Non-communicable Diseases 1

Chairpersons: M Lichtveld, R Wilks

O – 41

Targeted education as a strategy for increasing compliance and effective control of chronic diseases such as Type 2 diabetes

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Objective: To assess the effect that targeted education plays in increasing compliance and control of Type 2 diabetes.

Subjects and Methods: A representative group (by age) of persons with uncontrolled Type 2 diabetes was chosen from patients attending the Diabetes and Chronic Diseases Clinic of the General (Skeldon) Hospital (using the criteria of glycated haemoglobin [HbA_{1c}], blood sugar [BS] and/or urinalysis). These patients were provided with 'targeted education' in a classroom setting, facilitated by a doctor and team for a period of four months during which time a pre-planned programme was delivered with the aim of achieving 'control' of blood glucose.

Results: After the classroom sessions, there was 100% control of the BS levels for those who completed the programme. There was also the additional sharing of information – building of a peer network, sharing of recipes and exercise routines and sharing of problems and how they were overcome.

Conclusion: Targeted education as a strategy for increasing compliance and achieving BS control works and provides additional benefits of social networking and support. It comes at a limited cost to the facility and needs to be tested further.

O-43

Mental health expectancies in Latin America and the Caribbean

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Method: Data from The Survey on Health, Well-being and Ageing in LAC (n = 10 597) was utilized and cognitive status was assessed by the Mini-Mental State Examination (MMSE). The Sullivan Method was applied to estimate CILE and CIFLE. Logistic regression was used to determine the effect of age, gender and education on cognitive outcome. Meta-regression models were fitted for all seven countries together to investigate the relationship between CIFLE and education in men and women at age 60 years. Results: In Brazil, Chile, Cuba and Mexico, the odds of cognitive impairment (CI) were increased for persons with a low education level when compared to persons with a high education level. A significant gender effect was observed in Mexico with males having lower odds of CI compared to females. At age 80 years, the longest CIFLE for males were observed in Mexico (6.9 years), while the shortest was observed in Barbados (4.8 years). For females at age 80 years, Mexicans recorded the longest CIFLE (7.1 years) while Brazilians recoded the shortest (6.0 years). Meta-regression analysis was performed to determine the effect of education on CIFLE.

Conclusion: Increasing age, female gender and low education were associated with higher CI in LAC reflecting patterns found in other countries.

O-44

Black heterogeneity in cancer mortality: The US, Haiti, Jamaica and other West Indian nations

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Objective: To quantify and analyse the heterogeneity of cancer patterns within black populations in the United States (US) of America for the first time.

Subjects and Methods: We computed cancer mortality rates of US- and Caribbean-born residents of Florida,

specifically focussing on black populations (US, Haiti, Jamaica and the remaining West Indian nations) and compared them using age-adjusted mortality ratios obtained from Poisson regression models. In addition, we studied the changing patterns among immigrants in Florida by comparing mortality rates of Haitians and Jamaicans residing in Florida to populations in their countries of origin using GLOBOCAN.

Results: We analysed 185 113 cancer deaths from 2008–2012, of which 20 312 occurred in black populations. The overall risk of death from cancer was 2.1 (95% CI: 1.97, 2.17) and 1.6 (95% CI: 1.55, 1.71) times higher for US-born blacks than black Caribbean men and women, respectively (p < 0.001).

Conclusion: Race alone is not a determinant of cancer mortality. Among all analysed races and ethnicities, including whites and Hispanics, US-born blacks had the highest mortality rates while black Caribbeans had the lowest. The biggest intra-racial difference was observed for lung cancer. Migration from the islands of Haiti and Jamaica to Florida resulted in lower cancer mortality for most cancers including cervical, stomach, liver and prostate, but increased mortality for two obesity-related cancers, colorectal and endometrial cancers. Mortality results suggest that US-born blacks and not Caribbean-born blacks have the highest incidence rate of "aggressive" prostate cancer in the world.