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Global Health Paper

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Solutions to Help North Korea Achieve Good Health and Well Being

Sustainable Development Goals (SDGs) are a group of seven-teen specific goals that were adopted by all the member countries of the U.N. in 2015. These goals are meant to be achieved by 2030. (UN, n.d.). At their core, the sustainable development goals have the objective to achieve peace and prosperity globally by tackling the global issues of poverty, improving health and education, reducing inequality, and tackling climate change. Each SDG has specific objectives or targets, within the overall goal. The third of the seventeen SDGs is called Good Health and Well-Being. Its goal is to "ensure healthy lives and promote well-being for all at all ages" (U.N., n.d.). It has targets that focuses on improving issues like maternal mortality, infectious diseases, and non-communicable diseases. Each country's SDG progress is reported and ranked annually in a development report that is open data to the public (U. N, n.d.).

The Democratic People's Republic of Korea, also known as North Korea, is showing significant challenges to completing SDG 3 by 2030. Of the 14 indicators in the 2022 annual report, only five indicators are showing a positive trend of improvement. The annual SDG report states that the biggest threats, and in turn the indicators to focus the most funding and support include decreasing the presence of tuberculosis and decreasing the death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory diseases in adults aged 30-70. These threats were determined through the data that is available from the country (U.N. 2022). Decreasing the rate

of tuberculosis can be done through providing resources to less pollutant fuel sources like electricity. Decreasing the death rate due to non-communicable diseases can be achieved by increasing health education around tobacco use in addition to political support surrounding tobacco reform. Through improving these two targets that are stated within the goals of the Good Health and Well Being sustainable development goal, the country of North Korea will be closer to achieving better health overall.

North Korea is a mountainous Asian country north of South Korea and below China. It has an estimated 26 million people, and the average life expectancy is 66 years old for men and 72 years old for women, whereas the global life expectancy averages to be 72.74 years old (CIA, 2022). The country has sparse agricultural resources which restrict agricultural production due to the short cropping season that comes with experiencing long bitter winters, and mostly rainfall occurring in the summer. Their main industries include coal, iron ore, hydropower, and heavy mining. However, they import more than they export goods, suggesting economic assistance to improve their country's economy would be useful (CIA, n.d.)

Overall, their economic struggle, lack of agricultural growth, and their economy relying heavily on the heavy mining reflects in their progress towards achieving SDG 3. As coal still warms most houses and powers a lot of their industries, in combination with unregulated deforestation and mountainous topography, pollution is high and air quality is low (Tenenbaum, 2005). Indoor air pollution due to using resources like coal is a risk factor of environmental TB and can be contributing to the presence of tuberculosis in the country (TeleMed, n.d). The incidence of tuberculosis is one of the targets that remains with significant challenges in their SDG Development report (U.N. 2022). A solution to reduce the indoor pollution that comes from

burning coal to warm a house would be to provide the country with resources to better sourced fuel that Is not coal or wood and reducing needs for fuels for heating by using electric heaters (Sherry, 2022 b). By providing funds to allow for less polluting fuels and not needing to use them to heat a home would be beneficial in decreasing the presence of tuberculosis in the country.

Focusing on decreasing the percentage of the population dying from noncommunicable disease is another area where funding would prove beneficial. The second biggest challenge facing North Korea in achieving SDG 3 is addressing the conditions that contribute to 23.9% of the country dying due to chronic cardiovascular disease, respiratory disease, cancer, and diabetes (Yoo, 2016). The four most important risk factors for NCDs are tobacco use, unhealthy diet, harmful use of alcohol and physical inactivity (Sherry, 2022 a).

Based on a study done on a group of male defectors from North Korea, a projection of 84.2% of males from North Korea are current smokers (Kim, 2016). Increasing the education around tobacco and its health risks through health programs would be a great preventative tool to help decrease the use of tobacco in North Korea. However, culturally, and politically tobacco use in the country is a normal everyday activity. A quote from a group of male North Korean defectors states that there is a common saying of "one day without eating, no days without smoking" present in North Korean culture (New York Times, 2021). North Koreans also have rejected tobacco reform in the past because due to their political leaders not supporting and contradicting the reform as Kim Jon Un is a chain smoker himself (RFA, 2020). North Korea and the challenge facing the country of achieving SDG 3 due to its high death rate of NCDs is an example of how health, the economy, and the political environment are closely related (Albert,

2020). Increasing education and supporting a cultural shift will aid in decreasing the deaths due to noncommunicable diseases and become closer to achieving SDG 3.

Non communicable diseases (NCDs) are not expensive to prevent but can be costly to treat (Sherry, 2022 a). In North Korea, the average annual cost for a patient with a respiratory disease is \$8,853 in Korea (Yoo, 2016). While figures specifically for the North are unavailable, affording this suggested cost while earning the minimum wage of \$1.1-5.5 dollars a day (401.5-2,007.5 annually), would be extremely difficult (Minimum Wage, 2014). Without the proper support economically, politically, and educationally it will be difficult to see health improvements in North Korea. There is a lack of access to proper management and medication to treat these issues, but also the burden of medical care is great on the citizens who have symptoms and need care (Yoo, 2016).

Overall, the factors contributing to North Korea not being on track to achieve this sustainable development goal are complex and involve educational, political, and economic reform regarding how it manages the environmental impacts of having an economy based on heavy mining industries as well as living in an area that is not ideal for this type of activity nor one that promotes agricultural prosperity. While there are many avenues to begin improving the health of North Korea focusing on initiatives that would have direct impacts on the lives of its citizens with the least political resistance would be best. However, North Korea is a clear example as to how health, economy, and political environments are closely related.

Providing funding for programs that would allow the country to improve its form of heat while decreasing its use of pollutant fuel sources would have a direct impact on the health of North Korean citizens. Anything that can mitigate the negative effects of the country's

agricultural, industrial, environmental situation would be best. Aiming towards reducing pollutant sources of fuel for heating households would be a good start but requires funding to provide alternatives. As NCDs are expensive to treat, focusing on funding education programs that is available to all citizens no matter age, economic income, or job status about tobacco use would be a great preventative tool that would decrease a major behavioral risk factor for non-communicable diseases, the second most challenging factor that is preventing North Korea in achieving SDG 3.

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