

between burn mortality rates and economic health has not been evaluated for individual countries. This study seeks to answer the question, how strong is the correlation between burn mortality and national indices of economic strength?

Methods A retrospective review was performed of 189 countries during 2008–2010 with economic data from the World Bank as well as mortality data from the World Health Organisation. Countries were divided into 5 groups based on income level according to stratification by the World Bank (low-income, lower middle-income, upper middle-income, and high-income (OECD and non-OECD)). The Pearson Correlation was used to estimate presence and strength of association among death rates, country income level, GINI coefficient (measure of inequality of distribution of wealth), gross domestic product (GDP) per capita, gross national index (GNI) per capita, and income shares held by highest 10% and lowest 10% of the population.

Results and Conclusions There were statistically significant associations ($p < 0.05$) between burn mortality and country income ($r = -0.44$), GDP per capita ($r = -0.26$), GNI per capita ($r = -0.36$), GINI ($r = +0.17$), and lowest 10% ($r = +0.34$). The income level of a country is negatively correlated with burn mortality—the lower the country income level, the higher the burn mortality rates. In addition, the degree to which income within a country is equitably or inequitably distributed correlates with burn mortality.

Significance Both governmental and non-governmental organisations need to focus on preventing burns in low-income countries.