Administrative data and long-term trends in child maltreatment: the prospects and pitfalls





Research on child maltreatment in high-income countries has established several key facts. First, child maltreatment and contact with child protective services are common.^{1,2} Second, child maltreatment does children severe harm and has serious social costs.^{2,3} However, data limitations have made it difficult to document whether child maltreatment is increasing or decreasing, especially when viewed in a larger historical context.4

In The Lancet Public Health, Michelle Degli Esposti and colleagues⁵ make a laudable contribution to this area of research with an observational time-series analysis, using official government and charity record data to study trends in child maltreatment in England and Wales over a 158-year period. That contribution rests on two strategies. The first is to compile and compare data on multiple measures of child abuse and neglect. No single measure of abuse and neglect can be decisive because each captures only an aspect of this heterogeneous construct and depends on a combination of underlying behaviour, administrative effort, and historically shifting norms. By triangulating across measures, one can better assess the validity of each. The second strategy is to construct a lengthy time-series analysis, which the authors make publicly available in a new database, iCoverT. As a result, it is possible to know whether alternative measures of maltreatment covary, and whether trends over the past decade are continuations of historical patterns, meaningful anomalies, or random noise.

These strategies enable the authors to arrive at several novel findings.5 First, fatal violence against children in England and Wales has steadily decreased for the past 150 years (90% decrease in child death by homicide or assault between 1858 and 2016); this trend is most prominent among children younger than 1 year. Second, in the 21st century, registrations with child protection services have proliferated (182% increase between 1988 and 2016), driven increasingly by neglect and emotional abuse rather than physical abuse. Corresponding increases in criminal convictions help rule out the possibility that increased registrations are solely a function of increased effort by child protection services.

The Article nevertheless highlights some of the See Articles page e148 characteristic challenges of using administrative data. In a particularly impressive effort, the authors show that formal changes in definitions and recording practices do not meaningfully bias their findingsan important test that historical analyses such as these often do not take into account. However, the more important changes might be informal ones-a possibility the authors acknowledge only in passing. Over the past several centuries, children have come to be seen as more distinctive, precious, and sensitive. 6.7 These changing views have shaped how their treatment is perceived. Similar problems characterise other administrative data on families, such as divorces for spousal cruelty.8 Therefore, rather than just measuring a stable set of objective childhood experiences, long-term administrative data on maltreatment capture a basket of socially undesirable behaviours whose contents change over time.

These nuances recommend caution in interpretation. But they also recommend extension of the authors' strategy of comparing multiple data sources. For example, the analysis rightly treats homicide data as an objective complement to more ambiguous data on child registrations for physical abuse. But, because neglect now makes up a substantial plurality of registrations, coupling maltreatment data with data on malnutrition or accidental deaths could help researchers understand the meaning of increasing neglect registrations amid changing conceptions of neglect.9 Likewise, data on per capita expenditure on child protection services could give important context for overall increases in registrations.

The authors make one error of historical reasoning in this otherwise excellent analysis. When summarising long-term trends, they cite proportional changes in incidences over the period of analysis. Because their data are left-censored by availability, and because many observed trends are non-monotonic (a finding in its own right), these changes are sometimes arbitrary—not only the magnitude but also the direction of observed trends depends on when the data come into existence. Furthermore, the historical availability of alterative

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measures varies widely, so comparison of total changes over differing periods of analysis can be misleading. As the rapid digitisation of historical data opens exciting new frontiers in research, it will be important to remember the consequences of missing data and to compare like for like when analysing trends.

Through the innovative use of multiple sources of administrative data, Esposti and colleagues⁵ generate some definitive conclusions about long-term decreases in severe violence against children. If their findings about trends since the turn of the century are less conclusive, their approach nevertheless charts a careful path for navigating the thorny problem of measuring trends in child abuse and neglect, a path that others should emulate.

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