

Family Health

Chairpersons: S Keizer-Beache, M Edwards

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Alcohol use disorder and its relation with co-morbidities depression and smoking among patients presenting to public clinical settings in The Bahamas

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Objective: To determine the prevalence of alcohol use disorder as it relates to depression and smoking among persons presenting to public clinical settings in The Bahamas.

Design and Methods: A convenience sample of 485 persons (ages ≥ 18 years) from selected outpatient healthcare settings were interviewed using AUDIT (Alcohol Use Disorder Identification Test) and PHQ9 questionnaires, including sociodemographic, smoking and binge drinking questions. Descriptive and inferential statistical analyses (including ANOVA and logistic regression) on tallied scores were performed assessing possible differences and associations.

Results: A total of 7.1% (34) of the 485 participants screened positive for hazardous drinking (AUDIT score > 8). Six per cent of the males (8) and 2.1% (7) of the females screened positive for alcohol dependence and 20.3% were binge drinkers, 10.1% of persons studied were current smokers. Statistically significant relationships were found between smoking and AUDIT scores. 15.8% (75) screened positive for mild depression, 4.2% for moderate, 1.1% for moderately severe and 1.1% for severe. A significant association was seen between smoking and PHQ9 scores ($p < 0.001$). A linear relationship was seen in the association between AUDIT scores and PHQ9 scores ($r = 0.176$, $p < 0.001$).

Conclusion: Alcohol use disorder, a condition modestly prevalent in The Bahamas, is associated with smoking and higher PHQ9 scores, which is itself associated with AUDIT scores.

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Prevalence of psychological distress in Suriname in urban and rural areas: The Suriname Health Study

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Objective: To describe the presence of mental disorders in a representative sample of the Surinamese ethnic groups in the population, across urban and rural areas.

Design and Methods: The Kessler Psychological Distress Scale was applied to data from the Suriname Health Study ($n = 5436$ (15 to 65 years)) designed according to The World Health Organization (WHO) Steps guidelines, to determine levels of psychological distress. The K10 Scale was used in the urban and rural coastal area whilst the K6 Scale was used for the rural interior where the population lives in tribal settings. Prevalence's in all living areas were determined for no, mild, moderate and severe mental distress and were measured for subgroups of gender, age, ethnicity, education, income, marital and employment status.

Results: An overall prevalence of 3.8% (95% CI, 3.3, 4.4) was observed for severe mental health disorders, 4.9% (95% CI, 4.4, 5.5) for moderate mental health disorders and 10.8% (95% CI, 10.0, 11.6) for mild mental health disorders. Higher prevalence of all categories of mental health disorders were found in women compared to men and among Maroons, followed by mixed, Hindustani and Javanese. Respondents with lower education and lower income showed higher prevalence of all categories of mental health disorders. Prevalence was also higher among respondents living in urban *versus* rural coastal areas, among singles *versus* people living with a partner and in unemployed *versus* employed.

Conclusions: Overall 19.5% of respondents reported mental health disorders. The main risk factors were female gender, Maroon ethnicity, low-level of education and income, living in urban areas, unemployment and being single.

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Prevalence and Sociodemographic features of men with erectile dysfunction in Nassau, The Bahamas

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Objectives: The purpose of this study was to determine the prevalence of erectile dysfunction in Nassau, The Bahamas. This study also sought to describe the sociodemographic features of patients with ED in The Bahamas, to assess the strengths of association between ED and its related comorbidities and to assess the erectile function, orgasmic function, sexual desire, intercourse satisfaction and overall, sexual satisfaction of male patients in The Bahamas.

Methods: A cross-sectional study using the international index of erectile function (IIEF) was administered to 450 male patients between the ages of 40 to 85 years of age attending four public and one private medical clinic in Nassau, The Bahamas. Subjects were conveniently selected between October 2015 to January 2016, after informed consent was granted, supervised administration of the questionnaire was performed by the researcher or trained assistants.

Results: Three hundred and six participants completed the survey. The prevalence of moderate to severe ED was found to be 53.3% of the participants surveyed. The results obtained also found that 49.7% had moderate-to-severe orgasmic dysfunction, 53.9% had moderate-to-severe sexual desire dysfunction, 57.2% had moderate-to-severe dysfunctional intercourse satisfaction and 49.7% had moderate-to-severe dysfunction in overall satisfaction. Multivariate analysis found that age, yearly income, diabetes and hypertension are predictors of the development of erectile dysfunction.

Conclusion: The burden of ED in The Bahamas is significant. The most common associations include, diabetes and hypertension. Further research is needed on the effects of erectile function on the quality of life among Bahamian men.

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The challenges and realities to establishing a renal transplantation service in The Bahamas

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Objective: This study sought to highlight the challenges in healthcare in the Bahamas, with regards to access, availability and affordability to renal transplantation services.

Design and Methods: We reviewed retrospectively the outcomes of a cadaveric and a live donor programme to implement a renal transplant service for dialysis dependent patients (RDDP) in The Bahamas.

Results: The live donor programme was started in 2006, in a private hospital; 42 RDDP and 20 potential living donors were evaluated. Renal transplant service for dialysis dependent patients were referred from private dialysis centres with one self-referred from the public sector. Of the 42 RDDP, 16 had major medical insurance, 21 recipients had no coverage, five were unknown. Seventeen RDDP were unable to identify any donors. Twenty-two RDDP were unable to afford the evaluation procedures. Eighteen RDDP completed all their preoperative evaluations. Ten RDDP died whilst awaiting evaluation. Eight donor-recipient pairs completed their evaluation, a year on average, but only three donors met all standard criteria to donate; two were transplanted in the United States of America (USA) and one in The Bahamas.

The potential cadaveric programme arose out of a multi-organ donor initiative established in 1996; a University of Miami (UM) international team harvested organs in The Bahamas from brain-dead patients using approved international guidelines. From eight brain-dead donors, 30 recipients received, respectively, in the USA: 15 kidneys, eight livers, three pancreas, two hearts and four heart valves, inclusive of two Bahamians receiving a heart and a liver allograft each.

Conclusion: The affordability and availability of donor kidneys locally are major impediments to establishing a renal transplantation service in The Bahamas.

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The effect of lung function on blood pressure and vascular indices from adolescence to early adulthood in a London multi-ethnic cohort

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Objective: Vascular and lung function develop and decline over the life course; both predict cardiovascular events and mortality but little is known of how they develop over time. We hypothesised that in our multi-ethnic London cohort study, lung function (LF) from early adolescence would directly affect vascular indices as young adults.

Design and Methods: 'DASH' (<http://dash.sphsu.mrc.ac.uk>) included: 6643 children aged 11–13 years in 2003; a representative 10% sample (n = 665) participated in a pilot follow-up in 2013. Psychosocial, anthropometric, blood pressure (BP) and LF measures were collected in both surveys; aortic pulse wave velocity (PWV) and augmentation index (AIx) were measured at aged 21–23 years. Relationships between Forced Expiratory Volume z-scores

(zFEV₁), after global initiative-ethnic adjustments and blood pressure (BP), PWV and AIX were tested in linear regression and general estimating statistical models.

Results: Four hundred and eighty-eight people with complete data were included. At 11–13 years, systolic BP (SBP) was positively associated with zFEV₁ (coefficient = 1.90, 95% CI 1.11–2.68, $p < 0.001$); but not at 21–23-year. The 10-year increase in zFEV₁ was associated with rise in SBP (1.38, 0.25–1.51, $p < 0.05$) in mixed effect models adjusted for age, gender, ethnicity, waist-height ratio,

employment, reported racism, smoking and alcohol use but diastolic BP change was unrelated. In fully adjusted models, neither PWV nor central AIX (AIXao) were associated with zFEV₁ at 11–13 or 21–23 years ($p > 0.05$).

Conclusion: Forced expiratory volume 1 change is positively and independently associated with SBP change from adolescence-to-young adulthood, suggesting earlier lung function plays important roles in systolic BP development. Vascular indices were unrelated to lung function or its change.