

Healthy Cities Toolkit

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Income and Socioeconomic Status

Significant negative impact based on low quality evidence with high resource implications

Impact



Resources



Evidence



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Description

Income is defined as the total financial benefits received or gained from employment. Income levels are defined by the gross national income (GNI) per capita [[WHO](#)]:

- Low income is \leq \$1,045,
- Middle income is \$1,046 to \$12,745,
- High income is \geq \$12,745.

Socioeconomic status (SES) refers to the social standing of an individual or group and is usually a combination of income, educational levels, and occupation [[Baker 2014](#)].

Impact

The results of published reviews indicate that lower SES is associated with increased risks of morbidity and mortality, including several chronic diseases. Lower SES is also associated with other factors, such as increased consumption of red processed meat (RPM), which in turn is associated with increased greenhouse gas emissions (GHGE).

Results

Eight systematic reviews comprising more than 200 primary studies explored the association between income, SES and health outcomes, and one review explored the relationship between SES and consumption of red processed meat (RPM).

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- Increased mortality [[Huisman 2013](#); [Salgado-Barreira 2014](#)]
- Increased morbidity [[Chan 2018](#); [Ellena 2020](#); [Salgado-Barreira 2014](#)]
- Increased risk of cardiovascular disease [[Salgado-Barreira 2014](#); [Williams 2018](#)]
- Increased risk of respiratory diseases [[Salgado-Barreira 2014](#)]
- Increased risk of AIDS [[Salgado-Barreira 2014](#)]
- Increased risk of cirrhosis [[Salgado-Barreira 2014](#)]
- Increased risk of cancer [[Williams 2018](#)]
- Increased risk of psychotic disorders [[Castillejos 2018](#)]
- Increased risk of chronic pain [[Maly 2018](#)]
- Increased risk of parasitic diseases [[Kloos 2008](#); [Salgado-Barreira 2014](#)]

Higher socioeconomic status was associated with:

- Increased risk of diabetes [[Williams 2018](#)]

The consumption of red processed meat (RPM) is associated with increases in greenhouse gas emissions (GHGE). One narrative review [[Clonan 2016](#)] examined the impact of income and SES on the consumption of RPM. The authors found that lower SES persons were more likely to consume RPM more frequently and in larger quantities. There was a downward trend in the overall consumption of RPM in HICs, with an overall upward trend in LMICs.

A narrative review of 168 analyses in 155 papers [[Wilkinson 2006](#)] showed that income inequalities were associated with variations in population health. A scoping review of indices used to measure SES in urban Southeast Asia [[Saif-Ur-Rahman 2018](#)] (n=256 articles) reported that the asset-based wealth index was the most frequently used tool (n=142, 54%), followed by the index based on income and expenditure (n=80, 30%).

Strength of the evidence

Three reviews used standardized checklists to assess the reporting quality of the included primary studies. The overall quality was moderate in two reviews [[Castillejos 2018](#); [Williams 2018](#)] and poor in the third [[Chan 2018](#)]. A fourth review [[Salgado-Barreira 2014](#)] reported that the methodology across the studies was very heterogeneous, and some studies were of poor quality.

Resource Implications

The economic impact of low SES was not specifically addressed in the included reviews. One review reported that the economic impact of unrelieved chronic pain includes loss of employment [[Maly 2018](#)]. The resources required to overcome low SES are considerable and require sustained effort to reduce income inequalities.

Recommendations

- Future studies should be designed to take into account the indices used to measure social deprivation.
- Future studies should have adequate sample sizes and should control for confounders.
- Future studies measuring the impact of inequality should be expanded so as to reflect the scale of social class differences in society.
- Improvement in surveillance data of NCDs.
- More research should be conducted in low- and middle-income countries.
- Targeted interventional research studies directed at the rental housing communities.
- Empirical evidence on the effect of socioeconomic inequalities on the rates of morbidity and mortality should be continuously updated.

Related Resources

- World Health Organization. The Global Health Observatory. Income level. <https://www.who.int/data/gho/indicator-metadata-registry/imr-details/193>
- Baker EH. [Socioeconomic status, definition](#). Wiley Blackwell Encycl Heal Illness, Behav Soc. 2014; 2210–2214

References to Reviews

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