

Dean's Message

Social accountability – a responsibility for medical schools

Medical schools function in three major areas: education, provision of healthcare in conjunction with other partners, and research. In addition, they are expected to be innovative in all aspects of their work, relate to policy-makers and other stakeholders, and help to shape the external world in which they live.

Research is the systematic investigation and study of material in order to establish facts and reach conclusions. A balance between the freedom to carry out curiosity-driven research and research directed to meeting the needs of the community is essential as is the need for a long term vision of research that encompasses multiple settings and a collaborative approach. As the scope of medical research expands, funding for research has increased significantly. Medical schools must meet the challenge of a changing research paradigm that includes areas that have not been of paramount interest to academic researchers, while maintaining a leadership role in the traditional research arena. The goal is to be responsive to the current and emerging needs of our individual communities, by continually profiling the health status and healthcare needs of the community.

While basic science and clinical and health services research have been priorities for medical schools, research in population health becomes even more important to identify the needs of the communities served by medical schools. Where needs are identified, mechanisms to meet those needs must be introduced; this may mean that medical schools take the initiative to develop and implement interventions in collaboration with community health groups and other sectors, to improve the healthcare of the community they serve.

Evaluation research is key to ensuring that such interventions meet identified needs and to providing a strong evidence base for sustainability. Evaluation research into educational techniques and processes also needs to be promoted so that the most effective means of education, students, faculty and the community are developed.

Basic biomedical research creates new knowledge and understanding of molecular and cellular mechanism of health and disease and the biological pathways to the determinants of health. Discoveries and development in this area have the potential through technology transfer to contribute to commercialization and the creation of jobs.

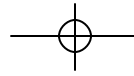
Applied clinical research is involved in the evaluation of the safety and efficacy of new drug treatments and procedures, and thus contributes to the protection of the health of our people, and to the quality of care provided.

Health services research evaluates the care of individual patients and of new delivery models of community-based and system-based care. As new models of delivery of primary care are implemented, health service research will play an important part in evaluating the impact of its individual components such as, interdisciplinary care, alternate funding mechanisms and registration of patients. At a systems level, health service research can contribute by evaluating the care provided in integrated systems of care such as cancer care networks. As the use of information technology and tele-health expands, research will be needed to demonstrate their impact on the healthcare system in terms of quality, access and cost effectiveness.

Medical schools and social mechanisms that fund research, have an obligation to recognize the potential influence that pecuniary contributions can have on the priorities of the research endeavour. Medical schools must at all times be beyond reproach in conducting themselves in such a way that the unfettered search for knowledge is not unduly influenced by factors other than the needs of society.

*O St C Morgan
Dean
Faculty of Medical Sciences, Mona
Jamaica*





12th Annual Research Conference and Workshop on Ageing Well: A Life Course Perspective

Programme

November 12, 2003

*Mona Visitor's Lodge
and Conference Centre*

Opening Ceremony

5:30 pm

Opening Remarks

*Professor O St C Morgan
Dean, Faculty of Medical Sciences, Mona*

Welcome

*Professor Kenneth Hall
Principal, Mona Campus*

Greetings

*The Honourable Horace Dalley
Minister of Labour and Social Security, Jamaica*

Cultural Item from Seniors

Introduction of The Sir Kenneth Standard Distinguished Lecture

*Dr The Honourable Denise Eldemire-Shearer
Co-ordinator WHO Collaborating Centre on Ageing and Health, Jamaica*

The Sir Kenneth Standard Distinguished Lecture

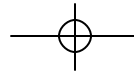
*Dr Alexander Kalache
Chief, Ageing and Health Promotion, WHO, Geneva*

Vote of Thanks

*Professor the Honourable EY St A Morrison
Pro-Vice Chancellor and Dean, School for Graduate Studies and Research, Mona*

RECEPTION





November 13, 2003
Research Conference
Main Medical Lecture Theatre

8:00 am Registration

Session 1

Surgery and Anaesthesia
Chair: AH McDonald and M Scarlett

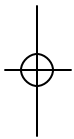
- (O – 1) 8:30 am *Surgery in the elderly: a prospective study in a developing country*
 IW Crandon, R Carpenter, JM Brandy, H Harding, D Simeon, F Pencle
- (O – 2) 8:45 am *Assessing postoperative adverse events and outcome in the elderly surgical patient at the University Hospital of the West Indies*
 C Greenidge, H Harding, K Ehikhametalor, M Reid, M Nelson
- (O – 3) 9:00 am *Tetanus: the bug-bear of the elderly*
 E Williams, H Harding, R Forde, D Chambers, K Allagapan, J Williams-Johnson, S French, R Hutson, P Singh, AH McDonald
- (O – 4) 9:15 am *Predicting outcome in the Intensive Care Unit of the University Hospital of the West Indies*
 A Williams, H Harding, I Hambleton
- (O – 5) 9:30 am *Chest pain in the Emergency Department: the broad spectrum of causes*
 J Williams-Johnson, E Williams, C Harris, AH McDonald
- (O – 6) 9:45 am *Syringomyelia – does pathophysiologic-guided intervention yield better results?*
 CAR Bruce, IW Crandon, R Ramcharan
- (O – 7) 10:00 am *Endoscopic retrograde cholangio-pancreaticography use at the University Hospital of the West Indies*
 JM Plummer, M Arthurs, AH McDonald, DIG Mitchell, MEC McFarlane, MS Newnham, W West

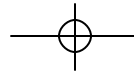
Poster Presentations

Session 2

Metabolism and Nutrition
Chair: H Reid and M Reid

- (O – 8) 10:45 am *Early adiposity rebound and maternal adiposity predicts blood pressure in children: the vulnerable windows study*
 MS Boyne, C Osmond, M Thame, FI Bennett, RJ Wilks, TE Forrester
- (O – 9) 11:00 am *Direct effect of nitric oxide on basal and insulin-stimulated glucose transport in rat skeletal muscle*
 D McGrowder, D Ragoobirsingh, K Barrett, P Brown
- (O – 10) 11:15 am *Genetic determinants of susceptibility to oedematous severe childhood malnutrition*
 KG Marshall, M Reid, AV Badaloo, TE Forrester, CA McKenzie
- (O – 11) 11:30 am *Nutritional status, self-care practices and glycaemic control in patients with diabetes mellitus*
 EMW Duff, A O'Connor, N McFarlane-Anderson, Y Wint, EY Bailey, R Wright-Pasc





- (O – 12) 11:45 am *The relationship between glutathione concentration and albuminuria in sickle cell disease*
A Allick, P Brown, R Marston, B Masters, TE Forrester, M Reid
- (O – 13) 12:00 noon *Concurrent administration of Neem extract prevents development of hypertension and accompanying alterations in the electrocardiogram patterns in DOCA-salt hypertensive rats*
I Obiefuna, R Young

12:15 pm

Lunch

Mona Information Technology Services (MITS)/Faculty of Medical Sciences (FMS) Seminar on Information and Communication Technology in Medical Education and Practice by Dr Suzanne Hardy, Information Officer/IT Manager, University of Newcastle, United Kingdom

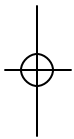
Session 3***Mental Health and Behaviour******Chair: FW Hickling and H Hewitt***

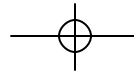
- (O – 14) 1:15 pm *Evaluation of the clinical outcome of patients treated in the psychiatric ward of a general hospital followed by a community mental health programme on discharge from hospital*
GA Lowe, FW Hickling
- (O – 15) 1:30 pm *Parenting, self-esteem and frequency of depressive symptoms of mothers of undernourished Jamaican children*
H Baker-Henningham, C Powell, S Walker, S Grantham-McGregor
- (O – 16) 1:45 pm *A study of psychosocial factors affecting Jamaican children with attention deficit hyperactive disorder*
GT Shetty, M Samms-Vaughan, FW Hickling
- (O – 17) 2:00 pm *Social and demographic characteristics of mentally ill deportees*
KAD Morgan, H Robertson-Hickling, WD Abel
- (O – 18) 2:15 pm *Sexual practices among students at The University of the West Indies, Mona*
K Bowla, KAD Morgan
- (O – 19) 2:30 pm *Factors influencing blood donation actions and intent among university students*
S Richards, D Holder-Nevins, D Eldemire-Shearer
- (O – 20) 2:45 pm *Prevalence and correlates of risk factors for chronic non-communicable diseases (CNDs) among adults without CNDs in Jamaica*
N Zohoori, RJ Wilks
- (O – 21) 3:00 pm *Knowledge and self-reported motivational factors in adults with diabetes mellitus*
YB Wint, EMW Duff, A O'Connor, N McFarlane-Anderson, EY Bailey

3:15 pm

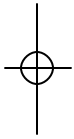
Poster Presentations**Session 4*****Obstetrics, Gynaecology and Child Health******Chair: J Frederick and M Barton-Forbes***

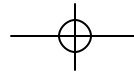
- (O – 22) 3:45 pm *Effect of labour induction with misoprostol on pregnancy outcome in gravidas with*





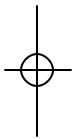
- (O – 23) 4:00 pm *Vasopressin versus normal saline as haemostatic aids to dissection at vaginal hysterectomy*
T Potter, H Fletcher, M Reid
- (O – 24) 4:15 pm *A cross-sectional retrospective analysis of socio-demographic factors and clinical presentation of human immunodeficiency virus infected adolescents attending the Centre for HIV/AIDS Research, Education, and Services in Kingston, Jamaica*
E Walker, B Mayes, H Ramsay, H Hewitt, C Christie, B Bain
- (O – 25) 4:30 pm *An assessment of mother-to-child human immunodeficiency virus transmission prevention in sixteen pilot antenatal clinics in Jamaica*
K Harvey, JP Figueroa, J Tomlinson, Y Gebre, S Forbes, T Toyloy, T Thompson, K Thompson

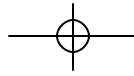




Poster Presentations

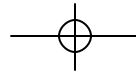
- (P – 1) *Yields from paired blood culture bottles*
G Saunders, A Nicholson, K Roye-Green, P Akpaka, NC Bodoaik, S Jackson, MF Smikle
- (P – 2) *Multi-resistant Escherichia coli*
G Saunders, NC Bodoaik, A Jones, J Jones
- (P – 3) *Ultrasonography and white blood cell count in the diagnosis of acute appendicitis*
WM West, D Brady-West, AH McDonald, B Hanchard, DIG Mitchell
- (P – 4) *Parents' knowledge, concerns and misconceptions about immunization*
C Fletcher, A Barrett, R Halsall, R Harris, T Wallace, M Barton
- (P – 5) *Outcomes of infants born to women with HIV infection in Greater Kingston, 2002 – 2003. A preliminary report of the Kingston Paediatric and Perinatal HIV/AIDS (KPAIDS) programme*
J Steel-Duncan, R Pierre, T Evans-Gilbert, B Rodriquez, P Palmer, S Whorms, MF Smikle, JP Figueroa, CD Christie
- (P – 6) *HIV positivity, uptake of interventions to reduce mother-to-child transmission and birth outcomes in Greater Kingston – a preliminary report of the Kingston Paediatric and Perinatal HIV programme*
N Johnson, A Mullings, K Harvey, G Alexander, D McDonald, E Williams, P Palmer, CD Christie
- (P – 7) *Capacity building at a tertiary level institution as part of a comprehensive HIV/AIDS response programme in the Caribbean*
S Bhardwaj, H Ramsay, N Muturi, J Mullings, B Bain
- (P – 8) *Knowledge, attitudes, practices and views of midwives regarding patients with HIV/AIDS*
H Douglas, EMW Duff, EY Bailey
- (P – 9) *Knowledge and attitudes of third year nursing students regarding caring for patients with HIV/AIDS*
C Pyne, EMW Duff, EY Bailey
- (P – 10) *Stress and coping mechanisms of first year nursing students at the Kingston School of Nursing*
S Forde, EMW Duff, EY Bailey
- (P – 11) *Job satisfaction among staff nurses at the Holberton Hospital, Antigua*
C Weaver, EMW Duff, EY Bailey
- (P – 12) *Factors influencing nursing students' career choice at the University Hospital of the West Indies School of Nursing*
D Thompson, EMW Duff, EY Bailey, E Kahwa
- (P – 13) *Perceived quality of healthcare services by patients with caesarean section*
P Ingram-Martin, EMW Duff, EY Bailey
- (P – 14) *Audit of Caesarean sections at the University Hospital of the West Indies*
R Blanc, S Kulkarni, A Mullings, L Matadial



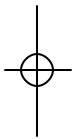


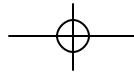
- (P – 15) *Assessment of general mental well-being of doctors and nurses at the University Hospital of the West Indies and the Kingston Public Hospital*
JLM Lindo, J LaGrenade, A McCaw-Binns, M Jackson, D Eldemire-Shearer
- (P – 16) *Patient satisfaction at the University Hospital of the West Indies*
S Win, R Willis, K West, S Mills, N McMorris, H Lowe, S Jaswani, R Gayle, N Crump,
R Crawford, D Cooke
- (P – 17) *Evaluation of the effects of an open door policy on the clinical outcome of patients treated in a psychiatric ward of a general hospital*
GA Lowe, FW Hickling
- (P – 18) *Validation of the international personality disorder examination in the Jamaican population*
A Harrisingh
- (P – 19) *The treatment of personality disorder with psychohistoriographic psychotherapy*
FW Hickling, W De La Haye
- (P – 20) *Insights into the psychosocial health of inner-city youth through projective drawings*
KAD Morgan, R Chung, RC Gibson, FW Hickling
- (P – 21) *Using art as a diagnostic tool for mental illness*
R Chung, KAD Morgan
- (P – 22) *Reported symptomatology within a sample of Jamaican adult survivors of childhood sexual abuse*
K Dockery, R Johnson
- (P – 23) *Knowledge, attitude and practices of female health workers regarding methods of early detection of breast cancer*
N Rodney-Peart, A Mullings, D Eldemire-Shearer, M Jackson
- (P – 24) *Clinico-pathologic features of male breast cancer in Jamaica*
SE Shirley, CT Escoffery
- (P – 25) *Non-gynaecologic exfoliative cytology at the University of the West Indies, 1997-1999*
SE Shirley, CT Escoffery, LA Sargeant, M Sutherland, J Gray, KK Hay
- (P – 26) *Screening older women for cervical cancer: attitudes versus practice*
D Carrington, D Eldemire-Shearer, A McCaw-Binns
- (P – 27) *Tumescent local anaesthesia and titrated sedation: a safe technique in plastic surgery*
G Arscott
- (P – 28) *Epidemiology of burns at the University Hospital of the West Indies*
R Venugopal, D Ferron-Boothe, N Meeks-Aitken, R Carpenter, G Arscott, AH McDonald
- (P – 29) *Laparoscopic cholecystectomy without routine intra-operative cholangiography: a review of 136 cases in Jamaica*
MEC McFarlane, CAL Thomas, T McCartney, P Bhoorasingh, G Smith, P Lodenquai, DIG Mitchell,
the UHWI/KPH Laparoscopic Surgery Group
- (P – 30) *Laparoscopy as a diagnostic tool for non-specific abdominal pain*
S Biswas, K McDonald, LME Falke





- (P – 31) *Aortic dissection at the University Hospital of the West Indies, 1989 – 2002: an evaluation of autopsy cases*
KCM Coard, DHA Skeete
- (P – 32) *Effect of pre-operative depo-medroxyprogesterone acetate therapy on uterine myomata associated menorrhagia in women admitted for surgical treatment (hysterectomy/myomectomy)*
N Johnson, H Fletcher, M Reid
- (P – 33) *Investigation of the pharmacological activities of aqueous alkaloidal extract of *borreria verticillata*, on the cardiovascular and uterine systems*
B Moodie-Henry, ME West, M Gossell-Williams
- (P – 34) *Investigation of the anti-diabetic potential of an extract prepared from *morinda citrifolia* (Noni)*
N O'Connor, O Simon, M Gossell-Williams
- (P – 35) *The use of alternative therapies by Jamaicans suffering from chronic non-communicable diseases*
A Dawes, P Williams, H Hill, C Wilson
- (P – 36) *Renal histopathological changes in adults with haemoglobin SS disease*
W Williams, DJ Shah
- (P – 37) *Neuropsychological impact of systemic lupus erythematosus in Jamaica*
A Bryan, A Ward, K De Ceulaer
- (P – 38) *Risk factors for severe malnutrition among children less than six months-of-age admitted to the Tropic Metabolism Research Unit*
K Phillips, TE Forrester, M Reid
- (P – 39) *Evaluation of the congenital malformations prenatal diagnosis programme by maternal serum alphafetoprotein measurement*
E Dyce-Gordon, B Dyce, M León, O Conde, F Mora
- (P – 40) *Glycaemic control, cardiovascular and renal risk factors in patients attending a specialist diabetes mellitus clinic*
A O'Connor, N McFarlane-Anderson, EMW Duff, R Wright-Pascoe
- (P – 41) *Clinical audit of management of hypertension in general practice*
M Asnani, D O'Connor, T Lewis, S Win, P Brown, M Reid
- (P – 42) *Interviewing skills of students in the final psychiatry Objective Structured Clinical Examinations*
WD Abel, R Pierre, M Barton, FW Hickling
- (P – 43) *Reliability and validity of the final examination in medicine and therapeutics at The University of the West Indies*
WD Abel, CE Denbow, Z Ali, K Dockery, FW Hickling
- (P – 44) *Students' performance in the final Objective Structured Clinical Examinations*
A Morris, WD Abel, R Pierre, FW Hickling
- (P – 45) *The impact of deportees on the epidemic of violent crime in Jamaica and other countries in the region*
H Fletcher





Workshop

Ageing Well: A Life Course Perspective

AIM

The aim of the workshop is to demonstrate the wide range of factors which contribute to the well-being of older persons and how healthcare providers can work at different levels and in a multidisciplinary framework to enhance such well-being. The issues are presented within the context of three fundamental levels of prevention and also highlight the life course as an appropriate framework for intervening.

OBJECTIVES

Perspectives on Primary Prevention

At the end of this session, workshop participants will be able to:

- i) describe the life course approach and its implications for healthy ageing
- ii) identify demographic trends related to ageing of the Caribbean population and how these affect public policy
- iii) examine the ageing process in terms of its psychosocial determinants and outcomes
- iv) describe an approach to improving the “age-friendliness” of primary healthcare facilities

Secondary Prevention Issues and the Older Patient

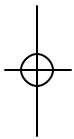
At the end of this session, workshop participants will be able to:

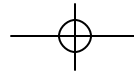
- i) describe the pattern of admissions found among older persons in a hospital setting
- ii) describe current clinical strategies for reducing the complications of diabetes mellitus and hypertension among older persons
- iii) highlight important considerations in the surgical approach to the older patient
- iv) apply relevant diagnostic approaches and appropriate interventions in managing dementia

Tertiary Prevention – Improving Functional Outcome for Senior Citizens

At the end of this session, workshop participants will be able to:

- i) identify and engage approaches to addressing the social needs of senior citizens in a non-residential setting
- ii) describe considerations in making a decision for nursing home care
- iii) utilize the skills of an occupational therapist in managing functional-related deficits of older persons
- iv) understand the needs of caregivers and consider strategies and support mechanisms to address these needs





Workshop Programme

November 14, 2003

**Main Medical
Lecture Theatre**

Session 1

Perspectives on Primary Prevention
Chair: PAHO Representative

8:30 – 10:00 am

Successful ageing: is this a childhood dream?
A Kalache

Ageing in the Caribbean
D Eldemire-Shearer

Psychosocial dimensions of ageing
J LaGrenade

Primary healthcare services: how can we make them age-friendly?
K Lewis-Bell

Coffee Break

Session 2

Secondary Prevention Issues and the Older Patient
Chair: A Mullings

10:30 am – 12:00 noon

An in-hospital morbidity profile of older persons
A Aquart-Stewart

Reducing clinical complications of diabetes mellitus and hypertension in older patients
R Wright-Pascoe

Surgery in the senior years: what, where and how?
AH McDonald

Menopause and hormone replacement therapy
H Fletcher

Diagnostic and management approaches to dementia
D Gilbert

Lunch

Session 3

Tertiary Prevention – Improving Functional Outcomes for Seniors
Chair: D Ashley

1:30 – 3:00 pm

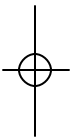
The socially active senior – non-residential options
B Taylor

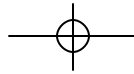
The residential home setting for seniors
Y Stewart

Strategies for optimizing function with increasing age
F Minott-Nembhard

The caregiver's perspective
M Hanson

Closure: The way forward
D Eldemire-Shearer





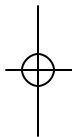
The Sir Kenneth Standard Distinguished Lecture

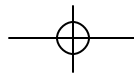
A demographic revolution is underway throughout the world. There are about 600 million persons aged 60 years and over in the world. This will double by 2025 and will reach virtually two billion by 2050. The vast majority of them will be in the developing countries. The challenge is huge: how to prepare societies for this unprecedented rapid ageing process – particularly in the developing world which is ageing before it is rich as opposed to the developed world which became rich before it became old.

The World Health Organization (WHO) argues that all countries can afford to age if governments, international organizations and the civil society enact appropriate policies in time. In this respect, WHO has developed a policy framework on Active Ageing which it defines as “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age”.

Developing countries such as Jamaica are faced with a window of opportunity – “population dividend”; for a few more years their population will feature a unique combination of few children (reflecting recent rapid decline in fertility rates) and relatively few older people (as the process of population ageing is yet to reach its peak). Countries cannot miss this opportunity. It only happens once in their demographic history. The time to plan and act is now. For them, policies to help older people remain healthy and active are a necessity, not a luxury.

*Alexandre Kalache
Chief, Aging and Health Promotion
World Health Organization
Geneva, Switzerland*





Session 1

Surgery and Anaesthesia

Chair: AH McDonald and M Scarle

(O – 1)

Surgery in the elderly: a prospective study in a developing country

*IW Crandon, R Carpenter, JM Brandy, H Harding, D Simeon, F Pencle
Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, Kingston, Jamaica*

Objective: To determine the numbers of elderly patients who require admission to the general surgical wards at the University Hospital of the West Indies (UHWI), their outcome and their effect on hospital resource utilization.

Method: Clinical data were collected on all patients admitted to the general surgery wards of the UHWI during a one year period, using audit forms designed by the Department of Surgery. Differences between elderly and non-elderly surgical patients were analyzed using Chi square and Mann-Whitney U tests as appropriate.

Results: Of the 2375 patients studied, 623 (26%) were 60 years and older. Comparison of elderly and non-elderly patients showed no differences in gender, but less elderly patients were emergency admissions (52% vs 64%, $p < 0.001$), more underwent surgery (68% vs 60%, $p < 0.001$), their mean hospital stay was longer (11.5 vs 8.0 days, $p < 0.001$) and their mortality rate was higher (8.8% vs 1.9%, $p < 0.001$). Forty-four (80%) of the 55 deaths in the elderly group were admitted as emergencies compared to elective admissions ($p < 0.001$). Cancer was the most frequent diagnosis amongst admissions (21%) and mortalities.

Conclusion: Steps to improve the opportunities for earlier admission and optimization of care of elderly surgical patients would not only benefit them, but would be an important step towards a more efficient use of already scarce resources.

(O – 2)

Assessing postoperative adverse events and outcome in the elderly surgical patient at the University Hospital of the West Indies

*C Greenidge, H Harding, K Ehikhametalor, M Reid, M Nelson
Department of Surgery, Radiology, Anaesthesia and Intensive Care and Tropical Medicine Research Institute, The University of the West Indies, Kingston, Jamaica*

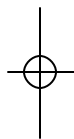
Objectives: To determine outcome and peri-operative factors affecting morbidity and mortality in the elderly surgical population.

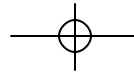
Method: This was a prospective observational study in which all patients, 65 years and above, undergoing surgical procedure between July and December 2002 at the University Hospital of the West Indies, were enrolled. Preoperative variables of age, gender, physical status, comorbidity, surgical diagnosis, timing and procedure, type and duration of anaesthesia were documented. Outcome variables included postoperative complications, intensive care admission and death. Statistical analyses were performed using Stata 7.0 (StataCorp, College Station, TX) and multivariate logistic regressions.

Results: One hundred and fifty-five males and 145 female were enrolled. Upper abdominal surgery (OR 14.5, CI 10.2, 20.9) and congestive heart failure (OR 8.7, CI 2.06, 36.9) were significant predictors of pneumonia; ASA III/IV (OR 1.96, CI 1.07, 3.57) and diabetes mellitus (OR 3.6, CI 1.407, 9.45) of sepsis. Intensive care unit admission was necessary in 11.1% with significant predictors being duration of surgery (OR 6.3, CI 3.0, 13.2), co-morbidity (OR 2.5, CI 1.07, 8.6), the need for preoperative referral (OR 0.03, CI 0.09, 0.9) and ASA category IV (OR 7.5, CI 1.5, 36.7).

Mortality was 12.3% and significant predictive factors were emergency surgery (OR 3.5, CI 1.1, 16.5), upper abdominal surgery (OR 12.6, CI 10.3, 15.4) and ASA IV (OR 4.2, CI 1.5, 8.2).

Conclusion: Improved peri-operative optimization in the management of elderly surgical patients based on the above predictors, can only improve outcome in this rapidly growing and increasingly vulnerable surgical population.





(O – 3)

Tetanus: the bug-bear of the elderly

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Objective: To evaluate the epidemiological profile of patients with tetanus admitted to the University Hospital of the West Indies (UHWI) and identify high risk groups for preventive strategies.

Methods: Retrospective analysis of the medical records of all cases of tetanus admitted to the UHWI between June 1993 and June 2003. Data regarding age, gender, presenting symptoms, severity of disease, duration of hospital/Intensive Care Unit (ICU) stay and outcome were retrieved.

Results: Thirteen patients, M:F ratio of 10:3, were clinically diagnosed with tetanus. Seventy-seven per cent had Grade 3 or 4 disease (Ablett Classification) and were admitted to the ICU. The most frequent presenting symptom was trismus (77%). Age range was 35-83 years (mean 63.2 +/- 18.1), with 46% being over 70 years-of-age. Duration of stay in the ICU was long, ranging from 20-109 days, with a median of 30 days. Mortality rate was 15.4% with the two deaths occurring in patients over 70 years-of-age (72 and 85 years respectively). The remaining 11 patients were discharged with no major sequelae. There was no correlation between length of hospital/ICU stay and age.

Conclusion: Besides the unimmunized, the elderly represent a high risk group which requires special attention. More emphasis should be placed on elucidating immunization status and administering routine booster shots in older persons, not only in hospital but at routine clinic visits for chronic medical disorders islandwide.

(O – 4)

Predicting outcome in the Intensive Care Unit of the University Hospital of the West Indies

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Objectives: To evaluate and compare the Acute Physiology and Chronic Health Evaluation (APACHE) II, the Simplified Acute Physiology Score (SAPS) II, and the admission and 24 hour Mortality Probability Model (MPM0, MPM24) II scoring systems in a prospective cohort of Intensive Care Unit (ICU) patients independent of the developmental sample.

Method: Demographic, clinical and laboratory data, admission diagnosis, length of ICU/hospital stay and outcome at hospital discharge were documented. Model

Hosmer-Lemeshow goodness-of-fit test and calibration curves and the receiver operating characteristic curves respectively. Distribution differences were assessed using the Mann-Whitney distribution-free procedure.

Results: The observed hospital mortality rate of 34 compared to the predicted of 31% (APACHE II), 30 (SAPS II), 20% (MPM0 II) and 41% (MPM24 II). Discrimination was 0.79 for SAPS II (95% CI, 0.71, 0.87), 0.78 for MPM II24 (0.70, 0.86), 0.77 for MPM II0 (0.68, 0.85), and 0.75 for APACHE II (0.66, 0.84). There was significant difference between the models ($\chi^2 = 1.3$, $P = 0.74$). Probability of death increased, whilst time to death decreased, as APACHE II score increased. Survivors had shorter ICU stay but their time to discharge increased as their APACHE II score increased.

Conclusion: The scoring systems showed similar predictive ability. The University Hospital of the West Indies plays a pivotal role in the development and delivery of quality healthcare in the region and the use of one scoring system would be of significant benefit in evaluating and optimizing resource utilization and quality assurance.

(O – 5)

Chest pain in the Emergency Department: the broad spectrum of causes

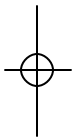
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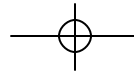
Objective: The aim of the study was to determine the causes of acute non-cardiac chest pain in the Emergency Department of the University Hospital of the West Indies (UHWI). This was also done to compare the diagnoses referred, self-referred and patients 'rushed in' by ambulance.

Methods: A retrospective review was done to describe the causes of chest pain in patients presenting to the Emergency Department, UHWI for the year 2001. The diagnosis in a consecutive case series of 142 patients with chest pain was obtained from their docket notes and the Accident and Emergency log books. The underlying disorders were categorized as cardiac, pulmonary, gastro-oesophageal disorders, musculoskeletal pathology, somatization disorders, other disorders and unknown disorders.

Results: Out of 142 patients, 132 (93.1%) were self-referred, 9 (6.1%) were referred by a general practitioner and 1 (0.8%) was rushed in by an ambulance. Cardiac disease represented 24.6% of cases, pulmonary disease represented 25.4% of the population followed by musculoskeletal disorders in 9.2%, gastro-oesophageal disease in 9.2%, somatization disorders in 6.3% and others and unknown at 22.5% and 4.2% respectively.

Conclusion: Acute coronary disease and pulmonary disease combined (50%) represented the major diagnostic categories for patients presenting to the Emergency





looked at was small, but it does emphasize the importance of a protocol to rule out life-threatening causes of chest pain in the Emergency Department.

(O – 6)

Syringomyelia – does pathophysiologic-guided intervention yield better results?

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Objectives: The outcome of this condition was accepted as being uniformly poor, partly due to treatment uncertainty. Its incidence is increasing due to improved management of spinal dysraphism and increased utilization of magnetic resonance imaging (MRI). The elucidation of the pathophysiology in recent years has refined operative intervention. We reviewed our cases to determine if the new treatment paradigm has had an impact on patient recovery.

Method: All patients with syringomyelia were identified from the Section of Surgery prospective operative database. Demographic and treatment data were cross-referenced with the patients' charts in the Medical Records Department.

Results: Fifteen patients with a mean age of 37.9 years, including nine females, had operative intervention for syringomyelia from 1989-2003. Shunting of the syrinx was initially the sole treatment. Craniovertebral decompression (CVD) and duroplasty were subsequently added. Syrinx shunts were abandoned over the last five years when only CVD and duroplasty have been done. All patients improved but this was clinically better in the latter stages of the study. MRI in the last eight patients documented dramatic, objective resolution of the syrinx with retraction of the cerebellum. Cine-MRI in the latter group of patients showed restoration of the craniospinal CSF dissociation seen previously.

Conclusion: The treatment of syringomyelia associated with Chiari malformation has evolved based on randomized controlled elucidation of the pathophysiology. The patients in the latter part of the series showed clinical and radiological improvement after craniovertebral decompression. We recommend this as the treatment of choice for Chiari-associated syringomyelia.

(O – 7)

Endoscopic retrograde cholangio-pancreaticography use at the University Hospital of the West Indies

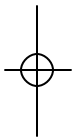
*JM Plummer, M Arthurs, AH McDonald, DIG Mitchel
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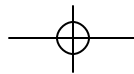
Objective: To study the effects of endoscopic retrograde cholangio-pancreaticography (ERCP) at the University Hospital of the West Indies (UHWI) since its introduction in patient management.

Methods: All patients undergoing ERCP at the UHWI were entered into a prospective database. Parameters entered included demographics, indication for the procedure, success of the ERCP and any immediate complications noted. The patients' case notes were analyzed retrospectively for complications developing after 24 hours and outcome.

Results: During the period March 1999 to December 2002 a total of 120 patients were subjected to 123 ERC examinations, all being performed by a single gastroenterologist. Of these 120 patients, eight had their ERCP as outpatients and were transferred back to their referring hospitals. These patients were excluded from further analysis. Ninety-six of the 115 UHWI patients had case notes that were available for analysis and this group formed the basis of this review. ERCP had successful cannulation in 97%. There were 70 females and 26 males with a female to male ratio of 2.7: 1. Ages ranged from 13 to 85 years (mean \pm SD = 43 \pm 17), males being an average 6 years older than females. The most common indication for ERC was a patient with cholelithiasis and abnormal liver function tests scheduled for laparoscopic cholecystectomy. This made up 33% of patients and in this subgroup sickle cell disease accounted for 50% of cases. Patients with common bile duct stones pre-operatively and post-cholecystectomy, accounted for 13% and 17% respectively while gallstone pancreatitis accounted for 13% of cases including three patients with severe pancreatitis. While 64% of the patients had a normal cholangiogram, 66% of them had a sphincterotomy. Common bile duct stones were seen in 23 cases and had complete success in removal in 48%. There were ten cases (10%) of ERCP pancreatitis and this was severe in three patients and the direct cause of death in one. One patient had ascending cholangitis post-ERCP and there were no cases of post-sphincterotomy bleeding or duodenal perforation.

Conclusions: ERCP at the UHWI has high diagnostic yield but the therapeutic use of ERCP needs further development.





Session 2

Metabolism and Nutrition

Chair: H Reid and M Reid

(O – 8)

Early adiposity rebound and maternal adiposity predicts blood pressure in children: the vulnerable windows study

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Objective: Age at adiposity rebound is the age, after age one year, at which the minimum body mass index (BMI) occurs. Early adiposity rebound has been linked with the development of obesity and diabetes mellitus in later life. We investigated whether age at adiposity rebound would predict childhood blood pressure (BP) and body composition, and if birthweight and maternal factors may influence the age at adiposity rebound.

Methods: Anthropometry (including skinfold thickness) and BP were measured in a cohort of women with uncomplicated singleton pregnancies. The anthropometry and BP of the offspring were measured at birth, at six weeks, three monthly to two years and then every six months.

Results: Three hundred and thirty-two children (138 boys, 194 girls) were seen until at least age six. The median age at rebound was approximately four years. The age at rebound was inversely associated with BMI (- 0.80 kg/m² per year; $p < 0.001$), and calculated percentage body fat ($p < 0.001$) at age six years. The age at rebound was significantly related to the mean systolic BP (- 0.84 mm Hg per year; $p < 0.001$) and diastolic BP (- 0.59 mm Hg/year; $p = 0.003$). Multiple regression analysis showed that while male gender, BMI at age one year and BMI at age six years had a significant relationship with blood pressure, age at rebound maintained an independent inverse association with BP ($p = 0.030$). Birth anthropometry was not significantly associated with the age at rebound. Maternal BMI and triceps skinfold thickness (p -values < 0.05), as well as maternal blood pressure ($p < 0.001$), were inversely associated with the age at rebound.

Conclusions: Early adiposity rebound predicts increased adiposity and BP in later childhood. Maternal factors (adiposity and BP), but not birth anthropometry, may influence the age at rebound.

(O – 9)

Direct effect of nitric oxide on basal and insulin-stimulated glucose transport in rat skeletal muscle

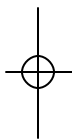
D McGrowder, D Ragoobirsingh, K Barrett, P Brown
Department of Basic Medical Sciences, The University of the West Indies, Kingston, Jamaica

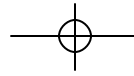
Objective: The purpose of the present study was to determine whether nitric oxide (NO) released from nitroso-N-acetyl-D, L-penicillamine (SNAP) exerts a direct effect on basal and insulin-stimulated glucose transport in skeletal muscle.

Method: Isolated skeletal muscle from Wistar rats was incubated with SNAP (100 μ mol – 1000 μ mol, 10 mmol and 20 mmol) in the presence or absence of 10 μ mol of insulin. Glucose transport was assessed by measuring the accumulation of a labelled analog, D-glucose-[1-3H] (1 μ mol) in isolated skeletal muscles.

Results: SNAP (100 μ M – 1000 μ M) significantly elevated *in vitro* basal D-glucose-[1-3H (N)] transport by 17 – 78% above control, with maximum increase at 100 μ M of SNAP ($p < 0.05$). Both insulin and SNAP had an additive effect on the D-glucose-[1-3H (N)] transport. D-glucose-[1-3H (N)] transport was increased by 6 – 106% above control with maximum effect at 100 μ M of SNAP ($p < 0.05$). SNAP 10 and 20 mmol inhibited the rate of basal D-glucose-[1-3H (N)] transport by 51% and 54% respectively ($p < 0.05$) and non-significantly decreased insulin-stimulated D-glucose-[1-3H (N)] transport by 33% and 35% respectively ($p < 0.05$).

Conclusions: The study confirms the involvement of NO in signal transduction by increasing glucose transport at physiological concentrations and decreasing glucose transport at pharmacological concentrations. This suggests that NO is a potential mediator of basal and insulin-stimulated glucose transport.



**(O – 10)****Genetic determinants of susceptibility to oedematous severe childhood malnutrition**

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Objective: To explore the possibility that there may be associations between genetic variants of glutathione S-transferases (GSTs) and oedematous severe childhood malnutrition (SCM).

Methods: SCM continues to be a major public health problem worldwide. However, only some children develop oedematous SCM (OSCM) despite relatively homogeneous exposures, suggesting that inter-individual variation may contribute to risk. As part of a larger study, we have recruited 132 former patients of the metabolic research ward of the Tropical Metabolism Research Unit. Urinary isoprostanes (a measure of *in vivo* lipid peroxidation) were measured by ELISA assay, and genotypes for genes of the GST superfamily (GSTPI and GSTTI) were determined using polymerase chain reaction (PCR) – based assays.

Results: For GSTPI, there was a difference in genotype frequency between subjects who previously had OSCM (cases) and those who had non-OSCM (controls) which was of borderline significance ($r = 3.74$, 1 df, $p = 0.053$) with the lower activity 105Val allele being found more commonly among the cases. For GSTTI, the difference in genotype frequencies was not significant ($p = 0.13$). There were no significant differences between groups for urinary isoprostanes.

Conclusions: The results of this pilot study suggest that further examination of associations between functional genetic variation and OSCM in larger studies is warranted.

(O – 11)**Nutritional status, self-care practices and glycaemic control in patients with diabetes mellitus**

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Objective: To determine the nutritional status and self-care practices in relation to glycaemic control in patients with diabetes mellitus (DM) attending the Specialist Diabetes Clinic (SDC), University Hospital of the West Indies (UHWI).

Methods: A pre-tested interview schedule was administered to 98 women and 35 men, randomly selected from a population ($n = 510$) of patients with diabetes mellitus attending the SDC, UHWI. Waist circumferences (WC),

heights and weights were measured. HbA_{1c} was used as the index of glucose control. Self-care practice score indicated the extent of compliance with appropriate lifestyle practices. Respondents were asked to recall their usual 24-hour dietary intake, the quantity of sugar added to food and beverages and their intake of packaged soft drinks. Data were analyzed using SPSS Version 7.5.

Results: Median age of respondents: 57.0, range: 20-99 years. Median time since diagnosis: 10 years. Sixty-nine per cent were being treated with insulin. Median BMI: 29.1, range 16.6 – 47.4 kg/m². Eighty-one per cent were overweight or obese. WC: 40% men ≥ 102 cm, 84% women ≥ 88 cm; 46% described diet and/or obesity as contributing to their diabetes mellitus. Eighty-five per cent had consulted a dietitian but only 56.4% reported being on a "special diet". Median sugar intake was 105g/week, range 0-672g/week. Only 16.5% reported not taking any sugar. Forty-five per cent reported compliance with medications. Seventy-six per cent exercised < 3.5 hours/week. They spent a median of 14 hours/day inactive. Exercise scores were inversely related to age ($p = 0.001$) and inactivity ($p = 0.001$) and positively to self-care practice scores ($p = 0.002$). Self-care practice scores were inversely associated with HbA_{1c}% ($p = 0.007$), BMI ($p = 0.005$), and sugar intake ($p = 0.02$). Only 23% had blood glucose controlled to HbA_{1c} $\leq 6.5\%$.

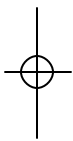
Conclusions: The majority of respondents were overweight or obese, with central obesity. Fewer than half recognized diet and/or obesity as contributing to their diabetes mellitus. Although the majority had consulted a dietitian, only a few patients were compliant in terms of diet and exercise. The strong inverse association between HbA_{1c} and self-care practice scores suggests that interventions to improve self-care practices, weight control, and reduction in sugar intake could improve glycaemic control.

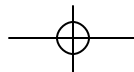
(O – 12)**The relationship between glutathione concentration and albuminuria in sickle cell disease**

A Allick, P Brown, R Marston, B Masters, TE Forrester, M Reid
Tropical Metabolism Research Unit, The University of the West Indies, Kingston, Jamaica

Objectives: Individuals with sickle cell disease (HbSS) have lower erythrocyte concentrations of the endogenously produced antioxidant glutathione (GSH), suggesting that they have impaired antioxidant capacity. Impaired antioxidant capacity as well as increased oxidant stress has been implicated in the pathogenesis of chronic renal failure. As chronic renal failure is the third leading cause of death in subjects with HbSS, we sought to determine if there was a relationship between glutathione, albuminuria (a marker of renal function) and urinary isoprostane a marker of lipid oxidative stress.

Methods: Twenty-two subjects (12 females and 10 males) with HbSS, had erythrocyte GSH, as well as urinary





albumin:creatinine and isoprostane:creatinine ratios measured on an overnight sample of urine.

Results:

The mean age and erythrocyte concentration GSH of the subjects were 25.7 ± 2.4 and 2.0 ± 0.5 (mean \pm sd) respectively. Serum creatinine ranged from 9 mol/l to 103 mol/l with mean of 23.6 mol/l. There were significant inverse relationships between GSH and albumin:creatinine ratio ($R^2 = 0.33$, $\beta = 1.1$, $p < 0.03$) and GSH and isoprostane:creatinine ratio ($R^2 = 0.27$, $\beta = 0.54$, $p < 0.05$). **Conclusion:** Increased oxidant stress and reduced antioxidant capacity may have a pathogenic role in the renal impairment observed in SCD.

(O – 13)

Concurrent administration of Neem extract prevents development of hypertension and accompanying alterations in the electrocardiogram patterns in deoxycorticosterone acetate salt hypertensive rats

I Obiefuna, R Young

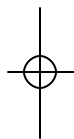
Department of Basic Medical Sciences, Faculty of Pure and Applied Sciences, The University of the West Indies, Kingston, Jamaica

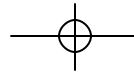
Objective: We investigated the chronic effect of neem-l extract on the development of hypertension and on t electrocardiogram (ECG) in deoxycorticosterone acetate (DOCA) salt treated animals.

Method: Over five to six weeks, inbred male Wistar r with a starting weight of 190 g were given either: (1) twi weekly subcutaneous (sc) injections of vehicle (soybe oil, 0.25 ml per animal) for the first two weeks, plus norn drinking water (Controls); (2) twice weekly (sc) injectic (weeks 1 and 2 only) of 15 mg/kg DOCA dissolved vehicle, plus drinking water containing 1.0% NaCl a 0.03% KCl (DOCA-salt group); or (3) 20 mg/kg of aquee neem extract daily, in addition to the DOCA-salt treatme (DOCA-salt-neem group). All groups (8-12 anima received normal rat pellets *ad libitum* and their blo pressure was measured weekly. Terminally, the anim were anaesthetized and ECGs recorded using sc pins in Lead II configuration.

Results: Mean arterial pressure was significantly lov ($p < 0.05$) in the Control (97 ± 3.7 mmHg) and DOCA-sa neem (87 ± 3.4 mmHg) groups than in the DOCA-s group (115 ± 7.1 mmHg). PR and RR intervals and t duration of the QRS complex were shorter ($p < 0.05$) in t DOCA-salt group than in the Control and DOCA-salt-ne groups. Amplitude of the QRS complex was increas ($p < 0.05$) in the DOCA-salt group compared with both t DOCA-salt-neem and the Control groups.

Conclusions: Daily administration of 20 mg/kg neem-l extract, prevents the development of hypertension and t accompanying alterations in the ECG patterns seen DOCA-salt treated rats.





Session 3

Mental Health and Behaviour

Chair: FW Hickling and H Hewi

(O – 14)

Evaluation of the clinical outcome of patients treated in the psychiatric ward of a general hospital followed by a community mental health programme on discharge from hospital

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Objective: To determine the clinical outcome of acutely mentally ill patients admitted to a psychiatric ward who were followed up on discharge by a community mental health service (CMHFUS).

Method: On September 1, 2001, a CMHFUS was implemented for patients discharged from the psychiatric ward at the University Hospital of the West Indies in September 1, 2001. Patients were followed prospectively for one year after discharge from hospital. The outcome variables included absconding while in hospital, relapse of clinical symptoms following discharge and readmission to hospital. The clinical outcome for the patients (n = 278) admitted from October 1, 2000 to August 31, 2001 (cohort without CMHFUS), was compared with the clinical outcome of patients (n = 232) admitted from September 1, 2001 to August 31, 2002 (cohort with CMHFUS).

Results: After implementation of the CMHFUS for discharged patients, the relapse rate of patients was observed to have decreased significantly ($\chi^2 = 19.296$, $df = 4$, $p = 0.001$), from 12.6% in the pre-CHM period to 7.75% in the post-CMH period. The readmission rate decreased significantly ($\chi^2 = 28.36$, $df = 4$, $p = 0.000$) from 9.9% in the pre-CMH period to 4.97% in the post-CMH period. The absconding rate of admitted patients also decreased significantly ($\chi^2 = 9.698$, $df = 2$, $p = 0.008$) from 2.9% in the pre-CMH period to 0.43% in the post-CMH period.

Conclusion: The presence of a CMHFUS following discharge from hospital significantly improved the clinical outcome of acutely mentally ill patients admitted to a psychiatric in-patient unit. The presence of a CMHFUS also helped to reduce the absconding rate of the admitted patients

(O – 15)

Parenting self-esteem and frequency of depressive symptoms of mothers of undernourished Jamaica children

H Baker-Henningham, C Powell, S Walker, S Grantham-McGregor

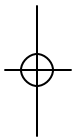
Department of Educational Studies, Epidemiology Research Unit, The University of the West Indies, Kingston Jamaica and Institute of Child Health, University College London, London, United Kingdom

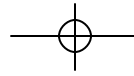
Objective: To compare mothers of undernourished children with mothers of adequately nourished children on maternal depression, parenting self-esteem, social support, exposure to stressors and stimulation in the home.

Method: One hundred and thirty-nine mothers of undernourished children ($WAZ \leq -1.5z$ scores) aged 9-36 months and 71 mothers of adequately nourished children ($WAZ > -1z$ scores) matched for gender and age group were recruited from 18 government health centres in Kingston, St Andrew and St Catherine. The mothers' verbal intelligence quotient (IQ) was measured and a structure questionnaire was administered concerning maternal depression, self-esteem, social support, stressors and stimulation in the home.

Results: Mothers of undernourished children were more depressed and had lower levels of parenting self-esteem than the mothers of adequately nourished children ($p < 0.01$). They also reported higher levels of economic stress ($p < 0.001$), had a lower verbal IQ ($p < 0.05$) and provided a less stimulating home environment ($p < 0.01$). There were no differences between the groups in social support and levels of other stressors including partner stress, domestic violence and community violence. Higher levels of economic stress, partner stress and domestic violence and lower levels of social support were independently associated with maternal depression. Lower levels of economic stress, partner stress and domestic violence and a mother's engagement in higher skilled work were independently associated with better parenting self-esteem. Mothers with lower self-esteem provided a less stimulating home environment.

Conclusions: These findings indicate that attention should be paid to the psychosocial status of the mother as part of the rehabilitative care of undernourished children.



**(O – 16)****A study of psychosocial factors affecting Jamaican children with Attention Deficit Hyperactivity Disorder**

GT Shetty, M Samms-Vaughan, FW Hickling

Departments of Psychiatry and Obstetrics, Gynaecology and Child Health, The University of the West Indies, Kingston, Jamaica

Objectives: To study the pattern of clinical presentation in a sample of Jamaican children with Attention Deficit Hyperactivity Disorder (ADHD) and to find significant differences, if any, in the demographic variables and the environmental experiences of Jamaican children with and without ADHD.

Methodology: A sample of 53 children meeting DSM IV criteria for ADHD from the three Child Guidance Clinics of Kingston were compared with their randomly selected, age and gender matched classmates without ADHD on psychosocial factors using a matched pairs design.

Results: In the Clinic-Group, 92.5 % (n = 49) met DSM IV criteria for ADHD-combined type and 7.5 % (n = 4) met criteria for ADHD-predominantly inattentive type with disruptive, aggressive, and oppositional behaviours being the most frequent presenting complaints. The children with ADHD exhibited significantly more relational problems with their parents, siblings and peers and performed poorly at school. Children with ADHD had greater exposure to gun related violence (28.3%, n = 15, $\chi^2 = 9.42$, df = 1, p = 0.009) and physical punishment (94.3%, n = 50, $\chi^2 = 35.87$, df = 1, p = 0.000). They received less financial ($\chi^2 = 10.5$, df = 2, p = 0.005) and emotional support ($\chi^2 = 13.1$, df = 2, p = 0.001) from their biological fathers. Five children (8.6%) in the initial control group (n = 58) also met criteria for ADHD.

Conclusions: Jamaican children with ADHD exhibit significant externalizing symptoms, social and academic impairment. They experience more psychological trauma and less support from their biological fathers when compared to their classmates of same age and gender. Significant number of school-aged children with ADHD may go unidentified in Jamaica.

(O – 17)**Social and demographic characteristics of mentally ill deportees**

KAD Morgan, H Robertson-Hickling, WD Abel

Department of Community Health and Psychiatry and Department of Management Studies, The University of the West Indies, Kingston, Jamaica

Objective: To describe socio-demographic characteristics and life experiences of mentally ill deportees in Jamaica.

Methods: A systematic review was conducted of all mentally ill deportees living in shelters and community residential facilities. Fifteen people were identified and

interviewed by trained personnel using a semi-structured format. Specific information such as age, forensic history, educational level, age at migration, marital status and psychiatric diagnoses was elicited. Trends were then reviewed.

Results: Fifty-three per cent had been diagnosed with schizophrenia, 20% with bipolar I disorder and 27% were substance abusers. All had been diagnosed prior to deportation. All were male, had at least some college education and had been deported due to criminal offences. Ninety-three per cent were single, 87% had been deported from the United States of America and 13% from Canada. Forty-seven per cent had migrated between the ages of 4 and 8 years, 33% between 9 and 13 years and, 20% between the ages of 14 and 18 years. Twenty per cent had children (who resided abroad) and 27% had a military history.

Conclusions: Possible risk factors associated with mentally ill deportees who live in shelters or community residential facilities may include: being male, having schizophrenia, migration between the ages of 4 and 8 years and having single union status.

(O – 18)**Sexual practices among students at The University of the West Indies, Mona**

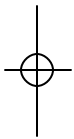
K Bowla, KAD Morgan

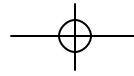
Department of Community Health and Psychiatry, The University of the West Indies, Kingston, Jamaica

Objective: To identify the sexual practices of students at the Mona campus of The University of the West Indies, and to determine association by gender and sexual attitudes.

Method: Using the accidental sampling technique, 400 students were selected to complete the Sexual Practices and Attitudes Questionnaire (SPAQ) developed by two researchers. Data was analyzed using the SPSS Version 6.1 and 10.

Results: The sample comprised 125 males and 37 females. More males than females were involved in, a permissive towards casual sexual and one-night stand relationships. Participants had engaged in all sexual practices identified on the SPAQ, including analingus (3%), pub exposure of sex organs (4%), dressing up in women/men clothing for sexual pleasure (1.5%), sexual activities with animals (1%) and sexual activities for monetary/material gain (3%). A significant relationship existed between gender and sex with partner outside primary union, $\chi^2 (1, n = 404) = 0.000$, (p < 0.01), multiple partners, $\chi^2 (1, n = 404) = 0.000$, (p < 0.01), cunnilingus, $\chi^2 (1, n = 402) = 0.04$, (< 0.05), fellatio, $\chi^2 (1, n = 401) = 0.000$, (p < 0.01), multiple sex/orgy, $\chi^2 (1, n = 407) = 0.000$, (p < 0.01), watching pornographic movies, $\chi^2 (1, n = 410) = 0.002$, (p < 0.01), masturbation, $\chi^2 (1, n = 434) = 0.001$, (p < 0.01), and use of sex toys, $\chi^2 (1, n = 430) = 0.03$, (p < 0.05). Sexuality, permissiveness, socio-sexual orientation, sexual stereotyping





and impulsiveness were significant predictors of engagement in sex practices, $p < 0.05$.

Conclusions: Findings highlight a shift towards a more liberal sexual attitude.

(O – 19)

Factors influencing blood donation actions and intent among students at the University of Technology

*S Richards, D Holder-Nevins, D Eldemire-Shearer
Department of Community Health and Psychiatry, The University of the West Indies, Kingston, Jamaica*

Objectives: To find out factors which influence decisions for or against donation of blood among university students.

Methods: Two hundred students were randomly selected from four programme strata in the faculty of Pure and Applied Sciences at The University of Technology, Jamaica. Their knowledge of blood donation facts, history of blood donation and intent to do so in the future were assessed using a questionnaire based on the trans-theoretical model of behaviour change.

Results: Females obtained significantly higher scores in their knowledge of the facts relating to the process of blood donation ($p = 0.048$). While most respondents had not donated blood in the past, significantly more males had a history of blood donation ($p = 0.0001$) and intent to do so in the future ($p = 0.0001$). Most donors were influenced by relatives and friends who needed to do surgical procedures, while a few felt it was their civic duty to do so. Fear of HIV/AIDS (42.5%) and fear of needles (37%) were leading inhibitors to blood donation among non-donors. Health workers were reported as having minimal influence in encouraging blood donation.

Conclusions: Knowledge of these university students about the process of blood donation did not predict their behaviour in this regard. The driving force to donate blood seems to rest more in emergency response than the culture for giving. Fear of HIV/AIDS and needles must be addressed in educational interventions and health workers do not seem to be the ideal persons for conveying blood donation messages.

(O – 20)

Prevalence and correlates of risk factors for chronic non-communicable diseases (CNDs) among adults without CNDs in Jamaica

*N Zohoori, RJ Wilks
Epidemiology Research Unit, Tropical Medicine Research Institute, The University of the West Indies, Kingston, Jamaica*

Objective: To assess, among healthy Jamaican adults, the prevalence of major chronic non-communicable disease (CND) risk factors: overweight, inactivity, high fat intake, low fruit/vegetable consumption, and cigarette smoking.

Using multivariate models, we also looked at the socio-demographic correlates of higher numbers of risk factors.

Methods: Data are a sub-sample of about 1300 adults, age 15-74 years, from the Jamaican Lifestyle Survey, without evidence of CNDs (diabetes mellitus, hypertension, cerebrovascular accident, myocardial infarction and cancer). Stata software and ordered logistic regression were used for analysis.

Results: Forty-eight per cent of subjects were overweight/obese, 38% had low physical activity, 63% got more than 30% of energy from fats, 35% had lower than the World Health Organization (WHO) recommended intake of fruits/vegetables, and 16% were smokers. Thirty-two per cent exhibited three or more risk factors; another 35% had two risk factors; the remaining 32% had one or no risk factor. In multivariate analyses, age, gender and urban residence were associated with a higher probability of having greater numbers of risk factors. There was a significant age-gender interaction: among males, predicted probabilities of having 3+ risk factors was 22% in all age groups, whereas younger females (< 35 years) had a significantly higher predicted probability of having 3+ risk factors than older females of 55+ years (39% versus 24%). Also, persons living in the southeast had greater numbers of risk factors compared to those in the South; there were no significant differences between other health regions.

Conclusion: Risk factors for CNDs are quite prevalent among healthy Jamaican adults. Targeted preventive and educational measures should be directed particularly at younger females and urban residents.

(O – 21)

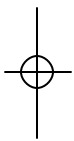
Knowledge and self-reported motivational factors in adults with diabetes mellitus

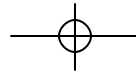
*YB Wint, EMW Duff, A O'Connor, N McFarlane Anderson
EY Bailey
Departments of Advanced Nursing Education and Basic Medical Sciences, The University of the West Indies, Kingston, Jamaica*

Objective: To determine the extent of knowledge, and self-reported factors that motivate patients with diabetes mellitus to make lifestyle changes.

Method: A random sample ($n = 133$) of men ($n = 35$) and women ($n = 98$) with diabetes mellitus were selected from a population of 510 patients attending the specialist diabetes mellitus clinic, the University Hospital of the West Indies (UHWI). A pre-tested in-depth interview schedule was administered, and anthropometric and biochemical measurements done. Knowledge was scored on basic knowledge of diabetes mellitus, its control and complications. Data were analyzed using SPSS Version 7.5. Qualitative data were analyzed by sorting texts into related categories.

Results: Median age of respondents: 57.0 years, range 20-90 years. Median time since diagnosis: 10 years. Sixty-four

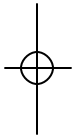


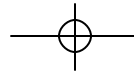


per cent completed primary education, 25.5% secondary and 7.5% tertiary; 3.0% had no education. Knowledge scores were related to respondents' level of education ($p = 0.001$) and number of years since diagnosis ($p = 0.04$). Forty-seven per cent did not know the meaning of "diabetes". Only seventy-five per cent knew diabetes mellitus could not be cured. There was an inverse relationship between age and knowledge scores ($p = 0.001$). Main sources of information included doctors (62.4%), diabetes mellitus educators (10.5%), books/television/radio (10.5%), nurses (3.0%), and dietitians (1.5%). Main motivational factors for lifestyle changes were: "to keep healthy" (30.8%), "follow doctor's orders" (20.3%), "fear of complications" (15.8%), "desire to live" (12.8%), "feeling compelled" (10.5%). Suggestions to improve control of diabetes mellitus included: "group

discussions" (30.8%), "education about diabetes" (21.0%), "financial assistance (drugs)" (12.75%), "video pamphlets" (12.7%), "doctors to describe complications" (9.0%), "more guidance from doctors" (7.7%), "doctors need to be firm and drive fear" (7.5%).

Conclusion: Patients' suggestions for control of diabetes mellitus indicated the need for structured education programmes, particularly in group settings, with specific targeting of older clients with diabetes mellitus. Doctors and other healthcare providers need to increase their educational interaction with patients regarding their condition, treatment and possible outcomes. The patients' reference to doctors and other healthcare providers as primary sources of information, indicates the need for a team approach to ensure effective educational programmes.





Session 4

Obstetrics, Gynaecology and Child Health

Chair: J Frederick and M Barton-Forbes

(O – 22)

Effect of labour induction with misoprostol on pregnancy outcome in gravidas with pre-eclampsia

N Johnson, H Fletcher, M Reid

Department of Obstetrics, Gynaecology and Child Health and Tropical Medicine Research Institute, The University of the West Indies, Kingston, Jamaica

Objective: To determine the impact of misoprostol for induction of labour in patients with pre-eclampsia (PE).

Methods: Seven hundred and ninety-three pre-eclamptic women, delivered in the five years following introduction of misoprostol (1993–1998), were compared with 709 pre-eclamptic controls, delivered during the preceding five years (1986–1991). Outcome variables were the frequency of mild and severe PE, eclampsia and other complications of PE, misoprostol and oxytocin inductions, fetal complications; Caesarean section (CS) incidence and indications. Sub-analysis of the misoprostol years was done to eliminate the confounding influence of time. Data were analyzed using Stata version 7.0.

Results: In comparison to controls, patients induced in the misoprostol years had a greater incidence of severe PE ($p < 0.05$), neonatal admissions ($p = 0.007$), fetal distress ($p < 0.05$), a higher CS rate ($p < 0.05$), but fewer oxytocin inductions ($p < 0.05$). However, sub-group analysis showed a reduction in the incidence of CS, eclampsia, and neonatal admissions in women who were induced with misoprostol ($p < 0.05$). Logistic regression revealed lower odds of CS delivery (OR 0.867, 95% confidence interval 0.02, 0.37) using misoprostol.

Conclusions: In patients with PE, induction of labour with misoprostol had a beneficial effect on pregnancy outcome with a decreased incidence of CS, eclampsia and Special Care Nursery admissions, but there is a possible drawback with an increased incidence of fetal distress. It is also apparent that other factors may be important in the management of these patients independent of misoprostol induction.

(O – 23)

Vasopressin versus normal saline as haemostatic aids to dissection at vaginal hysterectomy

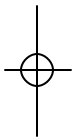
T Potter, H Fletcher, M Reid

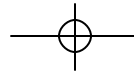
Department of Obstetrics, Gynaecology and Child Health and Tropical Metabolism Research Unit, The University of the West Indies, Kingston, Jamaica

Objective: To compare the haemostatic effectiveness of vasopressin versus normal saline as aids to dissection at vaginal hysterectomy.

Methods: A five year retrospective comparative study was done at the University Hospital of the West Indies involving the review of patient records to evaluate the impact of using vasopressin versus normal saline to aid dissection at vaginal hysterectomy. Both agents were used by different surgeons and the aim was to look at variables which could affect the outcome of the operation. Variables examined included age of the patient, reason for the operation, type of operation, seniority of the main surgeon, dissecting aid used, blood loss at the operation, the complications of the operation and length of hospital stay.

Results: Seventy-one cases were identified; of this, 2 (38%) had hydro-dissection with normal saline and 4 (62%) had vasopressin hydro-dissection. The mean overall age for the patients was 55.5 years (SD +/- 13.3 yrs), with the mean age for the vasopressin group being 54.7 years (SD +/- 13.1 yrs) and the mean age for the normal saline group being 57 years (SD +/- 13.8 yrs), $p > 0.242$. Fifty-two (73.2%) had additional procedures. Ten (19.2%) had anterior colporrhaphy only, 3 (5.8%) had posterior colporrhaphy only, and 39 (75.0%) had the combined anterior and posterior colporrhaphy. Thirty (68.2%) of the patients in the vasopressin group had additional procedure compared to 22 (81.5%) of the patients in the normal saline group. The average duration of the surgery for the vasopressin group was 127.2 minutes, SD +/- 36.3 minutes; and for the normal saline group was 145.6 minutes, SD +/- 37 minutes (p -value = 0.022). The overall mean blood loss was 253 mls, SD +/- 192.5 mls. The mean blood loss for the vasopressin group was 168.0 mls, SD +/- 104.6 mls; and for the normal saline group, was 392.6 mls, SD +/- 221.8 mls ($p = 0.001$). The average stay in hospital by both groups was 4.3 days.





Conclusions: In controlling for age, length of surgery, and the performance of additional procedures, there was a significant difference in blood loss by the method of hydrodissection used, in that the vasopressin group had approximately half the amount of blood loss when compared to the normal saline group. There was no increase in postoperative morbidity in the vasopressin group.

(O – 24)

A cross-sectional retrospective analysis of socio-demographic factors and clinical presentation of human immunodeficiency virus infected adolescents attending the Centre for HIV/AIDS Research, Education, and Services in Kingston, Jamaica

E Walker, B Mayes, H Ramsay, H Hewitt, C Christie, B Bain

The University of West Indies, Mona HIV/AIDS Response Programme, Kingston Paediatric and Perinatal HIV/AIDS Programme and the Centre for HIV/AIDS Research, Education and Services, The University Hospital of the West Indies, Kingston, Jamaica

Objective: To describe the socio-demographic factors and clinical presentation of adolescents infected with human immunodeficiency virus (HIV) at the Centre for HIV/AIDS Research, Education and Services Centre (CHARES), Kingston, Jamaica.

Methods: Clinical symptomatology and sociodemographic factors were studied in 25 HIV-positive Jamaican adolescents, 10-19 years of age, who were seen at CHARES between the years 1996 and 2002. Data was collected between June 2003 and August 2003 from CHARES social work files and the University Hospital of the West Indies (UHWI) medical records. Microsoft Excel was used to compile descriptive statistics for the data.

Results: The mean age of HIV diagnosis was 15.6 (\pm 3.09) years, and the mean age of enrollment at CHARES was 16.3 (\pm 2.9) years. Consensual sexual intercourse was the most prominent mode of transmission (56%), followed by vertical transmission (16%), unknown (16%), forced sexual intercourse (8%), and blood transfusion (4%). The predominant clinical presentations among these adolescent patients were generalized dermatitis (77.2%) and lymphadenopathy (50%). Of the patients for whom clinical status could be determined, 70% were "severely symptomatic". Of these patients only 14% were recommended for antiretroviral treatment.

Conclusions: This study reinforces the need to incorporate globally the goal of the 2002 Joint United Nations Programme on HIV/AIDS (UNAIDS) "to provide reproductive health services, including low-cost or free condoms, voluntary counselling and testing, diagnosis and treatment of sexually transmitted diseases and infection for adolescents in order to effectively prevent HIV infection."

(O – 25)

An assessment of mother-to-child human immunodeficiency virus transmission prevention in sixteen perinatal clinics in Jamaica

K Harvey, JP Figueroa, J Tomlinson, Y Gebre, S Forbes, T Toyloy, T Thompson, K Thompson
Ministry of Health, Kingston, Jamaica

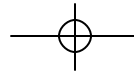
Objectives: To determine the number and age of pregnant women testing positive for human immunodeficiency virus (HIV) at 16 selected clinics in Jamaica in the years 2001 and 2002; the use of nevirapine/zidovudine to minimize the risk of mother-to-child transmission of HIV and the health status of the HIV exposed children.

Methods: A retrospective study was carried out at 16 perinatal clinic sites by examining the patient records for confirmed HIV positive pregnant mothers at these facilities for the period January 2001 to December 2002.

Results: A total of 176 HIV positive women gave birth during the period January 2001 to December 2002; however, only 123 of 8116 women tested positive during the period, with 62 (1.4%) and 61 (1.6%) testing positive in 2001 and 2002 respectively. Fifty-three (30%) women knew their seropositive state prior to becoming pregnant. Information on antiretroviral (ARV) received was available for 143 mothers and 136 infants; 110 (77%) and 113 (83%) of which received ARV therapy respectively (nevirapine 92%, zidovudine 8%). Thirty-three (23%) women received no ARV. Only 44 (25.0%) of the 176 infants had documented ELISA HIV test. The status of 40 (23%) of these children was known: 30 (75%) were alive and well of which five did not receive ARV, 1 (2.5%) was alive and well and 9 (22.5%) were dead of which five received ARV.

Conclusions: Although the majority of pregnant women discovered their HIV status during pregnancy, a significant number got pregnant knowing that they were HIV positive. The majority of mothers and infants received ARV but the follow-up and testing of infants was limited and a significant proportion had died despite receiving ARV.





Poster Abstracts

(P – 1)

Yields from paired blood culture bottles

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 Department of Microbiology, The University of the West Indies, Kingston, Jamaica

Objective: Yields from blood cultures are thought to be highly dependent on the volume of blood sampled. Routinely, a pair of aerobic bottles is submitted from adult patients. A comparison of yields from paired bottles was made.

Methods: Bactec (Becton Dickinson) software was used to extract lists of patients, the type of bottle and the culture result (positive or negative), for two months in 2003. The identity of isolates was recorded in a laboratory logbook. Clinical data supplied and records of ward consultations were used to assess the likelihood of contamination. Suspected contaminants were excluded from the assessment of yields from pairs.

Results:

	MAY	JUNE
Both negative	212	156
Same isolates	29 (64.4%)	29 (88.9%)
Different isolates	1	3
PLUS/F only	4	1
MycoF/lytic only	11	0
Total number of pairs	257	223
Yield (positives)	45 (17.5%)	33 (14.8%)
Contaminants	19 (7.4%)	35 (15.7%)

Conclusions: The optimal inoculum for the Bactec PLUS/F (the “standard aerobic bottle”) is 8-10 ml of blood, whilst the recommended maximum for the Myco F/lytic bottle is 5 ml. Unexpectedly, the Myco F/lytic bottle gave an equivalent (or slightly higher) yield compared to the PLUS/F bottle. Volumes that are being inoculated need to be examined.

(P – 2)

Multi-Resistant *Escherichia coli*

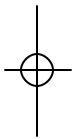
G Saunders, NC Bodonaik, MF Smikle, A Jones, J Jones
 Department of Microbiology, The University of the West Indies, Kingston, Jamaica

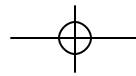
Objective: To confirm multi-resistance amongst a collection of clinical isolates of *Escherichia coli* using the Vite automated susceptibility testing system.

Methods: In a 30-day collection period, 21 isolates of multi-resistant *E coli* were obtained from seven patients: Two were single isolates from two patients, whilst the remaining 19 isolates were from two (or more) specimens from the other five patients. On disc diffusion susceptibility testing, these isolates were found resistant to amoxicillin, amoxicillin-clavulanate, piperacillin, cefazolin, cefotaxime, ceftazidime, gentamicin, amikacin and ciprofloxacin. These results were checked using the Vite system (BioMerieux, France) with GNI+ and GNS-11 cards, which also gave results for piperacillin-tazobactam and cefepime.

Results: Multi-resistance in this collection of *E coli* isolates was confirmed. All isolates were resistant to cefepime (MIC \geq 32 mg/L). For ceftazidime, an intermediate susceptibility (MIC 16 mg/L) (n = 15) or resistant (MIC \geq 32 mg/L) (n = 6) result was obtained. Fifteen isolates were susceptible to piperacillin-tazobactam, but intermediate susceptibility (MIC 32 mg/L) (n = 4) and resistance (MIC \geq 128 mg/L) (n = 2) were evident in six isolates. For two patients, five isolates were all susceptible to piperacillin-tazobactam (n = 3 and n = 2). Susceptibility to meropenem and cefotetan was present in all the isolates collected.

Conclusions: Multi-resistance was confirmed. Therapeutic alternatives were scarce. A description of clinical course and outcomes should follow.



**(P – 3)****Ultrasonography and white blood cell count in the diagnosis of acute appendicitis**

WM West, D Brady-West, AH McDonald, B Hanchard, DIG Mitchell

Departments of Surgery, Radiology, Anaesthesia and Intensive Care and Pathology, The University of the West Indies, Kingston, Jamaica

Objective: To determine the sensitivity and specificity of ultrasonography, and white blood cell (WBC) values in a group of patients with histologically confirmed acute appendicitis.

Methods: The ultrasonography register of the Radiology Department of the University Hospital of the West Indies, was reviewed to determine patients sent to evaluate a clinical diagnosis of acute appendicitis during the period January 1, 2001 and December 31, 2002. The ultrasonography diagnoses and WBC counts of patients with and without acute appendicitis on histology were compared.

Results: Two hundred and fifty-four patients were referred for ultrasonography. Thirty-one referrals had appendectomies. Histology was available for 30 cases and they form the basis of the subsequent analysis. Pathological diagnosis of acute appendicitis was made in 17 of the 30 specimens. Ultrasound was positive in five and negative in 12 of the 17 patients with acute appendicitis and positive in one and negative in 12 of the 13 patients without acute appendicitis. The WBC count was elevated in nine patients with acute appendicitis (53%), normal in six (35%) and not available for two cases. In patients who did not have acute appendicitis, the WBC count was elevated in three (23%), normal in nine (69%) and not available for one patient.

Conclusions: In this group of patients, ultrasonography had specificity and sensitivity of 92% and 29% respectively. A greater percentage of patients with acute appendicitis had elevated WBC counts (53%) than patients without acute appendicitis (23%) but a significant one-third of patients with acute appendicitis had normal WBC counts.

(P – 4)**Parents' knowledge, concerns and misconceptions about immunization**

C Fletcher, A Barrett, R Halsall, R Harris, T Wallace, M Barton

Department of Obstetrics, Gynaecology and Child Health, The University of the West Indies, Kingston, Jamaica and Ministry of Health, Jamaica

Objective: To determine the knowledge, attitude and misconceptions of parents with respect to the practice of immunization at a teaching hospital.

Methods: Consenting parents of children attending the child welfare clinic and the paediatric casualty department

interviewed by one of four medical students using a pre-tested questionnaire. Information on respondent's age, educational level, job description and number of children well as parent's knowledge of vaccines and vaccine preventable diseases (VPD) were recorded. Responses were rated using a 6-point Likert scale. Chi-square tests were used to determine factors influencing knowledge.

Results: One hundred of 120 (83%) parents consented to participate in this survey. Mean age was 29.34 ± 6.9 years. The level of uncertainty about disease was highest for diphtheria (40) and Hepatitis B (27). Correct identification of vaccine was highest for tuberculosis (64%) and lowest for vaccines not routinely offered in the national programme (11%). Older parents were more likely to be concerned about whooping cough ($p = 0.006$), polio ($p = 0.031$) and meningitis ($p = 0.031$) as severe diseases and also more likely to correctly identify more vaccines ($p < 0.01$) but tended to be less concerned about vaccine side effects. Eighty-six parents thought they were provided with insufficient information.

Conclusion: Providing adequate information to parents is important to reduce concerns about vaccine safety and to increase awareness of mortality and morbidity caused by VPD.

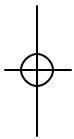
(P – 5)**Outcomes of infants born to women with HIV infection in Greater Kingston, 2002– 2003: a preliminary report of the Kingston Paediatric and Perinatal HIV/AIDS (KPAIDS) programme**

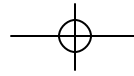
J Steel-Duncan, R Pierre, T Evans-Gilbert, B Rodriguez, P Palmer, S Whorms, MF Smikle, JP Figueroa, CD Chris
Department of Obstetrics, Gynaecology and Child Health, and Department of Microbiology, The University of the West Indies, and Ministry of Health, Kingston, Jamaica

Objective: To present preliminary results of the paediatric outcomes of the HIV-exposed infants seen in the Kingston Paediatric and Perinatal HIV/AIDS Programme.

Methods: A cohort of HIV infected pregnant women was identified at the three leading maternity centres in Greater Kingston through HIV counselling and testing. Antiretroviral prophylaxis was given to the HIV positive women and their newborns (KPAIDS identified infants) along with formula feeding. Some infants had been identified post delivery (non-KPAIDS identified infants). The infants' growth, health and preliminary HIV status (determined by a single DNA PCR via Roche Amplicor test kits) were reviewed and the infants received bactrim prophylaxis and immunizations in accordance with standard protocols.

At 18 months-of-age final HIV-infection status was determined by confirmatory HIV ELISA serology. The women and infants were seen by a multidisciplinary team at Kingston and Comprehensive (CH) Antenatal Clinic, Victoria Jubilee Maternity Hospital (VJH), Spanish Town Hospital (STH), Bustamante Hospital for Children (BH)





Results: Between September 1, 2002 and June 30, 2003, 106 HIV-exposed infants were identified in Kingston, from VJH (32), STH (31), UHWI (28), CH (12) and BHC (3). Preliminary results of outcomes are as follows:

	KPAIDS	Non-KPAIDS	Total
HIV-exposed	60	46	106
Zidovudine	45	6	51
Nevirapine	4	11	15
PCR – positive	5	6	11
PCR – negative	11	5	16
> age 18 months	–	17	17
HIV ELISA	–	5 (all negative)	5
Known HIV/AIDS	0	1	1
Deaths	1	1	2

Conclusion: This programme when fully implemented is expected to prevent at least 150 new cases of HIV/AIDS in children living in Greater Kingston over three years.

(P – 6)

HIV positivity, uptake of interventions to reduce mother-to-child transmission and birth outcomes in Greater Kingston – a preliminary report of the Kingston paediatric and perinatal HIV programme

N Johnson, A Mullings, K Harvey, G Alexander, D McDonald, E Williams, P Palmer, CD Christie
Departments of Obstetrics, Gynaecology and Child Health, Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, and Ministry of Health, Kingston, Jamaica

Objective: To present preliminary estimates from the Kingston Paediatric and Perinatal HIV Programme on HIV sero-prevalence among antenatal patients, uptake of interventions to reduce mother to child transmission and pregnancy outcome from September 2002 to May 2003.

Methods: Pregnant women presenting to Kingston Metropolitan Antenatal Clinics, Spanish Town Hospital (STH), or the University Hospital of the West Indies (UHWI) had HIV serology performed by ELISA, or by the new Determine Rapid Testing. HIV-positive women were referred to high risk clinics at Victoria Jubilee Maternity Hospital (VJH), STH, or UHWI. Antiretroviral prophylaxis with zidovudine or nevirapine was given.

Results: In total, 13 089 women delivered and 14 378 started antenatal care. At UHWI where all obstetric patients received antenatal care in-house, 1809 women commenced antenatal care and compliance with counselling, testing, reporting and follow-up was 100%. Seventeen women (0.9%) were HIV ELISA positive. At STH and VJH, antenatal care was provided from feeder community clinics, with diverse testing and counselling levels. Using

the Determine Rapid Test at ST during April to May, six HIV-positive cases were identified among the 298 tests (2%), while similar testing at the Comprehensive Health Centre which serves VJH revealed 21 HIV-positive among 1,217 tested (1.7%). From September 1, 2002 to May 31, 2003, 72 HIV-positive women, at varying gestational ages, were identified in the programme, 59 have so far received AZT and 5 nevirapine. Of 50 pregnancies, birth outcomes have been 44 live births, 4 perinatal deaths and 2 early pregnancy losses.

Conclusion: This programme needs strengthening in order to further reduce maternal-fetal transmission of HIV in Greater Kingston.

(P – 7)

Capacity building at a tertiary level institution as part of a comprehensive HIV/AIDS response programme in the Caribbean

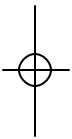
S Bhardwaj, H Ramsay, N Muturi, J Mullings, B Bain
Department of Community Health and Psychiatry, an CARIMAC, The University of the West Indies, Kingston Jamaica

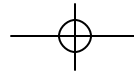
Objective: To develop a core HIV/AIDS instructional training capacity at a tertiary level teaching institution in the West Indies.

Methods: A total of 17 participants selected from the faculty attended a trainer's workshop from May 4 to 6, 2003 in Jamaica. The goals of the workshop were to enable the teachers to develop skills to act on their knowledge and to communicate these effectively to students and colleagues and to develop and understand teaching methodologies that effectively address and teach HIV/AIDS issues with a objective of behaviour change. Using a participatory methodology, the workshop addressed four themes: communication, sexuality, life skills, teaching methodologies and behaviour change, respectively.

Results: Analyses of the feedback forms showed that 58% of the participants said they had attended previous workshops on HIV/AIDS. Ninety-four per cent agreed that the workshop met their expectations. Sexuality emerged as the best covered area in the workshop followed by behaviour change. Further, the provision of resource materials and training were deemed necessary by participants. These included teaching aids (eg audiovisual material), a resource centre with an up-to-date HIV/AIDS database and a resource manual with current information on HIV/AIDS issues.

Conclusions: The workshop clearly highlighted the urgent need for addressing sexuality and behaviour change issues at a tertiary level institution. It also showed the need for more training and skill building programmes for faculty staff and students in a university setting.



**(P – 8)****Knowledge, attitudes, practices and views of midwives regarding patients with HIV/AIDS**

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University of the West Indies, Kingston, Jamaica*

Objective: To determine the knowledge, attitudes, practices and views of midwives regarding patients with HIV/AIDS at a selected hospital.

Methods: A 22 item pre-tested self-administered questionnaire was completed by the entire population (n = 31) of nurses and midwives working at the labour and delivery area of the Spanish Town Hospital, Jamaica. The response rate was 100%. Data were analyzed using SPSS Versions 7.5, 11.0. Qualitative data were analyzed by sorting texts into related categories and describing the main ideas of the subjects.

Results: Median age of the respondents was 40 years, range 27-59 years. Median duration of employment was nine years, range 3-30 years. Eighteen (58%) were registered nurse/midwives and 13 (42%) were midwives. There was an association between the age of the respondents and the desire to have the option of caring for patients with HIV/AIDS during labour and delivery ($p < 0.05$). The majority of the respondents (90%) had a high level of knowledge. Seventeen (54.8%) of the respondents always used universal precautions when caring for these patients. They demonstrated a favourable attitude: 22 (73.3%) scored $\leq 60\%$ on the negative attitude scale. A feeling of sympathy (64.5% of respondents) was the emotion most often expressed towards the patients. Fear of being stuck by a needle (27% of respondents) was their greatest personal concern. Thirty respondents (97%) suggested that education of the public was the most important assistance government could provide to prevent further spread of HIV/AIDS. The majority (77%) believed that family members and support groups could provide support for the patients. To improve the care of the patients, 15 (48%) respondents suggested the provision of more equipment and supplies.

Conclusions: The majority of the midwives had a high level of knowledge, but universal precautions were used by only half of them in caring for the patients. The older nurses were more likely to want to be given the option of caring for patients with HIV/AIDS. The majority showed a positive attitude. A feeling of sympathy was the emotion most often expressed towards the patients. However, a few expressed negative attitudes which could compromise the effectiveness of the care they offered. The midwives suggested several strategies to improve care and to provide support for patients with HIV/AIDS.

(P – 9)**Knowledge and attitudes of third year nursing students regarding caring for patients with HIV/AIDS**

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Objective: To determine the knowledge and attitudes of third year nursing students regarding caring for patients with HIV/AIDS.

Methods: A 28 item pre-tested self-administered questionnaire was completed by 52 (92.9%) of the total population (n = 56) of third year nursing students at the University Hospital of the West Indies, School of Nursing, Jamaica. Data were analyzed using SPSS version 7. Qualitative data were analyzed by sorting texts into related categories and describing the ideas of the subjects.

Results: All respondents were female. Their median age was 22 years, range 21-33 years. The majority of the students scored $> 75\%$ on the transmission, risk factors and universal precautions knowledge tests. The median score for positive attitudes was 95%, range 70% – 100%. Median score of negative attitudes was 53.33%, range 20% – 96.6%. Positive attitudes were associated with equity in the treatment of patients with HIV/AIDS ($r = 0.64$, $p < 0.001$) and respecting the rights of patients with HIV/AIDS ($r = 0.45$, $p < 0.01$). Negative attitudes were associated with avoidance ($r = 0.42$, $p < 0.01$), fear ($r = 0.41$, $p < 0.01$) and a desire for choice regarding caring for the patients ($r = 0.31$, $p < 0.05$). A Wilcoxon test showed that the positive attitudes scores were significantly higher than the negative attitude scores ($Z = -6.05$, $p < 0.001$).

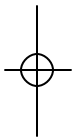
Conclusions: The majority of the students were knowledgeable about HIV/AIDS. Negative attitude scores were associated with avoidance and fear. Positive attitude scores, associated with equity and respect, were significantly higher than negative attitude scores.

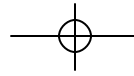
(P – 10)**Stress and coping mechanisms of first year students at the Kingston School of Nursing**

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University of the West Indies, Kingston, Jamaica*

Objective: To determine the level of stress and the coping mechanisms used by first year nursing students at the Kingston School of Nursing (KSN).

Methods: A 29 item pre-tested self-administered questionnaire was completed by 64 (95.6%) of the total population (67) of first year nursing students at KSN. Data were analyzed using SPSS Versions 7.5 and 11. Qualitative data were analyzed by sorting texts into related categories and describing the main ideas of the subjects.





Results: The respondents were all female. Median age of the respondents was 21 years; 75% of the respondents were ≤ 25 years. The majority (89%) of the respondents reported their current stress level to be ≥ 5 on a scale of 1-10. The median number of stress symptoms was four. The number of stress symptoms were related to the reported level of current stress ($r = 0.27$, $p < 0.05$). Respondents rated the classroom environment the highest among the stressors. Frequent examinations, workload and lack of support from administration also contributed to their high stress levels. The main stress symptoms included headache, frustration, anxiety, loss of sleep, confusion, anorexia, irritability and diarrhoea. Thirty-one per cent of the respondents had other roles apart from the student role. The majority (72%) used prayer as a coping mechanism. Other mechanisms included seeking support from peers, sleeping, talking to relatives, studying harder, avoiding stressful situations and performing constant analysis. Only 3% of the respondents used exercise as a coping mechanism.

Conclusions: Respondents reported high stress levels and experienced a variety of stress symptoms. The higher the current stress levels, the more stress symptoms were experienced. In an attempt to cope with stress, the nursing students used various mechanisms. The most frequently used coping mechanism was prayer, the least used mechanism was exercise.

(P – 11)
Job satisfaction among staff nurses at the Holberton Hospital, Antigua

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Objective: To determine the factors that may contribute to job satisfaction among staff nurses.

Method: A 28 item pre-tested self-administered questionnaire was completed by 32 (86.5%) of the population of staff nurses working on the medical, surgical and paediatric wards at Holberton Hospital, Antigua and Barbuda, in March 2003. Staff nurses who were on leave were excluded. Quantitative data were analyzed using SPSS. Qualitative data were analyzed by sorting texts into related categories and describing the ideas of the subjects.

Results: The median age of the respondents was 36 years, range 22-60 years. Their nationalities were Antiguan 23 (71.9%), Guyanese 6 (18.8%) and Cuban 3 (9.4%). Seven (21.6%) worked ≥ 20 hours overtime per month unpaid. Twenty-one (65.6%) agreed that their job was secure. Twenty-four (75%) rated their work related stress level at ≥ 5 on a scale of 1-10. The main factors associated with job satisfaction were seeing patients get well (87.5%), sufficient information to perform at a high level (87.5%) and being treated with respect (68.7%). The main dissatisfiers were lack of opportunities for education

(91%), lack of recognition for achievement (81%), non-nursing duties (78%), insufficient material to perform at high level (81%) and salary (69%). There was an association between their level of stress and the perception of being overwhelmed with non-nursing duties ($r = 0.44$, $p = 0.05$). Twenty-four (75%) rated their overall level of satisfaction with their job ≥ 5 on a scale of 1-10. Twenty-two (69%) reported that it was not likely that they would resign their job.

Conclusions: A majority of the nurses was satisfied with their jobs and would select a career in nursing again. However, although they appeared to be satisfied they reported several factors which could lead to dissatisfaction. These factors included lack of opportunity for further education, lack of recognition for achievement, being overwhelmed with non-nursing duties and high levels of stress.

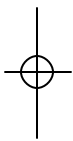
(P – 12)
Factors influencing students' career choice at the University Hospital of the West Indies School of Nursing

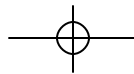
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Objective: To determine the factors that influence students' career choice at the University Hospital of the West Indies School of Nursing.

Methods: A 26 item pre-tested self-administered questionnaire was completed by the total population (n = 75) of first year nursing students at the University Hospital of the West Indies (UHWI) School of Nursing. Data were analyzed quantitatively by using SPSS and qualitatively by sorting texts into related categories and describing the ideas of the subjects.

Results: The response rate was 100%. The population consisted of 74 females and 1 male. Median age was 21 years with range 17-38 years. Sixty-three (84%) were single, 9 (12%) were married and 3 (4%) were in common law relationships. Five major themes emerged as the main reasons for students selecting nursing as a career. These included altruism, personal developmental issues, reward, fascination with the human body or medicine and unfulfilled career goals. Half (50.8%) of the response reflected an altruistic orientation. Components of altruism comprised: wanting to take care of family and friends; wanting to help the needy and wanting to alleviate pain and suffering. Friedman's test showed that "having an interest or talent" was the most important factor, ($p < 0.01$). The other themes in order of importance included: fascination with science/ the human body, benefits, flexible education and wanting knowledge of the subject. Other influential factors included wanting to learn technical procedures; wanting to guide/teach, opportunity to travel, financial/job security, wanting to administer/manage, observing nurse





Conclusions: Several factors influenced nursing students' career choice. Two major factors emerged as being the most important – altruism and “having an interest or talent” in nursing. Basic social and psychological factors continue to influence nursing students' career choice in spite of societal change.

(P – 13)

Perceived quality of healthcare services by patients with Caesarean section

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Objective: To determine the perceived quality of healthcare services by postnatal clients with caesarean sections at the Victoria Jubilee Hospital.

Method: A 28 item pre-tested interview schedule was administered by the researcher to 27 clients with Caesarean sections, attending the six week postnatal clinic. Each participant signed an informed consent. Data were analyzed using SPSS version 7.5. Qualitative data were analyzed by sorting texts into related categories and describing the ideas of the subjects.

Results: The majority of respondents, 21 (77.78%), identified the Victoria Jubilee Hospital being the “best” and “only hospital to deal with emergencies”, as the main reasons for accessing services there. The respondents rated the caring behaviours of doctors a median of 74.8%, while that of nurses, a median of 82.85%. Respondents rated the technical competence of doctors a median of 85%, and the technical competence of nurses a median of 95%. There was no significant difference between the rating of caring behaviours of doctors and those of the nurses. There was also no significant difference in the rating of the technical competence of doctors and nurses. The median cost of healthcare services to respondents was \$16 500, range: \$11 000 to \$22 600. The majority of respondents, 20 (74.07%), indicated that the hospital fees were reasonable for the quality of services they received. There was an inverse association between the perceived technical competence of doctors and the hospital fees, ($r = -0.45$, $p = 0.02$). The vast majority of respondents, 24 (88.89%), rated the overall services of the hospital greater than or equal to 4 on a scale of 1 to 5. However, they felt that there should be improvement in “food preparation”, “interpersonal relationships”, “customer service” and improvement in the “physical environment”.

Conclusions: The respondents were generally satisfied with the overall quality of services offered at the Victoria Jubilee Hospital. The higher the cost, the lower the ratings for the technical competence of doctors. This inverse association between hospital fees and doctor's technical competence is not clear. Suggestions were made by respondents for the improvement in the areas of food

preparation, interpersonal relationships and the physical environment.

(P – 14)

Audit of Caesarean sections at The University Hospital of the West Indies

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Objectives: To determine the frequency of Caesarean sections (CS) and associated indications and to assess the quality of clinical care associated with CS.

Methods: During the study period September 1 to November 30, 2002, all 187 patients delivered by Caesarean section completed a close ended questionnaire form within 24 hours of procedure.

Results:

Caesarean Section Rate (CSR) – 25.9%

Indications (most influential)	% of Study Population
Presumed fetal compromise/IUGR	25.67
Previous CS	25.13
Failure to progress- induction/ in labour	19.25
Others (12 indications)	29.95

Clinical practices: anaesthesia: general – 10.0%, spinal- 90.0% prophylactic antibiotics: 97.3%; gastric acid prophylaxis – 97.3% thromboprophylaxis: 2.1% (fragmin/heparin – 1.6%, aspirin – 0.5%).

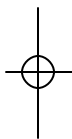
Conclusions: There has been an increase in the CSR (from 9.5% in 1974) in keeping with international trends which also show an increase in the CSR over the past 30 years. This audit found that (i) failure to progress (ii) presumed fetal compromise and (iii) repeat CS combined to form 70.05% of primary indications for CS. Recommendations are that gastric acid prophylaxis should be administered prior to general and regional anaesthesia. High level use of regional anaesthesia in gastric acid prophylaxis and prophylactic antibiotics should continue. There is a need to establish a thromboprophylaxis protocol.

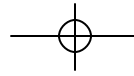
(P – 15)

Assessment of general mental well-being of doctors and nurses at the University Hospital of the West Indies at the Kingston Public Hospital

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Objective: To assess the level of general mental well-being among doctors and nurses from the University Hospital of the West Indies (UHWI) and the Kingston Public Hospital (KPH) using the General Health Questionnaire (GHQ).





Methods: A prospective cross-sectional study of 212 doctors and nurses at the KPH and UHWI was conducted using a 33-item questionnaire and the GHQ-30. Focus group discussions were also held with staff at both hospitals. Probable caseness was defined as a GHQ score ≥ 5 .

Results: Twenty-seven per cent of the study population were considered as suffering mental distress as defined by the GHQ-30. There were no associations between age, gender or hospital of employment and caseness. Only 7.14% of doctors and nurses had sought counselling and they visited the doctor infrequently. Length of service was a significant predictor of caseness; the risk of which declined with the length of time employed. Caseness was also associated with non-work related stress (OR 4.43; CI 0.48, 40.64), serious financial difficulties (OR 1.98; CI 0.88, 4.45) and fear of coming to work (OR 3.07; CI 1.37, 6.90).

Conclusions: A notable proportion of doctors and nurses employed to KPH and UHWI suffer mental distress from preventable causes. Intervention to improve general mental well-being should focus on creating a more healthy work environment including the reduction of stress at work and home and implementation of more human resource friendly policies.

(P – 16)

Patient satisfaction at the University Hospital of the West Indies

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Objective: To assess the level of satisfaction with care among in-patients on the medical and surgical wards of the University Hospital of The West Indies (UHWI).

Methods: In-patients of the medical and surgical wards of the UHWI during July 2003 were eligible for this study. A quota sample of 118 patients equally divided between both wards was selected. A 45 item pre-tested questionnaire covering issues related to structure, process and outcome aspects of care (Donabedian model) in addition to demographic variables was administered by the researchers to selected in-patients. Patients who were too ill to be interviewed were excluded from the study. Summary satisfaction scores were computed for relevant domains and analysis facilitated using SPSS Version 11.5.

Results: Of the 118 patients in the study, 54.2% were male and 45.8% female with a mean age of 49.5 ± 18.3 years. Approximately 52% of patients were unemployed and half had no prior admission to the UHWI. The majority of patients (66%) stated that they had no concerns with the care provided. Of those reporting concerns, staff-patient

interaction (22.9%) and problems with the infrastructure and processing (11%) were the most frequent issue mentioned. The mean overall satisfaction score was 120. (range of 32-154). There was no significant difference between scores for surgical and medical wards (119.5 and 121.1 respectively). Mean structure and process score were similar for surgical and medical wards. Between 78% and 90% of patients felt that their condition had improve since admission to the ward.

Conclusion: Patients on the medical and surgical wards at the UHWI appear to have good satisfaction levels with the care received.

(P – 17)

Evaluation of the effects of an open-door policy on the clinical outcome of patients treated in a psychiatric ward of a general hospital

GA Lowe, FW Hickling

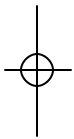
Department of Community Health and Psychiatry, Section of Psychiatry, The University of the West Indies, Kingston Jamaica

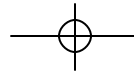
Objective: To evaluate the efficacy of an Open Door Policy (ODP) management system on the clinical outcome of patients managed on the psychiatric ward, University Hospital of the West Indies.

Methods: An ODP was implemented in October 2000. The ODP included daily therapeutic community meetings, art music and drama therapy, and open-door access to the community. Patients admitted from October 2000 to September 2001 were followed prospectively for one year. Demographic, clinical and outcome variables were collected and analyzed. Retrospective data from patients who absconded from the unit for the period October 1999 to September 2000 was also collected.

Results: The total number of patients studied in the period was $n = 277$. Of these, 51.3% ($n = 142$) were female and 48.7% ($n = 134$) male. The mean age was 33.03 ± 13.9 years. Of the cohort 74% ($n = 205$) were single and 74.7% ($n = 207$) were diagnosed as having an acute psychotic illness. The mean length of stay was 11.923 ± 10.326 days. Marijuana was the substance of abuse in 23.5% ($n = 65$) of the patients. There was no significant difference in the rate of absconding during the period of admission ($F = 1.76$, $df = 20$, $p = 0.0926$). Two hundred and sixteen (78%) were discharged to the hospital out-patient clinics. On discharge 96% ($n = 267$) were placed on oral maintenance pharmacological therapy, with 15.6% ($n = 43$) on long acting intramuscular antipsychotic therapy. Thirty-five (12.7%) of the cohort had relapsed during the one-year period following discharge, while 26 (9.4%) had been readmitted.

Conclusion: The open door model of managing acute psychiatric patients was efficient and effective.



**(P – 18)****Validation of the international personality disorder examination in the Jamaican population**

A Harrisingh

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Objective: To validate the International Personality Disorder Examination (IPDE) in the Jamaican population in order to determine its cultural relevance and incorporate its use in assessing personality disorders in mental health facilities.

Methods: The IPDE is compatible with the ICD-10 and the DSM-IV-R classification systems and consists of both a screening questionnaire and a comprehensive interview. The concordance of the number of personality disorders detected by the instrument and the professionals was examined. A clinical sample of 30 Jamaican subjects from the University Hospital of the West Indies and Clearbrook Community Group Home, previously assessed by a psychologist or psychiatrist completed both the screening questionnaire and the interview section of the instrument.

Results: Approximately 16.66% of the sample received at least one definite personality disorder diagnosis when previously assessed by a psychologist or psychiatrist, and when assessed with the IPDE. The prevalence of personality disorders in this Jamaican sample approximates what might have been expected based on information that is currently available in the literature. The instrument was also found to be culturally relevant. Only moderate agreement was found on the type and number of personality disorders diagnosed, questioning whether personality disorders were being overlooked rather than being fully investigated by clinicians.

Conclusion: The IPDE appears valid and culturally relevant in the Jamaican population.

(P – 19)**The treatment of personality disorder with psycho-historiographic psychotherapy**

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Objective: To assess the clinical outcome of patients with a diagnosis of personality disorder, receiving treatment with psycho-historiographic psychotherapy in a Jamaican psychiatry private practice.

Methods: Patients diagnosed with a Diagnostic Statistical Manual of Mental Disorders (DSM-III) diagnoses of personality disorder between 1974 and 1996, were treated with psycho-historiographic psychotherapy. The characteristics of the stages of this process and the one year clinical outcome measures were disaggregated and analyzed, using the Statistical Package for the Social

Results: A total of 94 patients completed treatment with psycho-historiographic psychotherapy. There were (64.9%) females and (33, 35.1%) males. Most patients were married (43, 45.7%), and from socioeconomic class I (56.4%). The main presenting complaints were poor sex (43.6%), inability to cope (13, 13.8%) and anxiety (11.8%). Depression was the most common current psychiatric diagnosis (27, 28.7%), followed by anxiety disorder (12, 12.8%). Histrionic personality disorder was diagnosed most frequently (37, 39.4%). Psycho-historiography was discussed with (93, 98.9%) patients and charted by (43, 45.7%). The working through process was completed by (82, 87.2%) patients and (40, 42.6%) completed the quadranting process. Goal setting was instituted by (82, 87.2%) patients and actualization by (33%). At one year follow-up, the exercise was maintained in (50, 53.2%) patients, and (60, 63.8%) felt they were still doing well.

Conclusion: Patients with personality disorders benefit from treatment with psycho-historiographic psychotherapy.

(P – 20)**Insights into the psychosocial health of inner-city youth through projective drawings**

KAD Morgan, R Chung, RC Gibson, FW Hickling

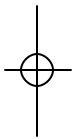
Department of Community Health and Psychiatry, The University of the West Indies, Kingston, Jamaica

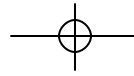
Objective: To analyze the projective drawings of children in order to decipher the issues that are depicted in order to facilitate community care and primary prevention strategies.

Methods: A multidisciplinary team visited an outreach project every week in Rema, Trench Town, St Andrew. As part of the children's art therapy experience, they were asked to produce projective drawings. Twenty-five drawings of houses and trees were analyzed using standardized procedures by two psychology research assistants, at the Masters level, trained in interpretation of projective drawings. Recurrent themes were noted and inter-rater agreement assessed.

Results: Results indicated that issues concerning problems with authority, the environment and dependency were found in approximately 20 – 40% of the drawings. Sex concept and anxiety problems were present in 16% however, there was no significant indication of trauma, issues with home and family. There was 85% over-agreement on findings by the two raters with two issues (problems with authority and interpersonal relationship) having poor concurrence between the raters.

Conclusions: Although these results are not indicative of what is expected in a volatile community setting, projective drawings can be effectively used to quickly and easily identify emotional and social issues in order to better facilitate behavioural risk-reduction interventions and assist with enhanced assessment procedures and treatment.





culturally validated and further research conducted with a larger sample size.

(P – 21)

Using art as a diagnostic tool for mental illness

R Chung, KAD Morgan

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Objective: To evaluate the efficacy of using art as a diagnostic tool for mental illness.

Methods: Artwork (drawings and paintings) produced by patients on the psychiatric ward (Ward 21), University Hospital of the West Indies from January 2002 to June 2003, were randomly selected and analyzed by an external professional artist using a rating scale devised by the activity therapist/artist on Ward 21. This scale included nine component variables (colour, texture, light, line, space, design, mood, emotional tone and quality of picture), which were assessed individually with Likert-type scales. Diagnoses were sorted into two categories: psychotic disorders (schizophrenia, schizoaffective, brief psychosis and substance-induced psychosis) and mood disorders (bipolar, major depression). SPSS program version 10 was used to analyze the data. Each component variable was analyzed and compared by diagnosis using chi-square.

Results: One hundred and twelve pieces of artwork were analyzed. Fifty-nine pieces from patients with a psychotic disorder and 53 pieces with a mood disorder. Results indicated that there was a significant difference in the quality of picture and diagnosis ($p = 0.027$) with individuals with a psychotic disorder tending to draw better quality pictures than mood disordered patients.

Conclusions: Some difference in diagnoses can be depicted through artwork. However, further studies are needed in order to determine whether there is conclusive evidence that mental illness can be more clearly defined by art.

(P – 22)

Reported symptomatology within a sample of Jamaican adult survivors of childhood sexual abuse

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Objective: To indicate symptoms that Jamaican adult survivors of childhood sexual abuse experience and examine the relationship between trauma symptoms and dynamics of the sexual abuse experience.

Method: A total of 36 adult survivors of childhood sexual abuse were recruited through various methods of advertisement and enlistment from counselling centres. Participants were asked to complete a questionnaire that

International Personality Disorder Screening Questionnaire (IPDE) and other demographical information. SPS (version 11.0) was used to analyze the data.

Results: The participants consisted of 3 males and 3 females, aged 19-42 years. Twelve (33.3%) of the participants fell within the range of mild trauma presentation, nineteen (52.8%) participants were in the moderate trauma presentation group while the remaining (13.9%) reported severe trauma presentation. Symptoms of dissociation, anxiety, depression and sleep disturbance were experienced at mild and moderate levels, while sexual problems were experienced at severe levels for the majority of the sample. The IPDE revealed possible indication of avoidant, narcissistic and borderline personality disorder in the majority of the participants. A significant relationship was found between the father-victim relationship and the sexual trauma index ($p = 0.001$) as well as overall trauma presentation ($p = 0.001$).

Conclusions: The symptoms associated with a history of sexual abuse are profound. Trauma related symptoms are more severe when the father is the perpetrator. These findings have implications for the development of effective treatment programmes curtailed for the Jamaican society.

(P – 23)

Knowledge, attitude and practices of female health workers regarding methods of early detection of breast cancer

N Rodney-Peart, A Mullings, D Eldemire-Shearer,

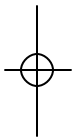
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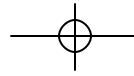
Departments of Community Health and Psychiatry and Obstetrics, Gynaecology and Child Health, The University of the West Indies, Kingston, Jamaica

Objective: To compare knowledge and attitude of female health workers with their personal practice of breast cancer screening.

Method: Stratified random sampling was used to select 170 female health workers of the Westmoreland Public Health Services. Data were collected by self-administered questionnaires; two focus group discussions were conducted to explore participants' views of issues raised in the questionnaire. Quantitative data were analyzed using SPSS Version 11.5.

Results: The majority of participants demonstrate satisfactory levels of knowledge – 84% knew the recommended methods, 97% could define “clinical breast examination” and 84% knew the recommended age for mammogram screening. Of the participants, 93% practise breast self examination but 70% did so only when they remembered and only 76% had clinical breast examination. Of those who were eligible for mammography, only 39% ever had one. Mammography was the only one of the three methods of early detection surveyed that showed a significant correlation to practice. Female health workers who were of the medical group ($p = 0.01$), younger than 4





($p = 0.000$) were more likely to participate in mammogram screening. Major barriers to participating in breast cancer screening programmes were inability to find the time (25%), facilities being out of the parish (25%) and fear of knowing the results (22%).

Conclusion: Although access to facilities in the rural areas is a negative factor, specific strategies are needed to encourage compliance with breast cancer screening among the knowledgeable female health workers.

(P – 24)

Clinico-pathologic features of male breast cancer in Jamaica

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Objective: To document the clinico-pathologic features of male breast cancer in Jamaica.

Methods: We reviewed all cases coded as male breast cancer in the files of the Jamaica Cancer Registry between 1958 and 2000 inclusive, documenting age distribution, annual incidence, presenting signs, parish of origin of specimens, tumour size, histologic type, histologic grade and stage. Follow-up information was recorded when available.

Results: There were 106 patients with mean age 67.7 ± 9.8 years (range 42-92). The average incidence was 2.7 cases/year. Presenting signs were: lump (83.0%), ulcer (13.2%) and gynaecomastia (3.8%). There were 146 specimens, the majority of which originated from Kingston and St Andrew (52.2%); St Catherine (11.0%), St Ann (8.9%) and Manchester (6.9%) were the next most common sources. Gross tumour was identified in 88 specimens (range 1-11 cm, mean 3.8 ± 1.9). Infiltrating duct carcinoma was the predominant histologic type (80.9%), and the majority of infiltrating tumours (63.8%) were moderately differentiated. T-stage could be assigned in 98 cases, with T4b being the most common (39.8%). An overall stage could only be assigned in 43 cases, 41.9% of which were stage IIIB. Follow-up information was available for 19 (17.9%) patients; all but one of these died (overall survival 1-184 months; mean 47.2 ± 49.9).

Conclusions: These findings are similar to those described in other series with respect to both the clinical and pathologic profiles. The relatively low percentage of patients with follow-up data underscores the need for comprehensive documentation, if uncommon disease entities like this are to be properly defined.

(P – 25)

Non-gynaecologic exfoliative cytology at The University of the West Indies, 1997-1999

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Objective: To document the distribution of cytology diagnoses by specimen type in non-gynaecologic exfoliative specimens (NGES) accessioned in the Department of Pathology, The University of the West Indies (UWI), and to determine relevant indices of validity based on histologic follow-up.

Methods: We reviewed the results of all NGES accessioned between 1997 and 1999 inclusive, and documented the age and gender distribution of the patients and the breakdown of cytology diagnosis by specimen type. Follow-up histology results were obtained from the departmental files. We calculated the sensitivity, specificity, false negative and false positive rates overall and by specimen type where numbers allowed.

Results: A total of 1402 specimens were received from 1173 patients; 151 patients had multiple samples (range 12; mean 2.5). The mean (SD) age of the patients was 54 (18.8) years with a F:M ratio of 1.17. The most common specimens were peritoneal fluid (28%), bronchial washings (22%), urine (19%) and pleural fluid (15%). The highest percentage yield in malignant diagnosis was for pleural and peritoneal fluids. A total of 397 (28%) specimens had histologic follow-up. The overall sensitivity, specificity, false negative and false positive rates were 24%, 98%, 41% and 10% respectively. Urine (58%) and pleural fluid (52%) had the highest false negative rates; bronchial washings (35%) had the highest false positive rate.

Conclusions: The relatively low sensitivity and high false negative rates seen in NGES at UWI could be related to several factors including the low rate of repeat specimens and tumour location in relation to the cytologic sampling. These findings are similar to those described elsewhere.

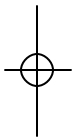
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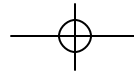
Screening older women for cervical cancer: attitudes versus practice

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Objective: To determine the attitudes and practices of primary care practitioners (PCPs) towards screening women over 55-years-old for cervical cancer.

Methods: The study was carried out in the southeastern region of Jamaica. All public sector PCPs and a sample





private general practitioners proportionate to the number in each parish, were invited to participate. The response rate was 84%, with a final sample of 122 persons (of a possible 146); 20 family nurse practitioners, 36 public medical officers and 66 private general practitioners. Women attending curative clinics in three community health centres were conveniently selected to determine actual screening experience.

Results: A total of 110 women, 55 years and older, agreed to participate. Over 80% of PCPS reported ordering annual Pap smears for female patients over 55 years of age, with no difference in attitudes and practices towards screening women over 55 years of age for cervical cancer, related to age, gender, profession, location or sector of employment. While patients reported a 73% lifetime history of being screened, only 28% had actually done a Pap smear in the previous year. Explanations given by PCPs in the focus group discussion for these discrepancies between providers' reported practice and patient compliance include their failure to remember to order the test and the patient not doing the test when ordered.

Conclusion: Patients identified provider recommendation as the main motivation for being screened, and ignorance about Pap smears and its importance at their age as the major reason they were not tested.

(P – 27)

Tumescent local anaesthesia and titrated sedation; a safe technique in plastic surgery

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Objective: To investigate and report on the consistency of safety in using this technique on a wide range of patients in plastic surgery.

Method: Four hundred and fifty-one patients, 322 female and 129 male, were reviewed between April 1989 and April 2003. All patients were ASA class I or II, and admission was on the day of surgery with overnight stay post-operatively when appropriate. Pre-operative sedation was administered one hour prior to the procedure, as intramuscular injections of pethidine and phenergan. Peri-operative sedation was administered using titrated doses of midazolam 10-15 mg in 500 mls of 5% dextrose. The operative field was injected subcutaneously with varying volumes of diluted lignocaine (0.1% to 0.25%) and adrenaline (1:200 000 to 1:1 000 000). Patients were monitored peri-operatively with continuous electrocardiography blood pressure measurements and pulse oximetry.

Results: There were no anaesthetic complications. There were no unintended admissions secondary to nausea, prolonged drowsiness or pain control needs.

Conclusion: Diluted tumescent local anaesthesia administration with titrated conscious sedation is a well-tolerated, safe, consistent and effective technique for a variety of plastic surgery procedures. The main benefits are: improved post-operative convalescence, reduced hospital stay, reduction in time off work and reduction in medical care expenses.

(P – 28)

Epidemiology of burns at the University Hospital of the West Indies

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Objective: To review the epidemiological features of burn patients at the University Hospital of the West Indies in order to improve burn care delivery.

Methods: The age, gender, cause of burn, type of burn, burn surface area, disposition and days in hospital of patients with burns admitted between August 1998 and December 2002 were obtained from the records.

Results: There was a total of 281 patients with a male to female ratio of 2.1 to 1 with the modal age group lying between 19-45 years. Accidents caused 79% of the injuries with flame burns, scalds, chemical burns and electric burns accounting for 50%, 30%, 13% and 7% respectively. The majority of burns affected 0% to 10% of body surface area and 27.8% of patients were discharged within three days. The overall mortality rate was 7.5% with a mortality rate for burns with 50% or more of body surface area being 77.8%. The general epidemiological patterns are similar to reports in the world literature except for the frequency of chemical burns. Short admission periods suggest that there may be a group of patients that may not have required hospitalization. The majority of deaths occurred in the first week.

Conclusion: The mortality rate for major burns may be improved with better intensive care services as the majority of deaths occurred in the first week.

(P – 29)

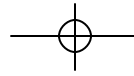
Laparoscopic cholecystectomy without routine intraoperative cholangiography: a review of 136 cases in Jamaica

MEC McFarlane, CAL Thomas, T McCartney,

P Bhoorasingh, G Smith, P Lodenquai, DIG Mitchell and the UHWI/KPH Laparoscopic Surgery Group

Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies and Kingston Public Hospital, Kingston, Jamaica





Objective: The objective of this prospective study was to evaluate the role of intra-operative cholangiography in patients undergoing laparoscopic cholecystectomy, to determine whether it could be safely omitted for all patients who fit standard criteria, namely: normal liver function tests, no history of gallstone pancreatitis, common bile duct diameter less than 10 mm, or previous history of jaundice.

Method: Data were collected prospectively from 136 consecutive patients who had laparoscopic cholecystectomy for symptomatic gallbladder disease. The procedure was performed by six surgeons in a non-teaching hospital. All patients who fit the above standard criteria were chosen for the laparoscopic procedure without intraoperative cholangiography. The procedure was performed using refurbished equipment and reusable instruments to reduce patient costs. Data were analyzed for a 74-month period from March 1997 to July 2003 and included the following: patient demographics, laboratory and ultrasound findings, operative statistics, postoperative stay and complications. Postoperative follow-up included two visits at one week and 12 weeks.

Results: Intraoperative cholangiography was not performed in any patient. The conversion rate was 8.8%, which was mainly due to ambiguous gall bladder anatomy. There were five postoperative complications and one common bile duct injury. Hospital stay averaged one day. Only one patient presented with retained common bile duct stones during follow-up.

Conclusions: Our experience demonstrates that laparoscopic cholecystectomy performed without routine intra-operative cholangiography does not result in an increased incidence of retained stones in selected patients who have no history of pancreatitis, normal liver function tests and common bile duct less than 10 mm diameter.

(P – 30)

Laparoscopy as a diagnostic tool for non-specific abdominal pain

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Objective: Non-specific abdominal pain (NSAP) is the most common reason for emergency surgical admission. It is generally defined as acute abdominal pain of less than seven days duration for which no specific cause can be found. In this retrospective study, the role of laparoscopy in the management of NSAP in a regional setting was evaluated.

Method: Between January 1997 and December 1999, 362 patients who were admitted to Tralee General Hospital with acute abdominal pain of uncertain aetiology underwent laparoscopy. Patients with a definitive clinical diagnosis of acute appendicitis were not included in the study. The clinical decision of whether to proceed to laparoscopy or manage the patient conservatively was made by the

consultant surgeon based on the severity of symptoms.

Results: A total of 36.18% of laparoscopies were normal allowing the surgeon to safely discharge the patient to avoid unnecessary hospital delays. Gynaecological problems accounted for 31.21% of cases, indicating usefulness in young women who have a wider differential diagnosis for acute intraperitoneal pathology (Table).

Diagnosis	1997	1998	1999	Percent
NSAP	65	42	24	36.18
Appendicitis	22	4	2	7.73
Adhesions	28	14	6	13.21
Mesentric adenitis	5	8	5	4.97
Small bowel/large bowel pathology	10	5	4	5.24
Gynaecological	49	39	25	31.21
Metastatic deposits	4	5	2	3.03
Others	4	1	2	1.93

Conclusion: The potential of early laparoscopy in NSAP is substantial. When used selectively, it can be both diagnostic and therapeutic and provide an alternative to “active observation” particularly when access to imaging techniques is limited (such as in a peripheral setting).

(P – 31)

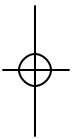
Aortic dissection at the University Hospital of the West Indies, 1989 – 2002: an evaluation of autopsied cases

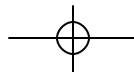
*KCM Coard, DHA Skeete
Department of Pathology, The University of West Indies
Kingston, Jamaica*

Objective: An analysis of the frequency and pathological features of aortic dissection (AD) in the autopsy service at the University Hospital of the West Indies (UHWI) was conducted 15 years ago. Since then, it has been our impression that this condition has increased in frequency. The purpose of this study was to re-examine the frequency and pathology of AD, to validate that impression.

Method: Retrospectively, we identified all cases of AD from our pathology post-mortem records during the period since the last study in 1988. From these, we collected demographic data and pathologic features identified at autopsy.

Results: During this study, 41 cases were identified, 28 males and 13 females. Males ranged in age from 39 – 85 years (mean 62.2) and females 46 – 85 years (mean 71). Hypertension was recorded in 37 cases (90.2%). Death due to rupture of the dissection occurred in 36 patients and others died during or immediately following attempted therapeutic surgery. The most common site of rupture was the pericardium either alone (12 cases) or in association with rupture into one or both chest cavities (7 cases). Twenty-eight dissections were Type A and 13, Type B. The correct diagnosis was considered antemortem in





Conclusions: Compared to the previous study, there has been an increased incidence of AD in the autopsy service of the UHWI. Changes in the patient profile included a reversal of the female predominance seen previously and an increased incidence of rupture of Type B dissections. Although the correct diagnosis was more often made, the overall prognosis has been unaffected. This information, therefore, suggests that, despite the recent advances in the treatment of hypertension, there has been an increase locally in the frequency of this lethal complication. The increased frequency in diagnosis will exert increasing pressure for surgical intervention.

(P – 32)

Effect of pre-operative depo-medroxyprogesterone acetate therapy on uterine myomata-associated menorrhagia in women admitted for surgical treatment (hysterectomy/myomectomy)

N Johnson, H Fletcher, M Reid

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Objective: To evaluate pre-operative treatment, with varying doses of depo-medroxyprogesterone acetate (DMPA), of a cohort of 42 women with myomata and menorrhagia, compared with 46 matched controls.

Method: On admission for surgery, demographic data, pre-therapy and post-therapy clinical data, were obtained by docket review and questionnaire. Data were analyzed using Stata version 7.0.

Results: DMPA was given as follows: Group 1 (6 patients) received a single dose of 150 mg intramuscularly. Group 2 (22 patients) received an initial dose of 150 mg stat followed by 150 mg monthly, Group 3 (4 patients) received 300 mg followed by 150 mg monthly and Group 4 (7 patients) received 300 mg followed by 300 mg monthly. Prior to treatment, patients treated with DMPA were more severely affected with menorrhagia based on number of sanitary pads used daily, median of 30, range (20-50) versus a median of 24, range (12-42) ($p = 0.0012$). However, they demonstrated a greater improvement in their haemoglobin, mean of 1.4 ± 2.0 versus a mean of 0.6 ± 1.9 ($p = 0.04$). This improvement was confounded by the complication of bleeding which had to be controlled with additional medical intervention. Subjects were heavier on admission, mean weight of 83 ± 16.7 kg versus 76 ± 12.3 kg ($p = 0.03$). No other significant differences were noted between the groups. Differences noted, between the effects of the varying doses of DMPA, did not achieve statistical significance.

Conclusions: DMPA is inexpensive and may be useful as pre-treatment for menorrhagia due to uterine fibroids, improving haemoglobin levels prior to surgical treatment.

(P – 33)

Investigation of the pharmacological activities of aqueous alkaloidal extract of *Borreria verticillata* on the cardiovascular and uterine systems

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Objective: Decoctions of *Borreria verticillata* are used in folklore medicine to lower blood pressure and as an abortifacient. The objective is to investigate if there is an scientific rationale to these folkloric uses.

Methods: Aqueous extracts of *Borreria verticillata* (tested positive for alkaloids using Dragendorff's reagent) were given intravenously to Sprague-Dawley rats of either gender weighing between 250 g to 350 g. Blood pressure measurements were recorded using a pressure transducer attached to a 79E grass polygraph. The aqueous extract (alkaloidal) was also tested for activity on isolated rat uterus (both pregnant and non-pregnant) maintained in D Jalon's solution in an organ bath. Isometric tension was recorded using a force displacement transducer attached to a 79E grass polygraph. The effects of the extract were observed independently and in the presence of adrenalin and oxytocin.

Results: Varying concentrations (0.04 – 0.32 mg/mL) of the alkaloidal extract showed a fall in blood pressure. This was inhibited by atropine (5 ng/mL), is an antagonist of muscarinic receptors. The extract relaxed the uterus even in the presence of oxytocin.

Conclusion: The aqueous extract produced a fall in blood pressure and relaxed the uterus and this indicates that there is scientific rationale for these folkloric uses. Further studies will be done to determine more detailed pharmacological activities, including mechanisms of action.

(P – 34)

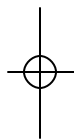
Investigation of the anti-diabetic potential of an extract prepared from *Morinda citrifolia* (Noni)

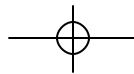
N O'Connor, O Simon, M Gossell-Williams

Department of Basic Medical Sciences, The University of the West Indies, Kingston, Jamaica

Objective: To determine if an aqueous extract prepared from *Morinda citrifolia* has anti-diabetic properties.

Method: Ripened noni fruits were crushed and the juice extracted and freeze-dried. An aqueous extract was prepared from the freeze-dried material and tested on streptozotocin-induced diabetic rats. Sprague-Dawley rats were made diabetic by a single intraperitoneal injection of streptozotocin (60 mg/kg) in citrate buffer pH 4.5. The noni extract was then administered daily to the animals via the oral route with aid of an oral dosing tube in concentration





of 10, 20, and 40mg/kg body weight. The animals' fasting blood glucose levels and weights were then observed once a week for six weeks.

Results: Noni seems to have some hypoglycaemic effect in this diabetic model. The lowest concentration of noni (10 mg/kg) produced the greatest fall in blood glucose levels, whereas the highest dose of the extract produced the smallest fall in blood glucose levels. However, the hypoglycaemic effect of noni in the concentrations stated above was seen only for a week, but the effect was re-established when the concentration was increased tenfold.

Conclusion: Since the effect of the noni extract was seen only for a week, it is very likely that the hypoglycaemia may have been produced via actions on surviving beta cells after streptozotocin treatment. However, verification of this mechanism is being investigated.

(P – 35)

The use of alternative therapies by Jamaicans suffering from chronic non-communicable diseases

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Objective: This study was designed to estimate the patterns of complementary and alternative medicine (CAM) use among patients suffering from chronic non-communicable diseases.

Methods: Two hundred and fifty patients (age range 19-99 years) with diabetes mellitus, hypertension, prostate cancer and breast cancer were recruited into the study between May 26 - June 27, 2003, from health centres and hospital outpatient clinics in urban and rural areas by convenience sampling. Questionnaires recording the use of prayer/spiritual healing, commercial herbal supplemental preparations, bush tea, homeopathy, relaxation techniques, acupuncture, iridology, reflexology, reiki, obeah/balm yard, ganja, along with socio-demographic data were administered by medical students.

Results: Eighty-seven per cent of patients reported CAM use, with no significant variations in the urban vs rural population. Prayer/spiritual healing, bush tea and commercial herbal supplements were most commonly utilized at 57.4%, 52.2% and 15.4%, respectively. The main reasons given for CAM use were tradition (43.9%), religion (19.8%) and experimentation (18.4%) followed by cost (8%). Patients (88.3%) used the therapies along with regular medical treatment, while 11.7% used them as a replacement for treatment. The majority of patients (92.2%) found their choice of CAM at least fairly helpful. Persons identified as having healthy lifestyles were also more likely to use CAM therapies.

Conclusions: We concluded that patients suffering from chronic non-communicable diseases were likely to use conventional Jamaican therapies *ie* prayer and bush tea, as an adjunct to western medical treatment.

(P – 36)

Renal histopathological changes in adults with Haemoglobin SS disease

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Objective: To study patients with haemoglobin SS disease who had percutaneous renal biopsy at the UHWI, Jamaica for the period 1980-2001.

Method: The histological reports were reviewed for glomerular, tubular, interstitial and blood vessel changes. The age, gender, renal function, 24-hour urinary protein excretion and immunological tests recorded were analyzed.

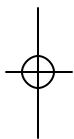
Results: Renal biopsies from 38 patients with haemoglobin SS disease were reviewed during the study period. There were 19 males and 19 females with an average age of 24 years (range 11 to 67 years). Thirty-one patients had abnormally elevated 24-hour urinary protein excretion recorded, with 16 patients (55%) in the nephrotic range. The creatinine clearance was reduced to less than 80 ml/min/1.73 meter square of body surface area in 11 of the patients (55%) in whom this test was recorded. Tubular glomerular changes showed a composite picture in 24 patients. Thirty-five biopsies showed mesangial hypercellularity, with increase in mesangial matrix and associated fibrosis in some cases. Thirty-five biopsies showed focal or diffuse glomerulosclerosis. Eighteen biopsies had a mesangiocapillary-like lesion. Eleven biopsies showed diffuse proliferative and exudative glomerulonephritis superimposed on the other types of glomerular lesions. In eight of these patients, the case notes were available for review. In six of seven patients (86%) the antistreptolysin O titre was increased, in four (50%) there was a nephritic presentation, four patients gave history of either a recent sore throat, skin sepsis or actin leg ulcers. These findings are consistent with a post-streptococcal glomerulonephritis. In none of the other patients were there any clinical or immunological features of any of the common causes of glomerulonephritis.

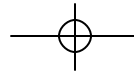
Conclusions: The glomerular changes in patients with HbSS disease who develop renal disease are similar to the changes described from other series of patients with Hb nephropathy. However, an increased number show changes of post-streptococcal glomerulonephritis superimposed on these changes.

(P – 37)

Neuropsychological impact of systemic lupus erythematosus in Jamaica

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Objective: To discern whether or not cognitive impairment exists in the Jamaican systemic lupus erythematosus (SLE) population.

Method: Attention, memory, and executive function were assessed in 31 SLE patients and 31 controls using a neuropsychological battery consisting of The University of the West Indies (UWI) Stroop test, Digit Span, and the UWI Cognitive Assessment System (UWICAS, a computerized battery). Self-reported data was collected on SLE patients' physical and neurological state. T-tests and Spearman's rho were conducted using SPSS Version 11.5.

Results: SLE patients displayed significant processing speed deficits ($p = 0.000$), attention deficits ($p = 0.050$) and executive function deficits ($p < 0.05$). Neither short- nor long-term memory deficits were found. Headaches, feeling faint, and fatigue were moderately correlated with reaction time and memory. Cognitive impairment was found to exist in 48.4% of the SLE sample.

Conclusion: These results are consistent with other studies, which indicate that cognitive impairment exists in persons with SLE.

(P – 38)

Risk factors for severe malnutrition among children less than six months-of-age admitted to the Tropical Metabolism Research Unit

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Objective: Children under six months-of-age accounted for 20.7% (40/193) of all Tropical Metabolism Research Unit (TMRU) admissions over the past five years. We sought to determine whether there were differences in risk factors and clinical presentation in children less than six months (cases) compared with children greater than six months (control) admitted to the TMRU for management of severe malnutrition for the period 1998-2002.

Design: This was a retrospective case control study. The docketts of 27 children age < 6 months were available for this study. These 27 children were matched for month of admission with 27 children > 6 months of age. All children were HIV negative.

Results: The variables age and employment status of mother, age and employment status of father, ever breastfed, immunization status, birth order, numbers of siblings, birthweight and gender were not significant risk factors for malnutrition in children < 6 months of age. Also there were no differences in the nutritional diagnoses between cases and controls at admission. However, at admission, cases were less wasted (88% vs 81% of expected weight-for-length, $p < 0.008$) but were more stunted than controls (84% vs 89% of expected length-for-age, $p < 0.02$), were more likely to have positive blood culture (37% vs 11.5%, $\chi^2 = 4.6$, df (1), $p < 0.03$) and had

were no differences in haemoglobin, total white cell count and blood glucose, serum albumin, serum liver enzyme concentrations and length of stay between cases and controls.

Conclusion: Apart from early linear growth retardation there does not appear to be major differences in the risk factors for malnutrition in children < 6 months of age compared to children older than 6 months.

(P – 39)

Evaluation of the congenital malformations prenatal diagnosis programme by maternal serum alphafetoprotein measurement

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Objective: To evaluate the Congenital Malformation Prenatal Diagnosis Programme (CMPDP) by measurement of maternal serum alphafetoprotein (AFP).

Method: A descriptive cross-sectional study was made in the "Dr Eduardo Agramonte Piña" University Pediatric Hospital, on pregnant women tested between June 1998 and December 1998. Data were obtained from the registries documenting and monitoring evaluation of maternal serum AFP samples. Annual reports of the Genetic Programme were also included in this review.

Results: The number of pregnant women screened increased over the study period and reached 98.4% between 1997 and 2001. Overall coverage was 93.4%. AFP elevations were noted in 5.6% (9546 cases). The main causes of AFP elevations were: estimation error at gestational age (22.25%), followed by twin pregnancies (4.5%), congenital malformations and other anomalies (3.8%) and lastly, fetal losses (3.5%). Malformations mainly diagnosed were neural tube defects and anterior abdominal wall defects. Serum AFP elevations were associated with 45% of all malformations diagnosed prenatally (366 cases).

Conclusions: The CMPDP by maternal serum AFP determination has improved over the years, and has shown an increase in the number of pregnant women screened and the kind of anomalies diagnosed prenatally.

(P – 40)

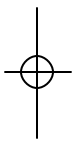
Glycaemic control, cardiovascular and renal risk factors in patients attending a specialist diabetes clinic

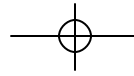
A O'Connor, N McFarlane-Anderson, EMW Duff,

R Wright-Pascoe

Departments of Basic Medical Sciences, Advanced Nursing, and Medicine, The University of the West Indies, Kingston, Jamaica

Objectives: To evaluate glycaemic control, blood lipid levels, microalbumin excretion, blood pressure (BP) and anthropometry in diabetic patients attending the diabetes





Methods: A sample of 133 patients (men, $n = 35$ and women, $n = 98$), with diabetes mellitus were selected by random sampling from a population of 510 patients attending the clinic. Height, weight, blood pressure, waist and hip circumferences were measured. Urine ($n = 124$) and fasting blood samples ($n = 122$) were obtained. Data were analyzed using SPSS version 7.5.

Results: Mean age was 56.7 ± 14.3 years with mean time since diagnosis 12.2 years. Mean fasting blood sugar was 8.6 ± 4.3 mmol/L. Twenty-three per cent had $HbA_{1c} \leq 6.5\%$. Sixty-nine per cent were being treated with insulin and there was no difference in HbA_{1c} levels in these subjects compared to those receiving other hypoglycaemic agents. Forty-seven per cent had total cholesterol levels ≤ 5.2 mmol/L, 70% triglyceride levels ≤ 1.5 mmol/L, 75% HDL levels ≥ 1.0 mmol/L, and 38% LDL levels ≤ 3.4 mmol/L. Twelve % reported being on "statins". Sixty-three per cent had BP $>135/85$ mm Hg. Eighty-one per cent were overweight or obese, with 40% of the men having waist circumferences > 102 cm, and 84% of the women > 88 cm. Microalbumin excretion was elevated in 37% of the subjects.

Conclusions: This study showed that a high proportion of patients have poor glycaemic control. The presence of overweight, obesity, central obesity, elevated LDL and hypertension in these subjects is indicative of high cardiovascular and renal risk.

(P – 41)

Clinical audit of management of hypertension in general practice

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Objective: Improvements in chronic disease outcomes have been influenced by the creation of standards of care guidelines by various expert groups. The Ministry of Health (MOH), Jamaica, has recently published standards of care for hypertension. We sought to determine the quality of care administered to hypertensive patients being seen in general practice for at least one year by performing a clinical audit.

Method: The medical records of a random sample of 125 hypertensive patients being managed by five current family medicine residents in their respective primary care practices were audited.

Results: Blood pressure was being properly measured in 100% of cases. Ninety per cent of docket also had current medications recorded. A history of hypertension in pregnancy and gestational diabetes mellitus was recorded in 80% and 90% of docket respectively. Concurrent risk factors were not adequately recorded as 60% of docket had no smoking history recorded; 64% had no history of alcohol intake; and only 30% of docket had any mention of physical activity level of patients. Additionally, body

mass index was not recorded in 32% of the docket although all practices had scales and height charts available. Target organ damage indicators were also poorly recorded. Fundoscopy was not recorded for 80% of patients in the last one year even though all practices had ophthalmoscope available whilst 69% of patients had foot examination recorded. Also 72% of patients had serum creatinine, electrolytes, cholesterol/triglycerides, complete blood counts done; 65% of patients had no record of an ECG ever being done and 82% of patients had record of a chest X-ray ever being done.

Conclusions: These results show limited adherence to the MOH recommended hypertension management guidelines in the general practices surveyed. The MOH needs to disseminate and educate general practitioners about the standards of care guidelines. The quality of care given to hypertensives could then be examined by timely audits in order to identify and correct departures from 'best practice'.

(P – 42)

Interviewing skills of students in the final psychiatry Objective Structured Clinical Examination (OSCE)

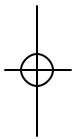
*WD Abel, R Pierre, M Barton, FW Hickling
Departments of Community Health and Psychiatry, Sections of Psychiatry and Obstetrics, Gynaecology and Child Health, Section of Child Health, The University of the West Indies, Kingston, Jamaica*

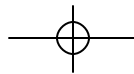
Objective: To evaluate the interviewing styles of medical students in the final psychiatry Objective Structured Clinical Examination (OSCE).

Method: The psychiatry component of the final OSCE the Medicine and Therapeutics examination consists of two stations using simulated patients. Seventy-four students were chosen from two campuses by cluster sampling. Students were observed and rated by a psychiatrist who used a structured checklist. The checklist was pre-tested at a Child Health communication station and it assessed seven domains with 27 related items. The domains included rapport-building skills, attending skills, the use of nonverbal expressions, the predominant question type used, feedback interaction and the overall conduct of the interview. Each item was scored by the rater as done or not done. The minimal competence score was determined using the Modified Angoff method.

Results: The internal reliability of the checklist was 0.7 (Cronbach's alpha). Thirty-two per cent of students achieved the minimal competence; no significant differences were observed by gender ($p = 0.42$) and campus ($p = 0.16$). There was a significant relationship between female gender and the use of handshake ($p = 0.001$) and appropriate verbal pleasantries ($p = 0.04$).

Conclusions: These findings have implications for the teaching and evaluation of interviewing skills.



**(P – 43)****Reliability and validity of the final examination in medicine and therapeutics at The University of the West Indies**

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Objective: This study seeks to determine the reliability and concurrent validity of the final medicine and therapeutics examination.

Method: The final examination in medicine and therapeutics consists of a written test, a multiple-choice examination and an objective structured clinical examination (OSCE). In 2003, a total of 210 students sat the examination across four campuses. The mean and standard deviation were calculated for students' scores on the two largest campuses, St Augustine and Mona. Cronbach's alpha was calculated to measure reliability. Pearson's correlation between students' scores on all three components of the examination was determined to evaluate the concurrent validity.

Results: The Cronbach's alpha for the OSCE was 0.66. The mean score was 338.46 (SD 27.28). There was a significant relationship between the students' OSCE scores and scores in the written test; for the Mona campus ($p = 0.00$, $r = 0.5$) and for the St Augustine campus ($p = 0.00$, $r = 0.7$). The Pearson correlation between all other examination components as a measure of concurrent validity, ranged from 0.5 – 0.8, ($p = 0.00$) for both campuses.

Conclusion: The OSCE has been shown to have good reliability and overall the examination has good concurrent validity.

(P – 44)**Students' performance in the final Objective Structured Clinical Examination (OSCE)**

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Objective: To evaluate students' overall performance by core competence skills in the OSCE.

Method: Seventy-four students completed a 17-station OSCE in the final medicine and therapeutics examination. At each station, examiners using standardized checklists assessed student scores by required tasks. Items in the checklists were grouped into the following core competence skills: doctor-patient relationship, interviewing, history-taking, physical examination, evaluation/

risk assessment, diagnostic, information reporting treatment, technical/procedural and knowledge skills. Univariate analysis was applied to student scores.

Results: The following table highlights the findings:

Skills	Maximum attainable score	Mean score (SD)	Mean %
Doctor-patient relationship	85.0	60.0 (5.9)	70
Information gathering	184.0	127.0 (10.5)	69
Evaluation skills	96.0	62.0 (7.3)	64
Information reporting skills	47.0	28.0 (3.5)	59
Treatment skills	12.0	7.7 (1.4)	64
Technical/procedure	12.0	9.5 (2.1)	79
Knowledge skills	37.0	24.5 (4.1)	66
Clinical reasoning	145.0	94.0 (9.2)	65
Composite clinical skills	328.0	224.0 (18.3)	68

* Clinical reasoning = evaluation, treatment and knowledge skills

** Composite clinical skills = doctor-patient relationship, information gathering, information and technical skills

Conclusion: Students appear to be very competent with demonstrating practical procedures (technical/procedural skills), but less capable of expressing their thought process (information reporting skills).

(P – 45)**The impact of deportees on the epidemic of violent crimes in Jamaica and other countries in the region**

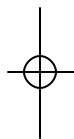
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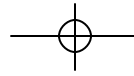
*Department of Obstetrics, Gynaecology and Child Health
The University of the West Indies, Kingston, Jamaica*

Objective: The study was done to see if the increase in crime in the region is related to the large influx of deportee from North America.

Method: Using computer search engines and newspaper articles, information on deportations and murders in the region was examined.

Results: Faced with rising crime in the 1980s, the United States of America (USA) congress enacted legislation in 1994 and 1996 to make it easier to deport immigrants. This resulted in a 164% increase in deportations to Mexico Central and South America and the Caribbean. Many were convicted criminals. The murder rates decreased in almost all cities in the USA with the overall rate decreased by 50%; the lowest it has been in 20 years. Many countries in the Caribbean region and Latin America have had an increase in violent crime with murder rates increasing starting around the same time that the deportations started in 1994. Between the early 1990s and the year 2000, murder rates have risen in Brazil 16.7-25/100 000, Venezuela 16.4-33/100 000, Tegucigalpa Honduras 38.3 – 53.9/100 000 and Cali Columbia 77.6-99/100 000. In Jamaica and Trinidad and Tobago, murders have doubled in the same period. The level of murders is not explained by social or political upheaval. Over 17 000 have been sent to Jamaica

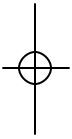


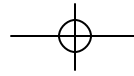


in the last 12 years. Deportations *versus* murder rates yielded a correlation coefficient $r = 0.91$ ($p = 0.030$) suggesting a direct relationship.

Conclusion: Murder rates are increasing in many countries in the region while it is decreasing in the USA. These changes correspond to the period when the USA enacted

measures to combat crime including deportation criminals to these same countries. The fact that this phenomenon is occurring in many diverse countries in this region suggests a relationship which requires more in-depth study.





Perth Framework for Age-Friendly Community-Based Healthcare

*Department of Noncommunicable Disease Prevention and Health Promotion (NPH) – Ageing and Life Course
WHO, Geneva*

The Madrid International Plan of Action on Ageing adopted by the Second United Nations World Assembly on Ageing (2002) emphasizes that health promotion activities, disease prevention throughout the life course and equal access of older persons to healthcare and services are the cornerstone of healthy ageing. It recommends measures to provide universal and equal access to community-based healthcare and to establish community health programmes for older persons. The Madrid Plan also calls for the elimination of discrimination in access to healthcare based on age or any other forms of discrimination.

The United Nations Principles for Older Persons (1991) reaffirm the principles of independence, participation, care, self-fulfillment, and dignity, whereby older persons should have access to healthcare and should benefit from family and community care and protection, in accordance with each society's system of cultural values.

Every human being is entitled to the enjoyment of the highest attainable standard of physical and mental health conducive to living a life in dignity. The human right to health is recognized in numerous international instruments, among them the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, the International Convention on the Elimination of All Forms of Racial Discrimination, the Convention on the Elimination of All Forms of Discrimination against Women, and the Constitution of the World Health Organization (WHO).

The process of rapid population ageing poses tremendous challenges to the provision of healthcare and social services and demands on such services may intensify as the number and proportions of older persons in populations continue to increase. The global disease profile is shifting from infectious to non-communicable and chronic diseases such as heart disease, stroke and cancer, many of which can be prevented or delayed through strategies which include health promotion and disease prevention. While the disease burden is rapidly shifting towards chronic conditions, health systems are still mostly geared to address acute, episodic events. But chronic diseases require ongoing monitoring in order to minimize the development of associated disabilities and negative

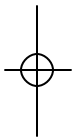
effects on the quality of life. Chronic care is often more effectively provided in a community-based rather than an acute care or institutional setting.

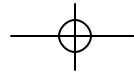
While most older persons continue to enjoy relatively good health and are active contributors to their communities and families, many older persons require special attention and support in order to maintain health. Generally, older persons prefer to age in their own homes within their communities or familiar environments. The proximity, accessibility, cost effectiveness and user-friendliness of community-based healthcare services are therefore of vital significance to the health and well-being of older persons and their families.

Community-based healthcare is generally the first point of contact with formal health services and is often complemented by social care. Healthcare provided at the community level should also include a range of health promotion and disease prevention activities. However, with a few exceptions, community-based healthcare services are often fragmented and are not sensitive to the needs of their older users. They may have inadequate resources and little emphasis on health promotion, prevention, systematic screening and referrals – all of which are essential for maintaining health of ageing populations.

Objectives: In an effort to promote the responsiveness of community-based healthcare to the needs of the population at large and in particular to the growing numbers of older persons, a set of General Principles Guiding Age-Friendly Community-based Health Care has been developed. Such General Principles aim at providing guidance and setting standards in the provision of community-based healthcare to ensure that services are age-sensitive, age-responsive and more accessible to users of all ages and, in particular, older persons. Users of healthcare services, especially older users, must be empowered and enabled to remain active, productive and independent in their own communities for as long as possible. As an overall objective, the General Principles aim to enable older persons to achieve active ageing, defined by WHO as **the process of optimizing opportunities for health, participation and security in order to enhance the quality of life as people age.**

The General Principles target two major groups: (1) policy makers and professional associations, particularly in the health and social services sectors; and (2) healthcare providers at community levels, which include health professionals such as general practitioners, nurses, com-





munity health workers, as well as clerical health centre staff, family care-givers and social workers. Beneficiaries of the General Principles will be healthcare users of all ages, in particular, older persons.

It is expected that the General Principles, once put into effect, will result in the promotion of age-friendly attitudes and the provision of age-friendly healthcare services, especially at the community level. This will be achieved through increased awareness and sensitivity to older persons and their needs, better training for service providers of healthcare for older persons, as well as better understanding and use of healthcare services by the users, *ie* older persons and their families.

The General Principles, once tested and implemented, will inform changes in attitude and practices at the community healthcare level. The implementation of the Principles should be monitored and evaluated regularly at the national and local levels by qualified professionals in collaboration with other stakeholders, to include, in particular, older persons. The implementation is to be governed by professional and ethical standards.

Overarching Principles

As an overarching principle, healthcare services must aim to provide the highest attainable standards of health, conducive to promoting active ageing and health over the life course and to maintaining life in dignity. Towards this end, healthcare services must meet the following essential criteria: availability, accessibility, comprehensiveness, quality, efficiency, non-discrimination, and age-responsiveness. All medical services and attention should cover both physical and mental health, including the provision of equal and timely access to basic promotive, preventive, curative and rehabilitative health services and health education, regular screening programmes, appropriate treatment of illnesses and disabilities, preferably at the community level, as well as the provision of essential drugs. Further, healthcare services should be coordinated with the provision of social support services, including, when necessary, the provision of basic essentials such as food, shelter and safety.

Healthcare users of all ages, of which older persons are a growing target group, should be enabled to make informed choices regarding services available to them. The principle of non-discrimination should be upheld to ensure equal distribution and treatment, as well as the prevention of abuse, taking into account the economic, social, psychological and physical vulnerability of older persons.

The special health needs of women, particularly older women, must be taken into account in the promotion of age-friendly attitudes and provision of healthcare services. As older women generally account for the majority of the growing older population, community-based healthcare must ensure that attitudes, services and relevant policies integrate both age and gender concerns. Further, there is growing evidence that the health needs of ageing men are often neglected and need to be addressed by healthcare

Age-friendly community-based healthcare must be responsive to cultural diversity, and sensitive to the concerns of all healthcare users, including older persons. The integration of cultural concerns and sensitivity in community healthcare provision will enhance the responsiveness of services and minimize barriers to service accessibility, thus empowering older persons, their families and community networks.

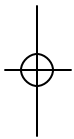
At the macro policy level, age-friendly community-based healthcare will help promote an integrated approach to public health and healthcare. The General Principles of Age-Friendly Community-based Health Care must therefore be fully integrated into relevant health and social policies at the national and local levels at all stages of policy making and implementation. For this process to be effective, cooperation and coordination between government departments, other relevant organizations and civil society as well as between the national and local levels must be improved. It is essential that investment in community-based healthcare, including healthcare of older persons and age-friendly community-based healthcare, be recognized as having long-term benefits and be supported by national governments, with adequate budget allocation and training support to professionals and informal caregivers. Ultimately, age-friendly community-based healthcare should result in attitudinal change, education, training and the whole range of integrated health services and social support to be comprehensive, accessible, responsive and cost-effective.

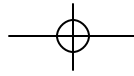
General Principles Guiding the Practice of Age-Friendly Community-based Healthcare:

It is recognized that the organization and delivery of community-based healthcare services depend on national healthcare systems and their individual settings. However, the following General Principles are applicable to a community-based healthcare setting and provide guidance to all providers of formal community-based health services. Such healthcare services include, among others, general practitioners, local healthcare centres, and community-based government clinics.

Age-friendly community-based healthcare should incorporate the following General Principles:

- 1. In the areas of information, education, and training:**
 - 1.1 All healthcare centre staff should receive basic training in age, gender, and culturally sensitive practices that address knowledge, attitude and skill
 - 1.2 All clinical staff in the healthcare centre should receive basic training in core competencies of elder care
 - 1.3 Healthcare centres should provide age, gender and culturally appropriate education and information for health promotion, disease management and medications for older persons as well as their informal carers in order to promote empowerment for health





- 1.4 Healthcare centre staff should review regularly the use of all medications, including complementary therapies such as traditional medicines and practices
2. **In the area of community-based healthcare management systems:**
 - 2.1 Healthcare centres should make every effort to adapt their administrative procedures to the special needs of older persons, including older persons with low educational levels or with cognitive impairments
 - 2.2 Healthcare centre systems should be cost sensitive in order to facilitate access to needed care by low income persons
 - 2.3 Healthcare centres should adopt systems that support a continuum of care both within the community level and between the community and secondary and tertiary care levels
 - 2.4 Healthcare centres should put into place mechanisms that facilitate and coordinate access to social and domiciliary care services
 - 2.5 All record keeping systems in healthcare centres should support continuity of care by keeping records on community-based, secondary and tertiary care as well as on the provision of social services for their clients
 - 2.6 All relevant stakeholders, including older persons, should be part of participatory decision-making

mechanisms regarding the organization of the community-based care services

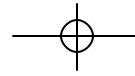
3. **In the area of the physical environment:**

- 3.1 The common principles of Universal Design should be applied to the physical environment of the healthcare facility whenever practical, affordable and possible
- 3.2 Safe and affordable transport to the healthcare centre should be available for all, including older persons; whenever possible, by using a variety of community based resources, including volunteers
- 3.3 Simple and easily readable signage should be posted throughout the healthcare centre to facilitate orientation and personalize providers and services
- 3.4 Key healthcare staff should be easily identifiable using name badges and name boards
- 3.5 The healthcare centre should be equipped with good lighting, non-slip floor surfaces, stable furniture and clear walkways
- 3.6 The healthcare centre facilities, including waiting areas, should be clean and comfortable throughout

These General Principles can be adapted to each healthcare centre and provider setting in order to ensure responsiveness and sensitivity to the community served.

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Ageing – Time for a Paradigm Shift in Healthcare Services

D Eldemire-Shearer, TJ Paul

INTRODUCTION

The Caribbean Population is ageing rapidly and the number of persons aged 60 years and over is expected to double by the year 2025 from the current level (Table). The fastest

growing age group among the elderly population is the oldest old, that is, those over the age of 80 years (1) (Fig.1)

Table: Demographic status of the Caribbean population aged 60 years and over

Country	Per cent		Percent		Per cent		Median age		Years of	
	Age 60 and over		Age 75 and over		Female in		(years)		Life expectancy	
	1997	2025	1997	2025	Population		1997	2025	At birth	
									1997	
					1997	2025	1997	2025	Male	Female
Antigua and Barbuda	7.4	21.3	2.1	2.3	54	64	28	40	72	76
Bahamas	8.0	17.7	2.2	4.6	62	60	26	35	69	77
Barbados	13.2	24.3	4.9	6.3	63	63	31	41	72	77
Belize	5.3	8.4	1.2	1.5	55	55	18	28	67	71
Dominica	12.2	19.1	4.3	5.3	61	63	26	39	75	81
Dominican Republic	6.5	12.4	1.3	2.9	54	57	22	29	67	72
Guyana	6.6	13.5	1.7	3.1	60	66	23	33	57	62
Haiti	6.3	7.1	1.4	1.6	54	60	18	25	47	52
Jamaica	9.1	15.0	2.8	3.8	59	60	24	35	73	78
St Kitts and Nevis	8.3	10.9	3.4	1.6	60	64	22	32	65	70
St Lucia	7.3	12.2	2.3	2.5	64	70	22	34	66	74
Trinidad and Tobago	9.9	21.4	2.7	5.0	57	57	27	38	68	73

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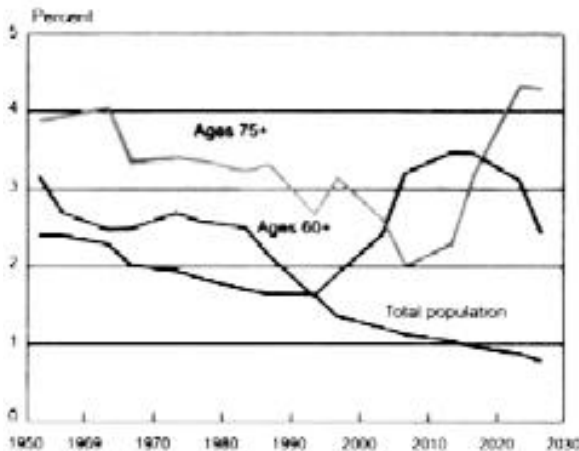
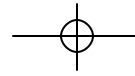


Fig. 1: Average annual per cent growth of total and older population in the Americas. Reprinted with kind permission, PAHO

The demographic transition or the ageing of the population is happening at the same time as the epidemiologic transition from infectious to chronic diseases. Chronic diseases require healthcare management over extended periods and are the major contributors to healthcare costs (2).

Changes in socio-cultural patterns as seen in lifestyle practices are also occurring and there is strong evidence to show that unhealthy diets and insufficient physical activity are among the major causal risk factors in heart disease, stroke, Type 2 diabetes mellitus, hypertension and obesity (3); the diseases causing increasing morbidity and mortality in Caribbean populations (2). Due to the nature of the risk factors, much of their effects are preventable. This raises many fundamental questions for healthcare policy and practices, as the goal is for people to remain independent and active as they age.

For the inevitable ageing of persons to be a positive



tant aspect and the longer life should be accompanied by continued opportunities for participation. The increasing levels of chronic disease especially those associated with disabling complications can and does threaten sustainability of good quality of life.

Active Ageing and the Life Course Perspective

Measures to help older persons remain as healthy and as functional as possible are a necessity not an option. Embracing the life course perspective, which includes actions at all levels; physical, social, psychological and economic and all ages, is a useful start. However, a rethinking is needed on how ageing is viewed and how prevention activities can be applied to older persons. Research (4) has indicated that there are several gaps in the practice of prevention with older persons as ageing is still associated with illness and disability and prevention is seen as unimportant as “old people cannot change” despite evidence to the contrary (5).

The World Health Organization's concept of active ageing, that is, the process of optimizing opportunities for health, participation and security in order to enhance quality of life as persons age has provided a useful framework (6) (Fig. 2).

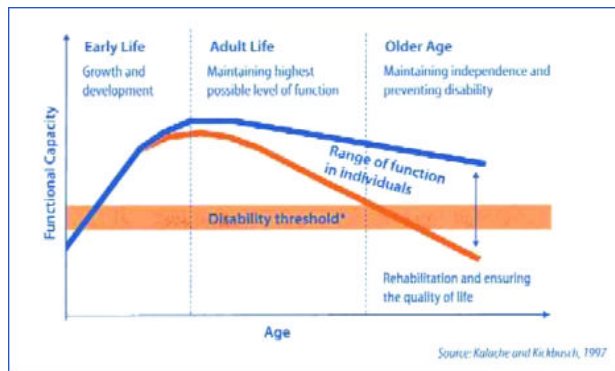


Fig. 2: Maintaining functional capacity over the life course. Reprinted with kind permission, WHO

To promote active ageing, health systems need to take a life course perspective that focuses on health promotion and disease prevention as well as providing equitable access to Primary Health Care and long term care (6). Such an approach allows for age specific prevention activities to maintain functional capacity across all ages. It provides the opportunity for interventions that, being age specific, recognizes the heterogeneity and diversity of older persons while creating supportive environments and fostering healthy lifestyle choices. It is a useful concept in considering how to reduce the risk and impact of chronic disease (Fig. 3).

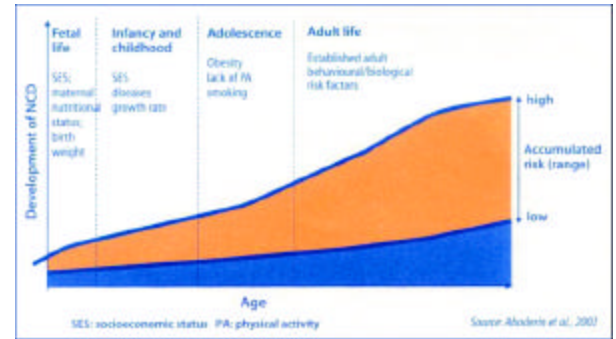


Fig. 3: Scope for non-communicable diseases prevention, a life course approach. Reprinted with kind permission, WHO

Active ageing programmes recognize the need to encourage and balance personal responsibility, self care age friendly environments and intergenerational solidarity. Several determinants influence active ageing (Fig. 4). On such determinant is an understanding of the ageing process:

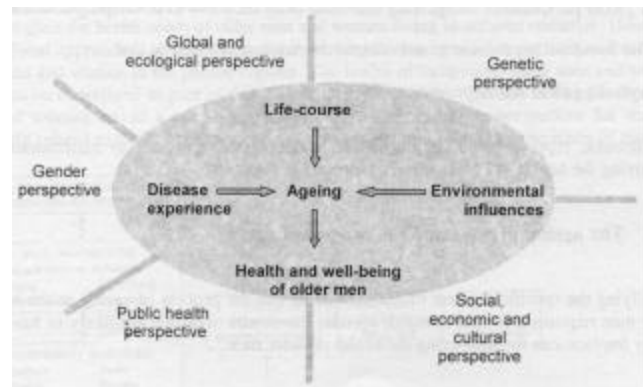
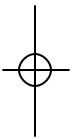


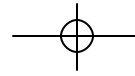
Fig. 4: Conceptual framework for the health of ageing. Reprinted with kind permission, WHO

The Ageing Process

The ageing process refers to the changes that occur with age and are unaffected by disease or the environment and should be distinguished from the process of ageing. The latter being strongly influenced by the effects of the environment, lifestyle and disease states that are related to ageing but not necessarily due to ageing. Poor health is not an inevitable consequence of ageing. People with a healthy lifestyle have half the risk of disability of those who do not (7). For example, smoking for forty years increases the risk of disease as an age associated factor. Yet in smokers old age and not smoking is often given as the risk factor for lung disease. Active ageing programmes encourage the process of growing older without growing old.

A fundamental element of the development of active ageing programmes is the recognition of the key role of health promotion and prevention programmes. Many of the determinants of health such as socio-economic circumstances, lifestyle and other behavioural factors as well as





cultural and political factors can be influenced and changed by external factors and policies. In the Caribbean, the bulk of the healthcare spending is on curative medicine (2). Decisions are needed on implementing a paradigm shift in the provision of healthcare, away from focusing on identifying and treating the affected individual towards identifying and minimizing risk in high-risk populations (3). In developing countries, the majority of chronic conditions present at the primary healthcare level and need to be tackled at that level. The present system is oriented to acute care-management wherein the individual is treated after the disease has manifested itself. A paradigm shift is needed in order to make prevention, a stated objective in policy documents a reality for chronic conditions (6). The lessons from the very successful infectious disease prevention programmes especially in maternal and child health will be useful.

The Challenge of Prevention

Health promotion, the process of enabling people to take control over and to improve their health and disease prevention are important in achieving positive health outcomes for older persons. Much of the emphasis to date has targeted younger persons but this needs to be broadened. Primary prevention activities such as reducing smoking, secondary prevention such as screening for early detection of chronic disease and tertiary prevention such as the appropriate clinical management of chronic disease all contribute to reducing disability and by extension maintaining high function and quality of life.

One barrier to health promotion and the adoption of healthy lifestyles is the belief that among seniors and health care workers that after a certain age it is too late to change one's lifestyle (4). Yet there is evidence against this as trials and population studies have shown the potential for prevention and disease reduction. In Finland and the United States of America, trials among high-risk individuals have shown that 60% of Type 2 diabetes mellitus could be prevented by modest changes in diet and physical activity compared to 30% by drug intervention (5). The increase in diabetes mellitus is a major concern in the Caribbean (8).

Health promotion and behaviour change is not easy and the challenge to health care workers is to give an age appropriate message so that older persons see the value of the message. Prevention activities in chronic disease management include not only providing knowledge but also sustaining the motivation for change.

Such activities alongside earlier interventions to prevent injuries, improve diets, increase levels of physical activity and improve soci-economic conditions can reduce the accumulated risk and burden of chronic disease and by extension health care costs. Programmes, both environmental and behavioural, which target risk factors, have their place in health delivery systems accompanied by improvements in community management of chronic disease. Their impact will be to reduce the number of older persons requiring costly treatment and long-term care

Toward the Future

New partnerships in the delivery of health care are needed (3). Such partnerships need to involve the high-risk individuals, patients and families, health care team community supports including the social and economic supports (Fig. 5) and the three pillars of the determinants of active ageing (6) (Fig. 6). Such partnerships will be influenced and supported by the broader healthcare environment including the political and policy framework. Inadequate resources are often cited as barriers to innovative uses of existing resources can help.

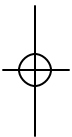


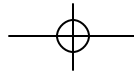
Fig. 5: Innovative care for chronic conditions framework. Reprinted with kind permission, WHO



Fig. 6: The three pillars of a policy framework for active ageing. Reprinted with kind permission, WHO

One barrier that needs attention is the present inadequate knowledge of ageing and age related issues. Improving the education of healthcare workers and the elderly themselves, on the subject of ageing and the role of prevention is vital. The adoption of the life course perspective and the shift to an active ageing approach, be fundamental to improving the care of older adults, w

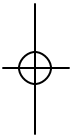


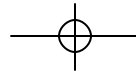


what to expect in old age to a more positive picture. Achieving such attitudinal change and keeping people motivated about maintaining lifestyle changes is a challenge but one, that Caribbean countries given their demographic profile, cannot ignore. There is a window of opportunity now as the region is on the verge of a doubling of the older population and adequate initiatives now will reduce the need for crisis intervention in 10-15 years. The question is, are we ready and willing to take on this challenge – the older persons of the next few generations are already born, today's adult is tomorrow's grandparent, today's child is the older person, three generations removed.

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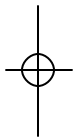




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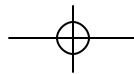
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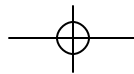
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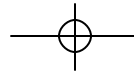
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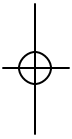
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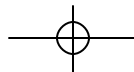
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CONTENTS

Dean's Message	1
Programme	2
Programme: Workshop on Ageing Well: A Life Course Perspective	9
Abstract of the Sir Kenneth Standard Distinguished Lecture	11
Session 1 Surgery and Anaesthesia	12
Session 2 Metabolism and Nutrition	14
Session 3 Mental Health and Behaviour	18
Session 4 Obstetrics, Gynaecology and Child Health	22
Poster Presentations	24
Perth Framework for Age-Friendly Community-Based Healthcare	42
Ageing – Time for a Paradigm Shift in Healthcare Services	44





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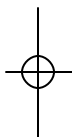
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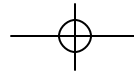
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