

Mental Health

Chairpersons: E Le Franc, A Misir

O – 65

Exposure to community violence and associated symptoms of psychological trauma among adolescents in New Providence, Bahamas

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Objective: This study examined exposure to violence and associated symptoms of psychological trauma (depression, anger, anxiety, dissociation, post-traumatic stress) among adolescents in New Providence, Bahamas.

Design and Methods: During the 2011–2012 academic year, 305 students, aged 14 to 16 years, in 10th grade from four public high schools participated in a cross-sectional survey to assess their exposure to violence and associated symptoms of psychological trauma. The survey instrument consisted of a self-administered questionnaire.

Results: Participants were mostly Black (99%) and female (57.4%). The most common forms of exposure to violence witnessed by adolescents within the past year were: threats (75.7%), physical assault (90.1%), beatings at school (88.5%), someone else attacked with a knife (62.5%), a real gun pointed at another (31.9%) and sexual assault of another (47.4%). The most common forms of exposure to violence witnessed by adolescents > 1 year ago were: a beating (87.5%) and a physical assault (86.9%). Clinical symptoms of anger (11.5%), sexual concerns (31.5%), and sexual distress (34.8%) were statistically significant between genders. Twenty (6.6%) students exhibited symptoms of post-traumatic stress. Evidence of psychological trauma was present for all scales measured.

Conclusions: Bahamian adolescents are exposed to significant amounts of violence and should be screened for psychological trauma. Mental health services should be available for adolescents.

O – 66

Longitudinal patterns of psychosocial distress in the Determinants of Young Adult Social well-being and Health (DASH) cohort study in London, UK: Implications for qualitative sampling and interview

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Objective: To identify patterns of psychological distress among an ethnically diverse cohort in London, UK to inform qualitative exploration in follow-up of the cultural appropriateness of psychosocial measures.

Design and Methods: Self-report questionnaires were completed by a school-based cohort in 2001–2 (11–13 years) and 2005–6 (14–16 years). A tracing exercise was completed in 2010–11 (19–21 years) and a feasibility study commenced in 2012 (21–23 years) with a sub-sample in preparation for full follow-up. Data on psychosocial well-being was obtained *via* the Strengths and Difficulties Questionnaire (SDQ) and General Health Questionnaire (GHQ-12). Strengths and Difficulties Questionnaire scores >18 and GHQ scores ≥ 4 indicated potential psychological morbidity. Longitudinal data were compared for 1713 participants in the tracing exercise to inform sampling and design for qualitative exploration of mental health measures used in follow-up.

Results: Seventy-one per cent scored below the cut-off across all SDQ/GHQ measures. More males than females scored consistently low, particularly males from ethnic minority groups as well as Indian females; 15.9% of girls and 9.9% of boys scored SDQ >18 in wave 2 who otherwise scored below, with variations by ethnic group as well as gender. In the tracing exercise, more unemployed, particularly Nigerian/Ghanaian and Bangladeshi respondents, and females scored GHQ ≥ 4 with highest gender differences among Nigerian/Ghanaians and Pakistanis.

Conclusions: Longitudinal analysis of psychosocial measures in DASH suggests interactions between ethnicity, gender, studying and employment. Qualitative sampling and interview design will include at-risk groups and those

who appear protected to explore the relative cultural, gender and socio-economic influences on mental health from adolescence into adulthood.

O – 67

Effect of traffic pollution and psychosocial stress on ethnic differences in respiratory health in adolescence

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Objective: To examine the effect of pollution and racism on ethnic differences in lung function and asthma in adolescence.

Design and Methods: Lung function, asthma, ethnicity, racism, anthropometry and deprivation were measured at 11–13 years; these, barring lung function, were measured again at 14–16 years. Annual-mean measures of particulate matter with an aerodynamic diameter of less than 2.5 μm , and 10 μm (PM_{2.5}, PM₁₀) were linked to neighbourhood and school addresses. Multilevel models were used to examine the influence of air pollution on ethnic differences in lung function and asthma, and the potentially modifying role of racism.

Results: Compared to Whites, ethnic minorities had lower mean forced expiratory volume (FEV₁) and forced vital capacity (FVC), reduced risk of asthma, and greater exposure to polluted environments. PM_{2.5} and PM₁₀ were associated with higher rates of asthma and lower FEV₁ and FVC across all ethnic groups. Air pollution did not account for the ethnic differences in asthma or lung function, with PM_{2.5} and PM₁₀ explaining less than 1% of the ethnic minority-White differences. Racism was positively associated with asthma and amplified the relationship with PM_{2.5} and PM₁₀.

Conclusion: Racism and traffic pollution had important synergistic influences on asthma, which suggests that interventions which eliminate discrimination might have benefits for ameliorating a wider range of health problems than mental health. Tracking the effects of greater exposure to racism and pollution among ethnic minorities over time may allude to their greater susceptibility to poor respiratory health and other chronic diseases in later life.

O – 69

Association of depression symptoms and high BMI in 15–19-year old Jamaican adolescents

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Objective: To quantify the association between depression symptoms and body mass index (BMI) among Jamaicans aged 15–19 years old.

Design and Methods: The data were gathered from 1317 15–19-year olds enrolled in a multi-stage island-wide survey. Analysis which accounted for complex sampling design produced weighted prevalence estimates for nine depression symptoms including anhedonia, suicidal ideations, changes in appetite, and BMI $\geq 25 \text{ kg/m}^2$. Chi-squared tests and generalized linear models quantified the nature of association of depression symptoms with BMI.

Results: Mean (\pm SE) BMI was 22.3 (± 0.17) with females having significantly higher BMI ($p = 0.008$). Of the nine mental health indices examined, more than 30% of youth suffered at least one of “feeling down/depressed”, “little interest/pleasure in activities”, “change in appetite” and “change in sleep pattern”. There was statistically significant association between being overweight and feeling sad/lonely ($p < 0.05$), change in appetite ($p < 0.05$), and planning suicide ($p < 0.05$). Logistic regression models showed that males who had planned suicide were eight-fold more likely to be overweight (OR = 8.05, 95% CI 1.93, 33.4). Females who had felt sad/lonely at least sometimes during the past 12 months or who experienced change in appetite during the past month were over 60% more likely ($p < 0.05$) to be overweight.

Conclusion: The results suggest that, in 15–19-year old youth, some mental health indices are associated with being overweight. Adolescents experiencing depression symptoms should be encouraged to practice weight management in order to lessen the burden of obesity and attendant health risks.