Obesity and Non-communicable Diseases

Lifestyle Medicine and Obesity Medicine – Preparing for the Twenty-first Century

R Kushner

Unhealthy lifestyle behaviours are the primary contributors for the development of non-communicable diseases (NCDs) and increased disability-adjusted life years (DALYs) in the United States of America and around the world. Two emerging fields in healthcare – Lifestyle Medicine and Obesity Medicine – are being established to combat these health conditions. Lifestyle Medicine focuses on the importance of lifestyle behaviours (*eg*, self-care, adherence, diet, physical activity, tobacco and substance use, stress and coping, mind-body techniques) that serves to lower the risk for chronic disease and/or, if disease is already present, serves as a therapy adjunct. Obesity Medicine recognizes obesity as a serious public health concern and a major risk factor for an expanding set of chronic diseases. Focussing on weight loss and weight maintenance is a target for primary and secondary prevention. Both fields have recently been incorporated into medical education to better prepare clinicians for the twenty-first century.

The Care, Connect, Communicate (Triple C) Study: Transforming Hospitals and Healthcare Centres to Health Innovation Spaces Powered by Activated Providers

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Far too often, healthcare providers are disengaged and report being ignored in key decision-making processes and policies that impact healthcare delivery in the hospitals, healthcare centres and clinics where they work. When 'activated', these same providers can employ their natural talents and creativity to design and implement solutions to many of the challenges to delivering high-quality care in countries where resources are limited. This paper discusses the results of the Care, Connect, Communicate (Triple C) study that was aimed at obtaining baseline data on discharge planning at the Rand Hospital in Grand Bahama, The Bahamas. This innovative mix, methodological observational study converted 40 healthcare providers from a wide-range of healthcare disciplines to 'activated providers'. Twenty of these activated providers were then engaged as researchers to capture data about 500 patients admitted and discharged at the hospital and three public health clinics over a two-month period. The paper discusses the methodology for creating 'activated providers', the value of using modern digital medicine in the process of 'activating providers', and the results of the Triple C study. The paper also discusses the potential social impact of 'activated providers' and provides recommendations on how this methodology can be scaled and employed in healthcare institutions in low- and middle-income countries in the region and internationally.

Descriptive Epidemiology of Patients with Acute Ischaemic Stroke who were Thrombolysed Having met the Criteria at Princess Margaret Hospital, Nassau, The Bahamas

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Objective: To determine the percentage of patients presenting to Princess Margaret Hospital with acute ischaemic stroke (AIS) who received thrombolytic therapy.
Methods: A retrospective chart review was conducted on the medical records of adult patients presenting to Princess Margaret Hospital with AIS between January 9, 2014 and October 23, 2016. Data collected were analysed using IBM SPSS statistical analysis package (v. 24.0). Descriptive and inferential statistics were calculated and reported.
Results: Medical records regarding patients with AIS were found for 34 adult patients, 44.1% of whom were male and 55.9% were female. The mean age of the participants was 67.68 (± 12.56) years; 76.5% were Bahamian. The median time from symptom onset to arrival at the emergency room (ER) was 10 hours; 43.5% arrived within 4.5 hours of symptom onset. The median time from arrival at the ER to being seen by a physician was 2.35 hours. The mean time from arriving at the door to getting a computerized tomography scan of the brain was 7.02 hours; 43.5% of patients with AIS

met the criteria for tissue plasminogen activator (tPA) on arrival. Because of barriers to an expeditious review by the medical team, no patient studied was thrombolysed.
Conclusion: Despite two in five patients in this study arriving in time to qualify for thrombolysis, none was seen in a timely manner at any point of care and therefore was not given tPA. Implementation of a multidisciplinary stroke team and protocols, in co-ordination with public awareness of stroke symptoms, is necessary to improve clinical results.

Dedication to My Medication: Factors that Affect Medication Compliance/Adherence in the Adult Hypertensive and Type 2 Diabetic Population: A Bahamian Experience
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Objective: To identify factors that affect medication compliance/adherence in the adult hypertensive and Type 2 diabetic population of 18 years and older in The Bahamas.
Methods: Cross-sectional design was used in conducting a survey interviewing participants by convenience sampling. The Morisky Medication Adherence Scale (MMAS) and Brief Medication Questionnaire (BMQ) were used. IBM SPSS statistics was employed to produce descriptive and inferential statistics.
Results: Of the 281 participants, 193 (68.7%) were female; 1.8% did not specify. The median age range was 50−64 years (IQR: 30−49 years, > 65 years), median highest education level was high school (IQR: some high school, some college), and 252 (92%) identified as of Bahamian nationality. Median MMAS score was 3 (IQR 1, 5). This scale's scores were related to the participant's age ($r_{Sp} = 0.142$, $p = 0.041$), use (or not) of bush/alternative medicines ($r_{Sp} = -0.278$, $p = 0.001$), amount of medications taken ($r_{Sp} = 0.145$, $p = 0.036$), difficulty remembering ($r_{Sp} = 0.751$, $p = 0.001$), forgot ($r_{Sp} = 0.734$, $p < 0.001$), concerns about long-term side-effects ($r_{Sp} = 0.243$, $p = 0.001$). A total of 46.2% did not forget to take their medications and 24.7% sometimes cut back on taking medications. A total of 32.8% forgot to take their medications when they travelled, and 29.7% expressed that it was a real inconvenience to adhere to their medications.
Conclusion: As with the findings of the World Health Organization, leading factors associated with medication adherence in this study were age, use of complementary/alternative medicines, difficulty remembering to take drugs, and concerns about long-term side-effects. Interestingly, in this self-reported study, as the medication amount increased, the level of adherence improved. Overall, the findings of this study reflected reasonable compliance in the Bahamian health clientele.

Knowledge, Attitudes and Practices of Primary Care Physicians in the Management of Type 2 Diabetes Mellitus in New Providence, The Bahamas
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Background: It is predicted that globally diabetes will be the seventh leading cause of death by the year 2030. The aim of this study was to assess the knowledge, attitude and practices (KAP) of primary care physicians in New Providence, The Bahamas, concerning diabetes mellitus.
Methods: A cross-sectional KAP survey was done on 131 primary care physicians practising in New Providence, The Bahamas. A total of 59 questionnaires were returned giving a response rate of 45%. Descriptive and inferential statistical analysis was done using IBM SPSS Statistics software.
Results: The median age of the participants was 36 (IQR: 33, 43) years, and the majority (66.1%) of these physicians were female. The mean overall knowledge score for the participating physicians using the per cent getting diabetes mellitus knowledge questions correct was 68.77% (± 13.09). In regards to the physicians' attitudes towards patients with diabetes using a scale from 1 to 5, the overall mean was 3.98 (± 0.31), reflecting positive attitudes towards caring them. The overall mean of the physicians' attitude score towards their good practice perception in the management of Type 2 diabetes was 81 of 100. Their mean level of confidence when it came to managing patients with Type 2 diabetes was 97.95 out of 100.
Conclusion: Primary care physicians in New Providence, The Bahamas, reflected appropriate knowledge, attitudes and practices regarding the diagnosis and management of patients with Type 2 diabetes. Despite these favourable results, there is always room for improvement which can be addressed through continuing medical education and routine medical audits.

What Can I Learn from the Patient by Taking a Weight History?
R Kushner

Although taking a comprehensive weight history is not traditionally taught in medical education, it is a valuable "autobiographical" approach to patient-centred chronic disease care that provides important diagnostic and therapeutic information. Population studies have shown that the trajectory and pattern of weight gain, as well as maximum weight attained, are associated with the development of increased morbidity and mortality. By using elements of narrative medicine (exploring the meaning, context and perspective for the patient's condition) and biopsychosocial medicine, a "life-events body weight graph" can be created whereby patients are able to express the onset, tempo, precipitating factors, setting and barriers they have experienced in their weight journey. In return, the clinician is better able to provide empathetic, meaningful and targeted treatment recommendations.