The Role of Alcohol and Tobacco Consumption on Income-related Inequality in Health in South Africa

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In many developing countries, there is wide inequality in the distribution of health, with those at the top end of the socioeconomic scale having better health outcomes. Mitigating the inequalities in health is the priority of most health care systems, including the National Health System in South Africa. In recent decades, many low- and middle-income countries have experienced an epidemiological transition from communicable to non-communicable diseases (NCDs). The prevalence of NCDs varies with socioeconomic status, and is driven by adopted lifestyle such as smoking, harmful alcohol use, and obesity among others. The idea is that the gradient in inequality in health between the poor and the rich is likely to depend on differences in their adopted lifestyle, and socioeconomic-related inequalities in health will widen if the negative effects unhealthy practices are concentrated among the poor. This has negative consequences on human capital development, and imposes a growing economic burden on society. Numerous studies that have attempted to examine the contribution of lifestyle factors on income-related inequality in health, have done so without considering health outcomes that are directly associated to these factors. We therefore examine the contribution of smoking and alcohol consumption to income-related inequality in health by incorporating measures of health that are directly associated to smoking and alcohol use.

Globally, over 63% of all deaths are attributable to NCDs, and over 6 million premature deaths each year are attributed to smoking, making tobacco use the leading avoidable risk factor for NCDs. The harmful effects of alcohol use on health are dependent on the pattern of drinking and the volume of alcohol consumed. On the whole, harmful and excessive alcohol consumption is the third most important risk factor contributing to NCDs, injuries, and communicable diseases. While reducing premature mortality from NCDs is now on the post-2015 development agenda, it is estimated that by 2030, deaths from NCDs will be five times higher than deaths from communicable diseases in low- and middle-income countries. The rapid acceleration of the NCDs is mainly due to lifestyle changes, including smoking habit and harmful alcohol use. A policy option that reduces the level tobacco use and alcohol consumption, can improve health outcomes and reduce inequalities in population health and the growing economic burden of risky lifestyles in developing countries.

In South Africa, there has been a decline in both smoking and per capita alcohol consumption in the last two decades, but there is little evidence on how these changes affect inequality in health, and whether or not the income-related health inequality from such behaviours are concentrated among the poor or the rich. Alcohol consumption has a long social history in South Africa and the industry is now an integral part of the economy, contributing about 1.7% of government revenue each year. But the costs of drunken driving accidents, alcohol-related medical costs, alcohol-induced domestic violence, and premature death from alcohol induced illnesses have made the industry responsible for much misery in the country.
The adult per capita consumption of 11 litres of pure alcohol and the average consumption per drinker of about 27.1 litres of absolute alcohol is among the highest in the world. Two in every five deaths in South Africa are related to non-communicable diseases (NCDs), with a high prevalence attributed to avoidable risk factors such as tobacco use and alcohol consumption. It is estimated that tackling lifestyle risk factors associated with NCDs could reduce premature disability and mortality by 20%. The prevention of NCDs is therefore considerably more effective and less costly than their treatment.

The results point to a significant positive effect of smoking and alcohol use on health. The index for smoking-related inequality in health is positive indicating poor health outcomes among heavy smokers and those who have been smoking for a longer period. The negative index for income-related inequality in health indicates that smoking-related and alcohol-related diseases are concentrated among the poor. We find a positive and significant contributions of smoking and alcohol use on income-related inequality in health. Smoking participation accounts for up to 7.4% of all measured inequality in health, and alcohol use accounts for 27.8% of all measured inequality in health. The estimates are higher for all measured inequality in health when smoking duration is considered. The implication is that the poor are more likely to adopt unhealthy behaviours, worsening the ongoing inequalities in health. Inequality in health results in inequality in human capital development and economic growth. With this, governments can work towards reducing the unhealthy practices of the poor partly by discouraging tobacco and harmful alcohol use. This will improve population health outcomes and reduce health inequalities.