

**P2-535** **PROGRESS TOWARDS ERADICATION OF POLIOMYELITIS IN GHANA: A REVIEW OF EASTERN REGION- GHANA, 1997–2009**

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**Background** Poliomyelitis is a highly infectious viral disease transmitted feco-orally, mainly affecting children under 15 years old. One in 200 infections leads to irreversible paralysis and immunisation can prevent poliomyelitis. Acute Flaccid Paralysis (AFP) surveillance, is used to documents the presence or absence of wild polio-virus. An in-depth review of AFP data in the Eastern Region was undertaken to assess the progress towards interruption of polio-virus transmission and to identify opportunities for system improvement.

**Methods** We conducted a secondary data analysis of AFP cases reported to the Regional Health Directorate from 1997 to July 2009. We reviewed records, calculated AFP surveillance performance indicators and described AFP-cases, surveillance indicators and polio vaccination by person, place and time.

**Results** Between 1999 and July 2009, of the 273 AFP-cases reported, one wild polio-virus was recorded. The non-polio AFP rate ranged from 0.12 to 3.94/100 000 and stool adequacy from 60% to 80%. The prevalence of non-polio entero-viruses was 8.4%. Thirty seven percent of the AFP-cases were males <5 years old. Most AFP-cases 38/273 (14.0%) occurred in October with Suhum District recording the highest 30/273 (11.0%). The commonest site of paralysis was the right lower limb 85/273 (31.0%) and asymmetric paralysis represented 169/273 (62%). Forty percent (109/273) of AFP-cases had three polio-vaccine doses. Completeness of data from case-based forms was however inadequate.

**Conclusions** The AFP surveillance indicators reflect consistent progress towards interruption of polio-virus transmission. However, the programme needs to improve on the completeness of case-based forms and stool quality. Surveillance officers have been re-trained on data management.

**P2-536** **CO-OCCURRENCE OF ANXIETY AND DEPRESSION AMONG OLDER ADULTS IN LOW AND MIDDLE-INCOME COUNTRIES: FINDINGS FROM THE 10/66 STUDY**

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**Background** There is relative little information about the prevalence and risk factors of co-morbid anxiety and depression in later life. These disorders are often associated with worse response to treatment than either condition alone, and researching its epidemiology in diverse settings is vital to policy makers. We therefore investigated the co-occurrence of anxiety and depressive syndromes among older adults living in developing countries and measured the separate and joint effect of these two disorders on levels of associated disability.

**Method** The 10/66 study carried out cross-cultural surveys of all residents aged 65 or over (n=15021) in 11 sites in seven countries (China, India, Cuba, Dominican Republic, Venezuela, Mexico and Peru). Anxiety was measured by using the Geriatric Mental State Examination (GMS) and the AGE-CAT diagnostic system. Depression was assessed according to ICD-10 and EURO-DEP criteria. Disability was measured by using the WHO-Disability Assessment Scale Version II (WHODAS-II). Negative binomial regression

models (ZINBs) were used to investigate the association between common mental disorders and disability.

**Results** Co-morbid anxiety and depression was high (range %: 14.4–26.8) in the Latin American and Indian sites. Gender, socio-economic status, urbanicity and physical co-morbidities were associated with the different co-morbid states. Having both disorders was linked to higher disability scores than having anxiety or depression alone.

**Conclusions** Given the close association of co-morbid anxiety and depression with disability, new policies to improve prevention, recognition and treatment will be needed to adapt to ageing populations and their mental health needs.

**P2-537** **TRACKING PROGRESS TOWARDS ELIMINATION OF IODINE DEFICIENCY DISORDERS IN PUDUCHERRY (INDIA), A SCHOOL BASED STUDY**

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**Background and Objectives** Iodine deficiency disorders (IDDs) though largely preventable continue to be an important public health problem worldwide. IODs have been reported from Puducherry and the surrounding States. We undertook this survey in all the four districts of the UT of Puducherry to study the prevalence of goitre in a sample of school children, to measure the level of iodine in salt samples and to determine the median urinary iodine concentration in a sample of these children so that the progress towards IDD elimination in the region can be assessed.

**Methods** In a cross-sectional study among 2581 school-going children in the age group of 6–12 years in the UT of Puducherry. A total of 30 clusters were selected by the PPS (Population proportion to size) method. The children were clinically examined for presence of goitre, urine samples were collected and salt samples from their kitchens were tested for iodine concentration.

**Results** The total goitre prevalence (TGP) was 27.5% (moderately endemic) among the children examined. The median urinary iodine concentration (MUI) was 142.9 µg/l (normal 100–199 µg/l). Only 7% of children (target <20%) showed low MUI (<100 µg/l). Iodine content was found to be adequate (>15 ppm) in over 60% (target >90%) of the salt samples.

**Interpretation and Conclusions** Goitre is still an important public health problem in Puducherry and as it's important for the mental development of children, the various operational factors need to be identified to strengthen the NIDDCP and improve the consumption of iodised salt.

**P2-538** **USING THE CES-D SCALE IN A LARGE COHORT AND DEALING WITH MISSING DATA: APPLICATION TO THE FRENCH E3N COHORT**

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**Introduction** The CES-D scale is commonly used to assess depressive symptoms (DS) in large population-based studies. Missing data (MD) in one or several of the 20 items of the scale are frequent and may create biases. Reasons for not completing items and impact on the estimation the prevalence of DS under various hypotheses are explored.