Current Health Expenditure as % GDP (X1)

As the world progresses and grows economically, progress in social issues is generally assumed to improve. While world GDP has been increasing, however, an increase in a county’s economic growth does not imply a decrease in suicide rates [4]. To look at this this further, the global industry of health care which cares for individual’s health was scrutinized. Data retrieved from the World Health Organization which gathered Civil Registration records for countries around the world and published the Current Health Expenditure as % of GDP or (CHE) [1]. As such the data’s accuracy can be attributed to the honesty, transparency and census taking abilities of the reporting agencies of each country. We consider the WHO to be a reliable source of information. CHE is based on expenditures “including healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.” [2].

For 2018 the USA’s CHE was 18% or $3.5 trillion, and for the world in 2015, CHE was 10%, and has been going up continuously for at least the past 40 years. [3]. These increased expenditures can be accounted for by increases in price as well as quantity of goods and services provided. Studies in the past have seen a negative correlation between CHE and suicide rates [5]. Our study has confirmed a this negative correlation between CHE and suicide.

Since there is a negative correlation between CHE and suicide, Policy Makers should consider ways to increase spending on Heath Care. Typically, a majority heath care expenditure are financed through public taxation and the remainder is private health insurance or through out of pocket payments [6]. Public funding can be done either at the federal or local level depending on a country’s government structure. Once funding has been allocated, then execution to combat suicide comes in the form of health policy. To address each country’s rollout of new policies, task forces, cross-departmental bodies, central-local partnerships can overcome institutional obstacles. It has been conjectured that specifically Mental health expenditures could combat suicide, which has been linked to mental health disorders.

A study broke down access to hospital beds per capita and found a negative correlation with suicide. This led to the hypothesis that when health expenditures focus on acute (imitate) care at the marginalization of preventative care, suicide may trend up [5]. If true, this implies that preventative services like screenings could combat suicide.

Michael:

References:

[1] <https://www.who.int/health_financing/topics/resource-tracking/ghed-update/en/>

[2] <https://datacatalog.worldbank.org/current-health-expenditure-gdp>

[3] <https://www.who.int/gho/health_financing/health_expenditure/en/>

[4] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3358624/>

[5] <https://journals.sagepub.com/doi/pdf/10.1177/070674371005500406>

[6] <https://www.sciencedirect.com/topics/medicine-and-dentistry/public-health-policy>

Psychiatrists working in mental health sector (per 100000 population) (X6)

Health care is a large field, and mental health services which employ professions such as Psychiatrists and Psychologists. A Psychiatrist is a practitioner of [psychiatry](https://en.wikipedia.org/wiki/Psychiatry), the branch of medicine devoted to the diagnosis, prevention, study, and treatment of [mental disorders](https://en.wikipedia.org/wiki/Mental_disorder) [1]. Since it has been conjectured that Mental health care could combat suicide, which has been linked to mental health disorders, we decided to determine the correlation between suicide and Psychiatrists. Using data from the WHO which shows the number of Psychiatrists working in mental health sector (per 100000 population) (PWMHS) for many countries across the world [2]. An initial look at this data reveals that low-income countries have 0.1 psychiatrists and 0.3 psychiatric nurses per 100 000 people. The rate of psychiatrists in high income countries is 120 times greater and for nurses is more than 75 times greater. See Figure 1 below for a breakdown.

A screenshot of a cell phone

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Figure 1: Psychiatrists working in mental health sector (per 100000 population) [2]

Our analysis shows a negative correlation between PWMHS and suicide. We would want to see higher numbers of psychiatrists to combat suicide. To enact this into policy decisions one need look at the implementation and workforce retention of Psychiatrists in the workforce for both devolved and 3rd world countries. Given that lower income countries have a lower PWMHS, a more cost-effective spreading of mental health practice has been tried. In Rwanda and Haiti, Psychiatrists have trained nurses and other health care workers, primary care centers have provided basic screenings, and implemented referral systems for individuals with devolved cases of mental health issues [3].

When looking at the United states, there is a predicted lack of Psychiatrists being outpaced by population growth. This coupled with an aging workforce and not enough enrollment in training programs is a worrying picture. These problems can pop up in other countries as well. To combat this, policies like increasing the number of federally funded residency positions, and cost effective measured implemented in developing countries could be practiced in developed countries. Finally, just 55-6-% of psychiatrists accept insurance which “contributes to maldistribution of services and limits access to mental health care.” [4]

References:

[1] <https://www.psychologytoday.com/us/basics/psychiatry>

[2] <https://www.who.int/gho/mental_health/human_resources/psychiatrists_nurses/en/>

[3] <https://www.usnews.com/news/best-countries/articles/2016-09-14/developing-countries-struggle-with-treating-mental-illness>

[4] <https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201700344>

Follow up work:

Furthermore, Keyes stresses the social dimension to positive health as in a person’s social integration, social actualization, social acceptance, and social contribution. Keyes (2002)