

IS590 PR: Programming Analytics and Processing Data
Final project topic: Analysis of Global Health Care Conditions – 2016
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INTRODUCTION

Hundreds of millions of people face an increased risk of infection by seeking care in health care facilities that lack basic necessities, including water, sanitation, hygiene, waste management and cleaning services. Not only does the lack of these services in health care facilities compromise patient safety and dignity, it also has the potential to exacerbate the spread of antimicrobial-resistant infections and undermines efforts to improve child and maternal health.

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), through the WHO-UNICEF Joint Monitoring Programme (JMP) have produced annual updates on Water Supply, Sanitation and Hygiene since 1990. Together they are responsible for monitoring the 2030 Sustainable Development Goal (SDG).

This data analysis provides a robust basis for identifying priorities, making investments, and tracking progress on the global health care conditions.

AIM

The objective of this project is to analyze the global health care conditions for developed and developing countries from the year 2016. The analysis is that is conducted will be visually represented using plots and charts.

METHOD

- In this project, in order to classify the 75 countries from the WHO-UNICEF dataset into the developed and developing countries, a dataset from World Bank had to be merged with it.
- The primary objective is to analyze if the economy of a country plays a vital role in providing and maintaining the required hygienic quality.
- The developed countries are categorized on:

ECONOMIC CLASSIFICATION	THRESHOLD	GNI/ CURRENT (US\$)
Developing country	Lower income	< 1,005
	Lower – middle income	(1,006 – 3,995)
Developed country	Upper – middle income	(3,996 – 12,235)
	High income	> 12,235

CONCLUSIONS AND RESULT

- From the analysis conducted so far, only 10 out of the 75 countries have been able to maintain 100% hygienic health conditions throughout the year 2016.
- The countries falling in the developed country category are economically capable to provide all the necessity health care services of its citizens.
- The economy of a country does play a very vital role in allotting the required monetary funds for maintaining the health care conditions of its country.

FUTURE ANALYSIS AND SCOPE

- The final stage will include the analysis of global health care condition with respect of water and hygiene qualities based on the economic classification.
- Analyze the reasons for the lack of maintaining health care quality in the developed countries.

Estimates of hand hygiene facilities at points of care were available for 55 countries in 2016

