

5th Annual Research Day: September 2011 “Building the Foundation for National Health Priorities”

Male Health: A Bahamian Perspective

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Objective: To review the utilization of a male health clinic in The Bahamas.

Design and Methods: This is a retrospective and observational study based on a review of data from the Ministry of Health Male Health Clinic ledgers and Flamingo Gardens clinical records from July 2006 to September 2010.

Results: There were 165 first time and 206 return visits made to the clinic, totalling 371 client encounters during the period July 2006 – September 2010. The ages of persons attending the clinic were between 18 and 82 years with an average age of 50 years. The primary reasons for visits were varied with prostate screening and annual physicals ranking 1st and 2nd, respectively followed closely by clients being seen for hypertension. Greater than 90 per cent of clients kept their appointments and over 65% attended their referrals.

Conclusions: Men of all ages and socio-economic classes are willing to participate in their own healthcare and attend a Male Health Clinic. Greater percentages of clients with hypertension and diabetes attended the Male Health Clinic than attended routine government medical clinics.

Prevalence of Mental Disorders in Male Prisoners Convicted of Murder/Manslaughter

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Violent behaviour has been postulated to be associated with mental illness. Studies examining the characteristics of prisoners in the Caribbean and specifically The Bahamas are sparse. This dissertation establishes the prevalence of mental and personality disorders in male prisoners convicted of murder/manslaughter in Her Majesties' Prison (HMP) Nassau, The Bahamas. This cross-sectional study comprised three primary instruments; the personality assessment inventory (PAI) and structured clinical interview (SCID I) were used in conjunction with a sociodemographic questionnaire to diagnose mental and personality disorders in the set population under the guidance of a clinical psychologist and consultant psychiatrist. Data was analysed by Statistical Package for Social Services (SPSS) also known as Predictive Analytic Software (PASW).

The study sample after inclusion and exclusion criteria was 99 participants. Resultant findings showed prevalence rates of mental illness using the SCID 1 at 93.00% and 41.50% with the PAI. Substance misuse disorders, mood disorders and psychosis were the most common disorders found.

Marijuana was the drug of choice by a slight majority and associations were found between the subject's total number of arrests, length of incarceration, socio-economic status and the diagnosis of certain psychiatric disorders such as anxiety, depression and psychosis. The study concluded that the sample population had a higher rate of mental illness than that expected in general populations. These findings necessitate a greater involvement of psychiatric specialty services in the prison population and provide the foundation for more research in criminal offenders in The Bahamas.

A Survey of Patients with Substance Use Disorders at Government Treatment Facilities in The Bahamas

KC Christie

Marijuana was introduced to The Bahamas in the late 1960s and early 1970s. The narcotic drug trade followed in the early 80s. With continued trans-shipments of illicit substances through the islands, more and more drugs were left behind for local consumption. This resulted in a growing cadre of pushers, abusers and dependents. This study is cross-sectional and interview based in its design. This dissertation determines the characteristics of patients presenting to government treatment facilities over a six-month period. Further, it determines the prevalence rates of alcohol, cannabis and cocaine use disorders in patients presenting to government treatment facilities. The structured clinical interview for diagnostic and statistical manual of psychiatric disorders IV-TR axis 1 disorders was used to screen for drug abuse or dependence. The survey of addicted patients in treatment centres standardized questionnaire was used to elicit responses about source of referral for treatment, demographic information and drug history of the participants. Collected data were coded and entered into the statistical package for social sciences and analysed. Results are as follows (i) mean age of all participants with substance use disorders was 36.22 (10.74) and they were

predominantly male [8 to 1] (ii) regarding the males, they were mostly single, unemployed or casually employed, of middle school education and were residents of New Providence (iii) alcohol, cannabis and cocaine were the common drugs that were misused (iv) of cocaine users 52 (82.5%) met the DSM-IV-TR criteria for dependence and of cannabis users 20 (18.9%) met the DSM-IV-TR criteria for abuse (v) polysubstance disorders are present, and the common triad of drugs include alcohol, cannabis and cocaine.

There is a need to conduct community surveys on school children, other adult populations *eg* in the wider community and on family island populations to determine the population rates of substance use disorders.

Robotic Radical Hysterectomy: Comparison of Outcomes and Cost

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Operative and peri-operative outcomes, complications and cost for radical hysterectomy for cervical cancer with negative sentinel nodes have been compared for robotics and laparotomy. Forty patients underwent radical hysterectomy with/without bilateral salpingo-oophorectomy, for early-stage cervical cancer. All cases were performed by one of two surgeons, at a single institution (16 robotic, 24 laparotomy). The data for the robotic group were collected prospectively and compared with data for a historic cohort who underwent laparotomy. The data included demographics and peri-operative variables including operative time, estimated blood loss, lymph node count, hospital stay and complications. Additionally, real direct hospital cost was compared for both modalities. Patients undergoing robotic radical hysterectomy experienced longer operative time than the laparotomy cohort (351 *vs* 283 minutes; $p = 0.0001$). Estimated blood loss was significantly lower for the robotic cohort than for the laparotomy cohort (106 mL *vs* 546 mL; $p < 0.0001$). The minor complication rate was lower in the robotic cohort than for laparotomy (19% *vs* 63% $p = 0.003$). Average hospital stay for the robotic patients was significantly shorter than for those undergoing laparotomy (1.9 days *versus* 7.2 days, $p < 0.0001$). Lymph node retrieval did not differ between the two groups (robotic 15 nodes, laparotomy 13 nodes).

The total average peri-operative costs for radical hysterectomy with lymphadenectomy completed *via* laparotomy was CAN \$11 764 § 6790, and for robotic assistance 8183 § 1089 ($p = 0.002$). When amortization of the robot was included, there remained a trend in favour of the robotic approach, but it did not reach statistical significance.

Whereas robotics takes longer to perform than traditional laparotomy, it provides the patient with a shorter hospital stay, less need for pain medications and reduced peri-

operative morbidity. In addition, real average hospital costs tend to be lower.

Occupational Safety: A Look at Immediate Decontamination and Terminal Waste Disposal in the Caribbean

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A pilot study was conducted between December 2010 and January 2011 on the knowledge, attitude and behaviour of healthcare-workers towards immediate decontamination and terminal waste disposal in five Caribbean islands. The results indicated that while there is knowledge on policies for exposure to blood and body fluids, disposal of body parts, sharps and infectious waste disposal, there were no written policies. Employee health services were not readily available in all islands; however, antiretroviral therapy was available in the immediate decontamination process. It was felt that leaders needed to advocate for written policies and that there was a need for training. The researchers concluded that there was a lack of legislation on occupational safety relating to blood borne exposure in the islands and the guidelines that govern healthcare-workers exposure to blood borne infections and their management were less than adequate. Lack of training, leadership and accountability were the main factors contributing to the relative neglect of occupational safety, including systems for immediate decontamination and for safe terminal disposal of infected material. More research is need in this area in the individual islands.

Endovenous Laser Ablation Therapy in The Bahamas: Immediate and Short-term Results

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Abstract Purpose: To report on the immediate and short-term results of endovenous laser ablation therapy (EVLAT) in The Bahamas.

Method: Between September 2009 and January 2011, 42 EVLAT were performed in 29 patients with symptomatic varicose veins. The veins treated included the greater saphenous, small saphenous, accessory and perforator veins. In all cases, pre-operative, intra-operative and post-operative venous duplex scanning were performed. All treated veins were accessed percutaneously using imaging guidance. Biolitec® laser fibers were used in all cases and were placed into the vein through a 6F vascular sheath. After tumescent anaesthesia was administered, the vein was ablated using an average energy of 39J/cm.

Results: There were 42 limbs in 29 patients. Females accounted for 89.7% (n = 24) and males accounted for 10.3% (n = 5). The mean age ± SD was 53.83 ± 11.9 years. The mean BMI ± SD was 29.35 ± 8.39. Between gender, this was significant in that the BMI for males was 48.82

and for females 28.06 ($p = 0.011$). The greater saphenous was treated in 97.6% of cases, the small saphenous vein in 19% of cases, accessory veins in 2.5% of cases and perforating veins in 40.5% of cases. The mean \pm SD for vein length treated was 38.79 ± 7.40 cm. The mean \pm SD for energy used was $1522.46 (\pm 618.54)$. Technical success was 95.24% and there were two technical failures (4.76%). Adverse events occurred in two cases (4.76%). At 30 days,

14.29% of patients were noted to have new reflux in previous non-refluxing veins. These were treated with sclerotherapy in the majority of cases.

Conclusion: Short and intermediate term results of EVLT the treatment of venous reflux showed that this technique is highly safe and effective in the Bahamian setting and these results are comparable to treatment results cited in the literature.