Women in Data COVID-19 Hackathon

BY ROAD NOT TAKEN

Women behind "Road not taken" team



Insight & Evaluation Adviser
United Kingdom, London



Lillian Zhang

Data Scientist

Australia, Sydney



Gavita Regunath

System Engineer

United Kingdom, Kenilworth

Women Parliamentarians in the fight against COVID-19

- Motivation of this research is to do with the effectiveness of female parliamentarians in handling the COVID crisis
- Recent media articles have suggested that women-led countries are doing better in terms of their responses to the COVID-19 pandemic
- "Current data shows that countries with women in a leadership position have suffered six times fewer confirmed deaths from Covid-19 than countries with governments led by men."

Source: Open Democracy – Women in power: countries with female leaders suffer six times fewer Covid deaths and will recover sooner from recession

Open Democracy

Women in power: countries with female leaders suffer six

..

Over the past few years, most women-led governments have also placed a stronger ... Our analysis shows that countries with higher female representation in national parliaments perform better in terms of 26 May 2020



World Economic Forum

Have female leaders responded to the pandemic differently?

Countries led by women have performed better, especially in terms ... But despite its inclusion, the overall results regarding women-led countries ... Another explanation of gender differences in response to the pandemic is to 1 month ago



The Guardian

Female-led countries handled coronavirus better, study suggests

Countries led by women had "systematically and significantly better" Covid-19 ... such as Germany's Angela Merkel, New Zealand's Jacinda Ardern, ... by the proactive and coordinated policy responses" adopted by female 18 Aug 2020



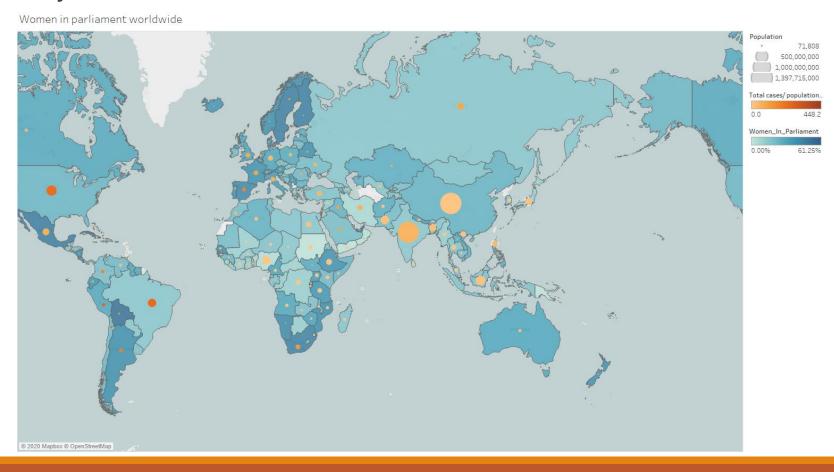
WID Covid-19 Hackathon ROAD NOT TAKEN

Global COVID-19 cases

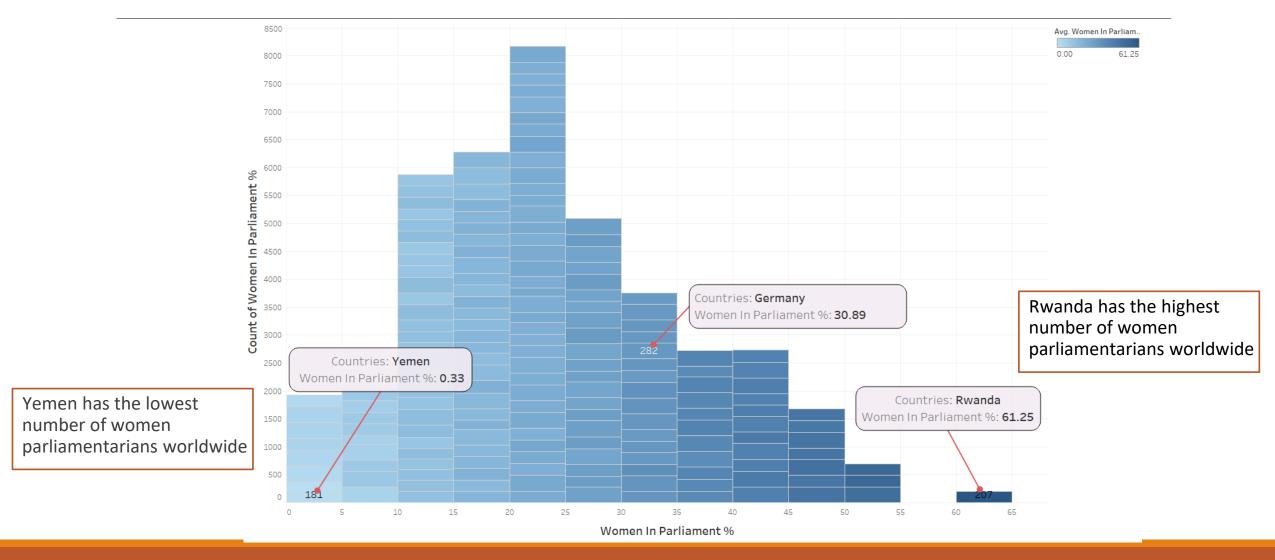


Women in Parliament

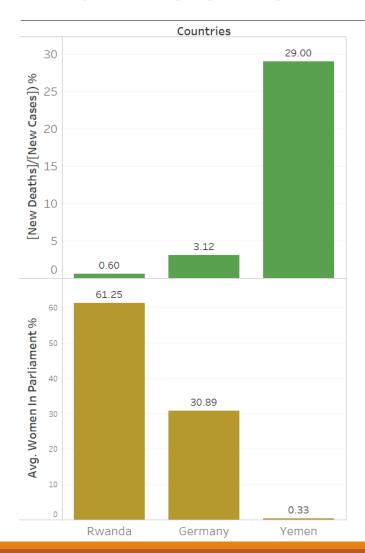
Women in Parliament: The percentage of parliamentary seats in a single or lower chamber held by women as of 2019 estimates.



Distribution of Women in Parliament



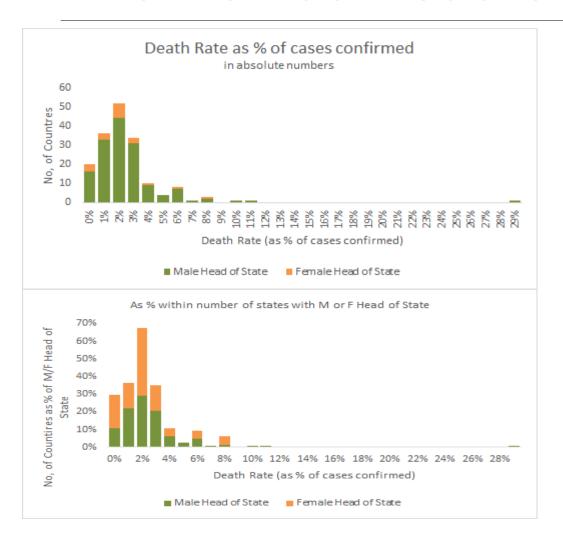
Number of Deaths vs. WIP



Women in Parliament and New Deaths/New Cases		
Countries	Women In Parliament (%)	New Deaths/New Cases (%)
Yemen	0.33	29.00
Germany	30.89	3.12
Rwanda	61.25	0.60

- Data shows that Rwanda who has the highest women in parliament has the lowest number of deaths (relative to the number of recorded cases).
- Yemen who has the **lowest** women in parliament has the **highest** number of deaths.
- This results **support** the reports stating that countries with women in position of leadership have suffered few confirmed deaths from Covid-19 as countries with governments led by men.

Women as Head of State

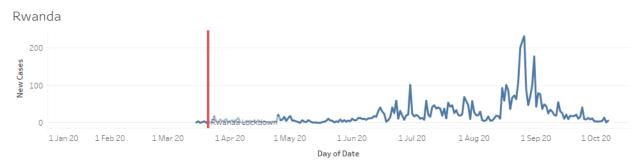


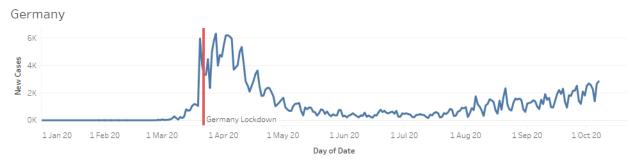
- However a Kruskal-Wallis H test performed on our dataset showed that there was no statistically significant difference in the death rate (number of deaths as percentage of cases confirmed) between countries with men or women as head of State, $\chi 2(2) = 0.308$, p = 0.579, with a mean rank of 86.79 for countries with a male Head of State, and 80.38 for countries with a female Head of State.
- This appears to be in **contradiction** with the published findings.

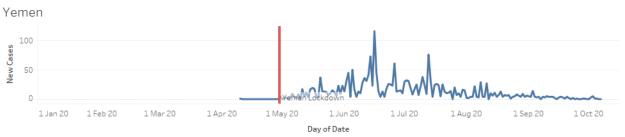
Timing of lockdown

- Data shows that Rwanda imposed their lockdown earlier than Yemen.
- Women leaders generally are more risk averse with regard to lives.
- Hence, they were prepared to take significant risks with their economies by locking down early compared to their male-led countries.

Daily new cases for Rwanda, Germany and Yemen







Summary

- COVID-19 has changed many things in our daily lives
- Statistically, female-led countries (as of publication), were quicker to lockdown and had fewer COVID fatalities than comparable, male-led countries
- Our findings appear to go partly in the same direction of the published results, and partly to disconfirm them.
- As the response to the pandemic is complex and multi-factorial, it is possible that our
 dataset was not sufficiently granular to appropriately explore the impact of women in
 power over the COVID-19 outcomes. More work is needed to explore more granular
 indicators and the mix of factors that have made some countries' response more effective.