International Journal of Population Data Science

Journal Website: www.ijpds.org

Examining the link between family health events and pupil performance in Wales

Murphy, P^{1*} and Brown, S¹

¹Swansea University

Background with rationale

There is evidence of a strong relationship between health (and mother's health) and early educational attainment. With access to administrative data this relationship can be explored to greater depth for the UK.

Conclusion

By splitting health into ICD-10 categories, the health events that affect education have been more clearly identified. Most importantly, however, is the contribution of administrative data, allowing for in-depth analysis of health on education.

Main aim

To explore the effects of a pupil's and their mother's health (split into 22 categories) upon the pupil's educational attainment through the use of administrative data.

Methods/Approach

Health events were found through hospital admissions and then converted into the World Health Organisation's ICD-10 health events. Two year lags were also created for these health events. Probit and ordered probit analyses were then used to explore the effects of these health events on a binary pass/fail core subject indicator and on a teacher assessed grade for Maths, Science and English. Analysis was split by gender and keystage.

Results

Few of the health events affect the educational attainment of the pupil. The health of male pupils has little impact on education, with the mother's health having a stronger impact. The mother's past health events have the greatest impact upon the male pupil's education. The male pupil's past health effects keystone 2 pupils the most, with little effect for keystone 1 and 3 pupils. Female pupils' health has little impact at keystone 1, with increasing importance at keystone 2 and 3. Mother's health (including past health) seems to have the opposite effect, being more important at keystone 1 and less at keystone 2 and 3. The female pupil's past health has a small but consistent impact across all keystages.

*Corresponding Author:

Email Address: p.d.murphy@swansea.ac.uk (P Murphy)