

O – 89

Marijuana use and quality of sperm for fertility competency: A preliminary investigation

AM Pottinger, KN Carroll, GE Mason, N Parkins
Department of Child and Adolescent Health; Hugh Wynter
Fertility Management Unit; Department of Sociology,
Psychology and Social Work; Department of Life Sciences,
The University of the West Indies, Kingston, Jamaica
E-mail: audrey.pottinger@uwimona.edu.jm

Objectives: The literature was contradictory about the effects of marijuana use on sperm parameters. Laboratory findings, of excellent sperm quality for some Jamaican males who are chronic marijuana users, support these contradictory findings. This paper describes and compares levels of marijuana smoking with sperm quality and pregnancy history among Jamaican men concerned with their fertility potential.

Design and Methods: Ninety-four male clients referred to a fertility clinic over an eight-month period completed a standard form which included demographics, employment data, general health, lifestyle practices, fatherhood and medical history, and an additional questionnaire which detailed their marijuana use.

Results: Significantly more chronic marijuana users had poor sperm quality, particularly preparation sperm count and motility, compared to those who had never smoked marijuana. This effect was found without differentiating current from chronic use. There were no differences in the distribution of marijuana use between men with extremely low or excellent sperm quality. A surprising finding was that males under 30 years old, who were less likely to be chronic users, had similar critically low sperm count as males over 50 years.

Conclusions: Chronic marijuana use seems to negatively affect sperm quality (especially preparation sperm parameters). However, the effects need to be more thoroughly investigated with the use of a larger sample size, more robust testing using DNA, and by examining socio-cultural practices associated with marijuana smoking.

O – 90

Association between health literacy, inhaler technique and disease control in obstructive airway disease

D Blackman, A Jagdeo, S Harry, I Mohammed, R Basdeo,
LM Pinto Pereira, S Sakhamuri, TA Seemungal
Faculty of Medical Sciences, The University of the West
Indies, St Augustine, Trinidad and Tobago
E-mail: lexleyp@gmail.com

Objective: The association of health literacy with compliance, inhaler technique and disease control with respect to both asthma and chronic obstructive pulmonary disease (COPD) patients is poorly addressed. We examined the association between health literacy, inhaler technique and disease control in patients suffering from obstructive lung disease in Trinidad.

Design and Methods: The method was a cross-sectional study which employed 781 patients from Chest Clinics in Trinidad (Arima Health Facility, Eric Williams Medical Sciences Complex, Port-of-Spain and San Fernando General Hospitals). Outpatients were interviewed on a pilot tested questionnaire for information on compliance and disease control. Morisky eight-item Medication Adherence Questionnaire, Asthma Control Test (ACT), and COPD Assessment Test (CAT) were used to assess compliance, asthma and COPD control, respectively. Health literacy was assessed using Rapid Estimate of Adult Literacy in Medicine-short form (REALM- SF) and inhaler technique was observed on dummies.

Results: Mean age of the sample was 58.7 ± 15.3 years; females showed higher frequency (55.3%). Health literacy was high in 260 (36%) and low in 463 (64%) patients. Poorer health literacy was associated with poor disease control in asthma ($p = 0.014$, OR = 2.105; 95% CI 1.160, 3.820) and COPD ($p = 0.044$, OR = 1.864; 95% CI 1.015, 3.423). Health literacy was associated with poor inhaler technique (Symbicort: $p = 0.003$ and Seretide: $p = 0.003$). Health literacy, disease control and inhaler technique were not associated with compliance ($p > 0.05$).

Conclusions: Health literacy was associated with inhaler technique and disease control in asthma and COPD.

O – 91

The mental and physical health of severely and non-severely abused US black Caribbean women

K Lacey, D Mouzon

University of Michigan Institute for Social Research, Ann Arbor, Michigan, USA; Rutgers, The State University of New Jersey, New Brunswick, New Jersey, USA

E-mail: ktlacey@umich.edu

Objective: The study examined the mental and physical health of United States of America (USA) Caribbean Black women using a nationally representative sample, with a special emphasis on the role of severe intimate partner violence.

Design and Methods: Data from the National Survey of American Life, the largest and the only known representative study on 1621 non-institutionalized Caribbeans residing in the USA, were used. The mental health (*ie* mood, substance, anxiety, eating) of participants was based on structured mental health assessments (DSM-IV) and physical health was based on self-report of physician-diagnosed conditions (*ie* arthritis, high blood pressure, liver problem, HIV or AIDS). Chi-squared tests of independence were used to address differences in rates of mental and physical health conditions between severely abused and non-severely abused women.

Results: Rates of mental and physical health problems were generally higher among women experiencing severe intimate partner violence in comparison to women who had not experienced intimate partner violence. This was apparent for conditions such as bipolar disorder (12.4% vs 1.3%), panic disorder (11.9% vs 1.9%), alcohol abuse (5.5% vs 1.8%), suicide attempts (12.7% vs 1.4%), kidney problem (6.0% vs 1.8%), liver problem (3.7% vs 0.8%), and HIV or AIDS (1.3% vs 0.1%).

Conclusions: The study had intervention and preventative implications for both detecting and addressing the health needs of women who are abused by an intimate partner.

O – 92

Ethnic and gender disparities in premature adult mortality in Belize 2008–2010

F Morey, IR Hambleton, NC Unwin, TA Samuels

Ministry of Health, Belize; Chronic Disease Research Centre, Tropical Medicine Research Institute and Faculty of Medical Sciences, The University of the West Indies, Barbados

E-mail: alafiasam@gmail.com

Objective: To determine if differences exist in premature adult mortality among the four main ethnic groups in Belize, by men and women aged 15–59 years.

Design and Methods: The analysis used 2008 to 2010 mortality data (Ministry of Health, Belize) and census data (2010) stratified by age, gender, and ethnicity (Statistical Institute of Belize). Underlying cause of death was classified using International Classification of Diseases (ICD)-10, then into three groups: communicable diseases, non-communicable diseases and injuries. We calculated the probability of death at five-year intervals, 1559 years (45q15) for all deaths and for the three broad (and competing) mortality causes.

Results: The probability of death among the population 15–59 years was 18.1%, and was higher in men than in women (women 13.5%, men 22.7%). Important ethnic variation existed, with Creole and Garifuna ethnic groups having three times the 45q15 probability of death compared to Mayan and Mestizo groups (Creole 31.2%, Garifuna 31.1%, Mayan 10.2%, Mestizo 12.0%). This ethnic disparity pattern existed in both genders but was greater in men. The female probability of death in the Creole and Garifuna groups was roughly twice that of the Mayan and Mestizo groups. For males, it was between three and four times higher. Violent death contributes to this difference, particularly in Creole men, where roughly one in seven can expect to die a violent death before their 60th birthday.

Conclusions: This study starts to identify health inequities. Targeted work to identify potential interventions aimed at reducing the excess adult mortality in the Garifuna and Creole groups is needed.

O – 93

Racism triggers smoking in British ethnic minority adolescents: Evidence from the Determinants of Young Adult Social Well-Being and Health (DASH) longitudinal study

UM Read, A Karamanos, A Cassidy, M Joao da Silva,

OR Molaodi, JK Cruickshank, S Harding

Social and Public Health Sciences Unit, Institute of Health and Wellbeing, University of Glasgow, UK; Kings College London, UK

E-mail: ursula.read@glasgow.ac.uk

Objective: Racism may have a negative impact on the health behaviours in adolescence, however, there are few longitudinal studies. We examined the impact of perceived racism on smoking in an ethnically diverse sample of adolescents in the United Kingdom (UK) and potential modifying factors.

Design and Methods: In 2002/03, 6643 eleven to thirteen year olds in London, ~80% ethnic minorities, participated in the baseline survey. In 2005/06, 4782 were followed-up. In 2012–14, 665 participants, aged 21–23 years, took part in a pilot follow-up, which included 42 qualitative interviews. Measures of socio-economic and psychosocial factors and health were collected.

Results: Ethnic minority adolescents were more likely to report racism compared with white British, but smoking was generally lower. Reported racism in adolescence was associated with having ever smoked (*eg* males odds ratio 2.20; 95% CI 1.59, 3.02) and with smoking initiation (males 4.09; 2.45, 6.83). Smoking initiation was greatest among black Caribbeans. Attendance to a place of worship, being a Muslim and a good parent-child relationship were independent protective factors. Qualitative interviews supported evidence for reported racism as well as protective factors including increasing ethnic diversity, a

sense of identity and belonging, supportive parenting, high aspirations and religious faith.

Conclusions: This is the first UK study to show the negative impact of racism on smoking in adolescence, regardless of ethnic origin. Religious involvement and parenting may provide social support and reinforce cultural and religious values which may prevent the uptake of harmful health behaviours such as smoking. This has implications for health promotion among young people of all ethnicities.



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+1 (651) 665-8500 ext. 1580
sgu.edu • SGUEnrolment@sgu.edu



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St. George's University
THINK BEYOND
Grenada, West Indies