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Managing Mental Health: Why we need to redress the balance between healthcare spending and social spending

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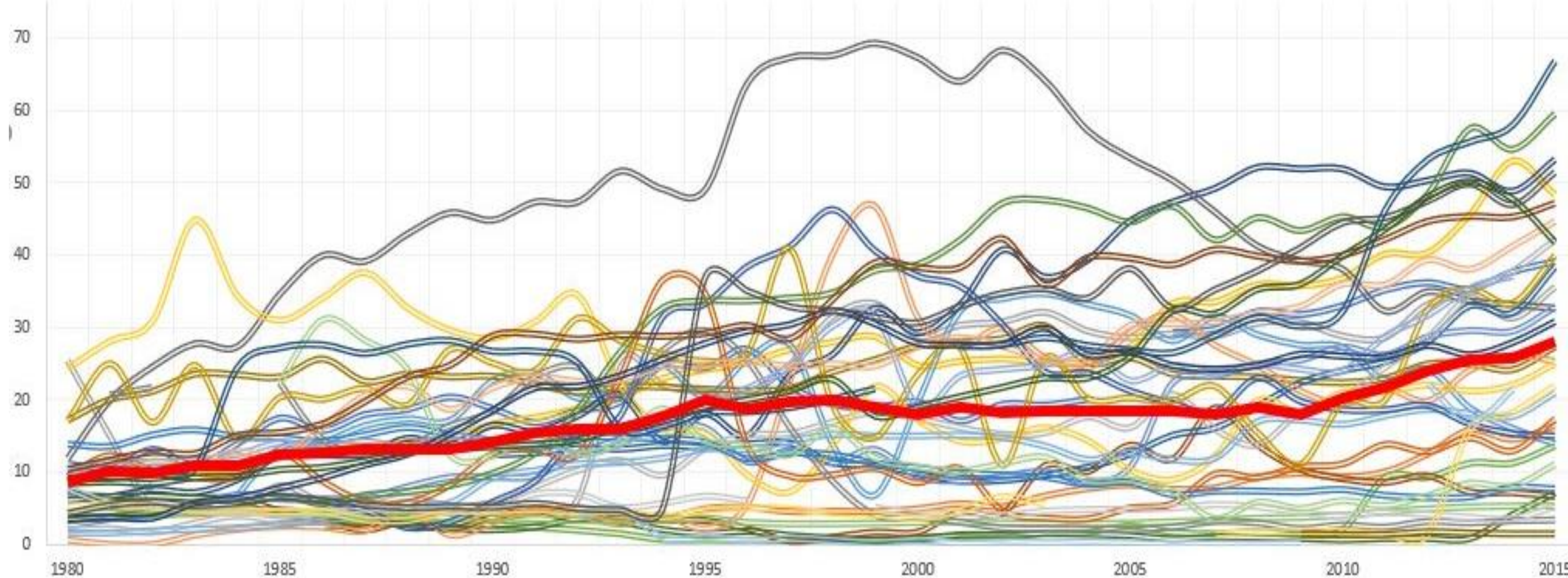
Background

Mental health is making up an increasingly large proportion of the global burden of disease in developed countries.

Whilst medical advances have led to a rapid decline in deaths from physical illnesses such as cancer and heart disease, there has been an increase in deaths due to mental and behavioural disorders. 28 of the 36 OECD countries have seen an increase in mental health deaths between 1995 and 2015.

Deaths per 100,000 population in OECD countries.
Bold line shows average death rate.



Population health is influenced by biological determinants, and social determinants. An individual's biological determinants include their age, sex, genetics etc whereas social determinants are factors arising from the environment an individual lives in, such as income, education and childhood experiences.

Across the OECD, there are large variations in government expenditure on healthcare and social services. Sweden spends around 4 times the amount it spends on healthcare on social services whereas the US spend almost equal proportions of GDP.

Recent studies have suggest that increased social spending relative to health spending is associated with improvements in a variety of population health outcomes, including life expectancy, infant mortality, lung cancer and obesity.

The hypothesis was that this relationship would also hold for mental health and that higher ratios of social to healthcare spending would be associated with better mental health outcomes in a population.

Methodology

Using publicly available data from the OECD.stat database, we conducted statistical analysis of the relationship between patterns of government spending (on social services and healthcare) and population mental health outcomes, controlling for economic and demographic factors to prevent the biological determinants from influencing the results.

Independent variables

- Healthcare spending: all curative services, long-term care, ancillary services, medical goods, preventative care and administration.
- Social spending: all universal and means-tested transfers from the government to the population, including old-age pensions, unemployment benefits, subsidised housing etc.

Dependent variable

- Crude mortality rate per 100,000 due to "mental and behavioural disorders" as classified by the OECD.

Results

Three models were run to gain a fuller understanding of the relationship between healthcare spending, social spending and mental health outcomes.

Model 1
Tests the association between healthcare spending and mental health outcomes without controlling for social spending.
This model finds no statistically significant relationship.

Model 2
Tests the association between social spending and mental health outcomes without controlling for healthcare spending.
This model finds a statistically significant relationship.

Model 3
Tests the association between the ratio of social spending/ healthcare spending and mental health outcomes when healthcare expenditure of controlled for.
This model finds a statistically significant relationship.

		Coefficient (SE)	P-Value
Model 1	Health Expenditure	-48 (40.8)	0.239
Model 2	Social Expenditure	-82.1 (17.9)	0
Model 3	Health Expenditure	-109.4 (48.8)	0.025
	Social/health expenditure ratio	-4.6 (1.6)	0.004

Conclusion

This study finds that higher levels of social spending are more closely associated with lower levels of deaths from mental health problems than higher levels of healthcare spending. Developed countries are experiencing lower returns on investment in direct healthcare provision than in social spending when aiming to improve mental health. Therefore, policies aimed at improving population mental health will be more effective if they focus on increasing social spending rather than healthcare provision.

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