**Risk factors for cerebral palsy amongst Palestinian children; case-control study.**

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Background. Little is known concerning the risk factors for cerebral palsy (CP) operating before or during pregnancy. Indeed existing studies focus on developed countries.

Aim. This case control study aimed to investigate risk factors for CP in Palestinian children. We examined known prenatal and perinatal risk factors for CP, and three factors specific to Palestinian society-: consanguineous marriage, delivery at private maternity homes lacking emergency facilities, and lack of pre-natal doctor visits by the mother.

Study Design. Cases came from The Princess Basma Centre for Disabled Children, Jerusalem, the national centre for Palestinian children with CP. We collected data on risk factors between January-August 2011, and cross checked information against medical records. Calculations in advance showed there was adequate power. The study was approved by the Al-Quds University IRB and all parents gave written consent.

Study participants. The 107 cases were resident at the centre on specified days. Controls were every other child attending ten West Bank paediatric clinics on those days, matched to cases by geographical location. Since there were few cases 223 controls were enrolled to increase power. Inclusion criteria for cases were-: doctor diagnosis of CP and aged under 15-: for controls-: any other diagnosis and aged under 15.

Analysis. Analysis was by SPSS 19, including descriptive statistics, followed by logistic regression.

Results. The results showed a higher risk of CP cases following cesarean delivery [45.3%] and for CP cases after hypoxia [45.8%]. Other known factors proved significant. New, population specific factors were statistically significant after adjustment; consanguineous marriage, OR =4.3 95% C.I. [2.2-8.6], and no medical care during pregnancy, OR=6.6 95% C.I. [1.7-24.9].

Interpretation. Known risk factors proved significant as did several variables assessed here for the first time despite the small sample size. Population risk factors are modifiable so prevention is a realistic possibility.

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**Conflict of interest**

We declare there are no conflict of interests.

**Contributors**

First author designed, collected data, analysed and reported study.

Second author advised, contributed ideas and oversaw the research.

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