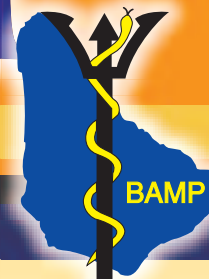


# BAMP

## BULLETIN

**BARBADOS ASSOCIATION OF MEDICAL PRACTITIONERS BULLETIN**

**No 173 April/May 2011**



### **Editorial**

Drug Formulary reform  
Medical professionalism and social responsibility  
Medical Registration Act

### **Commentary**

BAMP & Junior doctors  
Things you didn't know about fat

### **Clinical Articles**

School screening for scoliosis in Barbados  
The ineffable issue of physician burn out

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UWIMAA Conference papers  
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What lies beneath

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Of stars and whistling frogs

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Photo and Artist's Statement

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Psychosocial Issues





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## Notes From The Editor

This second issue of the new Bulletin is as rich as the first, and it has been a joy receiving the range of articles submitted from both our seasoned writers and “new blood”.

Original articles are being peer reviewed, which reassures both the Editorial Committee and the authors of highest quality, as positive suggestions for improvement, where appropriate, have been part of the process.

Editorials and Commentary articles will continue to be a major focus of the Bulletin, as the Association attempts to play a significant role in the expression of views, ideas and policies for improving health care. The invited article on the Barbados National Drug Formulary, by Dr. Colette George, Chairman of the Formulary Committee, is an excellent summary of the long awaited rationalisation of our formulary process, finally achieved because of the imperatives of cost containment to spread the health dollar further. As Dr. George points out, it is not cast in concrete, but is a flexible document, and under continuous review, but it is a start, in response to urgent need. And the theme of stress and junior doctor overload in the last issue has been followed with Dr. Cindy Flower's article on physician burn out. (A complementary, short article which is very much related but aimed at the general public, is the column “Be happy, beat stress”, by this Editor in the Sunday Advocate of May 15th.)

A solid research paper from Dr. Jones and colleagues on scoliosis is followed by a review of the papers presented from Barbados at the recent CHRC Scientific Conference in Guyana, while one particularly important paper, on HIV testing, is presented in the form of the full abstract.

We are pleased to present a second prize winning History of Medicine essay, “History of Medicine in Trinidad and Tobago”, by Dr. Shabbier St. John, joint prize winner with Dr. Cheriann Catwell in the Class of 2010. Dr. Catwell's essay on the cholera epidemic of 1854 in the January / February issue earned very favourable comment from many readers.

We call your attention in this issue to the highly instructive case report “What lies beneath”, by Dr. Maisha Emmanuel, and encourage the sharing of similarly valuable clinical vignettes. And we note with pleasure the donation by Dr. and Mrs. Cecil Cyrus of the Cecil Cyrus Museum in St. Vincent to the UWI Faculty of Medical Sciences (See Page 22). This unique and valuable gift – for teaching and public education – will need funding to conserve, pack, ship and install, and members and UWI alumni are invited to share in this exciting project, in a similarly generous way, for the benefit of our future colleagues and all health professionals.

We reproduce from an old Caribbean Medical Journal (the flagship of the Medical Association of Trinidad and Tobago) a biography of the great medical innovator of Barbados, Dr. Harry Bayley, of whom most Barbadians today know little or have never heard at all. Dr. Bayley initiated testing for venereal disease in Barbados in the 1930s, gave telling testimony to the post-1937 riots Dean Commission, and founded the Diagnostic Clinic, the foremost private hospital in the region in the 1940s and 50s. His outstanding diagnostic skills are commemorated in the Dr. Harry and Dr. Anne Bayley Memorial Prize for the best student in the Clinical part of the Final Medicine exam at the Cave Hill Campus.

Finally this issue is laced with art and humour. We are proud to have two magnificent, inspiring landscapes of the Scotland district from veteran fine art photographer (and obstetrician / gynaecologist) Dr. Raymond Maughan, and we will continue to feature the work of our creative colleagues in every issue ... so photographers out there, submit your work!

The Bulletin is being published quarterly, in hard copy, by electronic distribution to members and stakeholders, and on the BAMP website; the next issue will therefore be the July/ August issue. We invite your articles - commentary, case reports, research, CME, personal views, letters to the editor, *et cetera*. And please practise “best practice” - share, consult, review and re-write, to ensure the highest standards for a quality journal.





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## Drug Formulary Reform

The Barbados National Drug Formulary Committee must be congratulated on “biting the bullet” and bringing the rational, WHO recommended approach to drug selection for the National Drug Formulary.

The Special Article “Formulary Reform”, by Dr. Colette George, Chairman of the National Drug Formulary Committee, gives a clear and logical account of the explosion of drug expenditures by government and the rationale for a more rational approach! Our reformed Formulary is still more liberal or generous than the WHO Model List recommends, but it is a start to a much more cost effective approach to the use of drugs (medicines).

The WHO Model Lists of Essential Medicines has been updated every two years since it was first published in 1977. The current version, the 16th list, dates from March 2009 (with a supplementary edition in March 2010). It is significantly expanded compared with the first list of some 220 items almost 35 years ago, but it continues to be based on a cost-effective approach to provision of drugs.

Dr. George’s paper summarises the principles and guidelines for drug selection set out by the WHO, but perhaps two of the most important principles are:

1. Once efficacy and safety are established medicines should be compared based on cost of treatment, and
2. As many as 70% of the pharmaceuticals on the world market represent duplicates or non essential products, known as “Me too medicines”. These often differ only slightly from a prototype medicine and offer no therapeutic advantage but are often far more costly.

Application of these principles in drug selection for a national formulary can produce enormous savings, and WHO and PAHO have laboured mightily over three decades to get this message across. The first Barbados National Drug Formulary in 1980 / 81 came closest to the WHO Model list, but with almost 50 % more items,

and not including some of the drugs for infectious diseases that are rare in these parts. But the enormous proliferation of “Me too” drugs has driven up costs horrendously. No physician needs 20 plus antiinflammator drugs to choose from - perhaps by sticking a pin or based on the powers of persuasion of the newest pharmaceutical rep - nor to have a choice of every calcium channel blocker or every ACE inhibitor on the market. Even the hypertension specialist can’t remember the subtle differences in half life, metabolic route or dose range, and most physicians prescribe from a very limited “palette” anyway. In studies in the UK the average was just over 100 for family practitioners, while in the local polyclinics it was just over 40.

An accurate dictum is that for most new drugs, a 5 or 10% improvement in efficacy or side effects will probably cost 50 or 100 % more, which is simply not cost effective.

## Medical Professionalism and Social Responsibility

In his farewell address as president of the Association of American Medical Colleges, Jordan Cohen, MD, made this statement: “The physician professional is defined not only by what he or she must know and do, but most importantly by a profound sense of what the physician must be”. BAMP’s Award of Appreciation to Dr. Abdon Dasilva at this year’s Banquet is a profound statement of the recognition of the social and professional imperatives of a doctor, demonstrated by Dr. DaSilva throughout his career. Unfortunately that level of inspired professional and social responsibility does not seem to extend across the profession, and everyone in our Association should examine his own conscience and join in a dialogue to bring the body of doctors back to the ideal of integrity and social conscience that we would all like to see.

It is worth reviewing some of the thoughts on professional and social responsibilities of world leaders in medicine, and of bodies reflecting on professionalism in medicine. The professionalism requirements of the Accreditation Council for Graduate Medical Education are summarised as follows:

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; **a responsiveness to the needs of patients and society that supersedes self-interest**; accountability to patients, society, and the profession; and a **commitment to excellence and on-going professional development**
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

The importance of responsiveness and accountability to the needs of the society and the profession and professional development are highlighted in the passage above.

According to McDonagh (2008), since our current medical profession is a derivation of the guilds and represents a covenant

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between society and the medical profession, that covenant applies both to society at large as well as in our individual patient care responsibilities.

“Medical professionalism is our behavior as physicians. It is how we conduct ourselves as physicians in our interactions with our patients and society ... It encompasses the values, behaviours, and attitudes inculcated into us by our medical school education and postgraduate training along with our daily experiences interacting with patients and fellow physicians.

Medical professionalism is a behaviour that defines our relationship as a physician to our individual patients and our relationship to society.” (McDonagh D, Medical Professionalism. January 2008 Northeast Florida Medicine Supplement )

Thus medical professionalism includes the role of teaching, leadership and management – of both the professional associations and the health services or relevant components of it. “When medical trainees were asked about what defines medical professionalism, over 60% agreed or strongly agreed with the proposition that, along with setting ethical standards, having responsibilities to patients, and setting standards of care, clinicians should be able to direct resource allocation. Doctors plainly see a role for themselves in shaping the system within which their work is conducted. But management responsibility is still insufficiently recognised by many doctors.

While medical practitioners should certainly influence resource use, they must also accept their share of accountability for how those resources are deployed and for the difficult choices that inevitably follow when resources are constrained.” (Doctors in Society – Medical Professionalism in a changing world. Report of a working party, Royal College of Physicians, 2005).

This Report of the Royal College of Physicians continued: “A common view presented to us was that leadership in medicine today is seriously failing. The profession is underselling itself. Too often, doctors are regarded as negative, defensive and self-serving. Doctors’ leaders have struggled to convey the positive attributes of the profession and the contributions that the profession makes to society. The fragmented professional structure of practice hampers efforts to engage constructively with the public and politicians, and even stifles communication among doctors themselves. If doctors wish to be active participants in shaping the landscape of health, and not simply passive responders to prevailing circumstances largely outside their influence, they need to create the best and most effective institutional framework for doing so.”

Similarly, there is a clear case for a major medical professional forum on health care needs in Barbados, and the BAMP should take the lead, starting with a Strategic Planning Exercise, in studying, debating and developing policies which should assist the government of the day in developing the best health care systems and services, HUMAN and other resources needed, ethical issues and public health needs, OUTSIDE of the usual apparent imperatives of political strategies. And as Sir Graeme Catto, former Chairman of the British Medical Council said in a similar context: “The most important thing is to make sure that the fragmentation ends, and where there is common ground we should be speaking with one voice.”

Which brings us back to the responsibility of “each and every Doctor” (read “Teacher” and “Leader”) to play his part. It cannot

be left to the task of the few, while the great majority focus only on their own clinical practice, in the interest only of patient and purse, and to the neglect of the common good. Fifty “died and true” doctors at an Annual General Meeting in 2011 must become 250 by 2012, if we are to be true to ourselves and the society that paid for our training.

## The Medical Profession Act (2010) 2011 - BAMP’s views

The Barbados Association of Medical Practitioners (BAMP) is very pleased that we have finally got the revised Medical Profession Act through parliament and that it will come into effect on June 1st 2011.

BAMP has been at the forefront of this new act for over 17 years and welcomes the effort to modernise the regulation of the discipline and monitoring of the practice of medicine in Barbados.

We are however, very concerned that certain areas where we see potential disadvantage to both doctors and the public appear not to have been taken into consideration by those charged with producing the new act, despite repeated protestations.

Let us look at a few areas of concern:

- (a) 3 months for medical reports
- (b) 3 lay persons on the medical council
- (c) complaints, confidentiality of members of council and penalties for breach
- (d) CME credits - certification and determination
- (e) The impaired physician and fitness for practice

### Three months for medical reports

A doctor has 3 months to produce a report on the request of a patient. It does not specify that the doctor must be paid for his work but goes on to list this as an offence if not completed. In public practice, there are many constraints and BAMP is concerned about missing notes at the QEH and polyclinics, and lack of secretarial support.

***BAMP recommends that the three month period should start on receipt of payment for the report in private practice and in public practice on receipt of the notes by the doctor.***

### Three lay persons on the Medical Council

We now have 3 BAMP representatives on the 12 man council, a REDUCTION from 4 to 3, and 3 lay persons, 1 of whom is a lawyer.

BAMP recommended that a lawyer should be on the medical council but sees no benefit to having 2 additional lay persons on the Medical Council. Additionally, they equal the number of BAMP representatives and one wonders why. Much time will be lost explaining medical situations and terminology. If a second lay member is indeed justified, at least it should be a member of another health profession, e.g. a physiotherapist, psychologist, or medical ethicist. How can an ordinary member of the public determine issues of medical licensure, credentialing, etc.?

### Complaints, confidentiality of members of council and penalties for breach



BAMP recommends that all complaints should come as sworn affidavits in an effort to prevent frivolous complaints and that there should be a signed confidentiality agreement for all involved in the proceedings. BAMP strongly recommends that there should be penalties for breaching that confidentiality. This should include council members and administrative staff, and the same penalty mentioned on page 42, # 45 should be applied to those who breach confidentiality (that is a fee up to \$25,000.00).

#### CME credits - certification and determination

BAMP's view is that CME credentialing, recertification methodology, and certification of CME must be made clear by the council. It should be harmonized with the business trade and professionals act. The time period to obtain CME, what counts as CME, who certifies the CME (checks source, verifies

## EDITORIAL . . . cont'd

number of credits, verifies certificate produced by the doctor, keeps running check of CME credits submitted, time value, etc, what happens if the requirements are not met, and how this can be rectified ) need to be made crystal clear and the physicians need to be duly informed in a timely manner.

#### The impaired physician and fitness for practice

BAMP seeks an unambiguous definition of the impaired physician and a distinction must be made to distinguish and differentiate impairment from disability.

**BAMP's position:** If the general trend is towards an international norm then the international norm should prevail. There should be a provision for the voluntary submission of a doctor to treatment without prejudice and provision for rehabilitation of the doctor.

## BAMP and the junior doctors

Dr. Joseph Herbert, BMedSci (Hons), MBBS



In the short time that I have worked at the QEH it has been clear to me that there is a disconnect between BAMP and the junior doctors. While in theory one is supposed to be a subset of the other, in the last four years the Junior Doctors' Association (JDA) has aligned itself with the NUPW, and each party has embarked on industrial action that the other has failed to adequately support. As it stands now, the JDA

struggles to galvanise the juniors, with the large majority belonging to neither BAMP nor the NUPW.

It is no secret that many junior doctors see BAMP as mainly representing the interests of the consultants, and hence the break. The perception, rightly or wrongly, is that we have had to fight alone for salary increases and improvements in working conditions. Furthermore, many question BAMP's ability to function as a trade union when the organisation is run by busy professionals with little training in the area. Frankly speaking, all of these views are understandable, but what puzzles me is why more junior doctors do not see the need for an organization such as BAMP.

Firstly, it is only logical that the medical fraternity should have an association that can speak on its behalf. Our community is currently overrun by chronic non-communicable diseases, the government is beginning to overhaul the delivery of public health care and our main hospital is so poorly managed that it is often unable to stock basic supplies such as cotton wool, gauze and EDTA tubes. In an age where so many issues demand our comment, we cannot afford to be silent.

Conversely, BAMP plays a critical role in allowing other stakeholders in society to communicate with the members of the medical fraternity. Equally important is the ability to communicate

among ourselves. Will it take more poorly coordinated industrial action or even a major epidemic to demonstrate the importance of BAMP as our major channel of communication, especially for those of us in the private sector?

With continuing medical education (CME) now compulsory, we need BAMP more than ever as the main provider, along with the UWI Faculty of Medical Sciences, of local and pertinent CME opportunities. It follows that BAMP must take some responsibility for accrediting and regulating CME for local doctors, although this role is yet to be clearly defined.

Some may disagree, but I believe that we need a trade union that understands the peculiarities of our profession to negotiate the ongoing contractual disputes faced by doctors working in the public sector. In addition, through BAMP we have access to the Medical Protection Society which provides comprehensive indemnity and support for any medico-legal scenario.

I am not saying that BAMP is perfect; on the contrary, I think it needs to do much better in performing the roles previously outlined. This is not an indictment of those running BAMP – a small group of committed individuals have been doing their best with the few resources at their disposal and with little recognition or support from the great majority of the medical fraternity. The fact is that membership of BAMP is low and participation even worse! How can we expect BAMP to represent us properly if we continue to shun the organisation, and ignore our professional responsibilities to colleagues and society?

It is so easy to sit back and criticise (and I have often been guilty of this) but if BAMP is failing junior doctors, we should only blame our own apathy. So let us take this opportunity to create the change that we desire. If we all pitch in, I am confident that BAMP can become a vibrant and dynamic organisation that satisfies the needs of all doctors and our society at large. After all, we only reap what we sow.

## COMMENTARY

## Things you did not know about “fat”... and did not care to ask!

George D. Nicholson, Emeritus Professor of Medicine  
(University of the West Indies)



*Genesis 4.3 “In the course of time Cain brought to the LORD an offering of fruit of the ground, and Abel for his part brought of the firstlings of his flock, their fat portions. And the LORD had regard for Abel and his offerings, but for Cain and his offering he had no regard”.*

Historically, it has been relatively easy to equate “fat” with lack of “cleanliness” and for there to be prohibition, for

example, of the use of pork products for “religious” reasons. I have not followed that thought by probing the historical writings for documented association of illness with the pork tapeworm, but the thought does beg the question, as does the fact that the USDA does not require documentation of the absence of this infection in pork products. Almost everyone knows that “pork” should always be “well done”, though not necessarily “burned”!

As far as modern medicine and dietetics are concerned, it is important to appreciate that some “essential” vitamins, necessary for continued normal health, are “fat soluble” and are absorbed from dietary sources in the company of, and dissolved in, the consumed dietary fat. These essential vitamins are A, D, E, and K. Fortunately, in the Caribbean, deficiency of these vitamins rarely occurs in the absence of significant gastrointestinal disease.

Over the past 30 years or more, physicians and their patients have focused on the twin spectres of “bad cholesterol” and “heart disease”. It has been relatively easy to show the general public graphic TV images of “gunk” building up within blood vessels, and to associate these with eventual “clogging” of those vessels and the dreaded “Heart Attack”. This proved to be a very effective way to sell drugs that would lower “your bad cholesterol level”, and to convince folks (with limited success!) that they needed to know their “cholesterol number” at all times.

Gradually, however, physicians began to suspect that dietary restrictions in food selection, for example the avoidance of animal fats (butter and grandma’s “lard”) and their substitution by vegetable oils (soya, peanut, olive) and reduction of total caloric intake together with exercise might actually provide alternative mechanisms for the control of elevated cholesterol levels. Furthermore, the discussion points have expanded to include the multiple associations between excessive caloric intake, reduced exercise activity, consequential weight gain and obesity, and the resulting female infertility, cancer of the breast, development of diabetes mellitus, atherosclerosis, limb amputation, kidney failure, dialysis, and renal transplantation.

The major “problem” facing the Caribbean Medical Community in its efforts to control the current “Obesity Epidemic”, is that “fat” tastes good! Every Fast Food outlet knows that. But for reasons, not as yet revealed, it was the esteemed “offering” to God and he relished it in preference to fruits of the earth! However, what is at issue is the failure to understand that fat is not just passive “Fat”, but that It plays

an active role in how we determine that “enough” is, quite literally, “enough, already!” as my Jewish friends would say, and they should know!

It appears that our brains tell us that we have had enough to eat. Well, enough to make us feel “quite satisfied”. We then carefully position knife and fork in the socially accepted “formation” as a signal that we have indeed reached our level of “satiety”. But that signal does not indicate a disinterest in “perhaps a little dessert and a wee drop of your excellent brandy”. These “social” conventions can readily and easily override internal judgments and, in any event, it would indeed be “rude” to decline the offer of at least two helpings of your hostess’s “Special Pie”.

It would appear that our brains have a “satiety centre” that sends a signal that says, in effect, “Another forkful qualifies you for our “Pig of the Day competition”. But the accumulated fat in our bodies, once it has reached a critical level can suppress all warning signals that “enough is as good as a feast”.

The readily identifiable culprit is dormant within the collective mind of the Caribbean Family. It says, when challenged, that “all our family stay so”. And that is so true. They are merely giving credence to the “environmental” (rather than any genetic/hereditary) stimulus to what is really the end-product of a socially acceptable “behavior”, the placid acceptance of “Obesity” as the mode into which they have been “born”. In the Caribbean there is now a competition for ladies who are described as being “Big and Beautiful”. While one can readily celebrate their facial attractiveness where present, it is very hard to get past their obvious, severe health problem. Only clinically “obese” ladies qualify for entry to the competition.

Type 2 or “non - insulin - dependent diabetes” was, prior to the 1960’s, also referred to as “Diabetes of the Elderly”. Over the past 50 years we have seen the appearance of “Maturity Onset Diabetes in the Young” (MODY) in middle-aged patients young adults, and latterly the appearance of non-insulin-dependent diabetes in pre-teens and teen-agers. “Why is this so? What’s happening?” I asked. And the answer came back, paraphrasing CNN’s James Cargill, “It’s The Diet, Stupid”. But that’s just one side of the coin. The obverse says “Reduced physical activity”. How many schools provide inter-house, inter-form, and inter-school athletic competitions? All the year round? And if they do, what percentage of youngsters has the opportunity to engage in such activities? Which parents permit their little “couch potatoes” to become “couch melons”?

Throughout the Americas and the Caribbean there is an increasing prevalence of teenage diabetics. These youngsters are poorly adherent to regimens designed to control their medical condition and are prime candidates for the development of diabetic nephropathy and renal failure. A major contributor to teenage obesity and diabetes is the consumption of high caloric “soft drinks” that are of little nutritional benefit. Kids will drink what they are given, and what they are provided has little or no nutritional value. The purveyors of these “empty calories” cannot be controlled without governmental intervention by way of draconian taxation.

**SERVICE IS NOTHING BUT LOVE IN  
WORK CLOTHES.**

...Author Unknown



## School Screening for Scoliosis in Barbados

Dr. Jerome Jones, Dr. Prasad Chode, Dr. Maria Goddard,  
Mr. Randolph Carrington



### Introduction:

Scoliosis is a spinal deformity defined as having a Cobb angle (1) greater than 10 degrees. The incidence is approximately 1.5% in the general population with a female preponderance. Idiopathic scoliosis is the most common form. The complications of scoliosis can be classified as pulmonary, cardiac and musculoskeletal in nature and are

associated with a decrease in quality of life (2).

School screening programs designed to allow for early detection of scoliosis are currently mandatory in 20 states of the USA and in many other countries. It has been shown that an outcome of these screening programs is a reduction in the numbers of children needing surgical correction for scoliosis (3).

Non-operative treatment measures (bracing) are more likely to be effective if the spinal curvature is detected early. Criteria for orthopaedic referral from a screening program should be well defined. This would reduce the likelihood of a large number of children with minimal or no true spinal curvatures being unnecessarily referred. The screening procedures should be easy and quick to perform by persons of varying skill levels at a negligible cost.

The prevalence of scoliosis is highest in pre-adolescent females (4). Presented in this report are the results of a pilot program designed to identify children in Barbados with scoliosis or at risk for development of scoliosis. The purpose of this pilot program was to evaluate the efficacy of school screening for scoliosis in our primary schools and to identify those clinical findings that demonstrate significant correlation with x-ray evidence of scoliosis.

### Methods:

Formal authorization to implement the school screening at Hindsbury Primary school was obtained from the Ministry of Education. The program was discussed with the principal and then researchers met with the Parent Teachers Association. Signed parental consent was obtained from the parents of all participating students. The primary screeners were physiotherapists who were instructed in the examination procedures. An orthopaedic surgeon was present during the screening.

The screening format used was adapted from the protocol of the Georgia Department of Human Resources (5). The clinical parameters assessed and classified as "soft" findings were:

- shoulder elevation
- asymmetric scapula prominence
- unequal distance between the forearm and the side of the body
- pelvic obliquity

In addition, with the patient bent forward to identify any rib or para-lumbar prominence, a scoliometer (Figure 1) was used to measure the angle of trunk rotation (3) (ATR). Age, height and

weight of each student were recorded and body mass index (BMI) calculated.

**Figure 1**

*The student is bent forward. The scoliometer is being used by the examiner to measure the Angle of Trunk Rotation: the magnitude of the left para-thoracic elevation*



All students with positive findings were examined by an orthopaedic surgeon. Criteria for referral for x-ray evaluation were:

- thoracic or lumbar paraspin prominence  $\geq 5^\circ$  (ATR  $\geq 5$ )
- thoracic or lumbar paraspin prominence  $< 5^\circ$  PLUS any two soft findings
- no paraspin prominence but presence of three soft findings.

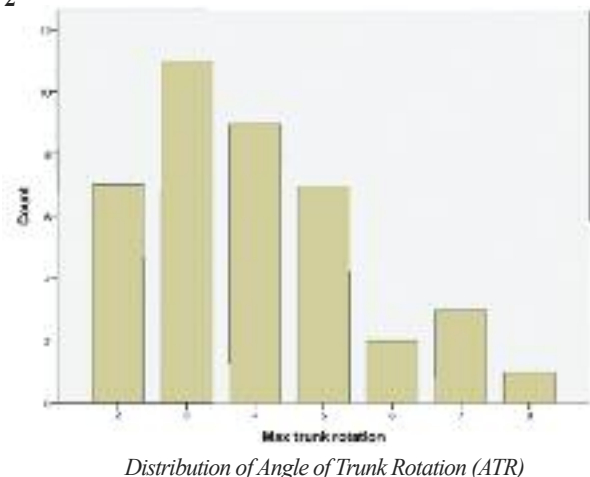
Data was recoded and analyzed on SPSS 11 software.

### Results:

Three hundred and twenty female students were enrolled at the Hindsbury Primary School in St. Michael during the screening period. Two hundred and fifty (78%) of these students received parental consent and were examined during three afternoon sessions. The mean age of the cohort was  $7.59 \pm 1.98$  years (range: 4-11 years). The mean BMI was  $17.47 \pm 4.20$  (range: 11.34 – 41.37).

Sixty-four of the students enrolled had one or more positive screening findings. Trunk rotation was present in forty children. The graph in (Figure 2) shows the distribution of ATR. Thirty-four students (13.6% of the cohort) met the criteria for referral for x-ray evaluation.

**Figure 2**



Thirteen students (5.2%) had thoracic or lumbar prominences (ATR) greater than or equal to five degrees. Twenty-one students (8.4%) had thoracic or lumbar prominences less than 5 degrees but with two soft findings. No child had absence of paraspinal prominence (ATR) in addition to a cluster of three soft findings. X-rays were performed on 27/34 students; seven were lost to follow-up but all children with  $ATR \geq 5^\circ$  had x-rays.

### X-rays findings

Only five children (5/27) had Cobb's angles  $\geq 10^\circ$  (true scoliosis). Thirteen (13/27) patients had no deformity on x-ray, nine (9/27) had Cobb's angles less than  $10^\circ$ . Of the thirteen children with  $ATR \geq 5^\circ$ , three had true scoliosis. Fourteen of the twenty-one patients with  $ATR < 5$  had x-rays; two of these had true scoliosis (**Table 1**).

**Table 1**

ATR	Cobb angle	Soft findings
$7^\circ$	$10^\circ$	1
$7^\circ$	$11^\circ$	2
$5^\circ$	$10^\circ$	3
$3^\circ$	$10^\circ$	2
$4^\circ$	$10^\circ$	2

*Correlation of scoliosis on x-rays with referral criteria*

### Discussion:

This study has demonstrated that a screening program for scoliosis in our primary schools can be organized and implemented efficiently with minimal costs. Two major objectives of this pilot study were: (1) to define for our population, findings on physical examination which should trigger referral to an orthopaedic surgeon; (2) design an examination protocol that would allow easy detection of clinical findings that fit those criteria.

Our criteria for x-ray referral were adapted from the recommendations of Bunnell (3): an angle of trunk rotation (ATR) greater than 5 degrees is considered a criterion for referral. ATR gives an indication of the magnitude of the axial rotation of the vertebrae at the level of the spinal curvature. This rotation results in a paraspinal elevation on the convex side of the curve. This is best visualised with the examiner viewing the patient from the back with the patient bending forward (**Figure 1**). Studies by Bunnell (3) and Huang (6) have shown that a  $5^\circ$  coliometer reading has a high sensitivity for curves of  $20^\circ$  and that using  $5^\circ$  increases the positive predictive value of detecting curves of  $>10^\circ$ .

This is a pilot study with some expected limitations. The index population was that of an all female primary school. Although males were not included, this study does give a representation of the preadolescent population which has the highest prevalence of scoliosis (4). Other factors limited our ability to perform robust statistical analysis to identify significant correlation between the suggested criteria for referral and scoliosis confirmed by x-ray. Seventy (22%) of the students at the school did not participate in the study. Seven of the thirty-four patients who met the criteria for x-ray

evaluation were lost to follow up. With progressive expansion of this study to a full screening program a larger number of children would be participating. This would increase the power of the study, allowing for the development of recommendations based on sound medical evidence. Use of concrete guidelines and a cadre of experienced screeners should mitigate against inter-observer variability in the screening process and minimize excess unnecessary referrals to the orthopaedic surgeon.

One important outcome of this study is that five children who were previously undiagnosed with scoliosis have been identified and appropriate follow-up and management arranged. Early identification of children who may be at risk for development of scoliosis would allow for monitoring and early intervention with non-operative measures (bracing) when indicated to limit progression of the spinal curvature.

### Recommendations:

For the next phase, this pilot study should be expanded to another two primary schools using the following criteria for referral to an orthopaedic surgeon and x-ray evaluation:

- thoracic or lumbar paraspinal prominence  $\geq 5$
- thoracic or lumbar paraspinal prominence  $<5^\circ$  PLUS any two soft findings

Follow-up of all children with scoliosis identified on x-ray should continue under the management of an orthopaedic surgeon.

After review and analysis of the data refined criteria will be developed and a full screening program can then be implemented in primary schools in Barbados.

### Acknowledgements

Special appreciation to:

- The Physical Therapy Department of the Queen Elizabeth Hospital.
- The staff and PTA of Hindsbury Primary School.

### References:

1. Cobb JR. The American Academy of Orthopedic Surgeons Instructional Course Lectures. Vol. 5. Ann Arbor, MI: Edwards; 1948.
2. McCarthy, RE; Prevention of Early complications of Scoliosis by early detection. Clinical Orthopaedics & Related Research. 222(): 73-78, September 1987
3. Bunnell, WP: An objective criterion for scoliosis screening. J Bone Joint Surg Am. 1984 Dec; 66 (9): 1381-7
4. Soucacos, PN, et al: School-screening for scoliosis. A prospective epidemiological study in northwestern and central Greece. J Bone Joint Surg Am. 1997 Oct; 79 (10): 1498-503
5. Georgia Department of Human Resources , Division of Public Health, Children's Healthcare of Atlanta & Georgia Association of School Nurses. 2004 Georgia School Health Resource Manual—Chapter 6. Huang, SC: Cut-off point of the Scoliometer in school scoliosis screening. Spine 1997 Sep 1;22 (17):1985-9

**ONLY A GOOD MAN CAN BE A  
GREAT PHYSICIAN**

Carl Nothnagel (Viennese professor of medicine)

## The ineffable issue of physician burnout

Dr. Cindy Flower, MB,BS (UWI), DM (UWI)



It's called the "silent anguish of the healers"(1) . . . a reflection of the shame and traditional taboo that often made this subject unspeakable. Burnout is a feeling of complete emotional exhaustion characterized by cynicism, depersonalization and perceived ineffectiveness. It occurs in the setting of an unbalanced life...mind, body and spirit.

There are far reaching consequences. For the physician it increases vulnerability to poor mental and physical health...chronic pain, depression fatigue, insomnia, hypertension and alcoholism and also increases risk of medical errors. It has been found that patients whose doctors are burnt-out express lower levels of satisfaction with medical care and are less apt to adhere to medical management. (2)

### *We're all running on fumes...*

This is typical in our environment where most doctors are overworked and overcommitted, with inadequate support and limited resources. Actually the seeds of burnout are sown in the very earliest stages of medical training and internship where working to fatigue and beyond is the norm and quite frankly an expectation. (3) The culture of overwork is however not the only reason for burnout. Certain personality traits exhibited by doctors also increase their risk. Those prone to doubt, feelings of guilt and an exaggerated sense of responsibility are apt to find themselves in a 'mid-career crisis'. (4)

There is a feeling of esteem that comes with putting service to others above self-care but it has become evident that this idealism must be balanced with realism and the old adage 'Physician, first do no harm. . . includes 'to one's self'.

### *Only the person wearing the shoes knows where it pinches...*

A troubling adverse effect of overwork and burnout is the associated deterioration in the working relationship among doctors and the cultivation of an attitude of blame.(5) Experts in conflict mediation say that the appropriate thing to do in these circumstances is to elevate the level of thinking, use your superior mind and 'go to the balcony' or a position of perspective.(6)

So before you get annoyed with your colleague understand that your perspective likely differs (superior mind engaged) and remember the reality of health care in Barbados...this tiny developing island with a small economy is striving to provide first world medicine free of cost to its population and though this is laudable it must be acknowledged that such an endeavour is going to be fraught with difficulties and imperfections (view from the balcony).

### *Some of us forgot to get married, others forgot to make the personal effort to stay married...*

One reason. . . 'the psychology of postponement' defined as habitual delay in attending to significant relationships and other sources of renewal until all the work is done and the next professional hurdle surmounted. (7)

Doctors have long been warned against compromising their role as spouse and parent, particularly in view of the fact that positive marital and family relationships are considered effective assets for success at work and overall wellness. In essence, palliative measures at home are not acceptable standard of care. (8)

### *The solution is simple...just not easy*

Once again, as I exit my neighbourhood to join a throng of other vehicles in the daily hassle of morning traffic jam I see one of my favourite colleagues briskly walking by...again. Fit and shirtless with a knowing smile and spouse alongside, he has likely figured it out himself but here it is. . .

The following 'induction and maintenance regimen (9) has been outlined for the treatment and more importantly prevention of physician burnout:-

- 1) Foster relationships
- 2) Attend to spirituality
- 3) Self-care. . .nutrition, exercise etc.
- 4) Foster meaning and control in the work environment
- 5) Develop an approach to life. . .what drives you, what sustains you, what are your values and boundaries
- 6) Have a mentor/ be a mentor

The empirical evidence in support of this is overwhelming and for individuals who pride themselves on rational thinking, this is simply the smart way to live.

### References

- 1) Neuwirth ZE. The silent anguish of the healer. Newsweek, Sept 13, 1999:79
- 2) Schorling J. Physician burnout: recognition, prevention, and management. Recent advances in medicine. Oct 28, 2004.
- 3) Herbert J. Reducing fatigue-induced errors in junior doctors. BAMP Bulletin 2011, 172: 5-6.
- 4) Spickard A Jr, Gabbe S, Christensen J. Mid-career burnout in Generalist and Specialist Physicians. JAMA 2002; 288: 1447-1450.
- 5) Azoulay E, Timsit JF, Soares M et al. Prevalence and factors of intensive care unit conflicts: the conflicus study. Am J Respir Crit Care Med 2009; 180:853-60.
- 6) William Ury. The walk from "no" to "yes". www.ted.com.
- 7) Gabbard GO, Menninger RW. The psychology of postponement in the medical marriage. JAMA 1989; 261:2378-81.
- 8) Kelly J, Kelly S. Medical marriages: promises and problems. JAMA 1997; 278:900.
- 9) Weiner EL, Swain GR, Wolf B et al. A qualitative study of physicians' own wellness-promotion practices. West J Med 2001;174:19-23.

THE NUMBER OF QUACKS IN A LOCALITY IS AN INDEX TO THE CHARACTER OF THE REGULAR MEDICAL PROFESSION IN THAT LOCALITY

Robert Morris (Surgeon)



## UWI Medical Alumni Reunion Abstracts, November 2010, Accra Beach Hotel

(Abstracts of two of the outstanding papers at the 10th UWIMAA Reunion conference. Renn Holness was Professor of Neurosurgery at Dalhousie University, Halifax, and John Stewart Professor of Neurology at McGill, Montreal)

### Rapid establishment of a neurosurgical service at the Cornwall Regional Hospital in Jamaica in 2010

Renn O. Holness, BSc, MBBS, FCCS

*Cornwall Regional Hospital, Montego Bay, Jamaica*

The Cornwall Regional Hospital was built in 1974 to serve the western region of Jamaica and over the years has evolved to provide coverage in almost all of the major specialties and sub-specialties with the exception of neurosurgery. In the past there have been two unsuccessful attempts at establishing a neurosurgical presence at the CRH and neurosurgical expertise has had to be sought in Kingston.

This presentation will demonstrate how a neurosurgical service was established in February 2010 as a part of the department of surgery and with the co-operation of all of the surgeons and the department of anesthesia. Despite lack of sufficient operating time as well as other constraints an average of 10 major operations per month have been performed. Many of these patients required emergency or acute surgery. Illustrative cases will be shown.

A similar number of inpatients not requiring surgery have been cared for and the service provides inpatient consultations as well as a weekly outpatient clinic.

The new service has been enthusiastically embraced by the nursing and medical staff at all levels as well as by the hospital administration. However its survival and expansion will depend on more than lip service; more equipment is required as well as at least one young neurosurgeon in the near future to carry the torch.

### The Making of the Book we Loved to Hate: Gray's Anatomy

John D. Stewart, BSc, MBBS, MRCP(UK), FRCPC  
Lion's Gate Hospital, Vancouver, BC, Canada

The first edition of Gray's Anatomy was published in 1858. Henry Gray, an ambitious and hard-working man of only 31 at the time was on his way to becoming a surgeon at St. George's Hospital. The remarkable illustrations, 363 in all, were the work of another St. George's man - Henry Vandyke Carter, 4 years younger than Gray. Both men, masters of dissection, had taught anatomy for years and saw the need for a better text than Quain's Elements of Anatomy and other extant texts.

Within weeks of publication, the Lancet and the British Medical Journal issued laudatory book reviews. Sales were brisk. Catastrophe struck when a 4 page review in the Medical Times and Gazette bluntly accused Gray of extensive plagiarism from Quain's text.

It now is clear that Gray based a lot of his descriptions on those in the other anatomy texts, but made them clearer, more concise and added his own expert observations; none of this constituted plagiarism. And Gray's contained highly superior illustrations.

This vicious review had no impact. Gray's immediately became the standard anatomy text worldwide. The American version appeared a year later and was revised and reissued until 1990. The British Gray's achieved its 40th edition in 2008. This text can rightly claim to be the best-known medical book of all time.

Unfortunately Henry Gray died of small pox just 3 years after the appearance of his monumental work. Carter, a morose and introspective person who had clearly been taken advantage of by Gray, moved to India, continued teaching anatomy, did seminal research in leprosy, and finally retired to England.

### Report on Caribbean Health Research Council 46th Scientific Conference in Georgetown, Guyana, April 14-16th, 2011, and review of the presentations from Barbados.

Professor M. Anne St. John, MB,BS (UWI), FRCPC, FAAP.



This year, the 46th CHRC Scientific meeting took place at the Princess Hotel in Guyana. As usual there was a wide representation of the Caribbean medical fraternity, and members of other health care professionals, both from within and outside of the Caribbean.

The Honorees at the Awards Banquet were **Professor J Peter Figueroa** of Jamaica, currently Professor of Public Health and Epidemiology,

"For Outstanding Contribution to Public Health and Research in the Caribbean" and **Prof. E Nigel Harris**, Vice Chancellor of the UWI, "For Outstanding Leadership in the Areas of Medicine and Research".

Ninety-nine research papers were delivered, with a roughly equal number of oral presentations and posters, covering topics such as Nutrition, Health Services, Clinical Studies and Family Health.

There were a smaller number of presentations presented by researchers from Barbados, contrasting somewhat with representation in past years. The overall quality of the presentations was of an

exceedingly high standard and they were well received by conference delegates.

The collection of research from Barbados included 4 oral presentations and 9 poster presentations.

#### ORAL PRESENTATIONS:

***Emerging dietary patterns in Barbados: A comparison of nutrient intakes, food choice and dietary adequacy in 2005 and 2010*** was authored by RM Harris, AMC Rose, BN Hopping, C Howitt, AJM Hennis, BL Oberdorff, LS Craig and S Sharma. (Barbados National Cancer Study, Sir Winston Scott Polyclinic; Chronic Disease Research Centre, University of the West Indies, Barbados; University of North Carolina, USA; University of Alberta, Canada)

This study aimed to compare dietary intake in Barbados from 2005 with that in 2010, in order to identify changes in food and dietary patterns among two groups of adults. The authors concluded that intakes of micronutrients and fibre were inadequate in both study periods. The findings of the study implied changing food choices in Barbadian adults, with an increasing role for sweets and deserts. The authors also concluded that there is a need for culturally appropriate interventions to improve nutrition in Barbados, to be further tested in a large national study.

***Identifying dietary sources of sodium to inform a salt intervention trial in Barbados: Results from the Barbados Salt Intake Survey*** was authored by S Sharma, BL Oberdorff, BN Hopping, AMC Rose, C Howitt and AJM Hennis. (University of Alberta, Department of Medicine, Canada, University of North Carolina, USA, Chronic Disease, Research Centre, Barbados, Stony Brook University, New York, USA)

In this cross-sectional design study, 51 randomly selected Barbadian adult participants completed 24 hour dietary recalls on 148, with a response rate of 80%. Mean sodium intake exceeded adequate intake in all age groups.

***The impact of HIV-1 drug resistance testing on clinical outcome of HIV-1 positive patients receiving highly active antiretroviral therapy*** was authored by S Branch, RC Landis and A. Abayomi. (Ladymeade Reference Unit, Barbados)

The objective of this study was to determine the impact and usefulness of HIV-1 drug resistance testing (HIVDR) as a clinical tool for monitoring and guiding treatment of HIV-1 positive patients receiving highly active antiretroviral therapy (HAART).

The conclusions of this study stated that HIVDR, an important tool in HIV care, can be used primarily for determining salvaging therapies for patients failing HAART. The authors also emphasized that adherence remains the key issue in the success of all treatment programmes.

***Experience with Severe Acute Respiratory Infection (SARI) in Children during a Recent Epidemic.*** M A St John, D Grannum, K Springer, N Sobers-Grannum, A Jennings and J Montague. (Paediatrics Department, QEH, Ministry of Health)

The authors performed a determination of epidemiological and clinical outcomes of SARI from July 2009 to June 2010, involving 698 (34% had N-P swabs- PCR testing) children aged < 15 years. Mortality was 0.7%. RSV predominated in the 1-4 age group and H1N1 in the 5-14 age group. The authors concluded that there was a need for increased, improved surveillance by NP swabs.

#### POSTER PRESENTATIONS:

***Oral health and dental adherence among medical students at the University of the West Indies (UWI) and the Queen Elizabeth Hospital, Barbados*** was authored by S Belgrave, D Peterson, K Gamble, L Jordan, A Samuels and D Cohall. (FMS-UWI)

This questionnaire administered study evaluated the adherence to guidelines set by the CDC (USA) among 75 medical students. There was a good 80% adherence to 4 of the recommendations.

***Ethnic differences in carotid intima media thickness and lipid profiles in South East London*** authored by K Connell, P Chowienczyk and A Donald. (FMS-UWI, Barbados, Department of Clinical Pharmacology, King's College London, London, United Kingdom)

The authors evaluated 60 healthy volunteers – virtually even black and white in number. The results indicated a significant difference in triglycerides favouring Black people and a higher carotid intima media thickness in Blacks- suggesting that ethnic differences may be determined by factors unrelated to traditional risk factors.

***Endothelial function relates more closely to renin status than to self-defined ethnicity*** was authored by K Connell, P Chowienczyk, A Donald. (FMS-UWI, Barbados, Department of Clinical Pharmacology, King's College London, London, United Kingdom)

The objective of this study was to establish whether there were any ethnic differences in flow mediated dilatation (FMD), a measure of endothelium derived nitrous oxide and plasma renin activity (PRA) – a measure of salt sensitivity, and whether ethnic differences in endothelial function might be explained by plasma renin activity; The study involved 116 health volunteers (black Caribbean and black African) aged 18 to 55 years. The authors concluded that results of the study suggested a relationship between FMD and PRA which was unexplained by sodium intake. Endothelium– derived nitric oxide was more associated with PRA than self-defined ethnicity.

***Skin SO<sub>2</sub> measurement using visible light-guide spectro photometry in Barbados*** was authored by AR Greenidge, DK Harrison and RC Landis. (Edmund Cohen Laboratory for Vascular Research, Chronic Disease Research Centre, Tropical Medicine Research Institute, The University of the West Indies, Barbados, Regional Medical Physics Department, University Hospital of North Durham, Durham, UK)

The authors studied their evaluation of the use of a Visible Light Guide Spectrophotometer device to determine relative oxygen saturation in diabetics and non diabetic volunteers, with 5 in each group. The researchers concluded that the instrument was useful and unaffected by skin pigmentation, and believe that there is a potential for using the instrument to assist in identifying patients at risk for developing microvascular disease.

***Prevalence of obesity among staff at the University of the West Indies, Barbados:*** Gender, age and diet was authored by T Boyce, T Austin, L Lucas, A Gill, N Gibson, A Samuels and D Cohall. (FMS-UWI, Cave Hill, Barbados)

In this cross-sectional, questionnaire administered study, it was revealed that 40% of the staff members were overweight and 31% obese. Obesity was more common in females and there was a significant association between obesity and number of meals not prepared at home. Authors concluded that the preliminary findings should provide a rationale for a larger study among the population

studied to determine the consistency of the findings.

***The prevalence of overweight, obesity, pre-hypertension and hypertension, and the association between body mass index and blood pressure in medical students in Barbados*** was authored by R Alleyne, AS Lowe, J Edghill, J Lendore, A Samuels and D Cohall. (FMS-UWI)

This questionnaire administered study of 50 students revealed a 16% prevalence of overweight and 6% of obesity, concluding that the prevalence of overweight and pre-hypertension was significantly higher in males and an association of BMI with blood pressure. The authors concluded that a larger study be conducted to establish consistency of the findings, within the entire student population.

***The association between the prevalence of hypertension in medical students in Barbados and waist-to-hip ratio (WHR, waist circumference (WC) and family history of hypertension*** was authored by AS Lowe, D Cohall, A Samuels, R Alleyne, J Edghill and J Lendore. (FMS-UWI)

This study of 50 medical students led to a conclusion that waist circumference was only positively associated with systolic blood pressure in males, and some students (younger adults) had abdominal obesity and / or hypertension.

***A comparison of the 10-year cardiovascular risk between the support staff members and the professional staff members of The University of the West Indies, Barbados*** was authored by R Lezama. (FMS, UWI)

This cross-sectional questionnaire, prevalence study, which sampled 136 staff members (87 studied) aged 18-64 years, had an objective to investigate the risk of developing cardiovascular disease. Determinants included height, weight, resting BP, random plasma glucose and total cholesterol concentrations. The study conclusion was that support staff are at greater risk than professional staff.

***A situational analysis of the structures and processes of selected priority health issues in Barbados: chronic non-communicable diseases versus communicable diseases*** was authored by F. Bowman-Jones. (FMS, UWI).

The study sought to contrast key service structures and processes existing in CCNCD (diabetes, hypertension and asthma) and CD's (Dengue, HIV/AIDS and vaccine preventable childhood diseases) in a questionnaire administered study. The main conclusion was that there was a statistically significant difference in the structures and processes in CNCD and CD programmes.

**Note:** Next year's CHRC Scientific Meeting has been scheduled to take place in the Cayman Islands.

## Efficacy of HIV Drug Resistance Testing in Barbados

Songee Branch,  
Clinical Information Specialist, Ladymeade Reference  
Unit, Ministry of Health, Barbados

*(This work was presented at the 56th Caribbean Health Research Council Meeting in Guyana, April 14th 2011.)*

The cheaper first line medications that comprise the backbone of Highly Active Antiretroviral Therapy (HAART) in Barbados and other developing countries, the class of Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs), are prone to generating resistance mutations in the HIV virus. To counteract this problem, The Ladymeade Reference Unit (LRU) examined the effect of HIV Drug Resistance Testing (HIV DRT) in a cohort of patients failing HAART between 2007 and 2009.

The work was performed in collaboration with Richard Harrigan, of the BC Centre for HIV Excellence, Vancouver, Canada, who performed the sequencing, and VIRCO, a biotechnology company that creates a virtual phenotype for each patient's virus based on a global database of known resistance mutations. Drug regimens were adjusted according to the VIRCO phenotype and follow-up tests for viral load and CD4 T cell counts were performed at the LRU at 6 months.

The intervention demonstrated a 76% success rate, with median viral loads dropping from 12,900 copies/ml prior to HIV DRT and drug regimen switching, to undetectable levels afterwards (< 40 copies/ml). Patient CD4 levels also recovered significantly, but 14% of patients were not able to control their viral load based on the new drug regimen and 10% of patients died. All cases of failed intervention revealed "poor" compliance with medication.

This study has revealed a paradox faced by developing countries, such as Barbados: that cheaper NNRTI first line medications demonstrate the most acute need for costly monitoring of drug resistance by HIV sequencing. Nonetheless, the clinical efficacy of HIV DRT, with a 76% success rate in reversing treatment failure on HAART, has justified purchase by the Ministry of Health of sequencing capacity to be installed in Barbados.

A MAN WHO HAS A THEORY WHICH HE TRIES TO FIT TO FACTS  
IS LIKE A DRUNKARD WHO TRIES HIS KEY HAPHAZARD  
IN DOOR AFTER DOOR,  
HOPING TO FIND ONE IT FITS.

J. Chalmers DaCosta  
(Surgeon and writer)



## BNDF Reform

Dr. Colette George, MBBS (UWI), MRCP (UK)



I date my interest in the whole issue of formulary reform back to 2007. At the time I was not a member of the Barbados Drug Formulary Committee, did not know I was ever to become one, and could not have envisaged being so closely involved in the process. What I did know was that it seemed inevitable!

One day I was in my office when my secretary called me to listen to the radio. A budget debate was going on in the upper house for a supplementary budget

for the drug service. A senator (I do not know from which side of the political divide and have no interest in knowing) was saying that the reason for the high drug budget was because doctors liked to prescribe expensive drugs. My first thought was "There they go again blaming doctors for everything!" My next thought was "Well, we prescribe what is in the formulary, so if the cost is too high then why are the products in the formulary in the first place?" However, not liking to dismiss anything, I took my formulary home that night to look at some prices and I was astounded by my revelation. I knew that the prices were listed in the formulary, but what busy doctor has the time to compare prices in their decision making on what to prescribe? What I discovered that night was that there were vast discrepancies in prices not only between branded and generic products (I knew that to be so but was not aware of the magnitude of the difference) but also between branded products of the same therapeutic class.

Sometime later, I was invited to a meeting at the Barbados Drug Service (BDS) to review the protocols for the diabetes drugs. I voiced my concerns regarding the price discrepancies to the director who was surprised that a doctor was actually interested in prices. In March 2008, having received no warning, in the mail one day were articles appointing me as a member of the formulary committee. Apparently I should have been asked first, but somehow this had not been done.

As the meetings were to be held on a Wednesday, my off day, I thought: "Well, why not, somebody has to do it." This has been a major learning experience for me. As doctors we are aggravated by the usual problems of drugs being out of stock for months, frequent changes in the supplier, change to generics that we are suspicious of, and are more than apt to blame the Barbados Drug Service for everything. The reality is quite different.

### Background

The Barbados Drug service was established in 1980, its aim being "to provide residents of Barbados with quality pharmaceuticals at an affordable price". Beneficiaries in both private and public sectors obtained formulary drugs upon presentation of a prescription and the appropriate co-payment. In 1986 the co-payment removed and the age for children was expanded from 6 to 16 years. The special benefit service is summarized below.

### Special Benefit Service

Groups currently covered	Provision of drugs and related items	
	Public sector	Private sector
Persons 65 years and over	Free	Free
Children under 16 years of age	Free	Free
Persons who receive prescribed formulary drugs for the treatment of Hypertension, Diabetes, Cancer, Epilepsy and Asthma	Free	Free
Persons between 16 and 64 who are not included in 3 above	Free	Patient pays a reduced price free of duties and taxes

Selection of pharmaceuticals was to follow the WHO criteria for drug selection as outlined below:

1. Drugs included must meet the needs of the majority of the population
2. Scientific data regarding the effectiveness of the particular drug for the desired indication must be available. There must be some scientific basis for drug use
3. The safety : risk ratio of the drug should be indisputable
4. All drugs products must be of an acceptable quality
5. Single pharmacological preparations rather than combination products are preferred
6. Exceptions to 5 may arise where patient compliance and/or therapeutic outcome are jeopardized otherwise
7. The Formulary would be listed in generic names only
8. Where drugs are therapeutically equivalent, the selection process would be based on cost, scientific research, pharmacokinetic profile, patient compliance and reliability of the local manufacturer

### Why review?

Over the years, the prevalence of chronic diseases such as diabetes and hypertension has increased, diagnostic criteria have become more stringent and there has been an explosion in medical knowledge as the result of several scientific studies. This has led to the institution of pharmacotherapy at an earlier stage and also to more aggressive treatment of chronic diseases such as diabetes and hypertension, the benefits of which are well documented. This has been greatly assisted by several new innovations, leading to a wider range of therapeutic classes in our armamentarium.

Not surprisingly there has been an exponential increase in the utilization of pharmaceuticals, putting a greatly increased burden on health care providers worldwide, Barbados being no exception. Since the inception of the BDS and in particular in the past 10 years, the cost to the BDS of providing pharmaceuticals has increased at a rate

that exceeded the rate of increase of revenue to the health care provider. As a result, a critical stage was reached at which the continuation of the BDS was in jeopardy as the ever increasing costs were not sustainable. It was with this in mind that the Drug Formulary Committee was asked to look at the formulary and suggest ways in which the costs could be reduced while not compromising care.

### Formulary review and rationalization

In early 2009, the Minister of Health (MOH) outlined to the Drug Formulary Committee (DFC) the challenges facing the drug service and recently imposed budgetary constraints were highlighted. He therefore felt that it was necessary for the DFC to engage in a careful review and selection process, to ensure that necessary drugs remained available so as not to compromise patient care, while still being cognizant of the need to reduce costs.

In October/November 2009 the government of Barbados with funding from the Pan American Health Organization (PAHO) held workshops for members of the formulary and tenders committees.

At these workshops members were exposed to the methodologies utilised in choosing products for inclusion in a formulary. This process was very extensive, requiring manpower and resources not immediately available to the committee. In light of this fact, the Ministry of Health commissioned consultants from the University Center for Pharmacology, WHO/PAHO Collaborating Center, School of Medicine University of La Plata, to review the 28th Edition of the Barbados Drug Formulary. The committee members felt that while these recommendations would be useful, the DFC would carefully review the recommendations before implementation, to ensure a local input on the selections.

In July the MOH informed the committee of certain stark realities. The Minister outlined the ever increasing costs in the expenditure on pharmaceuticals. During 2009-2010, \$ 50 million was spent by the BDS and an additional 17 million was spent by the Queen Elizabeth Hospital (QEH). In the 2010-11 fiscal year the pharmaceutical budget had been cut to 35 million. It was therefore urgent that the formulary review process begin, and plans were made to start the review with the first part of the document that had just been received from the consultants.

### Methodology

The methodology used was to be evidenced based, and criteria and methodology used by the WHO Essential medicines list were applied. Certain key observations regarding selection are summarized here:

1. The term medicine should be used instead of drug.
2. Medicines should be selected taking into account the pattern of prevalent diseases.
3. Most medicines should be called by the International non proprietary name (also referred to as the generic name).
4. Fixed dose combinations (FDCs) should be avoided except in instances where there is a demonstrated proven effect in efficacy, safety or therapeutic effect. Except in cases of HIV, malaria and tuberculosis, the evidence for their benefit is contradictory.
5. The process of assessment that includes inclusion of new

medicines and deletion of old ones is critical for managing a formulary. If a new medicine is included because it demonstrated a therapeutic advantage over an older one then the older one should be removed.

6. Evaluation should be based on:
  - Efficacy and comparative efficacy
  - Effectiveness and comparative effectiveness
  - Safety and comparative safety
  - Cost of treatment
  - Quality
7. Once efficacy and safety are established, medicines should be compared based on cost of treatment.
8. "Me too medicines" - As many as 70% of the pharmaceuticals on the world market represent duplicates or non essential products. These often have a minor variation of a prototype medicine and offer no therapeutic advantage but are often at a greatly increased cost.

The WHO methodology was applied and data about efficacy, safety and effectiveness were systematically searched for, using the best available evidence. Convenience was taken into account and when assessing "me too" medicines the one with the lowest cost was recommended. FDCs were analysed and their deletion recommended except in the cases listed above.

The first part of the document was received and deliberations started in August 2010. The committee considered the recommendations and decided on certain principles:

1. For a widely used class of medicine for a very prevalent condition, e.g. hypertension, instead of choosing only one member of a therapeutic class at least 2 and preferably no more than 4 would be chosen. The choice would be based on cost, indications, and usage patterns.
2. Where a whole therapeutic class was suggested for deletion our consideration was given to our patient population and need and were included if appropriate. (Examples are minoxidil and alpha blockers for add on therapy for difficult to control hypertension.)
3. The recommendation for the elimination of fixed dose combinations would largely be adhered to except in certain circumstances as outlined in the WHO protocol, and where the committee felt that there was a pressing need or a significant therapeutic benefit. Examples included eye drops, where an increased volume of preservative could mean increased corneal toxicity or in cases where the particular product was only available to us in a combination.

Each recommendation was deliberated and voted on; some led to much discussion; most were unanimous. The changes were received, as expected, with mixed views. The process is still ongoing, as part 3 of the document is still in the process of deliberation.

Reform of the Barbados Drug Formulary was an inevitable exercise that had repeatedly been talked about but had been delayed for too long. I think it is unfortunate that we live in an environment where policy decisions are too often affected by politics and of course any measure that seems to be one of austerity will undoubtedly be politically unpalatable and likely to be put on a back burner. In the case of the formulary, the result was escalating costs with little

controls, to the point where it became unrealistic to sustain it. The maintenance of the status quo was also of benefit to the pharmaceutical industry, which was able to realize great profits by the continuation of products which, while no one disputed they were good products, were not absolutely necessary, as the same effect could have been achieved at a lower cost.

We must bear in mind that the job of the managers in that industry is to maximize profit for its shareholders; the job of a health care provider, however, is to maximize utilization of its health care dollars while not compromising health care, a delicate balancing act.

In addition, the health care provider also has to make decisions that promote rational prescribing. It would have been a surprise if

changes such as those made did not meet with resistance from patients and health care providers alike. After all, change and adjustment to change is not always easy.

A review of the magnitude of that undertaken had never occurred since the inception of the BDS. Realistically, one would expect that it might be necessary to review and reconsider some of changes as the process (which is still ongoing) is fine tuned. Some decisions may need to be overturned and new decisions may need to be made.

However, I believe that fear of failure is the greatest impediment to the success of any venture. It means that necessary changes would never be undertaken and maintenance of the status quo would obtain. In the case of the Barbados Drug Service this is not an option.

## CME / CLINICAL GUIDELINES

### The Menopause – A Discussion

Dr Carlos Chase, MBBS, DGO, CLM, DM



*(Ed: This review article began in the Jan/Feb issue, but was incomplete due to lack of space. The entire article is included here).*

The Menopause is the cessation of menstruation for a minimum period of six months.

The climacteric is that perimenopausal period where symptoms are experienced by the patient. The average age of menopause in the

USA is 51 years, ranging from 47 – 55 years. This range is not affected by race, socioeconomic status, number of pregnancies, OCP, education, alcohol, age of menarche, or date of last pregnancy. Cigarettes have only been conclusively shown to hasten follicular exhaustion.

Menopause is due to ovarian failure, leading to reduced oestrogen output and increased FSH and LH production, which occurs within one year of the cessation of menses. The organ systems affected are wide and varied. The combination of senescence and hormone lack may manifest with symptoms and signs so varied that some physicians incorrectly attribute all symptoms in this period to gonadal failure.

#### AGEING:

Let's look at some effects on the organ systems.

**The Nervous System:** Normal ageing leads to a brain loss of 5 to 10% of brain weight and a reduction of 20 to 50% of brain cells. Cerebral blood flow is reduced and does not correlate with cognitive functions. All persons show deterioration in short term memory.

Thermoregulation is problematic and the senses are less acute. Postural hypotension, slowness of movement and reduced rate of

learning may occur.

**CVS:** Reduced cardiac reserve with hypertrophy of the myometrium and calcification of the heart valves.

**RS:** Reduced lung compliance and some emphysematous changes occur.

**CU:** Reduced ability to clear drugs due to decreased plasma flow and cardiac output with lack of concentrating ability of the kidney.

**GI:** Dysphagia, constipation and increased incidence of gall stones, carcinoma and diverticulosis.

**Immune System:** There is a reduced antibody response of B-cells and an increase in auto antibodies.

**Skin and musculo-skeletal systems:** There is a loss of subcutaneous fat and elasticity with age, with reduced healing and increased susceptibility to trauma, and reduction in the articular cartilage in the joints.

**Endocrine:** The pituitary loses 20% of its volume by its ninth decade of life. Normal levels of GH, ACTH, TSH are maintained but the thyroid undergoes progressive fibrosis. In the pancreas, Beta cells degeneration occurs and glucose intolerance results.

In the climacteric woman, changes peculiar to these organ systems occur. There is a progressive lengthening of the menstrual cycle as the lady approaches the menopause. The luteal phase remains 14 days but the follicular phase lengthens due to reduced supply of follicles. With a reduction in pre-ovulatory oestrogen cycles, anovular cycles occur.

FSH increases to exceed LH levels for the first time since puberty. Levels of >100 mIU/ml usually indicate follicular exhaustion. The maximal LH/FSH levels occur 2-3 years after menopause. GnRh levels remain relatively stable.

Oestrogen production is reduced, the predominant oestrogen being oestrone in the post menopausal female compared with oestradiol-17 beta in the pre menopausal one. The potency of oestrone is 1/3 that of oestradiol and this (oestrone) is produced by



the peripheral conversion of androstenedione by aromatase. Androstenedione is reduced and testosterone production is increased in the post menopausal female.

### THE MENOPAUSAL SYNDROME:

Signs and symptoms are caused by the oestrogen deprivation occurring at any age after ovarian failure (natural or surgical) and relieved by oestrogens. Signs and symptoms due to aging are not part of the syndrome. These menopausal symptoms may be divided into:

- a) Definitely hormone related
- b) Probably oestrogen deficiency related
- c) Possibly hormone related

Definitely hormone related symptoms include: genitourinary atrophy, vasomotor instability and osteoporosis.

Probably oestrogen deficiency related symptoms are: atherosclerotic cardiovascular disease and psychomotor symptoms, insomnia, fatigue and depression.

Vasomotor symptoms are hot flashes experienced by 75 – 80% of peri and post menopausal women and occurring in the early stages. 80% of females have the symptoms for one year and this can be associated with nausea, dizziness, headache, palpitations, diaphoresis and night sweats. These flashes are episodic rather than continuous.

**Genitourinary atrophy:** the vulva, vagina, urethra and trigone of the bladder all contain oestrogen receptors and are all affected by the oestrogen lack.

The vulva has accelerated atrophy leading to thinning of hair of the mons, flattening of the labia minora and loss of subcutaneous fat with pruritis being the most common symptom. Vulval dystrophies and associated squamous cell carcinoma in 5% of cases require careful screening and biopsy.

The vagina becomes pale and the epithelium thins with reduced secretion and distensibility and is therefore easily traumatized, trauma causing 15% of post menopausal bleeding. Vaginitis increases, with an increase in pH from 3.5-4.5 to pH 6.0-8.0 and so predisposition to pathogenic bacteria.

Cervical erosion, ectropion and ulceration become more common. The endocervical glands become less active and produce less mucin with a resulting dryness of the vagina. The squamo-columnar junction and transformation zone are high in the endocervical canal and lead to difficulty with pap smears and colposcopy.

The incidence of uterovaginal prolapsed is increased and this is largely due to a combination of oestrogen loss and senescence and laxity of the supporting ligaments and childbirth (grandmultiparity).

The distal urethra is affected, becoming rigid and inelastic leading to ectropion (urethral caruncle), diverticulae and urethrocoele.

The urethral syndrome may occur with burning, frequency, hesitancy, nocturia, and urgency in association with sterile urine cultures. Treatment with oestrogen therapy, uretectomy and urethral dilation are all options available.

The uterus is atrophic and the cervix is almost flush with the vault and the endometrium has a basal layer of simple tubular glands +/- cystic dilation (thought to be pre-malignant).

Osteoporosis occurs where the bone has lost enough mass to be

predisposed to fracture and this may be primary or secondary. Primary osteoporosis affects women between 55 to 70 years. The most common sites are the vertebrae, the long bones of hip (neck of femur) and arm (humerus).

Secondary osteoporosis is caused by any of the following diseases /conditions:-

Thyrotoxicosis  
Post Menopausal  
Glucocorticoid Excess  
Multiple Myeloma  
Hyperparathyroidism  
Leukemia  
Alcoholism  
Long-term Heparin therapy  
Immobilisation

Bone loss in the menopause is approximately 1 – 2 % per year. Genetic background, lifestyle and diet, age of menopause and existing endocrine disease all influence the development of osteoporosis. White people have less bone mineral mass than black people and are more likely to develop osteoporosis. Classically, the elderly white female in winter is the typical victim.

Calcium intake is important as post menopausal females have negative calcium balance. 30 – 35% of females have asymptomatic osteoporosis. Treatment is with oestrogens, calcium or calcitonin and herein lies the controversy.

Hormone replacement therapy in the menopausal female is an attempt to mimic by therapeutic means the sex steroid status of an individual in her premenopausal years. The ideal regimen would stimulate the physiology of the ovary itself with natural human oestrogen (plus or minus a progestagen), delivered into the systemic circulation, achieving a concentration within the range found during the menstrual cycle.

The delivery system is non-invasive and the regimen inherently manageable. The oestrogens should be sufficient to arrest the specific menopausal symptoms of vasomotor irritability, vaginal dryness, and insufficient to cause nausea. Treatment should be protective to the urethra in the medium term and to the skeleton in the long term.

It should achieve the end points safely with no grade off in terms of breast or uterine oncogenesis, carbohydrate tolerance, or delayed coagulation, and promote a lipid profile which would be reflected in clinical protection against coronary and cerebrovascular disease, be inexpensive and personally acceptable to the patients.

The safety of HRT is of major concern but we can say unequivocally that there is no increased risk of endometrial or breast carcinoma with HRT. There is little doubt that unopposed oestrogen is associated with an increased risk of endometrial Ca (Mack et al 11976) and that risk remains for years after cessation of treatment. The long term effect of HRT is of great importance on oncogenesis and vascular disease and is of value in relation to the rise of osteoporosis prevention.

We know that cardiovascular and cerebrovascular diseases are the leading causes of death in the 6th and 7th decades but with HRT these risks are reduced.

With fracture risk, there is a 50% reduction in the occurrence of spinal and distal fractures in women taking oestrogen compared with women who have never taken them. (Ettinger et al 1985).

There was however, no reduction in the incidence of femoral neck fractures. Progesterones have been shown to slow bone resorption and enhance cortical bone formation (Karambowla et al, 1986), Depot Medroxyprogesterone acetate 150mg being effective as the oral progesterone was shown to be ineffective at 10mg orally, daily over ten days.

### Techniques of Delivery

Oral versus other methods.

With oral oestrogens, the absorbed oestrogen enters the portal circulation and 35 – 60% is metabolized during the first pass through the liver, hence the dosage of oral oestrogen needs to be significantly higher than with other routes, for example the TTS (Transdermal Therapeutic System) or more commonly the skin patch.

With TTs, lipid soluble sex steroids are dissolved in a polar base (ethanol) in order to penetrate the epidermis and are further covered in a waterproof patch leading to increased hydration and increased absorption. The oestradiol patch (Estraderm, Ciba-Geigy) contains 17 beta-oestradiol in a reservoir which delivers a constant dose over 4 days and the dosage is related to the surface area of the patch.

With TTS there is a decreased incidence of hot flashes and the maturation index on vaginal cytology returned to premenopausal pattern, irritability and insomnia. Tolerance is not a problem as the patch is word twice a week. There was no influence in the LFT's and the endometrium was found to be proliferative. The 50ug patch was found to give equivalent effect to oral 0.625mg conjugated oestrogens daily. (100ug patch = 1.25mg oestrogen). This method has gained in popularity.

The combination oestrogen/progesterone skin patch with 17 beta oestradiol and 250mg of norethisterone acetate being released daily leads to a withdrawal bleed lasting approximately 6 days, (four light bleeding or spotting has promise but more research is necessary, with

larger trials).

**Oestradiol skin gel:** this method has been tried, with 17 B oestradiol in a hydroalcoholic base being absorbed in the circulation over 24hrs. Patient absorption varies and it is messy to use as the gel is applied to the skin and then air dried.

**Hormone implant pellets:** not new; 17 B oestradiol pellet is implanted into subcutaneous fat of the anterior abdominal wall with a trocar and local anaesthetic. Peak levels occur 1 – 2 months after implantation and release is sustained for up to one year. This method appears to have been effective in preventing bone loss.

**Vaginal Oestrogens:** absorption from the vagina is rapid and endometrial proliferation occurs as well as thickening of the vaginal epithelium. Progesterone is advised with prolonged use (more than a few weeks). Di Raimonondo (1980) reported a case of gynaecomastia in a man whose wife used vaginal oestrogens as a lubricant. Oestrogens are well absorbed from the penile skin (Ware et al 1985).

**Vaginal rings:** silicone rings impregnated with progestagens, and a combination of oestradiol and d-norgestrel have been shown to be effective with a reservoir of about 6 months but the insertion and removal of these devices are less than pleasant for some females and the thought turns off others.

Experimentation with intranasal and sublingual routes of administration have been less than encouraging. Absorption is rapid but the effects are short lived.

The menopause is the "change of life" and prompt recognition, correct diagnosis and appropriate treatment by the gynecologist can make it a pleasant one.

**References:** *Recent Advances in O & G – John Bonnar; O & G – Danforth, and Medline Service*

## WHY OUR HEALTH CARE COSTS ARE SO HIGH!!! A CAUTIONARY TALE (Emailed from Canada – NOT Barbados!)

Bubba had shingles.

Those of us who spend much time in a doctor's office should appreciate this! Doesn't it seem more and more that physicians are running their practices like an assembly line?

### Here's what happened to Bubba:

*Bubba walked into a doctor's office and the receptionist asked him what he had. Bubba said: 'Shingles.' So she wrote down his name, address, medical insurance number and told him to have a seat.*

*Fifteen minutes later a nurse's aide came out and asked Bubba what he had...*

*Bubba said, 'Shingles.' So she wrote down his height, weight, a complete medical history and told Bubba to wait in the examining room.*

*A half hour later a nurse came in and asked Bubba what he had. Bubba said, 'Shingles..' So the nurse gave Bubba a blood test, a blood pressure test, an electrocardiogram, and told Bubba to take off all his clothes and wait for the doctor.*

*An hour later the doctor came in and found Bubba sitting patiently in the nude and asked Bubba what he had.*

*Bubba said, 'Shingles.' The doctor asked, 'Where?'*

*Bubba said, 'Outside on the truck. Where do you want me to unload 'em??'*

## What Lies Beneath

Dr. Maisha Emmanuel MBBS, DM (Psych), MSc (Birm)



Thirteen-year-old TA, with no chronic illnesses, presented to the paediatric department with a 5 day history of fever, lightheadedness and abdominal pain. On the day prior to presentation he was noted to be staring blankly, with episodes of decreased responsiveness to questions asked, and lethargy. There was no history of trauma, loss of consciousness, syncope, headaches or seizures. There was one episode of self-induced vomiting. A review of

systems was significant for testicular pain and dysuria. There was no history of sexual contact. There was no history of illicit or prescribed drug use. His developmental history was normal.

On physical examination he was afebrile with normal blood pressure and respiratory rate. His pulse rate was elevated (114/minute). He was oriented in person only. He responded to questions after a long pause and was unable to cooperate with instructions during the examination. Kernig's and Brudzinski's signs were negative. He was tender in the epigastric, suprapubic, inguinal regions (bilaterally) and the scrotum.

Differential diagnosis included: altered mental state secondary to sepsis, to rule out encephalitis, to rule out renal sepsis / orchitis, and query psychotic disorder.

Renal function, liver function and thyroid function tests were normal. Dengue and Hanta virus titres were taken. Full blood count revealed mild anaemia, lymphocytosis and neutropenia. The ESR was mildly elevated. There was no growth on urine culture, and abdominal ultrasound and CT of the brain were both normal.

There was discussion as to whether this presentation was in keeping with a primary psychiatric disorder or if this was secondary to an underlying medical condition. The psychiatrist opined that the history of fever, change in behaviour and arousal state, lymphocytosis and neutropenia were highly suggestive of viral encephalitis. A lumbar puncture was done and the patient was started on intravenous acyclovir.

Two days post admission TA continued to have strange behavior, described as "moments of offensive and insulting expletive-laden outbursts." According to his parents this was quite out of keeping with his norm, as he was usually well behaved. CSF culture was sterile after 72 hours. TA's mental state made slow, gradual improvement.

By day 6 of admission: Dengue Ig M was reported positive and Hantavirus negative. His odd behaviours were improved but he was not back to baseline. His parents declined in-patient management and a mood stabiliser from psychiatry because they thought he would do better in the familiar home environment. Transfer to psychiatric ward was offered because of TA's on-going disinhibition, including inappropriate touching and exposure of his genitals. He was discharged from paediatrics.

One week later, on review by psychiatry, his disinhibition

persisted. His father reported that he was singing loudly all the time, and was confused, spending long periods in bed and staring. During the interview he kept touching the interviewer and attempted to touch her genitalia. His parents agreed to admission because they found his behaviour difficult to manage at home. He was started on carbamazepine (used as a mood stabiliser) and his mental state improved. He was discharged after 4 days but re-presented 6 days later with inability to wrinkle the brow on the right, unable to forcibly close the right eye, unable to blow out the cheeks and a lopsided smile to the left side.

**Final Diagnoses:** Viral encephalitis, secondary to dengue infection  
Bell's Palsy, post-viral infection

TA has not presented for further review, but his mother reported that all of his symptoms have resolved and he was doing well in school.

This case highlights the importance of a thorough history; although he was afebrile on admission there was a history of fever indicating possible infection. In addition, the acute changes in behaviour and mental state were more in keeping with a delirium and not a primary psychiatric diagnosis. Although this was an unusual presentation of dengue infection it underscored the need for complete investigation to rule out medical conditions.

### Editor's Comment:

*Neurological complications of dengue fever are much rarer than the classic complications of dengue haemorrhagic fever and dengue shock syndrome, and there have been a spate of recent case reports, chiefly from South East Asia(1,2). One of the earliest reports of neurological complications was more than 30 years ago, in the West Indian Medical Journal, from the University Hospital of the West Indies in the 1977 dengue epidemic in Jamaica, by the Editor and co-authors (3), a report that raised both doubts and eyebrows in some circles at the time!*

*Another valuable lesson from this case report is the value of carbamazepine as a mood stabilizer – a most important use of this drug that is not generally appreciated.*

1. Muzaffar J, Venkata Krishnan P, Gupta N, Kar P. Dengue encephalitis: why we need to identify this entity in a dengue-prone region. Singapore Med J. 2006 Nov; 47(11):975-7.
2. Matlani M, Chakravarti A, Rawal A, Kashyap B, Gurtoo A. Dengue encephalitis: an entity now common in dengue-prone regions. Trop Doct. 2009 Apr; 39(2):115-6.
3. Fraser HS, Wilson WA, Rose E, Thomas EJ, Sissons J G. Dengue fever in Jamaica with shock and hypocomplementaemia, haemorrhagic, visceral and neurological complications. West Indian Med J. 1978 Jun; 27 (2):106-16.



## Dr. P. Abdon Da Silva

### Citation for BAMP Award at BAMP Banquet

Professor Henry S. Fraser (Public Orator)

On July the 21st, 1950, a momentous event occurred in Mesopotamia – the birth of a child. I do not refer to that other Mesopotamia, the reputed “Cradle of civilisation”, the land between the rivers the Tigris and the Euphrates, the land that today is mostly the beleaguered lands of Iraq, but to our own Caribbean cradle of civilisation in the Mesopotamia Valley, in the exquisite dominion of St. Vincent and the Grenadines – acclaimed as the most beautiful place in the world – by all Vincentians.

P. Abdon Da Silva was born on that day, July 21st, and 19 years later, after two decades of research and planning, the people of the USA celebrated his birth with another momentous event.... the Moon landing – when Apollo, the Eagle, landed on the moon, and Neil Armstrong and Edwin Aldrin walked on the green cheese in the sky, and Neil Armstrong said: “That’s one small step for a man, one giant step for mankind.”

And Abdon DaSilva has made many small steps and many giant steps, over six decades, culminating in tonight’s Award of Appreciation from BAMP.

Don was the third of 11 children – a potential Mesopotamia cricket team, in the days when there was no TV or internet for his parents’ nocturnal pleasures. He attended the Boys’ Grammar School in Kingstown, on scholarship, and proceeded to the UWI Mona campus in 1968 to study medicine. He interned at the QEH and rotated through almost every specialty – at that time the best approach for a family physician to be able to do some of everything in medicine. And he left QEH and became a family physician and general practitioner – what Don describes as the only true specialty - in 1977, with a popular South Coast practice.

But he has never been one to focus only on the limited sphere of his own clinical practice. He is the very model of a true doctor and a true professional – as the Latin word doctor means, he is a leader and a teacher. He attributes his leaning for leadership and his leadership skills to his catholic upbringing and the priests who made him responsible for many administrative functions in the church in his youth ... indeed he was nicknamed “Chief” by one priest – a most splendid nickname, which I suggest deserves to be resuscitated tonight!

And so Don – with deeply imbued ethical instincts, true professionalism and a strong social conscience - has taken on a continuing series of collegial and professional responsibilities throughout his career in his adopted homeland, Barbados. And he considers what he has done for society and the profession as “merely an integral part of being a doctor ... and what is expected of us all”.

Let me list just a few of his contributions to society, the profession and his colleagues, for the record:

President of the Junior Doctors’ Association

Public Relations Officer on the BAMP Executive for several terms.

President of BAMP twice, and multiple terms on the Executive BAMP’s representative and Chairman of Medical Council, and under his chairmanship they formalised CAMC, the Caribbean Association

of Medical Councils, at a meeting of councils in Jamaica - and he is currently Deputy Chairman of Council.

BAMP’s representative on the National Drug Formulary Committee, on the National Advisory Commission on Safety and Occupational Health, on the UWI / BAMP CME Committee, and the QEH Ethics Committee

Editor of the BAMP Bulletin

Executive member and Life Member of the UWI Medical Alumni Association

Member of the Barbados Family Planning Association Medical Committee

And he has made a difference in many areas, including persuading the Registrar of the Supreme Court to institute registration numbers for doctors - and he got it done!

He has achieved all of this, according to his friends and fans, because he is a passionate idealist, AND hardworking, with the desirable characteristics of a leader – a stickler for time, frank but loyal and ever-honest, fair but calling a spade a spade “regardless of who may be offended”. “He says what he means, and he means what he says, and is not afraid to take an unpopular stand in which he believes”, and I quote: “even if it is to his detriment.” He is a champion for doctors young or old, and whatever the cause he is willing to serve the association. Oh, that there were more like him! He is a dedicated father to his son Nicholas, and he is supported in every way by Pansy, in all his endeavours.

For his passion, his idealism, his integrity, his professionalism and his immense contribution to health care in Barbados, to the profession and to society, I present Dr. P. Abdon DaSilva, for BAMP’s Award of Appreciation. Hail “The Chief!”

#### How would you pronounce this child's name? "Le-a"

Leah??	NO
Lee - A??	NOPE
Lay - a??	NO
Lee??	Guess Again!

**This child allegedly attends a school in Kansas City, Missouri.**

**Her mother is irate because everyone is getting her name wrong.**

**She said...It's pronounced "Ledasha". When asked about the pronunciation of the name, she said, "The dash don't be silent."**

**SO, hence, if you see something come across your desk like this, please remember to pronounce the dash. If dey axe you why, tell dem de dash don't be silent.**

**(Anon, received by email)**

## BAMP AGM

The Annual General Meeting of BAMP was held on Saturday, May 14th, at the Lloyd Erskine Sandiford Conference Centre, at the end of the first day of the Annual May BAMP / UWI CME Conference. The reports of the President, General Secretary and Treasurer were well received and there was healthy and extensive discussion on many topics by the almost 60 members who attended, leading to a number of positive recommendations for future initiatives.

The highlight of the meeting was the return to office of Dr. Carlos Chase as President, and the election of Dr. Rudy Delice, Head of the Department of Medicine at QEH, as First Vice President, Dr. Linda Williams as Second Vice President, Dr. Wayne Clarke as Public Relations Officer, Dr. Felix Gittens as Assistant General Secretary, and Dr. Shabier St. John, intern at QEH and until recently President of the Medical Students Association, as Floor Member.

The President expressed his great pride in BAMP on achieving in excess of the required numbers for a quorum at our AGM on Saturday for the first time in over 4 years, and for starting just 6 minutes after 300pm!

The full BAMP Executive for 2011- 2012 is shown below, with newly elected members in bold:

Council	Nomination	Proposer	Secunder	Term
President	Dr Carlos Chase	Continuing		1 year
1 <sup>st</sup> Vice President	<b>Dr Rudy Delice</b>	AY Kumar	H Fraser	2 years
2 <sup>nd</sup> VP	<b>Dr Linda Williams</b>			1 year
General Secretary	Dr Gregory Walton	C. Chase	H Thani	2 years
Assistant General Secretary	<b>Dr Felix Gittens</b>	M Brown	K Odle Cunningham	1 year
PR/O	<b>Dr Wayne Clarke</b>	K. Walton		2 years
Treasurer	Mr Hareesh Thani	Continuing		1 year
Asst Treasurer	Dr Brian MacLachlan	H Thani	C. Chase	2 years
1 <sup>st</sup> Floor Member	Prof Henry Fraser	Continuing		1 year
2 <sup>nd</sup> floor member	<b>Dr Arnel Y. Kumar</b>	C. Chase	H Thani	2 years
3 <sup>rd</sup> Floor Member	Dr Ingrid Durrant	Continuing		1 year
4 <sup>th</sup> floor member	<b>Dr Shabier St John</b>	AY Kumar	C Chase	2 years

The BAMP Annual Banquet was held on Saturday May 21st, when Dr. Abdon DaSilva was honoured for services to BAMP, in a citation delivered by Professor Henry Fraser, National Public Orator.

## President's Report

### AGM, SATURDAY MAY 14TH AT THE LLOYD ERSKINE SANDIFORD CENTRE

Good afternoon. Much has happened in the past year and we are gathered together once more to conduct the business of the Barbados Association of Medical Practitioners.

The past year has been full of many changes and successes but some disappointments.

#### Economic recession

This has been the talking point for the past year and it has certainly been the impetus behind cost cutting measures introduced in health care.

#### CTUSAB

The Congress of Trade Unions and Staff Associations of Barbados, more popularly known as CTUSAB, has been an area that has been beneficial to the association, with Dr. Durrant and I attending the meetings on behalf of BAMP.

CTUSAB has been instrumental in assisting us over the past year and the May Day signing of protocol VI of the Social Partnership by the Government, Private Sector and Trade Unions, of which BAMP was a signatory, marks a significant achievement. I look forward to a new level of cooperation and maturity in negotiations going forward.

#### Undeclared war on Doctors

BAMP undertook industrial action when one of our members was summarily dismissed without explanation, with the QEH Board using the "Determination of engagement clause" to avoid giving an

explanation. Included in the matter was the advertisement of a consultant's post while still employed, and the non renewal of the contract of another consultant.

BAMP suffered much negative publicity from this action but the administration did not repeat that action and the highly rumoured "list" of doctors to be fired was denied by the board.

BAMP's action was suspended after intervention by the Minister of Health and on consultation with CTUSAB and we went to negotiate with the board.

Consultation with our attorneys, our Industrial relations advisor and council took about three months and we produced a comprehensive revised contract after reviewing the following documents:-

- (a) current contracts for consultants and senior registrars
- (b) contracts of doctors from the USA,
- (c) contracts for doctors in the NHS in the United Kingdom
- (d) Our proposed revised contracts from 2007
- (e) The proposed Employment Rights Bill
- (f) Protocol V and the then proposed protocol VI of the social partnership
- (g) Appraisal system for doctors

We submitted our documents in January, 2011 to the QEH's Industrial relations advisor or negotiator and the chairman of the board.

We wrote in April advising that we wanted a meeting within 21 days to conclude our negotiations. There was the promise of a meeting, but to date no meeting has been arranged.

At our meeting with the Minister of Health on Wednesday 11th

May, the Minister told us that he was advised that BAMP was delaying the process and as such we presented him with documentation to the contrary. He said that he would instruct the board to meet and settle the negotiations with BAMP.

At the meeting with Minister of Health on Wednesday, the following issues were raised:

### 1. Polyclinics

- (a) Issues of polyclinic doctors: their contract issues and assessments should be similar to what we are negotiating with the QEH. Study leave and study travel grants for all doctors re CME. This was agreed.
- (b) Late payment of gratuities. A list was asked for. Reasons were cited.
- (c) Issue of absence of policy from Ministry of Health, re: zero tolerance of violence towards doctors in polyclinics. This was agreed.
- (d) Lack of security in the polyclinics. Agreed. Only yesterday BAMP received correspondence from the Ministry of Health inviting BAMP to be part of a committee set up to look at violence in the Polyclinics.
- (e) BAMP would like the Ministry to consider the suggestion of appointments. It is our understanding that the polyclinic posts may be changed to appointments and we would like the doctors to be able to exercise that option if they so desired. If opted for then there would be no gratuity but a pension would accrue.
- (f) On call for Polyclinic doctors' back pay had been agreed upon and is to be settled by Ministry of health. **To be looked into by PS, Ministry of Health**

### 2. General

- (a) Drug formulary and deletions from the formulary - **BAMP was accused of having representation on the committee and being part of the decision and having members of BAMP who were also on the committee. This was true. Much discussion ensued. We pointed out that BAMP reps across committees were being told that information was confidential and could not be shared with BAMP. This was the case with the Formulary committee and medical council. We held a meeting with BAMP reps to address this issue. The Minister agreed to look at the issue of committee representation by associations and the process of notification of the Appointing organisation on policy issues by their representatives.**
- (b) Medical Professions Act - specific issues: e.g. 3 months for medical reports; when does it start? private sector and public sector, self reporting of doctors and fitness for practice. We were advised to address same with Medical Council directly and via our reps.
- (c) CME subvention, since mandatory CME may be introduced.
- (d) CME to be verified and certified; proposal that this be done by BAMP; Doctors to present certificate to Medical Council re CME credits. We were encouraged to make our proposal to the Medical Council.

### 3. Queen Elizabeth Hospital

- (a) Entertainment allowance back-pay owed by QEH to persons of S4 and above going back years; **we produced documentation and were told that this would be investigated.**
- (b) Research at QEH: a need to establish research fund or policy:

**this was agreed to be looked into.**

- (c) Negotiations with QEH board, dragging on. **We would await the results of intervention by the Minister.**

#### 4. Medical indemnity insurance (malpractice insurance)

- (a) Insurance premiums,
- (b) Malpractice claims-
- (c) Setting limit on malpractice suits.
- (d) No faults settlements
- (e) Controlling the cost of medical care

The Minister was very receptive to the idea of limits on medical malpractice claims, just as limits already existed in other areas of general insurance. This was a positive response that we will follow through on.

Additionally, I was recently informed that the Minister had approved BAMP receiving the minutes of meetings of the Formulary Committee directly. So our discussion has already borne fruit.

### Medical Professions Act

This new act will come into effect on June 1st, 2011 and many changes will occur and there will be some teething problems, since all of our concerns have not been addressed. This is an agenda item and we can discuss further then.

### Council

The council has been very good with the healthy discussion of different ideas and approaches. The changes to the constitution have already borne fruit with the major delay in the business of the association, the election of officers now being a major obstacle to our conducting the business of the association now a thing of the past, with a rotation of members rather than the wholesale replacement of council. I want to again thank the Constitutional Review team for the significant work that they have done: Dr AY Kumar, Dr. Dorothy Golding, Dr. Abdon DaSilva, Professor ER Walrond, Dr. Opal Gibson and Dr. Angela Jennings.

### The future of BAMP

Where do we go from here?

The Barbados Association of Medical Practitioners is a Legal Trade Union and was registered on the 27th of February, 1980 as Trade Union No. 15.

As such we are both a trade union and a professional association. To this end, we have produced a bulletin in January with the steadfast hand of Professor Fraser, the PR and Editorial team. This bulletin was also circulated electronically via email and posted on our website. This was a very good achievement.

We do, however, need more participation for our members to have this as a regular and worthy feature with your submission of articles, comments, stories and so on.

The council has performed extremely well over the past year and I give full credit to them for adroitly charting BAMP through turbulent times. To Drs A Y Kumar, Mr John Gill, Dr Gregory Walton, Dr. Ermine Belle, Dr. Abdon DaSilva, Dr. Ingrid Durrant, Mr Haresh Thani, Dr Brian Maclachlan, Professor Henry Fraser, Professor George Nicholson and Dr Michael Brown, Thank you.

In conclusion, I think that BAMP has weathered the worse and has emerged stronger for it, but we must now chart a new path forward, maintaining our firm positions on matters of national



importance, speaking with a firm voice, an honest voice, a scientific voice, one voice; showing the world how a professional association of doctors truly functions when we put the health of the nation first.

"Don't forget that people will judge you by your actions not your intentions. You may have a heart of gold, but so does a hard-boiled egg".

Thank you.

Dr. Carlos Chase

President, Barbados Association of Medical Practitioners

2011-05-14

## Past President's of BAMP

No	Year of Tenure	Name
1.	1984-1985	Dr Michael Hoyos
2.	1985-1986	Dr George Mahy
3.	1986-1987	Dr George Mahy
4.	1987-1988	Dr George Mahy
5.	1988-1989	Dr Yvette Delph
6.	1989-1990	Dr Yvette Delph
7.	1990-1991	Dr James Boyce
8.	1991-1992	Dr James Boyce
9.	1992-1993	Dr James Boyce
10.	1993-1994	Dr Oscar Jordan
11.	1994-1995	Dr Oscar Jordan
12.	1995-1996	Dr Abdon DaSilva
13.	1996-1997	Dr Frank Bishop
14.	1997-1998	Dr Malcolm Howitt
15.	1998-1999	Dr Ermine Belle
16.	1999-2000	Mr Jerome Walcott
17.	2000-2001	Mr Jerome Walcott
18.	2001-2002	Dr Abdon DaSilva
19.	2002-2003	Dr Margaret O'Shea
20.	2003-2004	Dr Dave Padmore
21.	2004-2005	Dr Dave Padmore
22.	2005-2006	Mr Selwyn Ferdinand
23.	2006-2007	Dr Carlos Chase
24.	2007-2008	Dr Carlos Chase
25.	2008-2009	Dr Carlos Chase
26.	2009-2010	Dr Carlos Chase

1976 – 1977	Prof Errol Walrond
1977 – 1978	Prof Errol Walrond
1978 – 1979	Dr Michael Hoyos
1979 – 1980	Dr Michael Hoyos
1980 – 1981	Prof Errol Walrond
1981 – 1982	Prof Errol Walrond
1982 – 1983	Dr Michael Hoyos
1983 – 1984	Dr. Michael Hoyos

THE DIFFERENCE BETWEEN PERSEVERANCE AND OBSTINACY IS THAT ONE OFTEN COMES FROM A STRONG WILL, AND THE OTHER FROM A STRONG WON'T.

...Henry Ward Beecher

## ANNOUNCEMENT

### The Gift of Dr. Cecil Cyrus Museum

Dr. and Mrs. Cecil Cyrus have donated the famous Dr. Cecil Cyrus Museum of St. Vincent to the University of the West Indies, Cave Hill Campus, to be a part of the teaching and outreach facilities of the Faculty of Medical Sciences. It is planned that the Museum will be located in the new Clinical Teaching Complex at the refurbished Nightingale Home.

Dr. Cecil Cyrus, DSc (UWI Hon), is the famous "Isolated Surgeon" of St. Vincent and the Grenadines. During his more than 40 years of surgical practice in his homeland, when for much of the time he was the only trained surgeon, he was known for his innovative techniques and his ability to perform almost miraculous results with limited resources. His Museum is a unique and irreplaceable collection of almost 800 wet specimens (pathology specimens preserved in pots), over 4,000 photographs in 10 bound albums, X-rays and a complete operating theatre, including instruments and items used over more than four decades. He is a superb photographer, and produced a splendid compilation of hundreds of photos and text in his highly praised magnum opus "A Clinical and Pathological Atlas of St. Vincent." The Museum has been described by the curator of the famous Mutter Medical Museum in Philadelphia as "Unique and irreplaceable".

**Conservation, packing, shipping and storage of the Museum's contents will cost some \$300,000 Barbados dollars. The Faculty of Medical Sciences has started a fund to support Dr. Cyrus's splendid gift, and invites members of BAMP and the UWI Medical Alumni to contribute. The Faculty acknowledges the donations of Dr. Chris Warner and Dr. Vijaya Thani, and will be happy to receive contributions from as many members of BAMP and the alumni as possible, or from other benefactors whom our colleagues can encourage to donate.**

The Museum will be a hugely valuable teaching resource for medical and other health professionals, and when established it is intended to open it to the public for lay education. A modest or generous donation from all Members and Alumni would guarantee its successful establishment.

**Cheques should be written to the Faculty of Medical Sciences, UWI, Cave Hill Campus (The University is a registered charity).**

## FMS Cave Hill Report - January – May 2011

Professor Mike Branday, Dean

In preparation for the upcoming visit of the Caribbean Accreditation Authority (CAAM-HP) in 2012, a Faculty team, in tandem with those on the other campuses, has already begun the process of gathering the extensive documentation that is required. A cross-campus meeting is scheduled for July this year for compilation of the data and drafting of the final self-study report for submission to the Authority. It is anticipated that the site visit will take place by April, 2012.

Thirty-four students from the first entry cohort completed Phase 1 and have just begun their rotating fourth year clerkships, joining students from Mona and St. Augustine. They are expected to graduate in May/June 2013.

During this period, the Phase 1 programme welcomed two new members of staff. Dr. Kenneth Connell returned from studies in the United Kingdom (PhD in Clinical Pharmacology) as Lecturer in Clinical Pharmacology and Dr. Natasha Sobers-Grannum took up the post of Lecturer in Public Health and Epidemiology. It is also expected to have a second anatomist on staff for the beginning of the new academic year.

On March 10th this year, at a ceremony attended by the Minister of Education and the Vice-Chancellor, the 200 seat lecture theatre in the Medical Sciences Laboratory and Teaching Complex at Cave Hill was formally named in honour of recently retired Professor Emeritus Henry Stuart Fraser, in recognition of his contribution to the development of the Faculty and his prominent role in the design of the building.,

After many delays in the refurbishing of the Nightingale Home to house the planned new Clinical Teaching Complex, work is expected to begin in July. Adjacent to the Queen Elizabeth Hospital, the building will provide in excess of 20,000 square feet and, in addition to dedicated space for the teaching and assessment of clinical skills, it will include an expanded medical library, student lounge, staff offices and the Dr. Cecil Cyrus Medical and Pathology Museum, which has been donated by Dr. and Mrs. Cyrus.

I HEAR AND I FORGET.  
I SEE AND I REMEMBER.  
I DO AND I UNDERSTAND.  
...Confucius

## OBITUARY

### Professor John Conrad Waterlow, CMG, FRS, Dsc - A Tribute

Henry S. Fraser

Professor Emeritus, Faculty of Medical Sciences, Cave Hill Campus, UWI



*Professor John Conrad Waterlow, CMG, FRS, Dsc*

John Conrad Waterlow, Founding Director of the Tropical Metabolism Research Unit (TMRU) of the University of the West Indies at our Mona Campus, was the role model for what today is known as Evidence Based Medicine - the integration of scientific evidence from cutting edge, rigorous research, into policy and programmes. He developed his phenomenal research achievements and translation into World Health Organisation policies for treating malnutrition, with the gentle art and skills of an accomplished diplomat – in fact he was the son of a British diplomat! And his extraordinary life's work has, in the words of one of the speakers at his commemoration conference in London on Thursday, April 7th, benefitted millions.

Professor Waterlow won a scholarship in classics to Trinity College, Cambridge, but soon changed to medicine and physiology. After graduating in 1942 from the London Hospital, he was assigned to the Medical Research Council Military Research Committee, and spent a year in Iraq studying the effects of heat on soldiers protecting the oil fields. On returning to Britain he was appointed to the Medical Research Council (MRC) Nutrition Research Unit, and sent to the Caribbean on behalf of the Colonial Office to find the causes of high child mortality. In Guyana and Jamaica he found many children with malnutrition, oedema (swelling of legs and tummy) and fatty livers,

and he devised equipment to study these children. After a year in The Gambia (where I also did research on variation in drug metabolism in local populations 25 years later) he returned to Jamaica, in 1950, to teach physiology at our infant University College and continue his research.

In 1954 he persuaded the MRC to establish the Tropical Metabolism Research Unit, which he directed until 1970, when he was appointed Professor of Human Nutrition at the London School of Hygiene & Tropical Medicine, and proceeded to set up a Clinical Nutrition and Metabolism Unit. In his 16 years in Jamaica he nurtured, trained and inspired a multinational team of young medical scientists and nutritionists in cutting edge research on infant malnutrition and related problems. His differentiation of malnutrition into grades of stunting and wasting is known as the Waterlow Classification, and he mentored many successful researchers, including the current Chancellor of UWI, Sir George ("Champ") Alleyne (UWI Medical graduating class of 1957), Director Emeritus of PAHO / WHO and UN Special Envoy on HIV/AIDS; and Professor David Picou (Class of '55), who succeeded Professor Waterlow as Director of the TMRU and served for many years as the Director of the Caribbean Health Research Council.

But although he became the most respected nutritional scientist of his era, President of the Nutrition Society, Adviser to the UK's Overseas Development Agency (ODA) and Britain's Department of Health, to WHO and the FAO, he remained the father figure for research in the Caribbean - research mentor, "God-father and friend" to all of us from "the House that John built", whom he inspired to make medical research central to our efforts to serve humanity as physicians and health carers. He continued to return to UWI and our conferences for some 30 years, and to mentor and guide us in many ways. His last visit, was in 2006, at the age of 90, for

the 50th anniversary symposium of the TMRU, titled The House that John built.

The glowing tributes at his Commemorative Symposium were introduced by Baron Peter Piot, Director of LSHTM and global AIDS guru (and an Honorary DSc of the UWI), and led off by Sir George Alleyne, Chancellor of UWI and one of Professor Waterlow's leading legionnaires in tackling the malnutrition problem. In his inimitable, eloquent style, Sir George quoted Virgil's opening line of the Aeneid: "Arma virumque cano", or "I sing of arms and the hero", and he spoke passionately of Professor Waterlow's creativity, commitment and compassion.

Joe Millward, who, like Professor Picou, worked with John in defining the intricacies of protein metabolism, spoke on this tour de force of cutting edge research emanating from the UWI. Philip James, another Waterlow protégée and Chairman of the International Obesity Task Force, gave another eloquent talk on the theme "From Malnutrition to Obesity". Alan Jackson, Professor of Human Nutrition at the University of Southampton, spoke on the evolution of Nutrition as a profession and the seminal role of Professor Waterlow. And others, including Professor Sally Macgregor, Professor Kennedy Cruickshank and I, gave personal tributes in this moving symposium, organised by Professor Anne Hill.

For my own part, I deeply appreciated everything about this kind and generous, brilliant and intensely curious, but ever-so-modest man. I first met him while a young medical student at Mona, when he led one of several expeditions to the Andes to study Mountain Sickness, using himself as a subject – a common practice for medical researchers, including yours truly, until the 1970s - and was himself a victim of mountain sickness! I benefitted greatly from his kindness – from his teaching me how to make picture frames in the TMRU

workshop (I still have two of them), while I was doing my medical student elective with Sir George Alleyne, to his hosting me at his house in Notting Hill while I was seeking job interviews in London as a penny-pinching young doctor; to his praise of my humble research work and later encouraging my efforts to establish the Chronic Disease Research Centre here at Cave Hill. I have drawn tremendous inspiration from my many visits to him in London since my own return home, always stimulated by his wide ranging knowledge and humanitarian interests. And over the years, until my last visit last August, 2010, he would preface the most probing and insightful question with the phrase "I don't know much about this, but ..."

There is hardly a medical researcher in the Caribbean who has not benefitted directly or indirectly through one of John's direct mentees, from this extraordinary man, of enormous mental, moral and physical strength, who eventually surrendered at the age of 94, sadly because of bad medical management after a fall. In the obituary in The Independent of November 29, 2010, by G Rickey Welch and Sir John Meurig Thomas, they wrote: "In his presence one sensed a towering mind but a generous and humble spirit." And they concluded with the words: "John Waterlow was a compassionate and charming individual with a voracious intellectual appetite and was always sympathetic to the underdog and underprivileged people, wherever they were."

No one could have expressed it with greater precision - a precision that John would have appreciated, but praise to which he would have demurred.

We thank him and we sing in praise of his personal guardian angel, Joan, his companion and partner for 50 years.

## No one believes seniors . . . everyone thinks they are senile.

An elderly couple was celebrating their sixtieth anniversary. The couple had married as childhood sweethearts and had moved back to their old neighbourhood after they retired. Holding hands, they walked back to their old school. It was not locked, so they entered, and found the old desk they'd shared, where Andy had carved I love you, Sally.

On their way back home, a bag of money fell out of an armoured car, practically landing at their feet. Sally quickly picked it up and, not sure what to do with it, they took it home. There, she counted the money-fifty thousand dollars! Andy said: "We've got to give it back." Sally said: "Finders keepers." She put the money back in the bag and hid it in their attic.

The next day, two police officers were canvassing the neighbourhood looking for the money, and knocked on their door. "Pardon me, did either of you find a bag that fell out of an armoured car yesterday?" Sally said no. Andy said: "She's lying. She hid it up in the attic." Sally said: "Don't believe him, he's getting senile!"

The agents turned to Andy and began to question him. One said: "Tell us the story from the beginning." Andy said: "Well, when Sally and I were walking home from school yesterday ...."

The first police officer turned to his partner and said: "We're outta here!"

THE FAINTEST INK IS MORE POWERFUL THAN THE STRONGEST MEMORY.

...Old Chinese Proverb



## A Concise History of Medicine in Trinidad and Tobago: 1950 to 2000

Dr. Shabier St. John ,



*(This paper was a prize winning essay in the student medical humanities clerkship, Faculty of Medical Sciences, UWI Cave Hill Campus, in 2009).*

History is the study of the past with special attention to the activities of man over time. Information is gleaned from a variety of sources, from written records to artistic pieces. In order to give an adequate account of the History of Medicine in Trinidad, a picture must first

be painted giving insight into the diseases affecting the people in the period studied, their socioeconomic make up, the medical systems including the individual health professionals and departments administering care. It is also important to highlight areas of excellence and pioneering. It's always useful to gain an appreciation for where we have come from as it helps in the quest for excellence in the future.

Dr. Theo Poon-King, perhaps Trinidad's most celebrated doctor, and honoured as "Researcher of the Century", gave accounts of the state of medicine on his return home in the 1950s, in an interview with the author on March 2nd 2009. He described Trinidad in the 1950s as a picture of English colonialism on the eve of Independence. The Mother Country had "exploited all it could from the island and was on the verge of discarding it to its own devices, an-all-too familiar picture for European colonies at this time".

Dr. Poon-King recalled that the major diseases affecting Trinidadians in the '50s were infections. The old adage that "poverty breeds disease and then disease breeds poverty" was very much the case. With the shortage of clean water and good sanitation, and the poor living conditions of the masses, the major health problems stemmed from polio, typhoid, tuberculosis, gastroenteritis, rheumatic fever and nephritis. At this time, the common causes of illness were reflected in the hospital wards: a doctor returning home to work in the hospital would find a Typhoid Ward, Rheumatic Ward, TB Ward and Gastro Ward! The Red Cross also set up a convalescent home with 100 beds for children with rheumatic fever, to take some of the load off the hospitals after acute care had been administered.

There were two major hospitals: Port of Spain in the North and San Fernando in the South - for acute care primarily, with little capacity for outpatient care. The concept of community health and preventative medicine was non-existent. Within the hospitals there was one specialist per specialty: a general medicine doctor and a general surgeon under whom all other doctors worked. There was virtually no sub-specialisation. Up to 1960 it was customary for a surgeon to practice as a general surgeon until there was the possibility of specialization. From this route many pioneers of surgical specialties returned and made invaluable contributions. It would be beyond the scope of this paper to document all of these selfless individuals, but some of the best known are highlighted. The first to be recalled is Dr. Buster Robertson, who eventually became Trinidad's first orthopaedic surgeon.

Dr. Robertson obtained his FRCS and in 1949 worked at Royal

Manchester Children's Hospital until returning home to the Port of Spain General Hospital. He was assigned casualty duty from 6 pm one day to 6 am the next, and then was on call to administer anaesthesia from midday to 6 pm. This roster operated twice a week for 6 months. He was then put in charge of the Septic Wards, male and female (30 beds each). In the male wards he handled prostate operations and strictures of the penis due to gonorrhoea, while in the females he handled complications of traumatic delivery such as ruptured bladder.

Eventually, he was granted study leave with expectations that he would return as orthopaedics and plastic surgery specialist for the San Fernando General Hospital. He studied for six months in plastic surgery at Oxford followed by nine months at the London Royal Orthopaedics Hospital. He returned to Trinidad in 1954 in the equipping of the new San Fernando Hospital.

In 1954 a polio epidemic swept the Caribbean, from Jamaica down the archipelago. In order to provide the best care for those crippled by the disease, Dr. Robertson invited the dean of the London Orthopaedics Hospital to Trinidad for three months. Instructions were given on physiotherapy and design of orthopaedic appliances. Along with Dr. Robertson they visited all district hospitals. It was not until 12 – 18 months after acute illness that operative procedures could be considered. Dr. Robertson used this time frame as a window of opportunity for nine months at the Royal National Orthopaedics Hospital in London, to perfect his techniques. He returned and promptly began operating - joint stabilization, correction of fixed deformities and leg length adjustment. The goal was always to restore function as close to normal as possible. The subsequent implementation of the Salk vaccine virtually eliminated polio, but Government's failure to continue the programme saw another epidemic in 1962, confined to very small children.

Dr. Robertson continued to provide great contributions to Trinidad in plastic and orthopaedic surgery. There were a variety of surgical cases peculiar to Trinidad: in addition to the usual motor vehicle accidents and injuries due to domestic violence, one worth mentioning is Side Swipe Surgery, described by historian Anthony de Verteuil in Surgery in Trinidad. From 1950 to the 1980s orthopaedic surgeons became experts at reparative operations of the right elbow, simply because they had to perform so many. It was then customary for many private-taxi men to drive with their right elbows sticking out of the window. This, according to de Verteuil, enabled them with the least expenditure of effort to signal to a following car, hail a prospective passenger, point out a building to a tourist passenger, wave to a good-looking lady, gesticulate freely in a moment of excitement, buy nuts from a pavement vendor, and so on, ad infinitum (de Verteuil 1996, p.73).

Unfortunately, particularly in the case of taxis squeezing their way through traffic, they side swiped, or were in turn sideswiped by other cars, and the driver's elbow was fractured. The orthopaedic surgeon then had to repair this "well mash up" elbow! The operation involved preliminary excision, internal fixation of the bone, tendon repair and skin grafting. A public awareness programme on television and radio had no effect as most people had the attitude that "It could never

happen to me” (de Verteuil 1996, p. 74). Incidence of this type of fracture decreased with air conditioning in cars, introduction of maxi taxis and better traffic control.

Another surgical pioneer was Dr. Halsey McShine who performed a number of closed heart surgeries in the 1950s at the San Fernando Hospital and later in Port of Spain. These operations were done on children with congenital anomalies such as patent ductus arteriosus. Dr McShine performed the first open heart surgery in the West Indies in 1968 on a young boy with congenital pulmonary valve stenosis. He describes the operation in his own words in de Verteuil’s book (de Verteuil 1996, p. 172-173):

The young little patient was wheeled into the operating theatre and anaesthetized by Dr. David Lee. Ice-cold water was passed through the newly obtained sheeting (one enveloping the boy’s back and the other his chest and stomach) and the boy’s temperature began to fall slowly. In an hour and a quarter the temperature had been brought down from 38 degrees centigrade to 28 degrees centigrade. Mr. Josa, my intern at the time, plotted a graph of the fall in temperature. We could not afford to let it fall too low. Then the operation began. Carefully and deliberately I opened the chest (sawing down the middle of the breastbone) and exposed the heart. Next the two venacavae were tourniquetted and after six feeble beats the heart stopped. Time was now of the essence. The arteries were quickly clamped. I began the operation. Mr. Josa called time every half-minute during the arrest of the heart. Four minutes had passed and still the operation continued. Speed was essential but haste could kill. With just a minute and a half to go, the final silk sutures were put in and the heart restarted by removing the tourniquets from the main veins. With the first contraction of the heart, blood shot out of the pulmonary artery and hit the anaesthetist on the shoulder! Sure now that there was no air in the system, the artery was sutured. The sternum was wired together.

We brought back up the little boy’s temperature in half an hour by substituting warm water for the ice-water and pumping it through the same corrugations. The patient had good convalescence and the operation was completely successful. He is now just over thirty and a strong and well developed young man and an accomplished marathon runner! The first patient to have open heart surgery in Trinidad and indeed, in the West Indies.

The first neurosurgeon in Trinidad was Dr. Samuel Ghouralal. He completed his studies in the USA in 1952, but curiously, the Director of Medical Services felt “there was no room in Trinidad for this specialty, which was meant for places like New York, Baltimore, Montreal or London” (de Verteuil 1996, p.93). In spite of this, he returned home in 1956 and was allowed to operate unofficially in the San Fernando Hospital. It was at this time that good fortune befell him. A relative of the then Minister of Health sustained a fracture of the cervical vertebrae when diving, resulting in paralysis of all his limbs. Dr. Ghouralal was asked to see him and applied skull traction, the routine management at that time. The boy’s condition improved significantly, impressing the Minister, who promptly created the first neurosurgery post. Dr Ghouralal spent 2 days a week at Port of Spain Hospital and 2 at San Fernando. Word of his appointment soon spread and referrals came both from Trinidad and the other islands of the Eastern Caribbean. The St. Elizabeth Clinic was built to facilitate treatment of private patients. By 1970, with the introduction

of CAT scan and MRI, Dr. Ghouralal was able to cover almost the full spectrum of neurosurgical problems. Gynaecology came to the fore in Trinidad in the 1950s with the arrival of Doctors Teddy Cummings, James McGee and Donald Briggs and, soon thereafter, Ralph Hoyte and Percy Harnaryan. In the field of obstetrics, until 1950, most deliveries were made by midwives. In rural areas they were often poorly trained. As late as 1942, 1,099 still-births were recorded. At the hospital there was no specialist in obstetrics and gynaecology and, save for the most routine deliveries, problems were likely to arise. Those fortunate enough to afford it went to private nursing homes. The Oil Fields had their own hospitals, to which their maternity cases were sent.

In 1961 a new three-story maternity block was built at the Port of Spain Hospital. Dr J A Waterman, allegedly the first Caribbean doctor elected Fellow of the Royal College of Gynaecologists, was in charge. Not peculiar to this period, he never performed Caesarean operations, as this was left to the General surgeons. At Port of Spain, the best known surgeons for Caesarean were Doctors Pierre and Shepherd. After 1950, this changed rapidly with the setting up of private nursing homes with operating theatres. From this time it was expected that the obstetrician did his own surgery, although until the 1980s the use of forceps was usually preferred to the Caesarean.

Dr. Poon-King recalls the state of medical care was very limited in the 1950s, with few General Practitioners. Community care was poorly organized, with few health centres. It is easy to see that this system failed to give adequate care to the average Trinidadian who, when faced with illness, had to travel long distances to one of the two main hospitals. He started the first diabetic clinic in 1958 in San Fernando and, seeing the need for a cardiac clinic, he did the requisite fellowship and returned to start one in 1959.

It is also notable to mention the great culture of scientific research in Trinidad and Tobago, starting with the Trinidad Regional Virus Laboratory (TRVL), founded in 1953 by the Rockefeller Foundation in cooperation with the Trinidad and Tobago Government, and originally housed in an old wooden army barrack near the docks. A large wired-in “animal house” was built out-back to house the many wild animals brought in for study. The Virus Lab’s first Director was the renowned epidemiologist, Dr Wilbur Downs, who served until 1961. The lab was one of four tropical virus research laboratories sponsored by the Rockefeller Foundation in the 1950s, including one in Brazil and two in Africa.

Under Dr. Downs the lab began intensive research and made many discoveries, including the isolation of several arthropod-borne disease-causing viruses, and new insights into the epidemiology of key viral diseases, including yellow fever, dengue and rabies. Downs headed a team of dedicated researchers including Dr. Charles R. Anderson (virologist), Dr Leslie Spence (epidemiologist), Dr. Thomas Aitkens (entomologist) and Dr Brooke Worth (mammologist and ornithologist). The lab worked closely with other scientists locally – at the New York Zoological Society’s research station headed by Dr William Beebe, the Imperial College of Tropical Agriculture, the Trinidad and Tobago Health and Agriculture Departments, Arthur M. Greenhall, world expert on vampire bats and Dr A. E. Hill, specialist in Tropical and Internal Diseases.

*...to be continued in next issue*



Dear Editor and Colleagues

There has been much comment on the new policy directive of the Ministry of Health regarding non nationals. I therefore want to make it clear what BAMP's position on the matter is, as discussed by Council.

Doctors will follow the directive from Ministry of Health, but will not be seeking to verify the status of any patient presenting to them for care.

Other Ministry or polyclinic personnel may screen or determine who accesses the system but doctors will NOT be checking ID cards and passports of their patients.

We will treat all patients equally as per our duty as physicians, and as defined in the pledge taken on graduation from the UWI, reproduced below:

**UNIVERSITY OF THE WEST INDIES, FACULTY OF MEDICAL SCIENCES**

*I GRATEFULLY ACKNOWLEDGE THE DISTINCTION TO BE CONFERRED UPON ME AND I SOLEMNLY PROMISE THAT AS A GRADUATE OF MEDICINE, I WILL ABIDE STEADFAST IN ALL DUE LOYALTY TO THE ETHICS OF MY PROFESSION AND ENDEAVOUR ALWAYS TO PROMOTE THE WELFARE AND MAINTAIN THE REPUTATION OF THE UNIVERSITY OF THE WEST INDIES.*

*FURTHER, IN THE EXERCISE OF MY PROFESSION I WILL EVER HAVE IN MIND THE CARE OF THE SICK AND THE WELL-BEING OF THE HEALTHY. TO THESE ENDS I WILL USE ALL MY KNOWLEDGE AND JUDGEMENT.*

*I WILL KEEP SILENCE ON ANY MATTER WHICH I MAY SEE OR HEAR IN THE COURSE OF MY PROFESSIONAL WORK AND WHICH WOULD BE IMPROPER TO DIVULGE.*

*I WILL NOT PERMIT CONSIDERATIONS OF RELIGION, NATIONALITY, RACE, PARTY POLITICS OR SOCIAL STANDING TO INFLUENCE MY DUTY TO MY PATIENT.*

Dr Carlos Chase  
President, BAMP

## BIOGRAPHICAL ARTICLES

### Harry Bayley of Barbados: of Stars and Whistling Frogs.

Professor Henry Fraser



**Dr. Harry Bayley**

Bristol in early days and the point of departure of rum, molasses and sugar for the mother country).

In the nineteenth century family members became prominent jewellers and goldsmiths. Harry's grandfather performed the daily task of signalling noon from the clock tower of Bridgetown Parliament Buildings, for ships in the harbour to set their chronometers. Two uncles were opticians and one a homeopath. His father was proprietor of the family's jewellery establishment but was in many ways a prodigy. A fine musician, Walter Bayley used

Harold. Haynes ("Harry") Bayley was born on April the seventh, 1909, the only surviving son of Walter DeCoursey and Charlotte Bythessea Bayley. He was a tenth generation Barbadian and a direct descendent of one of the earliest settlers, Colonel Richard Bayley, who came to Barbados in 1627. The family name is recorded on the earliest map of Barbados (Ligon, 1657) which shows Bayley's well, near to Speightstown (known as little

to deputise for the Cathedral organist at eleven and came first in the local solicitors' exam at thirteen. As a Vestryman he was a leader in local government affairs and was a reformist and agitator against contemporary abuses. He had an ability to hold an audience "Unrivalled by any public speaker in the island" but "it was his turbulence of spirit which prevented his election to the House of Assembly."

Such a man was the elder Bayley and the only son of such a powerful figure might easily have rebelled. The lead writer of the local newspaper knew father and son well and was to write of the son: "He was suited by a kind fate to measure up to a life decreed for him from birth."

Henry Bayley manifested an unparalleled zest for life, encouraged and rewarded by his father. He entered Harrison College, the island's leading boys' school, and came top of his class. He was rewarded with a boat, which put paid to any further academic success at school. He became one of the toughest of his contemporaries, a strong swimmer and an artist of the triple somersault from the roof of the engineer's pier. As a goal-keeper he became a legend, able to punch the ball while in play from one goal area to the other and his fist was feared as much as his foot.

He entered Columbia University (New York) at sixteen to study sciences, including mineralogy, astronomy, embryology and



genetics, which were not, of course, on the school curriculum at home. He went on at eighteen to Sydney Sussex College, Cambridge, completing his second M.B.B.S. in nine months, apparently a record. He nevertheless had time for putting the shot and pole vaulting, and was awarded a Blue for Athletics in his first year. An album kept by his father chronicled success after success. He completed his M.A. in Pathology, coming under the influence of Professor Henry Dean and R.A. McCance. He was awarded the Burney Yeo scholarship to Kings College Hospital and qualified in medicine in 1934.

### Return to Barbados

By 1935 he felt he was adequately trained to return home and set about his life's ambition, i.e., the true study of medicine in his own country, by clinical and laboratory research. He had recognised at Cambridge the fundamental role of investigative pathology in medicine and he had hoped to obtain a government post in which he could be a clinical pathologist. Unfortunately the petty jealousies of a reactionary medical fraternity prevented this. How much Bayley was himself to blame, how much the resentment which his father's boasting might have caused and how much was due to the insecurity of the local medical elite is not clear.

The family doctors of the pre-penicillin era still wore tops hats and tails and were fossilised in the turn-of-the century medicine of their own training. It was understandable that they should resent the arrival of a new and shining star who, they felt, would detract from their own reputations. Bayley himself held them and their knowledge in scant respect and with Churchillian frankness made his views known.

For several years he attempted to obtain a government post - as Parochial Medical Officer or Government Pathologist, but he was always denied appointment. In the view of one committee member the former appointment would do Bayley positive harm as he was overtrained! His appointment as Pathologist was said to be unnecessary as all investigations could quite easily be carried out in the side room of the ward by the hospital's junior surgeon.

He married Iris Bradshaw (a Barbadian) in 1935 and together they set up home and office close to Bridgetown. His first patients waited in the garden and he used the tops of puncheons (sugar barrels) in his garage for his first laboratory. At King's he had known and worked for R.D. Lawrence, who started one of the first diabetic clinics in Britain, so he started his own diabetic clinic in Barbados with enthusiasm. At this time no more than ten units was considered safe as a single dose.

Much of his private earnings went into buying insulin for the poor, who could not afford it, and he established his non-paying diabetic clinic in response to the totally inadequate Government Hospital service of the colonial era. He soon developed a late afternoon V.D. Clinic, doing his own Wasserman reactions, in response to the need for a working man to see a doctor without missing work and the risk of losing his job.



*Dr. Bayley in his workshop.*

### Social Conditions and the Royal Commission

These were times of extreme socio-economic hardship in the West Indies, when most un-skilled workers earned a weekly wage of ten shillings or less.

The reactionary policies of the planters, the major employers, were to lead to disturbances throughout the Caribbean in 1937, and Dr. Bayley was one of those who gave evidence as a private individual to the Royal Commission which investigated the conditions of the West Indian Colonies in 1938 and 1939. The transcript of his evidence indicated clearly his progressive views on the need for a free national health service. This was much at variance with opinion of the time (both of the local administrators and His Majesty's Investigators). It was evident that he incurred astonishment and displeasure by insisting that all earners of less than one pound weekly should receive free medical attention. When it was pointed out that this included the majority of the population and was obviously out of the question, he reluctantly compromised with a figure of ten shillings!

These radical views on free health care antedated the British National Health Service by a decade. It was to be another seven years before the gross inadequacy of the Barbados General Hospital was investigated by another Commission, 20 years before a new hospital was opened (in 1964) offering free medical care to all who desired it through "Casualty" and Outpatient clinics, and 40 years before a government proposed free comprehensive health care along the lines of the National Health Service.

### Medical practice in the nineteen thirties and an epidemic of Jaundice

Tales abound about Harry Bayley and his early practice. He disliked the traditional doctor's garb and offered to do house calls on his genteel patients at half price without the tails and topper. On one occasion he was called to a comatose diabetic to find three undertakers quoting for their services. When he resuscitated her to their reputed dismay, he was accused of "taking bread from their mouths."

About a year after his return he was asked by an elderly practitioner to see a very ill man with jaundice, who died soon afterwards.

It was suggested that it might be yellow fever. There had long been controversy about cases of jaundice in Barbados. Yellow fever had waged relentless war on the population, especially the English soldiers, over the centuries, but there was also recognised another type of infectious jaundice in Barbados. It was uncommon, occurring sporadically but was of unknown aetiology and had a high mortality.

Richard Ligon, in the first historical account of Barbados, described a yellow fever epidemic in 1640. In 1691 it killed 69% of the troops at the Garrison and was known as Kendal's disease after the unfortunate governor of that time. The island abounds with tombstones marking deaths from yellow fever.

The English Quaker Physician, William Hillary, lived and practised in Barbados and described a yellow fever epidemic in 1742. In his book "Observations on the Changes of the air and the concomitant Epidemic Diseases in the Island of Barbados" he discussed the difficulties of distinguishing it from the "putrid bilious fever." The latter had been subsequently recognised in epidemics of infectious jaundice for 100 years, killing 70,000 in the American war of Secession. Weil, in 1886, described four cases in his classical paper and the spirochaete was demonstrated by Inada in 1916.

Barbados had had an epidemic of jaundice in 1907 - 1909 and Sir Rubert Boyle was sent out to investigate its cause. Harry Bayley, in reviewing the evidence, was unimpressed by Boyle's conclusions that this was yellow fever and commented that Boyle "was at great pains to prove that it was yellow fever". Bayley noted that the distribution of cases in 1907 - 1909 was in the windswept eastern and central parishes, where sugar cane grew and not in low lying, mosquito ridden areas of the west coast. This was in marked contrast to the distribution of malaria in the epidemic of 1927, which occurred in these low lying regions, abounding with both the *Anopheles* mosquito which transmits malaria and *Aedes aegypti* which transmits yellow fever.

Hilary had already observed that "the putrid bilious fever was very rarely or never infectious or contagious to others, except "a chance time in the very malignant cases and at the latter end of the disease". Bayley had noted that cases in 1907 did not seem to include more than one in a household and he therefore began his investigations convinced that he was not dealing with yellow fever but perhaps with a previously unidentified entity of "Barbados Jaundice."

His first personal case was a white grocery clerk who admitted recently handling a dead rat. He was able to identify the spirochaete in the urine, providing an immediate solution to the diagnostic problem, but he nevertheless set about to provide a full epidemiological and clinico-pathological documentation of the epidemic. He equipped his laboratory to carry out the bacteriological, haematological and biochemical tests he considered necessary, doing all of them himself initially but then teaching his wife and a technician to perform the more routine tests. He carried out his own post mortem examinations whenever he could obtain permission. All of this was done with initial cooperation but subsequent obstruction from the authorities, who appeared to resent his interference with the provision of medical care by the grossly inadequate General Hospital and to disapprove of his research.

He made a number of relevant observations. He considered a grossly elevated white cell count with marked neutrophilia and a fall in the lymphocyte to monocyte ratio from 5:1 to 1:1 as important diagnostic features. He noted the consistently low values of serum sodium, of less than 130 meq. per litre, in very ill patients, with dramatic rises of direct bilirubin, urea and potassium concentration. He linked the hyponatraemia with adrenal haemorrhage seen at post mortem and postulated that acute adrenal failure was the cause of death in the severe cases.

Finally he recognised that most victims were sugar cane workers, the majority of cases occurring in the harvest months during heavy rains. Indeed the peak in the epidemic of 1938 followed the heaviest rainfall in the island's history. He pointed out the similar association with heavy rains in the 1907 - 1909 epidemic and suggested that these conditions would increase the risk of transmission from rat to man by prolonging the viability of the Spirochaete passed in the rat urine. Sugar cane workers, handling the wet razor sharp foliage while harvesting, would risk introducing the spirochaete through minor skin abrasions. He was able to convince the health authorities of the role played by the rats which infested the cane fields, resulting in a massive extermination campaign and a subsequent dramatic fall in the incidence of Leptospirosis.

The award of his M.D. for this work in 1942 by the University of Cambridge was noted with a glowing editorial tribute in the local daily newspaper. This was met with a perhaps predictable response from the medical establishment, and an attempt to strike him from the register for counselling "advertisement"!

### **The Bayley Diagnostic Clinic**

By this time Bayley's professional reputation was well-established in the Eastern Caribbean. He had borrowed \$2,000 for the purchase of Bay Cottage, an old plantation manager's house and three acres of land near to Bridgetown, to build the "Bayley's Diagnostic Clinic". His cousin and legal adviser, Eustace Shilstone, insisted that the consulting offices should be built in the form of a modest three bedroom residence, in case "this wild scheme" failed and it needed to be let!

Money was always short, as his charity continued to exceed his business sense. He acquired X-ray equipment by salvaging the burnt out set discarded by the hospital and re-wired it with the help of an electrician friend. Within a short time 23 beds for private patients were in use, along with the best diagnostic laboratory in the West Indies. The well-to-do in the Caribbean were cut off from medical treatment in North America and Britain by the Second World War, and Bayley's Clinic became the medical centre for the Caribbean and Venezuela.

In twenty short years his interests ranged widely and he tackled every problem with ingenuity. He researched and published original articles on the treatment for larva migrans and the poisonous scorpion fish (*Scorpaena plumieri*) or "lion fish" a coral-living fish not previously described in the West Indies. With Dr. K. Vigors Earle, he adapted the Galli-Mainini pregnancy test for use in Barbados with the local frog *Bufomarinus*, using it for many years. Dr. Earle worked in Barbados in the late thirties. He appears to have been Harry Bayley's sole research collaborator in his pioneer days and he later paid glowing tribute to Bayley's remarkable talents.

Other interests included investigation of local bush teas, in which

his wife had an equally strong interest; the Barbadian Cherry (genus *malpighia*) which is the richest natural source of vitamin C; and measurement of basil meta-bolic rates (B.M.R.) He constructed his own Heath-Robinson style B.M.R. machine. When the war was over his equipment needs were great and foreign exchange was extremely limited. He was able to use an excuse for surgical treatment of a hernia to obtain valuable foreign exchange and make a trip to Canada and New York. Within days of his operation he was in New York to learn the techniques of the Papanicolaou Smear from Papanicolaou himself. His wife read "Pap" smears for the Eastern Caribbean for the next decade. He was also the first to introduce the testing for Rhesus factor in the region when he set up his own blood transfusion unit.

#### Of *Penicillium notatum*.

But perhaps his most remarkable feat was the production of penicillin in his own home in 1940 when it was still a research project. He had declined an opportunity to work with Professor H.W. Flory (later Lord Florey) in his new Sir William Dunn School of Pathology in 1935, but he maintained close contacts with his colleagues at Cambridge and Oxford.

He saw the value of penicillin while it was still in the early stages and he obtained an innoculum of *Penicillium notatum*. With his usual inventive approach, he built a "distillery" with sewer pipe made of local pottery and the glass chimneys of oil lamps. The medium was prepared in a sugar barrel and the cultures grown in hundreds of Gordon's Gin Bottles, which, with their flat surfaces could be stacked in a bed room. The collection of all the old gin bottles in the island is recalled as one of the earliest war efforts in Barbados, while idle elderly ladies of means were recruited to roll cotton wool bungs. He continued to make and use his own penicillin for about two years.

His interest in distilling extended to that ubiquitous drug alcohol. With a friend he ventured into a small rum distillery business, but here his lack of concern with profits led rapidly to the inevitable and he was bought out by a bigger manufacturer. This was undoubtedly a good thing. His word was regarded as the final verdict on matters of health and, the association of his name with rum could only have provided further justification for its consumption in even greater quantities!

#### Of Stars and Whistling Frogs

His non-medical interests ranged as widely as the medical. In his wife Iris he seems to have identified the perfect mate - not only a woman of similar interests but of equal intellect and energy. She recalls their first meeting, when he invited her to look at the moon, not with the romantic naked eye but through a telescope. His mother's first cousin was Professor Duxie Greaves, Astronomer Royal for Scotland, and he made his first telescope with spectacle lenses at ten. His fascination with astronomy grew until he founded and was elected Pre- sident of The Barbados Astronomical Society.

On his death his wife succeeded him, and the society, housed in the Harry Bayley Memorial Observatory, has been the most active society of its kind in the Caribbean.

Together they created a magnificent tropical garden, around a small hillside gully. A curious mind asks questions continuously and while re-potting plants Mrs. Bayley noticed some tiny unfamiliar

eggs in a globule of transparent jelly. Characteristically she took it into the house and watched the hatching over the next few days in a petri dish of some very tiny frogs, which had not gone through a tadpole stage. This initially unbelievable observation excited them both and for the next few months the sex-life of the whistling frog (*Eleutherodactylus martinensis*) was a pre-occupation. (This tiny frog, whose adult body length is less than one inch, emits a piercing cry or whistle, one among the chorus of tropical night music in Barbados. It was reputedly introduced to the island from Martinique to annoy an unpleasant neighbour.)

Encouraged by her husband, Iris spent several months studying its embryology, co-operating with Professor Ronnie Harrison of Liverpool and writing a definitive description of the whistling frog of Barbados.

Harry Bayley's enthusiasm overflowed into everything he did and infected those who knew him. He had all the qualities of Lord Rutherford in a mind and body of similar expansive breadth. He was ebullient and intensely sociable but did not suffer fools gladly and his frankness often gave offence. He had no time for idle socialising. He preferred, when not in his clinic, his laboratory, his workshop or his garden to spend his time in bed. There he held court, his family and friends came to talk, often to be a sounding board for his ideas; there he thought, planned his myriad schemes and listened to music.

He smoked and drank with equal gusto, for he lived fully according to the lights of his time. At the time of his sudden death from a coronary at 49 the work of Doll and Hill was still in its infancy. For most of his professional life he was obese, losing 30 to 40 pounds with rigid dieting from time to time.

He was larger than life in every way. He was exuberant, he was inspired. "He was interested in life, in nature, in the arts, in science, and the impact of changes which scientific discovery can bring to the lives of people around him." He was not just a great physician but a great eccentric, who chose to apply his genius for the benefit of his own small community. He not only lived at the crest of the wave; throughout his life he **made** the wave.

#### *Refusing to grow old*

*"It takes character to refuse to grow old,  
Doctor ... successfully to refuse to ...  
It calls for discipline, abstention.  
One cocktail before dinner, not two, four, six  
... a single lean chop and lime juice  
on a salad in restaurants famed  
for rich dishes.*

*Tennessee Williams*

*(Suddenly last summer, 1958)*



## Artist Statement

**Dr. Raymond Maughan**



A true artist is a person who experiences the environment on an emotional level. His/her eyes see and feel what the average person has overlooked. Some days every thing, even an old rusty nail looks beautiful.

A few people feel nothing. Others feel a lot but have not developed a mode of release, of expression.

What we call artist are those who can not only feel and are moved by God's many gifts but have developed a mode of expression, a vehicle where they can share their experience with their fellow man. Be the eyes for those who have not been blessed with the sensitivity to see the overwhelming beauty that is all around us. My modes of expression are music (voice and violin), Ballroom dancing and photography.

What we produce as a work of art is just a small fraction of what we have experienced when we are inspired. The photographs which you see here are missing the wind that danced around me exciting the leaves, the sounds that caressed my being, the aroma that teased me, the warmth of the sun that vitalized me, the three dimensional depth, the changing environment before me. All of these are like the icing on my life's experience. We can only hope that when all of this has been removed from the final product that what is left is still worthy of your admiration and that you can feel even a little of what I have tried to share with you.

I started photography when I joined the Harrison College Photographic club. That was a great learning experience. We had photographic exhibitions every year at school. The agricultural exhibition was another avenue for us to showcase our work. In 1969 I started a photographic club at the Barbados Community College and while there I won the first prize in portraiture and the best photograph taken with a Nikon at an exhibition put on by Barclays Bank. 1973 to 1978, five years of medical school put a stop to my photographic aspirations except when I won first prize in an "All India Photographic Exhibition".

After that life got in the way and I packed away my camera. You can say that I am a "born again" photographer because I only started back serious photography in 2005. Soon after that I upgraded to digital and in 2006, joined the Barbados Photo Club (now Barbados Photographic Society). Between 2006 (when I first participated in NIFCA) and now I won 5 Bronze 9 Silver and 3 Gold awards, and in 2007 had my first solo Photographic Exhibition, and since then, exhibited in 4 other exhibitions. In NIFCA 2009 I was also awarded the most improved Photographer, the most Promising Participant Colour Photography, and the coveted Perce' Tappin Award. I was also nominated for the Prime Minister's Award.

Apart from being a farmer, a singer (founder member of the Cecillian Singers), a ballroom instructor, and a doctor (Obs/Gyn) of 32 years, I am now again exploring life through photography.

Please join with me and enjoy a photographic appreciation and artistic record of what is still a very lovely but rapidly changing island. 99.9% of my artwork is and will always be of Barbados.

*Photograph by Dr. Raymond Maughan.*



## Psychosocial issues in West Indian Primary Health Care

by Rohan G. Maharaj

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Primary Care specialists often say that primary care is the Cinderella of Medicine, receiving less funding and less attention in medical training than other specialties. This has been particularly so in developing countries, and many Caribbean countries illustrated this until just a few decades ago, when Sir Ken Standard, Dr. Owen Minott and Dr. Winsome Segree at the Mona Campus, UWI, led the way, and PAHO / WHO strongly promoted primary care strengthening. In Barbados Dr. Michael Hoyos led the local effort, establishing postgraduate education in Family Medicine, expanded by his successor Dr. Peter Adams, and in Trinidad Dr. Tennyson Sieunarine, followed by Dr. Rohan Maharaj. Nevertheless the attention to training in primary care or family medicine has lagged behind other specialty training, and the medical literature in the field has also been limited. Dr. Maharaj's newbook therefore goes a long way to fill that gap.

Locally, Dr. Hoyos's many papers at the UWI / BAMP Continuing Medical Education (CME) conferences have highlighted the uniquely challenging case scenarios facing family practitioners, whose diagnostic acumen needs to be as finely tuned as the brilliant detective skills of Sherlock Holmes, and Dr. Hoyos has fascinated his colleagues with themes such as "The drug 'doctor', or "The doctor as medicine". And his early papers on diagnoses in multiple family practices in Barbados, on arthritis and obesity, and on attitudes to obesity can be considered West Indian classics.

The collection of papers in this volume extend those early studies in many directions. Dr. Maharaj explains in his preface that he had several aims: to improve primary health care of patients, through the experience of those who had gone before; to share the initial research on depression and psychosocial issues, his major research interest and activity, with other Caribbean primary health care (PHC) providers; to set the stage for the next phase of research in this area, namely interventions; to make information relevant for training medical students, residents and other PHC providers; and finally, to stimulate others in PHC to carry out research.

The book is divided into two parts. The first 13 chapters provide the evidence of the psychosocial burden in PHC, and the last nine chapters provide what Dr. Maharaj calls "a psychosocial toolkit for the West Indian PHC provider" - namely, a series of essays on management of individual topics, from managing depression to the challenge of talking about sexual issues and care of the dying. The author / editor has single- authored seven of them, co-authored nine and five are entirely the work of others.

Some of the challenges of research in different societies are the difficulties in validating research instruments across cultures. Thus the lower prevalence of depression in adults in primary care in Trinidad (12.8 %) than in the USA (20.9 %) may relate to study tools, but it has always been the view of our own local psychiatrists that we see less clear-cut depression than is seen in metropolitan societies. Interestingly, Trinidadian researches report twice the prevalence in

Interestingly, Trinidadian researches report twice the prevalence in Trinidadian adolescents compared with adolescents in the sister island, Tobago! If these findings are true, they may say a great deal about differences in the society and social environment even in two islands locked together! Such findings emphasise the importance of cross-comparative Caribbean studies – so necessary, yet so rarely achieved by our highly individualistic fraternity.

The point is made that while women predominate in the depression figures, it is not that men do not get depressed, but that instead of seeking help Caribbean men deal with it in unhealthy ways – alcohol, drug use, violence and suicide, contributing to the shorter life expectancy of males.

The range of topics treated in the book is wide, and the research techniques used are also varied, and therefore instructive to trainees. The topics of masculinity and health, and erectile dysfunction are followed by guideline papers on caring for the male patient and talking about sexual issues. Almost all of the articles are lucid and provide enjoyable reading and valuable, useful information. I particularly enjoyed some of the tid-bits that most people either don't know or forget to practise, for example the great benefits of resistance exercise in the very elderly!

But I won't spoil your fun or your curiosity! Get your copy from the University bookshops, because it should be essential reading for every primary care physician in the Caribbean.

(Reviewed by Professor Henry S. Fraser)

### O B I T U A R Y

#### *Dr. David R. Colman*

*It is with much sadness that we have learnt of the death of David R Colman, PhD (Jan 4, 1949 – June 1, 2011), Director of the Montreal Neurological Institute (MNI) and Wilder Penfield Professor of Neuroscience at McGill University.*

*Dr Colman visited Barbados regularly in recent times, and has been enthusiastically fostering links between the MNI, UWI Cave Hill and the Queen Elizabeth Hospital at clinical and basic neuroscience levels. He has been meeting with the Deans, first Professor Fraser and then Professor Branday, with our neurologists Dr. David Corbin and Dr. Sean Marquez, and QEH neurosurgeon, Mr. John Gill, Director of Medical Education Dr. Priscilla Richardson and others. Three clinical neurologists from MNI have recently visited and lectured at the Queen Elizabeth Hospital and three third year medical students from the Cave Hill campus of the UWI visited MNI last summer, at the invitation of Dr Colman, for research elective attachments as a part of their research course (See BAMP Bulletin, January / February 2011 issue, for their report of that visit).*

*Dr Colman was born in New York but moved to the MNI in 2002. His laboratory has made major contributions to our understanding of myelination and synapses within the peripheral and central nervous systems. He will be greatly missed by the neuroscience community. BAMP extends deepest condolences to his family and close friends.*

Lifestyle-related diseases such as heart disease, cancer, diabetes, hypertension, stroke and obesity are spreading through our region, and continue to create serious social and economic challenges. We must all seriously commit to doing our part in promoting increased physical activity and healthy eating to live longer, healthier lives.

Sagicor also supports the regional goal that, by 2012, 80 percent of people with non-communicable chronic diseases will receive quality health care and have access to preventative education.

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# HEALTH IS A STATE OF COMPLETE HARMONY OF THE BODY, MIND AND SPIRIT.





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- *dry* • *chesty* • *stubborn*
- *irritating* • *non productive*

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