

analysis was used to estimate ORs for factors contributing to satisfaction with healthcare.

Results In all 27 883 individuals were studied. The mean age of respondents was 32.7 (SD=11.8) years. In all 20.7% of the respondents were satisfied or very satisfied with healthcare delivery while 36.2% of people indicated little or no satisfaction with healthcare. The results obtained from regression analysis indicated that income (a proxy measure of access to healthcare) and information was the most significant contributing factor to people's dissatisfaction [OR for lower income=2.17, $p<0.0001$; OR for people with poor health information = 2.01, $p<0.001$].

Conclusion The study findings suggest that improving access to information and healthcare could lead to people's satisfaction with healthcare.

P1-422 ACCURACY AND QUALITY OF ROUTINE IMMUNISATION DATA MONITORING SYSTEM IN OGBARU AND ONITSHA NORTH LOCAL GOVERNMENT AREAS OF ANAMBRA STATE, NIGERIA

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A Fatiregun,* C Awogu. *College of Medicine, University of Ibadan, Ibadan, Oyo State, Nigeria*

Immunisation managers often depend on immunisation coverage obtained from immunisation data monitoring system to guide planning. However, limited studies have been carried out to verify the accuracy or determine the quality of the immunisation information system at the Health Facilities (HFs) and Local Government Areas (LGAs), which are the sources of the data reported to the state and national levels. This study was to assess the quality and accuracy of immunisation data in Ogbaru (OGB) and Onitsha North (ONN) LGAs of Anambra State, Nigeria. A WHO validated methodology of immunisation Data Quality Audit was used. All the HFs conducting immunisation in OGB (28) and ONN (20) as well as the two LGAs' Immunisation Units (IUs) were visited. The records of DPT3 immunisation at the HFs from January to December, 2009 was recounted and compared with reported data at the LGA IUs for the same period. An Accuracy Ratio (AR) which expresses the ratio of immunisation recounted at the HFs to that reported to the LGAs IUs was obtained. AR of ≥ 0.95 to ≤ 1.05 indicates data consistency. Immunisation Focal Persons (IFPs) in each HFs were interviewed using a validated tool that contained a 70 point knowledge scale and a 120 item quality score (QS) on data monitoring system. The proportion of HFs with consistent data were 27.6% and 42.9% ($p<0.05$) in OGB and ONN respectively. The overall AR was 89.8% in OGB and 96.3% in ONN. The mean knowledge score among IFPs in the LGAs was 44.0 ± 8.0 and 46.2 ± 6.9 ($p<0.05$), while the mean QS for HFs was 74.5 ± 18.0 and 73.6 ± 13.2 in OGB and ONN respectively ($p<0.05$). There was a fair correlation between the overall QS and the overall knowledge score in the two LGAs, $r=0.3$ ($p>0.05$). Auditing showed inconsistent data and low quality of data reporting in the LGAs.

P1-423 ASSESSMENT OF INFLUENZA OUTBREAKS USING A PRIVATE HEALTHCARE INFORMATION SYSTEM: AN ANALYSIS OF THE 2009 H1N1 EPIDEMIC IN BUENOS AIRES

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S Figar,* V Aliperti, V Talierno, C Otero, E Salazar, M Schpilberg, P Otero, F G B de Quirós. *Hospital Italiano de Buenos Aires, Buenos Aires, Argentina*

Introduction This study aims to determine if the A/H1N1 influenza outbreak could have been earlier detected through changes in morbidity and mortality patterns analysed from a health information system (HIS).

Methods Specific data subsets were created to compare the burden of influenza during the epidemiological week (EW) 21 to 26 for years 2007 to 2009 among 150 000 Health Maintenance Organization members in Buenos Aires. The threshold for identifying an epidemic was considered met when the weekly influenza-like illness (ILI) rate exceeded 200 per 100 visits. Mortality rates of severe acute respiratory infection (SARI) from 2007 to 2009 were compared. Case fatality and mortality rates for A/H1N1 influenza 2009 also were estimated.

Results The HIS detected the outbreak in EW 23 while the government Ministry of Health (MoH) gave a national epidemic alert during EW 25. The number of visits for ILI increased more than fourfold when comparing 2009 to the 2007–2008. SARI mortality rate in 2009 was higher than in 2008 (RR 2.8; 95% CI 1.18 to 6.63) and similar to that of 2007 (RR 1.05; 95% CI 0.56 to 1.49). 2009 was the first year with mortalities younger than 65 years attributable to SARI. The estimated A/H1N1 case fatality rate for SARI was 6.2% (95% CI 2.5 to 15.5). The estimated A/H1N1 mortality rate was 6 per 100 000 (95% CI 0 to 11.6).

Conclusions the outbreak was detected 2 weeks before than the MoH gave a national alert suggesting that with a private-public integration a more real-time outbreak and disease surveillance system could be implemented.

P1-424 LIFETIME SCHOOL FAILURE AND PHYSICAL FIGHTING AT 17 YEARS OF AGE

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^{1,2}S Fraga,* ^{1,2}E Ramos, ^{1,2}H Barros. ¹*Institute of Public Health, University of Porto, Porto, Portugal;* ²*Department of Hygiene and Epidemiology, University of Porto Medical School, Porto, Portugal*

Objective To evaluate the association between school grade retention and physical fighting among adolescents.

Methods We evaluated 1687 adolescents, part of EPITeen population-based cohort of urban adolescents, at 13 and 17 years of age. At both study waves, socio-demographic and behavioural characteristics were obtained by self-completed questionnaires. School failure was considered as the school grades retention reported by adolescents. Physical fighting was only assessed at 17 years-old, and participants were asked "During the past 12 months, were you involved in a physical fight?" ORs and 95% CIs were estimated separately for girls and for boys.

Results 28.2% of the girls who had school grade retention after 13 years old and 33.5% who had school retention before 13 years old reported involvement in physical fighting. For boys, the respective frequencies were 49.4% and 61.7%. After adjustment for potential confounders in a stepwise model, the odds for involvement in fights were 2.45 (1.50–3.99) in girls and 1.38 (0.90–2.12) in boys when considering school grade retention that occurred only after 13 years old. Considering those with school grade retention before 13 years old, the association was even stronger: 2.75 (1.64–4.59) in girls and 2.52 (1.63–3.89) in boys.

Conclusion School failure increased the risk of physical fighting involvement among adolescents; school retention during compulsory school phase (until 13 years old) seems even more relevant.

P1-425 RISK FACTORS FOR OVERWEIGHT AND OBESITY IN PRE-SCHOOL CHILDREN

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^{1,2}V Kaufman-Shriqui, ^{1,2}D S. Shahar, ^{1,2}D Fraser.* ¹*Ben-Gurion University of the Negev, Beer-Sheva, Israel;* ²*Intl. Center for Health & Nutrition, BGU, Beer-Sheva, Israel*

Introduction In 2008 the prevalence of obesity in the USA, England and Italy were 14.6%, 21.2% and 22.2%, respectively. Childhood