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NEW INSIGHTS ON CONGENITAL ANOMALY CASE ASCERTAINMENT USING PRIMARY CARE DATA: THE BORN IN BRADFORD, MULTI-ETHNIC COHORT STUDY

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Background: In the UK Congenital Anomalies (CA) are a common cause of childhood death and disability; they are the most common cause of infant death for children of Pakistani origin. The CA rate in Bradford is nearly twice the national average. In the present study we linked children with CA in the Born in Bradford study (BiB) to General Practice (GP) data. We have used this routine data to prospectively study late diagnoses of CA and to further describe associations with risk factors for CA.

Methods: We used questionnaire data on 11474 babies from BiB, a prospective birth cohort study of 13857 babies and their families, for which recruitment took place between 2007 and 2011. CA cases were identified by linking cohort babies to GP records, anomalies were classified according to European Surveillance of Congenital Anomalies (EUROCAT) guidelines and coded using ICD-10. Children with one or more CA (n=708), were compared to those without CA (n=10766). We calculated univariate and multivariate risk ratios (RRs) with 95% confidence intervals for various maternal risk factors.

Findings: Use of routinely collected GP data increased the ascertainment of children with CA. At age one, rates for CA were 376 per 10,000 live births but accounted for only 60% of diagnoses. 40% of diagnoses were made after age one, increasing rates to 619 per 10,000 live births to age eight. Consanguinity was found to be a risk factor for anomalies in Pakistani mothers (multivariate RR 1.89, 95% CI 1.51-2.39).

Interpretation: 98% of UK CA registrations occur before age 1 year; our data suggest this is leading to incomplete case ascertainment. National registries should reconsider an age restriction of one for CA case ascertainment. More complete case ascertainment would provide better information for commissioners and allow funding decisions to better reflect clinical requirements.

Biography

Chrissy 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 she 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.

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