYPERTENSION IN THE
BAHAMAS: FINDINGS FROM THE STEPS SURVEY, 2012** DR. D. BRENNEN

HYPERTENSION IN UNIVERSITY STUDENTS—BURDEN AND RISKS IN BARBADOS

- DR. ALAFIA SAMUELS

FRIDAY 19TH SEPTEMBER 2014
SESSION II

8:30AM -10:30AM

DETERMINANTS OF DISCLOSURE, KNOWLEDGE OF PARTNER SEROSTATUS, AND PATTERNS OF SEXUAL BEHAVIOR AMONG ADULT HIV-POSITIVE PATIENTS RECEIVING CLINICAL CARE IN NASSAU, BAHAMAS: *DR. C. BETHEL*

ACCEPTABILITY OF NEONATAL MALE CIRCUMCISION FOR HIV PREVENTION AMONG ADULTS IN THE BAHAMAS: *DR. A. FERGUSON-DYER*

CHLAMYDIA AND GONORRHEA INFECTION PREVALENCE AMONG PREGNANT TEENS, IS IT ASSOCIATED WITH PRETERM BIRTH?: *DR S. KNOWLES.*

RESPONSE, MANAGEMENT & RECOMMENDATIONS WITH HYPERTENSION:
DR. ALAFIA SAMUELS

THE PREVALENCE OF PULMONARY HYPERTENSION IN A BAHAMIAN POPULATION OF RENAL REPLACEMENT PATIENTS & OBSERVED CARDIAC MORBIDITY AND MORTALITY: *DR J. HALL*

PHARMACOLOGIC ADHERENCE TO THE JOINT NATIONAL COMMITTEE VII GUIDELINES AMONGST FAMILY PHYSICIANS AT THE FAMILY MEDICINE CLINIC NASSAU, BAHAMAS: *DR. D BAIN,*

COFFEE BREAK: 10:30 AM – 11:00AM

FRIDAY 19TH SEPTEMBER 2014
SESSION III
11:00AM -12:30PM

THE COLPOSCOPIC IMPRESSION-HISTOLOGY DISCONNECT IN THE DIAGNOSTIC VALIDATION OF PRE-INVASIVE CERVICAL LESIONS AT THE PMH: *DR. S. SEALY*

SLEEP AND HYPERTENSION: *DR. WINSTON CAMPBELL*

VAGINAL BLEEDING IN EARLY PREGNANCY: NASSAU'S ER EXPERIENCE: *DR. A. ALLICK*

THE 30-MINUTE DECISION TO INCISION RULE: THE PMH EXPERIENCE: *DR. S. SEALY*

BROWN BAG LUNCH: 12:30PM – 1:30PM

FRIDAY 19TH SEPTEMBER 2014
SESSION IV
1:30PM - 3:30PM

COLORECTAL CANCER IN THE BAHAMIAN POPULATION: *DR. M. COOPER*

INITIAL EXPERIENCE WITH CYTOREDUCTIVE SURGERY AND INTRAPERITONEAL CHEMOTHERAPY FOR PERITONEAL SURFACE MALIGNANCY: *DR. T. HUMES*

SPONTANEOUS (HYPERTENSIVE) ICH IN THE BAHAMAS: *DR. MAGNUS EKEDEDE*

ENDOVENOUS LASER ABLATION THERAPY IN THE BAHAMAS: IMMEDIATE AND SHORT TERM RESULTS: *DR. D. MAJOR*

STRATEGIES FOR RECRUITMENT OF RELATIVES OF BRCA MUTATION CARRIERS TO A GENETIC TESTING PROGRAM IN THE BAHAMAS: *DR. R. BUTLER*

TRANSTHORACIC ECHOCARDIOGRAPHIC IDENTIFICATION OF INTRACARDIAC DISEASE THAT PREDISPOSE TO CARDIOEMBOLIC STROKE. *DR. C. BONIMY*

FACTORS INFLUENCING POOR ADHERENCE TO HYPOGLYCEMIC MEDICATIONS AND SELF-CARE AMONG TYPE 2 DIABETIC PATIENTS IN NASSAU, BAHAMAS. *DR. O. ABLACK*

**THE PREVALENCE OF DEPRESSION AND THE QUALITY OF LIFE IN HEMODIALYSIS PATIENTS AND PATIENTS WITH CHRONIC MEDICAL ILLNESSES (CMIs) IN THE BAHAMAS:
*DR. D. ADDERLEY-SANDS***

PANEL DISCUSSION

SESSION ENDS 4:40PM



Message From



HON. PERRY GOMEZ, MD., MP.
MINISTER OF HEALTH

I congratulate the University of the West Indies School of Clinical Medicine and Research, The Bahamas, on their 8th Annual Research Day. The theme of this year's symposium is timely; hypertension presents as the most prevalent chronic noncommunicable disease and comorbidity in the Bahamas. In our CNCD survey 2005, an estimated 37% of the population has hypertension. Our research denotes also that uncontrolled hypertension is one of the primary determinants of cardiovascular deaths, strokes and end stage renal disease; it places a heavy economic burden on the health care system and is a major impediment to improving the quality of life of our citizens.

Disease prevention and health promotion is a primary objective in our National Health Services Strategic Plan. "Bettering prevention and treatment of hypertension" is the essence of what we propose to do.

Our Ministry of Health and I, are particularly pleased that you have recognized the research and contributions of Dr. John Lunn, my esteemed medical colleague in the Department of Medicine at the Princess Margaret Hospital for over thirty years. His pioneering research in the 1970s established the optimal treatment of hypertension in Black populations and implemented the treatment protocols that defined standards of care that remain in use today.

The quality of papers to be presented and the School's continued efforts to have regional experts propels your Research Day as a sentinel event in health care and services research in the country. We applaud your research initiatives and wish for a most successful two days of scholarship and outcomes that translate to bettering the health for all our citizens.

A handwritten signature in black ink, appearing to read 'Perry Gomez'.

The Honourable Dr. Michael Perry Gomez, M.P.
Minister of Health



Message From



HON. JEROME K. FITZGERALD, M.P.
**MINISTER OF EDUCATION, SCIENCE AND
TECHNOLOGY**



On this eighth Annual Research Day, I am pleased to extend congratulations to The University of The West Indies' School of Clinical Medicine and Research in The Bahamas. Over the years, your institution has been at the forefront in providing insight about health issues and illnesses in our country. I applaud the work of your organization in the effort to offer guidance and assistance in such a sensitive area.

Your theme, Hypertension: Bettering Prevention and Treatment in The Bahamas, is in keeping with your thrust to educate the public about how to prevent and curb the occurrence of this disease in the Bahamian society. Your legacy is built on a strong foundation. I am certain that your cadre of exemplary physicians is equipped to face and conquer the challenges ahead. Moreover, I believe that through the information presented during your sessions, you will discover innovative methods and procedures that will lead to successfully alleviating one of the nation's primary health challenges.

In a time when there is a great outcry for cures to be found for so many ailments, it is encouraging to note that there are praiseworthy Bahamian doctors who are a part of the healing process. I salute Dr. John Lunn, the RBC lecturer for this year for his stellar contribution in the research of hypertension and Dr. Winston Campbell, the first Bahamian to be certified in Sleep Medicine. Additionally, I welcome our guest lecturers, Dr. Alafia Samuels and Dr. Trevor Ferguson. I am certain that all of your presentations will be valuable to the successful treatment of hypertension in The Bahamas.

I extend best wishes to you as you make this forward movement to address genuine issues in the health care system of The Commonwealth of The Bahamas.

Message From

DR. ROBIN ROBERTS
THE DIRECTOR



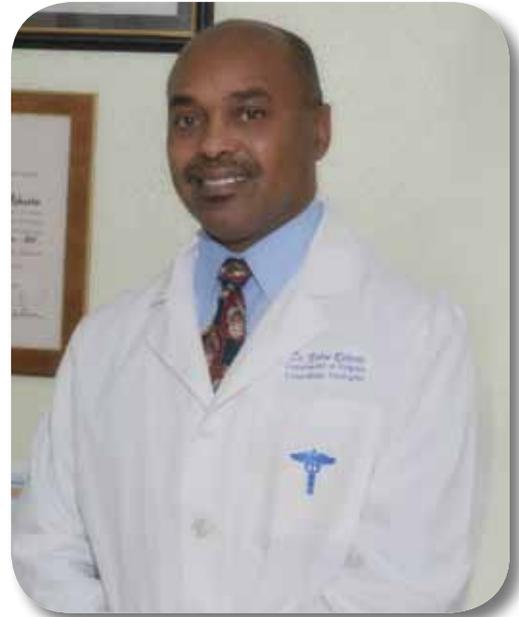
Eight years and counting. I liken our Research Day efforts to a Continuous Quality Improvement initiative. Every year we endeavor to have improved quality of papers presented and more presenters including renowned regional and international researchers. From one day, to a day and a half, with a full two-days event on the horizon; we had a record breaking number of abstracts submitted this year. Kudos to the Research Day Committee lead by Dr. Frankson and Dr. Butler. They have steered the Research Day to a more focused agenda but maintaining the Committees mandate to advance the goals of the National Health Services Strategic Plan. Hypertension is a leading cause of morbidity and mortality in the country in both the inpatient and outpatient service delivery systems.

The Committee was able to attract two leading researchers from Barbados, Dr. Alafia Samuels and Dr. Trevor Ferguson. Both are from The UWI Tropical Medicine Research Institute, (Barbados and Jamaica respectively), which sets the standards in the region in the research and management of chronic noncommunicable diseases. They have much to impart on advancing our efforts to curb this disease.

This Research Day is special. We embraced the opportunity to experience the pioneering spirit of the country's leading medical researcher in his time, Dr. John Lunn. His international collaborative research was published widely and established the inexpensive Thiazide diuretics as first line treatment for hypertension in Black populations; it remains so today. Though retired, Dr. Lunn remains active both in clinical practice, continuing to produce cutting edge research and publications in oncology, most notably the breast cancer BRACA gene project.

We give special thanks to our sponsors, the Royal Bank of Canada who has journeyed with us every step along the way. So too we thank the College of The Bahamas, our collegiate partner, for hosting us in the College's lecture hall, every year, and counting.

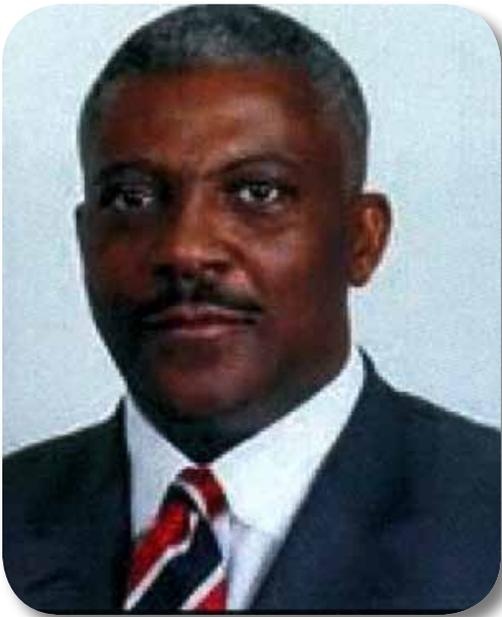
We welcome you to our 8th Annual Research Day symposium as we continue our efforts to "To improve the health of the people of the Commonwealth of the Bahamas through clinical research" and "To become the leading centre of research, in all aspects of health in the Commonwealth of the Bahamas."





Message From

MR. NATHANIEL BENEBY
SPONSOR
PRESIDENT AND COUNTRY HEAD
RBC ROYAL BANK, BAHAMAS



RBC Royal Bank (Bahamas) Limited is pleased to sponsor the Eighth Annual Research Day held by the University of the West Indies Clinical Programme, The Bahamas. For over a century RBC and our employees have been an integral part of The Bahamas helping causes, supporting needs, and giving back to the communities we serve.

Supporting research and educational initiatives that will improve the health of Bahamians is a core area of focus for our community involvement programmes. Our goal is to provide sponsorships and donations that will have a lasting social impact.

The medical research conducted through this programme will benefit a wide spectrum of persons in The Bahamas and wider Caribbean. The key accomplishments of the Research Unit since its formation are impressive. These accomplishments, along with the University of the West Indies' excellent track record in training Bahamian medical professionals have made this an ideal partnership for success.

We look forward to working with you now and in the future.

Nathaniel Beneby,
President and Country Head
RBC Royal Bank, Bahamas



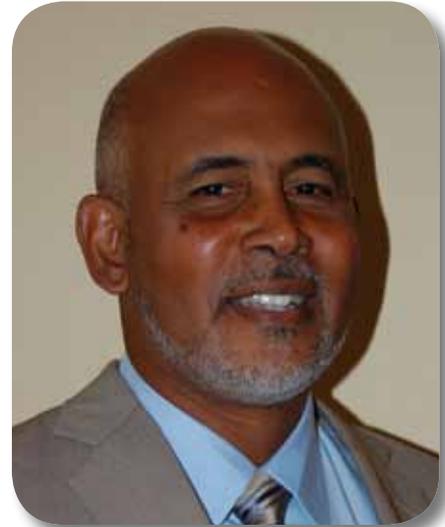
Message From

**DR. ANTHONY FRANKSON
& DR. RALEIGH BUTLER
CO-CHAIRMEN**

We the chairmen of the Research Committee of the School of Clinical Medicine and Research/Bahamas of the University of the West Indies are truly delighted to have worked with the school's Director and the other committee members to facilitate this 8th such conference. The presenters have all worked diligently to complete several very important bodies of scholarly inquiry into what ails residents of The Bahamas and for that our research committee members are most grateful.

Do make every effort to attend and be edified by these presentations. Our school's research committee members collaboratively went through several iterations of what this year's theme, and hence emphasis, should be before we agreed of the present one "Hypertension: Bettering Prevention and Treatment in The Bahamas". In too many countries within our region of the world hypertension looms large as a top underlying cause of mortality and morbidity for our populace and this meeting here in The Bahamas is therefore most timely. At least one of our keynote speakers has for some time pioneered work in this arena here in The Bahamas and we're so glad to see young physicians now taking up the mantle in chronic diseases research. We the faculty of this school commit to be ever readying ourselves to exemplarily support them as well as colleagues venturing into scientific inquiry in other areas needing to be addressed locally (and via international collaboration) with similar zeal.

Plans are afoot to have our faculty and students also endeavour to partner with other entities of this university and other institutions of higher learning here in The Bahamas to both enrich work presently being carried out as well as address our significant health challenges in pertinently interdisciplinary fashions. Forward, onward, upwards TOGETHER.



Biography of

GUEST SPEAKER DR. ALAFIA SAMUELS

T. Alafia Samuels is currently Senior Lecturer in Epidemiology and Public Health, Faculty of Medical Sciences, UWI Cave Hill and CARICOM Consultant in Chronic Disease Prevention and Control. She is a UWI medical graduate, with a Masters in Public Health and a PhD in Chronic Diseases Epidemiology, both graduate degrees awarded with honors, from Johns Hopkins University. Past employment include Advisor in Chronic Diseases at PAHO/WHO, Director of Outcomes at XL Health, a Disease Management company in Baltimore MD, and 20 years with the Ministry of Health Jamaica managing Primary Health Care Services. She is currently a member of the Barbados National NCD Commission, appointed by the Hon. Minister of Health and is External Examiner for the MPH at University of Technology Jamaica. For the last two years she held the position of Director of the MPH programme at UWI Cave Hill.

Alafia has a strong interest in the role of behavioural and clinical interventions in the prevention and control of NCDs, particularly diabetes and hypertension. Past research has investigated the determinants of poor compliance with diabetes and hypertension treatment, and in particular the impact of physician factors. Current work includes developing and evaluating workplace based initiatives, and evaluating the impact of an intervention programme for schools in Barbados



GUEST SPEAKER
DR. MAGNUS EKEDEDE

Biography of

Dr. Ekedede did his medical undergraduate and postgraduate studies at the prestigious University of Havana Medical Institute graduating in both programs summa cum laude. He is a Neurosurgeon and Chief Consultant of Neurological Surgery at the Princess Margaret Hospital and Doctor's Hospital, Bahamas, and a Visiting Consultant at the Cheshire Hall Hospital in Providenciales, Turks & Caicos Islands.

He is a member of the Congress of Neurosurgical Surgeons of North America, a Fellow of the American Association of the Neurological Surgeons and memberships in numerous other international and regional neurosurgical and neurological associations.

Dr. Ekedede is an Associate Lecturer at the UWI School of Clinical Medicine and Research, The Bahamas, with his primary research interests, presentations and publications in traumatic brain injuries and the surgical management of hypertension. He has been recognized as a pioneering surgeon in the region with feats including the first lobotomy, and the lead surgeon in the first ever separation of conjoined (parasitic) twins in the Caribbean.

He is a founding member and Vice Chair of the Mitchell Ekedede Brain Injury Foundation and Director of the Neurosurgical Institute of The Bahamas. He was voted the Physician of the Year at the PMH and in 2012, the Jones Communications Network Person of the Year.



Biography of

GUEST SPEAKER DR. TREVOR FERGUSON

Dr. Ferguson is a Senior Lecturer at the Epidemiology Research Unit, Tropical Medicine Research Institute (TMRI), The University of the West Indies, Mona and a Honorary Consultant in General Internal Medicine for the Department of Medicine, University Hospital of the West Indies.

He obtained a Doctor of Medicine (DM) degree in Internal Medicine having completed his Internal Medicine residency at the University Hospital of the West Indies in 2003. In 2007 he obtained a Master of Science degree in Epidemiology from the University of London, through the London School of Hygiene and Tropical Medicine. In 2011, he was elected to Fellowship in the American College of Physicians.



Dr. Ferguson is part of the Chronic Disease Research Group at the Epidemiology Research Unit (ERU) and conducts research and holds research grants in the field of cardiovascular disease epidemiology and diabetes with a particular interest in etiology of hypertension and risk factors for cardiovascular disease. His work has also focused on diabetic foot complications.

Current research projects include:

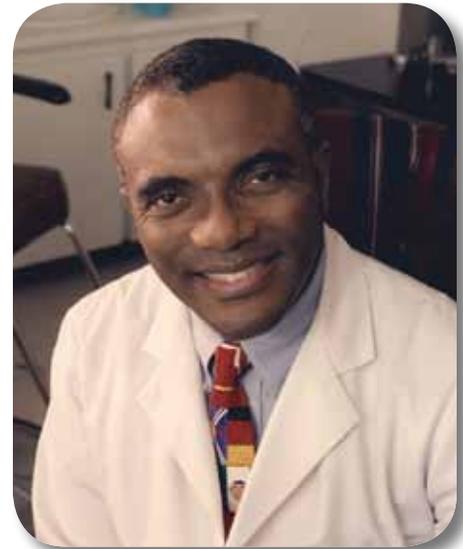
- The Impact of Early Life Experience on Cardio-respiratory Risk and Bone Mineral Density in Adolescents
- The United States of America (US)-Caribbean Alliance for Health Disparities Research (USCAHDR)
- Jamaica Amputation Prevention Project: A Clinical Audit and Intervention Study of Diabetic Foot Ulcers and Amputations

His research work has been presented at several scientific meetings regionally and internationally and has been published in peer-reviewed journals.

GUEST SPEAKER DR. WINSTON CAMPBELL

Biography of

Dr. Winston Campbell is a graduate of the University of the West Indies Faculty of Medical Sciences, and has the distinction of being the first fulltime Government Medical Officer at the Rand Hospital in Freeport when the Government of the Bahamas purchased it in 1973. Dr. Campbell completed his postgraduate training in General Surgery at Beth Israel in New York, a residency in the specialty of Otorhinolaryngology (Ear, Nose and Throat/Head & Neck Surgeon) at the Mayo Clinic and a Masters in Science at University of Minnesota. He won the first Cottle Award for research in Rhinology for his Master's thesis. He returned home as the first Board-certified Ear-Nose-&-Throat/Head & Neck surgeon in the Bahamas. Engaged at the PMH for over thirty years and a past Chief of the Department of Surgery, he has given a lifetime of service and commitment to the people of the Bahamas.



He is an Associate Lecturer at the UWI School of Clinical Medicine and Research, The Bahamas. With a number of ENT presentations and publications in his earlier years, lately Dr. Campbell has focused his interest and research in Sleep Medicine. He is a Fellow of the American College of Surgeons, American Academy of Sleep Medicine, the Caribbean Association of Otorhinolaryngology and numerous other ENT professional organizations. Dr. Campbell has the distinct honor of becoming our first board-certified specialist on the faculty, in the field of Sleep Medicine in the region.

Sleep disorders are now known to comprise the hub of high risk factors for our prevailing chronic non-communicable disorders such as hypertension, diabetes mellitus type II, obesity, cardiovascular, cerebrovascular, neuro-psychiatric disorders, breast cancer and road traffic accidents.

Sleep disorders pose a high economic burden and with significant numbers of persons being unrecognized and undiagnosed – estimated at more than 80%, in our community, the overall impact is staggering. There is a great need for this new dimension of medicine to be incorporated in all aspects of delivering care in our primary, secondary and tertiary health services.

Biography of

GUEST SPEAKER
DR. JOHN LUNN

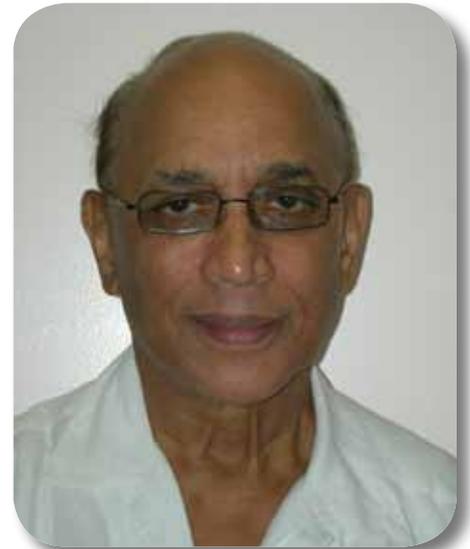
Dr. John Lunn is a medical graduate with distinction from the University of Edinburgh, and a Member and Fellow of the Royal College of Physicians of Edinburgh with subspecialty in Hematology and Medical Oncology. He was an avid researcher from his early days as a House Officer receiving grants from the Bahamas Government, British Medical Association and the university of Edinburgh.

On his return to the Bahamas in the early 1960s, he served as the Consultant in Internal medicine for over 40 years until his retirement. He continued his research initiatives on return to the Bahamas, serving as the Director of the Bahamas Foundation for High Blood Pressure and Hypertension Clinical Research, President of the Commonwealth Medical Research Institute and Director of the Medical Oncology Bahamas Comprehensive Cancer Centre.

His pioneering research in the Bahamas in cardiovascular diseases and hypertension was launched with his publication “Epidemiology of Cardiovascular Disease with particular reference to hypertension” in 1972. He noted from autopsy studies the absence of coronary heart disease and thus ischemic heart disease in the Bahamian population despite the high prevalence of hypertension. This he hypothesized and confirmed experimentally, was due to our high intake of dietary linoleic fatty acid. His subsequent research and publications highlighted numerous randomized clinical trials exploring medical therapies in the treatment of hypertension in our Black population, producing the sentinel studies that defined the thiazide diuretics as first line therapies and the standard of care in Black populations. In his later year, his interest focused more on the molecular genetics of cancer, in particular breast cancer; he was an integral part of the team that identified the high prevalence of BRACA mutations in the Bahamian population.

His pioneering medical research and contributions to advancing health care in the Bahamas has not gone unrecognized. He received the Commonwealth of the Bahamas, Silver Jubilee Award for outstanding contribution to the National Development in Medicine contributions, the PAHO Outstanding Service Award and he is recognized by the Medical Association of the Bahamas as “Physician Emeritus”.

A past president of the New Providence Human Rights Association, it is notable that he has received the Papal Honor from the Vatican for significant contribution to the country and Catholic community.



THURSDAY SEPTEMBER 18TH, 2014

HYPERTENSION RESEARCH IN THE BAHAMAS – A GLOBAL LEADER IN THE 20TH CENTURY. *J. LUNN, BAHAMAS COMPREHENSIVE CANCER CENTRE, NASSAU BAHAMAS*

This research was conducted first to examine the causes of the low frequency of ischemic heart disease, in black Bahamians as there was an extraordinary high incidence of hypertension in this population. Hypertension is known to be a risk factor for coronary heart artery disease in the United States and Europe.

The first research established that coronary artery disease at post mortem was extremely low in patients dying of hypertension. The next paper showed that the depot fat in Bahamian patients had a high content of linoleic acid which had been shown to protect against the development of coronary artery disease. This suggests that the Bahamian diet at that time was contributing to this.

The next series of papers were to compare the effects of Thiazide diuretics which were known to be extremely effective in black patients with hypertension with other new drugs that were coming on the market. These papers showed that in black patients in the Bahamas Hydrochlorothiazide was more effective than ace inhibitors, beta blockers and to a lesser extent calcium channel blockers. There was no difference between Thiazide diuretics and loop diuretics. And the response was the same to different potassium sparing diuretics

In conclusion the recommendations are that Thiazide diuretics should be first line therapy in uncomplicated hypertension in black patients. Recommendations for first line therapy for hypertension in the Bahamas should be based on local research and not on the recommendations of other countries like the United Kingdom, Europe, and the United States, whose recommendations differ remarkably.

EARLY LIFE DETERMINANTS OF HYPERTENSION: OPPORTUNITIES FOR PRIMARY AND PRIMORDIAL PREVENTION.

T. S. FERGUSON. EPIDEMIOLOGY RESEARCH UNIT, TROPICAL MEDICINE RESEARCH INSTITUTE, THE UNIVERSITY OF THE WEST INDIES, KINGSTON, JAMAICA

High blood pressure is now the greatest single risk factor for disease globally, accounting for some nine million deaths and 7% of disability adjusted life years in 2010. Studies have shown that blood pressure in childhood tracks into adult life, so that levels in the upper end of the blood pressure distribution in childhood, or adolescence, predict the development of hypertension in adulthood. Over the last two decades a large body of research has documented a relationship between early life factors and the development of chronic diseases, including hypertension, in later life. A number of studies from Jamaica have explored these relationships and have found that low birth weight and small placental size are associated with higher blood pressure in children and young adults. Additionally some studies have also found a relationship between poorer maternal socioeconomic position and higher blood pressure. This body of research suggest that opportunities for prevention of hypertension may begin as early as in the intrauterine period, and even in the preconception period through measures targeting improved socioeconomic circumstances and nutrition among women of child bearing age. Further research exploring the mechanism involved and potential intervention strategies will prove illuminating.

THE PREVALENCE OF RAISED BLOOD PRESSURE AND SELF-REPORTED HYPERTENSION IN THE BAHAMAS: FINDINGS FROM THE STEPS SURVEY, 2012. *D. BRENNEN., N. BRATHWAITE, C. DELEVEAUX. MINISTRY OF HEALTH, HEALTH STATISTICS AND RESEARCH UNIT*

Objectives: To determine the prevalence of raised blood pressure and hypertension in the Bahamas.

Design and Methods: Findings were used from the 2012 Bahamas STEPS survey, a population-based stratified multi-stage cluster sample of adults 25 to 64 years. To measure self-reported hypertension, respondents were asked whether they were told by a doctor or health worker that they had raised blood pressure or hypertension. Blood pressure measurements were also taken on a sub-sample of respondents to determine raised blood pressure.

Results: Among all respondents (n=1632), 26.6% were told that they had hypertension. 6.8% were diagnosed by a health worker before the past 12 months with raised blood pressure or hypertension (95% CI 4.2, 9.3; 5.7% males, 7.8% females) and 19.8% were diagnosed within the past 12 months (CI 14.6, 25.1; 16.5% males, 23.2% females). Of those measured by interviewers the mean systolic blood pressure for this group, along with those currently on medication for raised blood

pressure was 127.4 (CI 122.3, 132.6; 129.3 males, 125.6 females). The mean diastolic pressure was 81.6 (CI 80.1, 83.1; 82.7 males, 80.5 females). Further, of this combined group, 34% had raised blood pressure or were currently on medication for raised blood pressure (CI 29.2, 39.5; 35.9% males, 32.8% females).

The percentage of persons with raised blood pressure and NOT currently on medication was 23.9% (CI 16.5, 31.4; 28.3% males, 19.4% females).

Conclusion: It appears that approximately one out of three adults in the Bahamas have raised blood pressure or hypertension. Further, a sizeable proportion may have raised blood pressure/hypertension and have never been measured by a health practitioner. More detailed analyses by risk factors and demographics are warranted. Ongoing interventions and screenings by government and non-government agencies should be continued, with more targeted monitoring and education for persons at-risk.

HYPERTENSION IN SPECIAL POPULATIONS—BURDEN AND RISKS. A. SAMUELS FACULTY OF MEDICAL SCIENCES, UWI, CAVE HILL

Background: Hypertension is responsible for 7.1 million deaths, (13%) of deaths world-wide, with global prevalence of 26% in 2000, is projected to increase to 30% by 2025. The risk factors for hypertension are physical inactivity, excessive salt consumption, obesity, alcohol, and “stress”. Non-modifiable risk factors include a family history of hypertension, age and African ancestry.

Hypertension causes approximately 20% of all death in Caribbean countries, with hypertension prevalence in recent national studies among adults 25 – 64 years: Barbados 40.6% (2013); St Kitts, 34.5% (2007), Dominica 32.1% (2007); Trinidad & Tobago 26.3% (2011, 15 – 65 years).

Hypertension in Special Populations: UWI Cave Hill students: A cross-sectional prevalence study of 582/1400 randomly selected undergraduates 18 – 30 years old in 2013 determined the prevalence and predictors of hypertension and prehypertension among UWI undergraduates at Cave Hill campus. The response rate was 41.6%. The prevalence of hypertension was 6.9% overall, 9.3% among males vs. 3.6% among females (p-value=0.008). Prevalence of prehypertensive readings was 54.5% among males and 18.6% among females (p-value=0.000). Predictors were obesity and being sedentary among males and obesity and number of snacks/day among women. Interventions to promote physical activity and availability and promotion of healthier eating options are necessary.

Hypertension Control Among Patients With Diabetes in Baltimore MD: In diabetic adults, tight control of risk factors reduces complications. A non-concurrent, prospective study of 383 adults with diabetes in managed care revealed that only those with the worst blood pressure control (SBP \geq 160 mmHg) at baseline, showed any improvement over 2 years. This was primarily due to failure to intensify treatment, resulting in their systolic blood pressure being 22.2 mmHg (95% CI: 16.6, 27.9) than their counterparts with adequate intensification. Failure to intensify therapy leads to suboptimal control, even with adequate visits and monitoring. Interventions designed to promote appropriate intensification should enhance diabetes care in primary practice.

Hypertension Control Among Patients With Diabetes in a Small Caribbean Island: Control of BP among 190 patients with diabetes in a Caribbean Island in 2013 was examined as part of an MPH thesis. There was only sporadic measurement of blood pressure associated with 13.2% of this diabetic population having blood pressure controlled to target while 30.5% had blood pressure \geq 160/100 mmHg. Greater attention to measuring and controlling this important risk factor is needed.

FRIDAY SEPTEMBER 19TH, 2014

DETERMINANTS OF DISCLOSURE, KNOWLEDGE OF PARTNER SEROSTATUS, AND PATTERNS OF SEXUAL BEHAVIOR AMONG ADULT HIV-POSITIVE PATIENTS RECEIVING CLINICAL CARE IN NASSAU, BAHAMAS. C. BETHEL, H. ORLANDER, F. WILLIAMS, M.A. FRANKSON DEPARTMENT OF FAMILY MEDICINE

Objective: To determine patterns of self-disclosure of HIV status to sexual partner, knowledge of partner serostatus and risky sexual practices among PLWHA in light of statistically significant associations between these factors.

Design and Methods: A convenience sample of 407 PLWHA aged 18 to 72 years attending an Infectious Disease Specialty Clinic and the National HIV/AIDS Centre was surveyed. Demographics, self-disclosure of HIV status, knowledge of partner's serostatus and high risk sexual practices were measured. Descriptive statistics summarized the sociodemographic correlates, and associations between disclosure and knowledge of partner serostatus and high risk behaviours.

Results: Data on 407 respondents was used in this analysis (M225, F181). Their mean age at HIV diagnosis was 33.48 (\pm 11.53) years and the median length of time since diagnosis was 5 to 10 years. 72.0% reported having a current sexual partner. Condom non-use at last sex was reported by 14.3%, sex under the influence of alcohol, or other drugs by 13.3%, recent sex with multiple partners by 4.2%, recent transactional sex by 1.5% and sex with a commercial sex worker by 4.2%. Among persons reporting sexual activity in the past 6 months, 56.7% reported disclosure to their partner, 52.2% indicated knowing their partner's HIV status and 61.7% claimed consistent condom use. Proportions reporting self-disclosure was 92.6% for cohabiting partners, 63.5% for regular partners and 15% for casual partners. Awareness of partner's serostatus was reported by 84.1% for cohabiting partners, 61.2% for regular partners and 12.4% for casual partners. Consistent condom use was claimed by 78.6% with casual partners, 57.5% with regular partners and 43.4% with cohabiting partners. Males reported disclosure, knowledge of partner's serostatus, and consistent condom use in significantly greater proportions than females for participants in casual relationships ($p < .001$).

Among participants reporting disclosure to their current partner, 71.8% indicated also knowing their partner's serostatus, and 51.3% reported consistent condom use. In addition, 68.2% who reported knowing the serostatus of their current partner also reported consistent condom use.

Conclusions: Determinants of self-disclosure revealed in this study were:- male gender (casual partnerships), being in a cohabiting relationship, awareness of partner's HIV status. Determinants of awareness of partner serostatus were:- male gender (casual partnerships), and being in a cohabiting relationship. Significant improvements can be made in persons disclosing and becoming aware of their casual partner's serostatus and in consistency of condom use among cohabiting partners.

ACCEPTABILITY OF NEONATAL MALE CIRCUMCISION FOR HIV PREVENTION AMONG ADULTS IN THE BAHAMAS.

FERGUSON-DYER, FAMILY MEDICINE

Objectives: To assess the knowledge of Bahamian parents of the reduction of HIV and sexually transmitted diseases through male circumcision, as well as parents' desire to have their newborn son circumcised, and quantify any impact information on the procedure may have.

Design and Methods: A cross-sectional survey of parents enrolled by convenience sampling was carried out in public antenatal clinics and hospital antenatal and postnatal wards in Nassau, Bahamas.

Results: 314 mothers and 39 fathers participated including 87.8% Bahamians and 7.4% Haitians; 97.1% followed Christianity. 7.4% had at least one other circumcised male child and 25.7% of parents reported a circumcised father. Uncircumcised fathers were more likely to not have circumcised sons. 15.7% of participants were aware that male circumcision reduces a man's chance of getting HIV and 29.8% knew the procedure reduces sexually transmitted infections. 88.5% and 88.4% of Haitians were unaware of male circumcision reducing HIV and STI acquisition respectively. Having a circumcised father or other male child did not increase awareness but having higher levels of education did. 55.6% of parents initially opted for neonatal male circumcision with increased likelihood among circumcised fathers; Bahamian and Jamaican nationals; those of the Black race; those who completed secondary school education or higher; and those believing male circumcision reduces HIV and sexually transmitted disease rates in males. Improved health, appearance, and hygiene motivated participants more than cultural and religious relevance. Both mothers and fathers felt the decision on neonatal male circumcision should be made in unison. After reading the information pamphlet on neonatal male circumcision acceptance rose to 68.0%. Those where the father or other male child was uncircumcised were more likely to change their mind after being informed.

Conclusion: Neonatal male circumcision can be considered by parents in the Bahamas to reduce the HIV and sexually transmitted disease burden. Although largely unaware of the benefits, parents should be given the option of the procedure through unbiased discussion with health care providers.

CHLAMYDIA AND GONORRHEA INFECTION PREVALENCE AMONG PREGNANT TEENS, IS IT ASSOCIATED WITH PRETERM BIRTH? S. KNOWLES, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Introduction: There was an apparent rise in Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) infections and preterm birth among pregnant adolescents in The Bahamas. The increased maternal morbidity, the increased perinatal morbidity and mortality and the escalated cost of caring for this group was of grave concern in our publically funded obstetrical care program. We therefore sort to determine the prevalence of chlamydia and gonorrhoea among pregnant teenagers and its impact on preterm delivery.

Methods: After ethics committee approval a chart review was done between September 2012 and January 2013. We included all patients between the age of 13-18 years who attended the adolescent health care clinic or other government antenatal clinics. Those for whom antenatal records were not available were excluded, and this was also done for those with multiple gestation, antepartum haemorrhage or preterm birth due to an obstetric emergency. The patients' demographics, co-morbidities and antenatal data including GC and CT results were recorded. If positive stand treatments were offered and the client was re-tested in 3-4 weeks. The data were analyzed using the Statistical Package for the Social Sciences (IBM SPSS). Factors contributing to preterm labor in this population were also analysed.

Results: There were 195 clients involved. The mean ages was 17.36 (+ 1.39) years. None smoked cigarettes or had a chronic medical illness or antepartum hemorrhage during their pregnancy course. There mean gestational age at booking 18.06 (+ 7.44) weeks. In this study 82.9% had no PTL while 17.1% had. The mean gestational age at PTL was 34.13 ± 2.27) weeks. The prevalence of PPRM was 2.05 % and these ended in preterm labor. Chlamydia prevalence was 27.5 % and gonorrhoea was 3.2% There was a greater likelihood to be gonorrhoea positive if a participant was chlamydia positive (OR = 5.625, 95% CI: 1.00, 31.70). Logistic regression with gonorrhoea as a predictor for PTL showed a statistically significant relationship (OR = 5.500; 95% CI: 1.056, 28.644; p = 0.043). This relationship was not confounded by the covariate such as chlamydia infection status and age. Our study noted that adolescents who had more attendance to antenatal clinic were less likely to have preterm birth (p = <0.001). In this study bacterial vaginosis (BV) was found to be a statistically significantly independent risk factor for PTL (OR = 11.630; 95% CI: 2.742, 49.322; p = .001) Positive urine culture status was associated with occurrence of PTL; however this did not reach statistical significance.

Conclusions: The data suggest that preterm labor is a significant challenge among the adolescent population. Infection with GC and BV were independent significant factors associated with PTL. CT infection was not. UTI trended towards being a significance factor contribution to preterm labor in this group. These data need to be validated, a larger study. Early antenatal care with prompt treatment of STIs seems to be an effective intervention as clients with a higher numbers of antenatal visits were less likely to have preterm labor.

RESPONSE, MANAGEMENT & RECOMMENDATIONS: A. SAMUELS FACULTY OF MEDICAL SCIENCES UWI, CAVE HILL

The Caribbean has the highest prevalence of non-communicable diseases (NCDs) in the region of the Americas, and hypertension causes approximately 20% of all deaths. CARICOM Heads of Government issued the historic Port of Spain Declaration in 2007, "Uniting to Stop the Epidemic of Chronic NCDs" elevating NCD prevention and control. Their advocacy led to the United Nations High Level Meeting (UNHLM) on NCDs in 2011, and the WHO has now recommended 9 targets and 25 indicators to monitor progress. Hypertension control is an integral part of this response.

Recommendations: There is a significant problem with inaccurate blood pressure measurement evidenced by rounding of BP readings, with 70% BP readings ended in a "0" vs. expected 10 or 20%. The World Health Organization (WHO) recommends independently validated, accurate automated blood pressure measuring device which eliminates errors of interpretation, observer bias and terminal digit preference. It recommends 4 specific products as being accurate and validated. Cost effective approaches to controlling blood pressure in populations include: 1. Population-based strategies, both Healthy Lifestyle at the individual level and Creating Health Promoting environments. 2. Finding and treating high risk patients, by screening for undiagnosed disease and focused evidenced-based clinical interventions for those at high risk. 3. Secondary prevention to prevent complications. The WHO is promoting the Total Risk approach to CVD risk factors, because risk is multifactorial. The absolute CVD risk of any one risk factor is determined by the multiplicative effects (total risk) of the other concomitant risk factors. Therefore the intensity of the prevention strategy should be guided by level of absolute multifactorial or total risk.

Barriers to Controlling Hypertension. We compare the Organization of Health Care as it should be, with what it is. The

Chronic Care model is advanced as a method of organizing the health system to improve chronic care. There are a number of interventions shown to improve quality. Lifestyle Guidelines for both primary prevention and therapeutic intervention is given for alcohol use, obesity, sodium consumption and physical inactivity. In the Caribbean, a regional initiative for Creating Supportive Environments was mandated by the Heads of Government in their 2007 NCD Summit Declaration, declaring the second Saturday in September as Caribbean Wellness Day to promote Population Based Physical Activity. Examples of the celebrations in the Bahamas are given. An Educator Toolkit with resources for Hypertension Control and Sodium Reduction is provided.

THE PREVALENCE OF PULMONARY HYPERTENSION IN A BAHAMIAN POPULATION OF RENAL REPLACEMENT PATIENTS & OBSERVED CARDIAC MORBIDITY AND MORTALITY. J. P. HALL, D. DAMES, M. A. FRANKSON & DR. A. SAWYER.
DEPARTMENT OF MEDICINE, PMH

Objective: To determine the prevalence of Pulmonary Hypertension in a cohort of Bahamian dialysis patients as well as identifying cardiac morbidity and mortality in the observed cohort

Method: The study covered the period of 2009-2011. In the first phase consenting patients completed questionnaires inclusive of demographic, dialysis access, length of time on dialysis, history of admission for myocardial infarctions or heart failure, comorbid conditions (hypertension, diabetes, other conditions). In the second phase patients had echocardiography 24-hours post dialysis.

Results: The 220 persons received dialysis at The Princess Margaret Hospital and 106, 52.8% being female and 47.2% male, consented to participate. Of these, 96.2% had haemodialysis as the principal mode of dialysis. Diabetes Mellitus accounted for 44.3% ranking first as a common cause for dialysis while ranking second was 39.6% with essential hypertension. Pulmonary Hypertension (PH) was observed in 69.8%; mild PH-41%, moderate PH-15.1%, and severe PH-16.9%. Heart failure was evident in 12.3% and myocardial infarction represented 6.6%. Mortality among study participants was not directly related to myocardial infarction; seven (7) participants died. Findings did not differ statistically significantly by levels of the sociodemographic variables.

Conclusion: The frequency of pulmonary hypertension (69.8%) in this Bahamas-based cohort was higher when compared to other studies. Diabetes was identified as the main associated covariate with persons requiring dialysis.

THE PREVALENCE OF DEPRESSION AND THE QUALITY OF LIFE IN HEMODIALYSIS PATIENTS AND PATIENTS WITH CHRONIC MEDICAL ILLNESSES (CMI) IN THE BAHAMAS. D. ADDERLEY-SANDS

Background: Depression is projected to be the leading cause of the burden of disease by 2030. Symptoms of depression are commonly encountered in dialysis patients and patients with CMI, and can influence the quality of life of these individuals. Aim: To determine the prevalence of depression and the quality of life in patients receiving hemodialysis at the outpatient dialysis units at the Princess Margaret Hospital and the Kidney Centre in Grand Bahama, and patients with chronic medical illness attending the internal medicine clinics at the Princess Margaret Hospital and Rand Memorial Hospital, Grand Bahama respectively.

Methodology: This study used a cross sectional design with consecutive sampling. Data about sociodemographic characteristics, depression, and quality of life were collected using a sociodemographic questionnaire, the Beck Depression Inventory BDI-II, and the Short Form36 (SF 36) respectively. Data was analyzed using the Statistical Package for Social Services (SPSS).

Results: In this study 305 individuals (CMI: 106; Dialysis: 199) participated, 22 refused; 50.2% were males, 49.8% were female; mean age was 53.44 (± 14.44); 45.9% were married; and 32.8% were unemployed for more than 2 years. The prevalence of depression was 43.7% for dialysis patients and 36.8% for CMI patients. The age of patients was associated to marital status, occupational status, ethnicity, and educational level. The hemodialysis patients were shown to have a lower quality of life than CMI patients. Linear regression analysis found that eight quality of life items were statistically significant predictor factors of the Beck score for the CMI and dialysis groups, and accounted for 45.5% of the variance

Conclusion: These results do not necessarily show causality. However, they highlight to health professionals and policy makers the importance of evaluating CMI patients and dialysis patients for depression, identifying risk factors, and facilitating treatment when necessary.

THE COLOSCOPIC IMPRESSION-HISTOLOGY DISCONNECT IN THE DIAGNOSTIC VALIDATION OF PRE-INVASIVE

CERVICAL LESIONS AT THE PMH. S. SEALY, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Introduction: The Pap smear is a screening tool and all abnormal results needs to be further evaluated. Colposcopy with biopsy may used to triage these abnormal results. There may be discrepancies between the colposcopic impression and the histological diagnosis, which may result in under treatment or over treatment. The former may result in progression to cancer and the later may contribute to cervical incompetence. Quality assurance audits are an important part of a colposcopy unit. The study received ethical committee approval.

Methods: We performed a chart review of procedures colposcopic procedure done in 2012. We included all patients with abnormal smears who had complete colposcopy records and patient with dysplasia noted at colposcopy or biopsy. Patients with cervical cancer were excluded. Patient demographics, Reid colposcopy index, overall colposcopic impression and histology results were collected. The data was analyzed using IBM SPSS.

Results: There were 102 case included in the study. A resident rotating with the service performed the majority f the colposcopies. The mean age was 38.93 (+ 13.48) years . The most common cytological abnormality noted amongst the group was atypical squamous cells of undetermined significance ASC-US accounting for 47% of the referrals. Low- and high-grade squamous intraepithelial lesions were reported in 22.5% and 15.7% of the cytology results respectively The sensitivity of colposcopy for pre-invasive disease was 90%, and the sensitivity for negative disease was 16%. The positive predictive value of colposcopy was calculated to be 53% in this study. The investigator also noted a weak but statistically significant correlation between colposcopic impression and histopathology results ($r_{Sp} = 0.213$, $p = 0.031$).

Conclusion: The results of our study show that colposcopy is a highly sensitive indicator for the detection of precancerous lesions of the cervix (90%), however the specificity is low (16%). The researcher discovered a weak correlation between colposcopic impression and histopathology results . Ongoing training of residents in colposcopy may be needed to improve results.

SLEEP & HYPERTENSION W. CAMPBELL, DEPARTMENT OF SURGERY PMH

We spend about a third of our lives in sleep, that period of so-called 'cortical de-afferentiation', when the upper brain is switched off from the bombarding, fast impulses of the mid-brain, lower brain and periphery, enabling it to revel in its own very slow, restorative waves.

Laboratory and epidemiologic evidence is presented to show that some of the prevalent disorders of the sleep period, such as sleep apnoea, short sleep and circadian dysrhythmias of blood pressure play an aetiologic role in the genesis of hypertension. Further evidence is displayed to show that amongst uncontrolled, drug-resistant hypertension, [about 50% of those being treated], this conglomerate of sleep disorders may further account for up to 80% of the secondary causes.

Evidence for the role of nocturnal nasal continuous positive airway pressure and nocturnal medication dosing in this latter grouping is displayed.

A short series of one hundred and twenty locally diagnosed sleep apnoea cases, using clinical, anthropometric and Home Sleep Study devices, is presented as a clarion call for huge need to initiate further indigenous research into the vast, costly, regional Public Health burden pertaining to, not only SLEEP & HYPERTENSION, but also SLEEP & THE CHRONIC NON-COMMUNICABLE DISORDERS, in general.

VAGINAL BLEEDING IN EARLY PREGNANCY: NASSAU'S EMERGENCY ROOM EXPERIENCE. DR. ALPHEUS ALLICK DEPARTMENT OF EMERGENCY MEDICINE

Objectives: To compare women with spontaneous versus induced abortions with respect to their socioeconomic and demographic factors, emergency management and immediate outcomes in the emergency room setting.

Methods: A cross-sectional study was carried out over a nine month period in the emergency department of the main public hospital in Nassau, Bahamas. Women with vaginal bleeding in early pregnancy were administered a face-to-face survey instrument, and clinical proformas were filled by the managing physician. The differences between the abovementioned groups were statistically analysed.

Results: 176 interviews and 256 proformas were obtained, and a 12.5% induced abortion rate was noted. These women

were younger ($p=0.002$), unemployed ($p=0.011$), with less pregnancies, less living children, and a previous history of induced abortion ($p=0.003$). There were more unplanned pregnancies ($p=0.020$), and they had little awareness of long-term contraceptives. Induced abortion was associated with an open cervix ($p=0.021$), more bleeding on physical examination ($p=0.021$), and an increased incidence of sepsis ($p=0.021$), a greater need for transfusion ($p=0.028$) intravenous antibiotics ($p<0.001$) and further blood investigations. Admission rate was greater among induced abortions, but did not reach statistical significance ($p=0.064$)

Conclusion: This study demonstrated a strong correlation between specific socioeconomic and demographic factors and induced abortions. There was also demonstrated an increased burden on emergency department services, and immediate complications among these patients. These results indicate the need for further study to assess the dynamics of induced abortions, and present valuable information toward educational and preventative social measures.

THE 30-MINUTE DECISION TO INCISION RULE: THE PMH EXPERIENCE. DR SIMONE SEALY, DEPARTMENT OF OBSTETRICS & GYNECOLOGY

Introduction: The cesarean section rate in the Bahamas has peaked at 24.9% while in perinatal mortality rate has remained stable. Worldwide the cesarean delivery rate is approximately 15% with the highest rates in developed counties, Latin American and the Caribbean. ACOG recommends that emergency cesarean deliveries should be accomplished in thirty minutes. Data is lacking concerning the outcomes at our institution therefore we performed this audit to determine compliance with this recommendation and to determine whether this influences our perinatal outcomes.

Methods: During September 2011 and January 2012 we perspective collected data from all patients undergoing emergency cesarean delivery public ward at the Princess Margaret Hospital(PMH). We included patients with singleton gestations between 35-40 weeks complicated by one of the following: cord prolapsed, abruption, previa with hemorrhage and non-reassuring fetal rate pattern. We recorded maternal demographics antenatal, peripartun parameters neonatal parameters on standard formed developed for this study. IBM-SPSS was used for data analysis. We used Pearson X2 or Fisher exact tests to determine the significance of trends. The study was approved by the ethic committee.

Results: There were 393 deliveries during the study period and 112 that meet the study criteria. There were two groups consisting of those who delivered in < 30 and who delivered in > 30 minutes. There were no statistically significant differences between the groups with respect to age parity, nationality and whether or not they received antenatal care.

The median decision to incision interval was 45mins, 22.1% of cases were commenced in less than 30 minutes. Non reassuring fetal status was the most common reason for delivery in 77.7%, followed by abruption and failed vacuum. Reason for delays included , no available theater, nursing and anesthesia staff shortage. Even though there were no statistically significant differences between the two groups with respect to <7 APGARS, resuscitation methods, and NICU/SCBU admission, there were notable clinically significant differences. No case delivered < 30 minutes munities had APGARS < 7 while 2.5% did and there were no still births in the first group but there were 2.5% in the > 30 minutes group.

Conclusions/Recommendations: The factors influencing incision times are multifactorial. There were more clinically significant advise outcomes in the >30 minute group, however this was not statistically significant. Further study with a larger sample size is needed.

COLORECTAL CANCER IN THE BAHAMIAN POPULATION. A. CHANDRA, M. COOPER. DEPARTMENT OF INTERNAL MEDICINE PMH

Purpose: The annual incidence of colorectal cancer (CRC) in the Commonwealth of the Bahamas is unknown; In addition, little is known about the epidemiology of CRC in the region. The aim of this study is to determine the annual incidence of CRC in the Bahamas and the stage at presentation.

Methods: Histology reports for all colon and rectal cancers identified in the Bahamas between January 1st, 2012 and December 31st, 2013 were retrieved by diagnostic codes using an electronic database. All ambulatory endoscopy centers provided reports for all biopsies performed during the period. Demographics and staging information was reported for each patient.

Results: One Hundred and twenty five cases of CRC were identified in the Bahamas during the two-year study period. This

corresponds to a national 2-year incidence of approximately 18.6 per 100,000 in the Bahamas. Forty-four tumors were identified during colonoscopy and 81 at laparoscopy or laparotomy. Procedure or operative reports were not available for 4 cases. Fifty-three percent (n=69) were male (ratio of 1>25:1). Ages ranged from 28 to 83 years (mean 65 years). Thirty-eight (29%) of tumors were identified in the proximal colon, 47 (36%) in the distal colon, and 22 (17%) in the rectum. The location of 22 neoplasms could not be confirmed. One hundred and three (80%) of the tumors were well-differentiated adenocarcinomas. Staging was available for 78 patients. Fifty-four cases (41%) were well- or moderately differentiated adenocarcinomas. Staging was available for 78 patients. Fifty-four cases (41%) were identified as advanced neoplasms with regional or distant metastatic spread (TNM stages 3 and 4). Patients under the age of 50 years represented 18% of new colon cancers diagnosed during the period. Although staging could not be confirmed in 6 patients, at least 50% of patients under age 50 years presented with stage 3 disease or higher.

Conclusion. Colon cancer is currently the third most common malignancy in the Bahamas following breast and prostate, and is a significant cause of morbidity and mortality. The calculated annual incidence rate is similar to other countries in the region. Patients commonly present in the sixth decade with advanced disease. Further studies are needed to determine the prevalence of colorectal cancer in this region and to identify potential risk factors that may be unique to this population. A significant percentage of people diagnosed with CRC during this period would have been missed by current colon cancer screening guidelines. Ongoing data collection is necessary to establish optimal screening strategies for the Bahamas.

INITIAL EXPERIENCE WITH CYTOREDUCTIVE SURGERY AND INTRAPERITONEAL CHEMOTHERAPY FOR PERITONEAL SURFACE MALIGNANCY. *T. HUMES, M.A. FRANKSON, W.P. FRANCIS, DEPARTMENT OF SURGERY, PMH NASSAU, BAHAMAS.*

Background: Cytoreductive Surgery (CRS) with heated intraperitoneal chemotherapy (HIPEC) is a treatment option with curative intent for selected patients with peritoneal carcinomatosis (PC). CRS and HIPEC have been implemented in the Bahamas by a single surgeon in 2010. The initial experience with this procedure was evaluated to assess the safety, feasibility and outcomes.

Design and Methods: A prospective database of patients treated with CRS and HIPEC was maintained since 2010. Patient demographics, performance status, resection status and peritoneal surface disease were classified according to primary site. Morbidity, 30-day mortality, and long-term survival of patients were analyzed.

Results: Between 2010 and 2014 seven patients underwent CRS and HIPEC. PC originated from colon carcinoma in four patients, rectal cancer in one patient and appendix cancer in two patients. Mean age was 42 (\pm 12) years, median peritoneal carcinoma index (PCI) was 13 (IQR: 4, 18), and mean operative time was 655. (\pm 146.9) minutes and median blood loss was 1300 (IQR: 400, 2000) cc. Sixty-six percent of patients developed a complication all of which were grade 3 or less. There was no 30-day mortality. The median length of stay was 14 (IQR: 10, 18) days. Overall, median survival was 20 months. Patients with PC from colorectal origin succeeded in remaining above the median survival mark.

Conclusion: CRS and HIPEC seems a safe procedure for PC in the Bahamas. Favorable long-term survival was achieved in highly selected patients with PC from colorectal origin.

SPONTANEOUS (HYPERTENSIVE) ICH IN THE BAHAMAS. *M. EKEDEDE, DEPARTMENT OF SURGERY, PMH*

Objective: The Primary objective of this study is to demonstrate the prevalence of Hypertensive ICH The Bahamas (using PMH & DH as a model). The Secondary objective is to compare the results of patients who have undergone Surgical treatments with patients who have used Non-surgical treatments. Note: opinions vary regarding the indications for neurosurgical treatment for SICH.

Design & Methods: Data from the study period was obtained from the Accident & Emergency Dept. of Princess Margaret Hospital, the Medical Records of Princess Margaret Hospital and Doctors Hospital and also from Dr. Magnus Ekedede's Neurosurgical Log Books. This was a 12 year study (May 1997 to May 2008). A total of 553 patients were involved in the study. 369 patients were treated surgically and 184 were treated non-surgically. Surgical treatments included Decompressive craniotomies, ventriculostomy and ICP monitoring, craniotomy plus ventriculostomy plus ICP monitoring.

Results: Surgical treatment is more favorable when is 6 or more and ICH score \leq 2, when there is no CT sign of Uncal herniation and when it is subcortical. Surgical treatment is less favorable with massive hemorrhages and impending

herniations and ICH ≥ 4 . All of these patients have hypertension and a good number of them have risk factors like obesity, diabetes mellitus and hyperlipidemia. SICH is slightly more frequent in males than in females, the ratio is 1.3:1. Surgical patients have less hospital stay than Non-surgical patients (21 days vs. 35 days). The average mortality in 6 months is 32.5% of our study population (n=553). SICH is an illness, costly and devastating. The Surgical treatment is promising once handled promptly. Medical treatment still has a big role. Neuro-rehabilitation helps to improve outcome.

Conclusion: In The Bahamas, the mortality is at 32.5%. Parts of the brain involved are the basal ganglia, subcortical white matter, cerebellum and brain stem. Non-compliance is a major contributing factor of ICH. SICH is always associated with obesity, hyperlipidemia and sometimes diabetes mellitus. Hypertensive ICH is the leading cause of SICH in our society. Most patients die once ICH score is ≥ 4 . Surgical treatment has helped to decrease mortality and hospital stay in our series. A good number of young people suffer from this disease and male to female ration is 1.3:1. As expected 87.3% of all the patients were admitted at PMH and only 12.7% came from DH. The only reason for this is that DH is a private hospital. Patients with a higher GCS had much more favorable outcome. A good number of patients fell under fair outcome n=163 = 29.5% which explains why unfavorable outcome was high. Frankly speaking a fair outcome is not a bad outcome. A vigorous acute rehabilitation facility for stoke patients is highly recommended.

Recommendation: In view of the fact that The Bahamas receives a fair amount of these patients each year it may be helpful and useful that: (i) a similar study should be done in the rest of the Caribbean countries to determine whether it is feasible for The Bahamas to be recognized as a referral/study centre for stroke, (ii) to further investigate the advantage of surgical treatment in these patients at the early stage and (iii) to highlight the overall incidence of spontaneous hypertensive ICH in the rest of the Caribbean countries.

ENDOVENOUS LASER ABLATION THERAPY IN THE BAHAMAS: IMMEDIATE AND SHORT TERM RESULTS

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PURPOSE: To report on the immediate and short-term results of Endovenous Laser Ablation Therapy in the Bahamas. Methodology: Between September 2009 and January 2011, 42 Endovenous Laser Ablation Therapies (EVLAT) were performed in 29 patients with symptomatic varicose veins. The veins treated included the greater saphenous, small saphenous, accessory and perforator veins. In all cases, venous duplex scanning was performed. All treated veins were accessed percutaneously using imaging guidance. Biolitec® laser fibers were used in all cases.

RESULTS: There were 42 limbs in 29 patients. Females accounted for 89.7% (n=24) and males accounted for 10.3% (n=5). The mean age \pm SD was 53.83 ± 11.9 years. The mean BMI \pm SD was 29.35 ± 8.39 . Between gender this was significant in that the BMI for males was 48.82 and for females 28.06 (p= 0.011). The greater saphenous vein was treated in 97.6% of cases, the small saphenous vein in 19% of cases, accessory veins in 2.5% of cases and perforating veins in 40.5% of cases. Technical success was 95.24% and there were 2 technical failures (4.76%). At 30 days, 14.29% of patients were noted to have new reflux in previous non-refluxing veins. There were treated with sclerotherapy in the majority of cases.

CONCLUSION: EVLT is highly safe and effective in the Bahamian setting and these results are comparable to treatment results cited in the literature.

STRATEGIES FOR RECRUITMENT OF RELATIVES OF BRCA MUTATION CARRIERS TO A GENETIC TESTING PROGRAM IN THE BAHAMAS. M.I. TROTTIER, J. LUNN, R. BUTLER, D. CURLING, T. TURNQUEST, R ROYER, M.R. AKBARI, T. DONENBERG, J. HURLEY, S.A. NAROD. DEPARTMENT OF INTERNAL MEDICINE, DIVISION OF ONCOLOGY, PMH

The prevalence of BRCA1 and BRCA2 mutations among unselected breast cancer patients in the Bahamas is 23%. It is beneficial to advise relatives of mutation carriers that they are candidates for genetic testing. Women who test positive are then eligible for preventive interventions, such as oophorectomy. It is not clear how often relatives of women with a mutation in the Bahamas wish to undergo genetic testing for the family mutation. Furthermore, it is not clear how best to communicate this sensitive information to relatives in order to maximise patient compliance. We offered genetic testing to 202 first-degree relatives of 58 mutation carriers. Of 159 women who were contacted by the proband or other family member, only 14 made an appointment for genetic testing (9%). In contrast, among 32 relatives who were contacted directly by the genetic counsellor, 27 came for an appointment (84%). This study suggests that for recruitment of relatives in the Bahamas, direct contact by counsellor is preferable to using the proband as an intermediary.

TRANSTHORACIC ECHOCARDIOGRAPHIC IDENTIFICATION OF INTRACARDIAC DISEASE THAT PREDISPOSE TO

Background: There is significant controversy in determining the use of transthoracic echocardiography (TTE) in the assessment of newly diagnosed stroke or TIA. In the routine workup for new stroke/ TIA, patients admitted to Princess Margaret Hospital are routinely sent for transthoracic echocardiography testing to assess for cardiogenic source of embolism. It appears that intracardiac disease that predispose to cardio-embolic stroke is much lower than that described in other populations, however there have been no studies done in a Bahamian population. We aim to assess the identification of intracardiac disease that predispose to cardio-embolic stroke as evidenced by transthoracic echocardiography in patients at the Princess Margaret Hospital, Nassau Bahamas.

Methods: Echocardiographic reports with respective patient files were assessed in all patients who received a transthoracic echocardiogram in the workup for ischemic stroke/TIA at The Princess Margaret Hospital between January 2009-December 2012.

Results: The prevalence of TTE performed in new stroke/TIA patients was 39.4 per 1000. Of new stroke/TIA patients, 44.3% (82) were male and 55.7% (103) were female. The mean age of participants was 57.85 (\pm 14.41) years old. Of new stroke/TIA participants, 90.8% were Bahamians and 9.2% non- Bahamians. A thrombus was identified in 3.3% of new stroke patients. Left atrial Dilatation was found in 36.3%, wall motion abnormality in 6.4% and a cardiac mass in 1.1% of patients using transthoracic echocardiography. With regards to clinical findings, atrial fibrillation was found in 13.7% of new stroke/TIA patients, an identifiable cardiac murmur in 14.4%, a history of hypertension in 63.0%, history of diabetes mellitus in 63.0%, a history of cigarette smoking in 15.0% and a history of acute coronary syndrome in 7.7% of new stroke/ TIA patients who had TTE done.

Among participants statistically significant risk factors associated with thrombus detection by TTE included atrial fibrillation ($p < 0.001$), left atrial dilatation ($p = 0.043$), cardiac murmur ($p = 0.026$) and history of acute coronary syndrome ($p = 0.037$). When a multiple logistic model was attempted with the dependent variable (criterion) being the presence or absence of thrombus and the predictor variables being atrial fibrillation, cardiac murmur and acute coronary syndrome, the statistically significant model emerged as one with simply atrial fibrillation as the sole trustworthy predictor in this study. Conclusion: Transthoracic echocardiography has been used to identify a number of intracardiac diseases that predispose to cardio-embolic stroke. Our study is consistent with others in which there is a low percentage of thrombi detection in this select group. However, there is a higher association with thrombus detection when persons have atrial fibrillation, an identifiable cardiac murmur, a dilated left atrium and a history of acute coronary syndrome. Of all clinical variables, the presence of atrial fibrillation is the strongest associated with thrombus detection on TTE.

FACTORS INFLUENCING POOR ADHERENCE TO HYPOGLYCEMIC MEDICATIONS AND SELF-CARE AMONG TYPE 2 DIABETIC PATIENTS IN NASSAU, BAHAMAS. O. ABLACK, A. CHATLANI, M. A. FRANKSON, R. THURSTON. DEPARTMENT OF MEDICINE, PMH

Aim: To identify and assess factors that correlate with poor adherence to hypoglycemic medications and self-care among type 2 diabetic patients

Methods: A Cross-sectional observational study design was used. The 150 participants that took part in this research study were admitted to the Princess Margaret Hospital, with type 2 diabetes in 2014. It included Male and female patients 18 years or older. The patient had to be on at least one hypoglycaemic medication in order to be included in this study. A stratified random sampling was used to ensure that the sample represented the population.

Results: Mean age of participants in study was 59.56 (+ 13.43) yrs. Participants' mean height was 1.69 (+ 0.10) m, their mean weight was 88.93 (+ 22.46) kg and their mean waist circumference was 108.23 (+ 20.49) cm. The participants had a BMI mean of 31.48 (+ 8.33) kg/m².

The mean total number of drugs participants took per day was 4.77 (+ 2.72). Mean of years since diagnosis of T2DM was 5-10 (+ .87884) years. The mean years on current medications were 8.08 (+ 8.12) years. The mean number of changes to medications was 0.87(+ 1.82).

The mean previous Morisky's score was 1.80 (+ 1.35). The mean of current modified morisky score was 1.88 + 1.32. The

mean of current motivation score was 1.44 (+ 1.05). The mean of current knowledge score was 2 (+0 .94). The mean score on the PHQ9 depression-screening questionnaire was 3.91 (+ 4.21). Participants who reported experiencing little pleasure/loss of interest/none at all was 73.3% (110). Those reporting this for several days were 17.3% (26), more than half of the days 6% (9), and almost every day was 2.7% (4). Participants who reported feeling down, depressed or hopeless was 72% (108). 98% (147) reported not at all having suicidal thoughts or thoughts of hurting themselves. 64/150 patients had HbA1c drawn six months prior to this study or during the study period. The mean HbA1c was 8.9 (+ 2.5)%.

Conclusions: Using the Modified Morisky Score there is a medium level of adherence amongst diabetics in the Bahamas and it can be inferred that the current knowledge on diabetes and compliance is medium approaching low.

THE PREVALENCE OF DEPRESSION AND THE QUALITY OF LIFE IN HEMODIALYSIS PATIENTS AND PATIENTS WITH CHRONIC MEDICAL ILLNESSES (CMI) IN THE BAHAMAS. D. ADDERLEY-SANDS

Background: Depression is projected to be the leading cause of the burden of disease by 2030. Symptoms of depression are commonly encountered in dialysis patients and patients with CMI, and can influence the quality of life of these individuals. **Aim:** To determine the prevalence of depression and the quality of life in patients receiving hemodialysis at the outpatient dialysis units at the Princess Margaret Hospital and the Kidney Centre in Grand Bahama, and patients with chronic medical illness attending the internal medicine clinics at the Princess Margaret Hospital and Rand Memorial Hospital, Grand Bahama respectively

Methodology: This study used a cross sectional design with consecutive sampling. Data about sociodemographic characteristics, depression, and quality of life were collected using a sociodemographic questionnaire, the Beck Depression Inventory BDI-II, and the Short Form36 (SF 36) respectively. Data was analyzed using the Statistical Package for Social Services (SPSS).

Results: In this study 305 individuals (CMI: 106; Dialysis: 199) participated, 22 refused; 50.2% were males, 49.8% were female; mean age was 53.44 (± 14.44); 45.9% were married; and 32.8% were unemployed for more than 2 years. The prevalence of depression was 43.7% for dialysis patients and 36.8% for CMI patients. The age of patients was associated to marital status, occupational status, ethnicity, and educational level. The hemodialysis patients were shown to have a lower quality of life than CMI patients. Linear regression analysis found that eight quality of life items were statistically significant predictor factors of the Beck score for the CMI and dialysis groups, and accounted for 45.5% of the variance

Conclusion: These results do not necessarily show causality. However, they highlight to health professionals and policy makers the importance of evaluating CMI patients and dialysis patients for depression, identifying risk factors, and facilitating treatment when necessary.



The University of The West Indies

The UWI School of Clinical Medicine and Research, The Bahamas The program to teach undergraduate medical students in the Bahamas was established in 1997; at that time, it represented the first major expansion of the Faculty of Medicine UWI since the Eric Williams Complex in 1979. As in their two prior clinical teaching programs in Barbados and Trinidad, the Bahamian initiative was established in a Government owned public health facility, the Princess Margaret Hospital (PMH). This 450 bed facility is the Bahamas Government's flagship institution delivering the full spectrum of health care services: primary, secondary and tertiary.

The Bahamian medical initiative was launched as a clinical training program under the auspices of the St. Augustine campus, Trinidad. In 2007, on its 10 anniversary, the program was advanced to The School of Clinical Medicine and Research, The Bahamas (SCMR). In its first graduating year in 1999, 20% of the 14 medical graduates were Bahamian. By 2009, it had been transformed to a predominantly Bahamian-based program: of the 21 graduating students, 85% were Bahamian nationals. As of June 2012, there have been 247 medical students graduating successfully with their medical degrees, Bachelor of Medicine, Bachelor of Surgery (MB,BS) of which 77% are Bahamian nationals. In our postgraduate programs, 5 have graduated with a Doctors of Medicine (OM) in Internal Medicine, 4 in Psychiatry, 5 with a OM in Obstetrics and Gynecology, 1 in General Surgery, 3 OM in Family Medicine and 17 with both the Masters Degree and Diploma in Family Medicine.

As September 2012 academic year, there were 56 undergraduate and 60 post graduate students registered. The undergraduate students enter the SCMR program for the final two years of their medical curriculum. The current postgraduate programs are offered in 7 medical specialty areas: Family Medicine, Internal Medicine, General Surgery, Pediatrics, Obstetrics and Gynecology, Psychiatry and Accident and Emergency. The academic faculty is comprised of 6 full time lecturers, 17 Clinical tutors and 23 Honorary Associated lecturers. Dr. Robin Roberts was appointed as the Director of the SCMR in November 2009.

The motive for establishing a clinical training program in the Bahamas was prefaced in the strategic plan of the PMH's Office of CME, to transform the PMH from a service based facility to an academic one. The rationale: medical and surgical care delivered in an academic institution provides a higher quality of care and better patient outcomes than a nonteaching one. With the increasing numbers of returning Bahamian physicians - specialty trained, certified and practicing at the PMH, it augurs well for patient care to inculcate the university's mission of patient care, teaching and research.



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