

International Journal of Population Data Science

Journal Website: www.ijpds.org



Maternal age and child development outcomes at age five in Australian Aboriginal and non-Aboriginal children: a population data linkage study

Falster, Kathleen^{1*}, Hanly, Mark², Banks, Emily¹, Lynch, John³, Jorgensen, Mikaela², Brownell, Marni⁴, and Jorm, Louisa²

¹Australian National University

²University of New South Wales

³University of Adelaide

⁴Manitoba Centre for Health Policy

Objectives

Almost one-fifth of Australian Aboriginal mothers give birth before 20 years of age compared with 3% of non-Aboriginal mothers. We aim to quantify the effect of maternal age at birth on child development outcomes in Aboriginal compared with non-Aboriginal children.

Approach

The 'Seeding Success' study cohort comprises an almost complete population of children who started school in Australia's most populous state, New South Wales (NSW), in 2009 or 2012, and were born in NSW, identified by linking Australian Early Development Census (AEDC) data to perinatal and birth registration datasets. Of the 154,936 children in the cohort, 8001 (5%) were Aboriginal. We calculated the risk of developmental vulnerability on one or more AEDC domains by maternal age at birth and Aboriginality. Risk differences and risk ratios (RR) were estimated as measures of absolute and relative inequalities, respectively. Multilevel Poisson regression was used to test the effect of maternal age on child development by Aboriginality.

Results

This paper will report results on the relationship between regular, proactive GP contact and diabetes PPHs in the population with and at risk of diabetes. Socio-demographic, geo-spatial and access factors were found to influence the regularity of GP access. Individual factors, in particular disease status, were found to substantially modify the relationship between regularity and PPH outcome. Findings differed between the periods prior to

and following the introduction of government policies aimed at promoting proactive primary care in chronic disease.

Conclusion

Children born to very young mothers had a high risk of vulnerability regardless of Aboriginality, whereas Aboriginal children had a greater risk of developmental vulnerability across the rest of the maternal age range. Both absolute and relative inequalities in developmental vulnerability increased with increasing maternal age. Early intervention and support services targeted at Aboriginal mothers and their children, regardless of the mother's age, may reduce this inequality.

*Corresponding Author:

Email Address: kathleen.falster@anu.edu.au (K. Falster)

