

4th International Conference on

Epidemiology & Public Health

October 3-5, 2016 | London, UK

NEW INSIGHTS ON REPORTING CONGENITAL ANOMALY RATES USING PRIMARY CARE DATA FROM A MULTIETHNIC COHORT STUDY: THE BORN IN BRADFORD PROJECT

Chrissy Bishop^{a,b,c}, Neil Small^{a,b}, Roger Parslow^{b,c} and David Bowles^d^aUniversity of Bradford, England^bBradford Institute for Health Research, England^cUniversity of Leeds, England^dSheffield Hallam University, England

Introduction: Bradford has high rates of infant mortality for children of Pakistani origin, with Congenital Anomalies (CA) being the most common cause of death and disability in this group. The CA rate in Bradford is higher than the national average before age of 1 at 399 per 10,000 live births¹. We linked children with CA to General Practice (GP) data, allowing prospectively collected medical information to provide promising new insights into CA research including risk factors for CA and more complete case ascertainment.

Methods: Of 11474 babies with questionnaire data available, children with one or more CA (n=1039) were linked to their mothers GP data and compared to those without CA (n=10435). Diagnoses were classified using ICD-10 and validated by clinicians. Data for case ascertainment were compared to national CA registries. We calculated univariate and multivariate risk ratios (RRs) with 95% confidence intervals for various maternal risk factors.

Findings: The prevalence of CA was consistent to national registries for early diagnoses, but age to diagnoses was an important factor in demonstrating increased prevalence after age 1. We found the rates slightly higher but comparable to previous rates at 461 per 10,000 live births. Only 46% of diagnoses were made before age 1, increasing significantly to 902 per 10,000 live births up to age 8. Consanguinity was found to be a risk factor for anomalies in Pakistani mothers (multivariate RR 2.2, 95% CI 1.54-3.03), and maternal age >34 years for White British mothers (multivariate RR 1.72, 95% CI 1.02-2.92).

Biography

Bishop worked as an Occupational Therapist for 5 years, during which she developed interests in public health and policy research. She studied her MSc in Professional Health and Social Care whilst working in the NHS, progressing her interests towards health determinants and epidemiology. She left the NHS to study a second MSc in Epidemiology and Biostatistics at the University of Leeds, during which was introduced to the Born in Bradford Project. On graduating she was awarded a scholarship to study her PhD with Born in Bradford. Her special interests are pathways through care for children with complex healthcare needs.

c.bishop1@bradford.ac.uk

Notes: