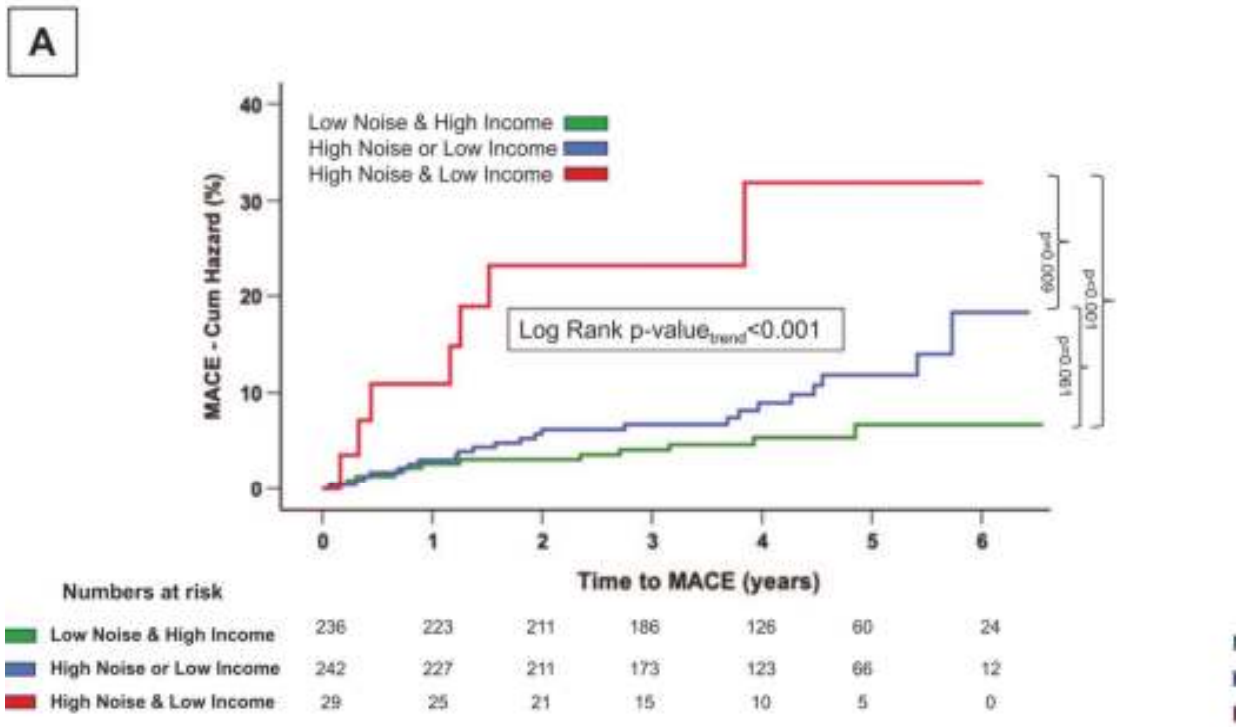
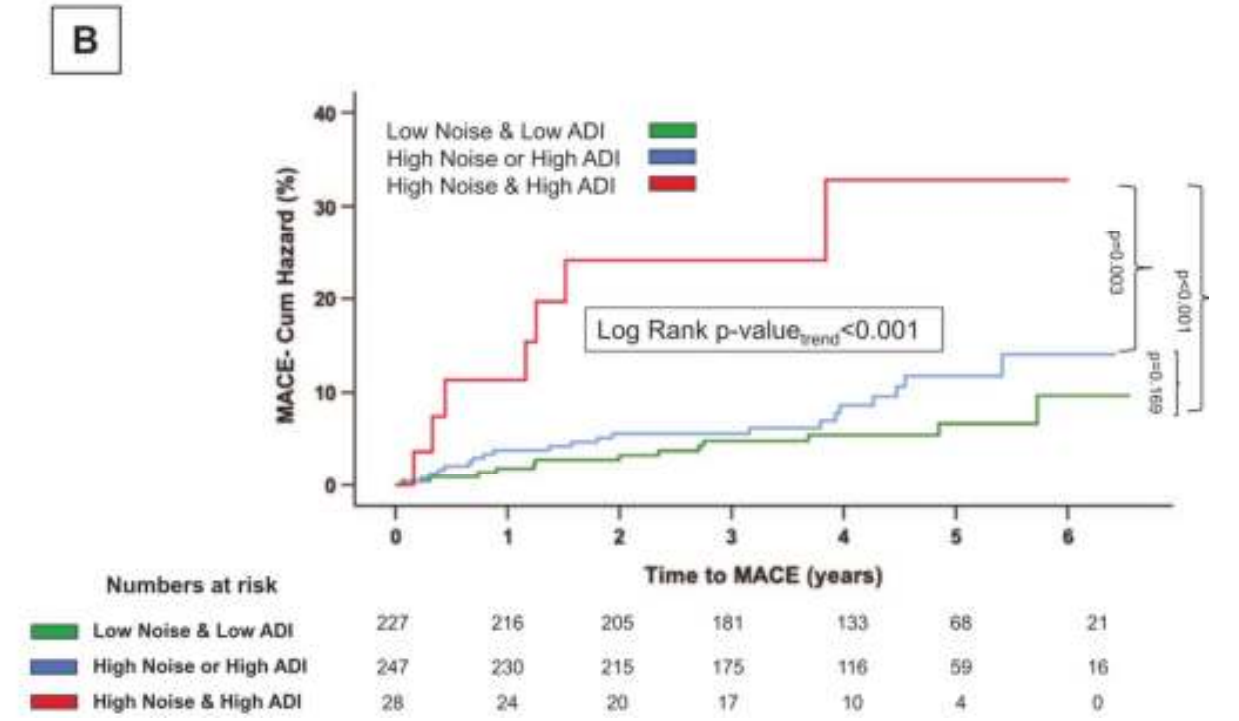
Noise, Low-Income and Health

A major new study shows a clear link between traffic noise, low-income and cardiovascular disease (1). Previous studies have shown links between noise and low incomes and between noise and health but this is the first one to bring all three together. The focus was on Boston in America but was carried out by an international group of academics, led by Dr Shady Abohashem of Harvard Medical School.

The links are dramatic. The tables below from the study couldn't be clearer.





Implications for traffic noise policy

Noise policy and practice might look very different if it was based on these findings. The noisiest roads are nearly always the 'main' roads. I put 'main' in inverted commas because, in built-up areas, these are nearly always residential roads as well. They are also roads where people work, shop, socialise or attend school. And low-income communities spend more time on these roads than most wealthier people. If you lack money it's a treat to travel to the city centre. You go to the Café Nero, the McDonalds or the pub on your high street. There is a strong case for concentrating on 'main' roads when seeking to reduce noise from traffic.

These days the technology exists to make it happen. It is the political will that is so often lacking. Slower speeds enforced by in-car speed limiters, quieter road surfaces, electric vehicles as and when they become viable, reallocation of road space to quieter forms of transport, the widespread introduction of noise cameras.

I am not talking about banning traffic from 'main' roads. That is simply not realistic. 'Main' roads are usually the principal arteries for buses, trams, business traffic and other vehicles essential to the lifeblood of a town or city. Nor am I talking about pedestrianisation as that usually just diverts the traffic – and the noise – elsewhere. (And we would need to watch that the reduction in traffic is not replaced by other noises as has happened in parts of Paris and some Spanish cities with the proliferation of 'terraces' - outdoor eating and drinking areas – often accompanied by loud music).

It could, though, mean scaling back some urban motorways that were built in a different age for a different age. That has been done successfully in some European cities. There is a campaign in Glasgow to Reclaim the M8, the motorway which cuts an ugly, noisy swathe through the city and which impacts very many low-income areas as the roar from the motorway spreads far and wide either side of. If scaled back, alongside big improvements to public transport, it need not result in extra traffic on other roads.

It would also make economic sense to tackle traffic noise on 'main' roads. The Phenomena Study (2), commissioned by the European Commission, found that you get the best return on your investment though cutting noise in the worst affected areas first.

Implications for wider noise policy

Although the study only looked at traffic noise, it would no surprise if the same situation didn't prevail with most noise sources. We know that the UK's rush to build onshore wind turbines in the 2000s impacted particularly on poor communities in rural areas. We know that noise from heat pumps is likely to be a bigger problem for low-income communities than for people in detached houses. We know that social housing tenants are much more likely to be impacted by neighbour noise than those living in their own home. We know, too, that people on low-incomes generally have fewer choices, have less chance of moving away.

These are the issues which should have a central role in framing noise policy. This report gives decision-makers the ammunition they need to do so.

References:

(1) https://www.nature.com/articles/s41370-024-00734-2

(2) https://op.europa.eu/en/publication-detail/-/publication/f4cd7465-a95d-11eb-9585-01aa75ed71a1

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