Zika in Brazil and Knowledge Production in Social Epidemiology Based on Traditional Cohorts and Large-scale Linked Health and Social Data

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Cohorts based on the linkage of large-scale social and health data are a methodological and conceptual innovation in the study of the Social Determinants of Health.

BACKGROUND

- Zika virus (ZIKV) and associated Congenital Zika Syndrome (CZS) was declared a public health emergency of national concern in Brazil (2015) and international concern (2016), with long-term consequences for the children, their families and society.
- Since the beginning of the epidemic, Brazil has produced good quality data on Zika and Congenital Zika Syndrome (CZS).
- Opportunity to deepen the study of the possibilities and challenges
 of producing knowledge in social epidemiology based on different
 epidemiological cohorts.



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- **METHODS**
- Based on scientific literature, the experience of the The Long-term Impacts for Families affected by the Epidemic of Zika Study (LIFE Zika) and the Centre for the Integration of Data and Knowledge for Health (CIDACS) in Brazil.
- Investigates the production of knowledge in social epidemiology from epidemiological cohorts based on different data sources, e.g. traditional cohorts and large-scale linked administrative and social data (Big Data).

RESULTS

- The LIFE Zika study aims to follow children's problems from different perspectives.
- Cohorts based on large-scale linked administrative data:

Large sample size, investigation of rare outcomes and innovative approach to research the social determinants of health based on the linkage of social and health data. Data from the beginning of the epidemic.

Cohorts based on primary data/traditional cohorts:

Opportunity to study and describe clinical manifestations of CZS for the first time. Questions based on the research objectives, follow-up by different specialists and participatory research methods, in coconstruction with cohort participants.

RESULTS CONTINUED

Cohort studies based on Big Data

Traditional cohort studies

Investigation of rare outcomes due the large samples.

Cohorts based on the linkage of large-scale social and health data are methodological and conceptual innovations.

Investigation of the social determinants of health.

Detailed description of the event of interest.

To investigate and describe for the first time the clinical manifestations of CZS.

Especially in the case of CZS, as it is a disease with characteristics that are still unknown.





CONCLUSIONS

- The different types of cohort are important as they investigate the problem from multiple perspectives, producing complementary knowledge.
- Data does not speak for themselves; requires appropriate methodological approaches, theoretical and conceptual frameworks aligned with problems, possibilities and interests.

ADDITIONAL KEY INFORMATION

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