# Article information:

Global, regional, and national time trends in mortality for congenital heart disease, 1990–2019: An age-period-cohort analysis for the Global Burden of Disease 2019 study - ScienceDirect
<https://webvpn.fudan.edu.cn/https/77726476706e69737468656265737421e7e056d234336155700b8ca891472636a6d29e640e/science/article/pii/S2589537021005307?via%3Dihub=>

# Article summary:

1. Congenital heart disease (CHD) is the leading cause of deaths from non-communicable diseases in populations under 20 years old globally.

2. Despite an overall declining trend in CHD mortality, there are widening disparities between countries, with mortality gains not necessarily matching socioeconomic development.

3. Age-period-cohort analysis reveals treatment gaps for CHD, particularly in recent birth cohorts in India, and worsening mortality in adolescents and adults in Mexico, Pakistan, and older adults in China.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Global, regional, and national time trends in mortality for congenital heart disease, 1990–2019: An age-period-cohort analysis for the Global Burden of Disease 2019 study" provides an analysis of the trends in mortality for congenital heart disease (CHD) across different countries and territories. While the study offers valuable insights into the global burden of CHD and its mortality rates, there are several potential biases and limitations that need to be considered.

One potential bias is the reliance on data from the Global Burden of Disease study. Although this study aims to provide comprehensive and consistent estimates of population health metrics, it is important to acknowledge that data collection methods may vary across countries and territories. This could introduce inconsistencies or inaccuracies in the reported mortality rates for CHD.

Additionally, the article highlights a declining trend in CHD mortality globally. While this may be true overall, it is important to consider that the study primarily focuses on high-income countries. The findings may not fully represent the situation in low- and middle-income countries where access to healthcare resources and quality of care may be limited. Therefore, the generalizability of these findings to all countries should be approached with caution.

Furthermore, the article does not thoroughly explore potential factors contributing to the observed trends in CHD mortality. It briefly mentions progress in interventional cardiology and congenital heart surgery as factors that have reduced mortality rates but does not delve into other possible determinants such as improvements in prenatal detection or advancements in neonatal care. A more comprehensive analysis of these factors could provide a better understanding of why certain regions or birth cohorts experience different mortality rates.

The article also lacks discussion on potential disparities within countries or regions. It mentions widening disparities between countries but does not explore potential disparities within countries based on socioeconomic status or access to healthcare services. Such disparities could significantly impact CHD mortality rates and should be considered when interpreting the findings.

Additionally, the article does not provide a balanced presentation of potential risks or limitations associated with interventions for CHD. While it mentions the success of interventional cardiology and congenital heart surgery in reducing mortality rates, it does not discuss potential complications or adverse outcomes associated with these interventions. A more comprehensive analysis would consider both the benefits and risks of these interventions to provide a more nuanced understanding of CHD management.

Overall, while the article provides valuable insights into global trends in CHD mortality, it is important to critically evaluate its findings and consider potential biases and limitations. Future research should aim to address these limitations by including data from a wider range of countries and territories, exploring disparities within countries, and providing a more comprehensive analysis of factors influencing CHD mortality rates.

# Topics for further research:

* Factors influencing congenital heart disease mortality rates in low- and middle-income countries
* Disparities in congenital heart disease mortality based on socioeconomic status
* Adverse outcomes and complications associated with interventional cardiology for congenital heart disease
* Advances in prenatal detection of congenital heart disease and its impact on mortality rates
* Neonatal care advancements and their role in reducing congenital heart disease mortality
* Comprehensive analysis of determinants of congenital heart disease mortality rates

# Report location:

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