

Supporting Documentation

Natallia Casey

Bellevue University

The dashboard was created to draw attention to the state of children's health in the World. The main question raised is whether we are doing enough to support the children whose health might be at risk. Even though there is a popular narrative of noticeable progress in the state of children's health (for example, the article [Global Health](#)), we can't ignore that problems of survival, healthcare and nutrition are still urgent and need accelerated action.

The dashboard used children's health data queried from the main UNICEF data source as well as data from UNAIDS. The region of focus is the World with some attention drawn to the least developed and poorest of its parts in the visualizations "Under 5 Mortality Rate, 1990 and 2018" and "Newborn Care within 2 days after delivery".

For the sake of creating a contrast and making the dashboard accessible I used different shades of gray. The light blue for the title was chosen because of its popularity in healthcare. White space including margins was used to separate the visualizations and a coherent story. All of the charts maintain a zero baseline. To avoid clutter chart border, ticks and grid were removed.

Dashboard is split into 3 horizontal rows with 2 charts in each row.

The first row included visualizations related to mortality rate and prenatal care.

The **horizontal grouped bar chart** of mortality rate relative to the 2 time periods (1990 and 2018) and 2 regions (least developed and the World) was chosen to create a comparison and to analyze the progress in child survival.

Results:

The chart displays a more than 50% reduction in mortality rate over the time period of almost 3 decades for both of the regions. The higher mortality rate is observed for least developed regions. The mortality rate is lower for the World yet it is still high and concerning.

The **horizontal bar graph** "Newborn Care within 2 days after delivery" was created to compare prenatal care provided in the different regions based on the wealth.

Results:

Only 37.23% percent of newborns receive prenatal care within 2 days after birth in the poorest regions which is significantly lower than the richest regions where 60.06% of newborns receive prenatal care. Overall, the availability of newborn care is not high.

The second row of the Dashboard includes two **line charts** visualizing the trends for malnutrition effects over the period of 3 decades.

Results:

The line chart “Overweight Children (0-59 months old)” displays a steady increase for the last almost 20 years in the number of overweight children. The increase since 2000 constitutes about 8 million.

The line chart “Stunting among Children” indicates that there has been a decrease in the number of children suffering from stunting (failure to develop to the full potential physically and cognitively caused by malnutrition). As of 2019 there are still about 144 million children in the World suffering from stunting. The decline is not sufficient enough to make children’s life malnutrition free in the near future.

The third row includes an **area chart** and another **line graph** that tell the story about the trends in the state of children (0 -14 years old) with HIV, their treatment and testing.

Results:

The area chart “Children (0-14) with HIV and on antiretroviral therapy” shows a decrease in the number of children living with HIV and an increase in the number of children on ART (antiretroviral therapy). The chart allows to see that there is still a big gap (about 850 000) between the number of children infected and those on ART.

The line chart “Infants getting HIV-test in the first 2 months” shows the unsteady increase (with noticeable decline in 2016) in the number of HIV-tests that infants receive in the first 2 months of their lives. The improved access to testing is still needed since the progress is not always steady.

Conclusion

The choice of charts and design were meant to convey that the need to keep working on the state of children’s health despite some improvement is still urgent. Comparison created with the help of visualizations allowed to demonstrate that there are still regions with higher needs to meet. The charts showing the trends over a period of time allow us to understand the progress or regress and show responsiveness to measures taken yet still the need for acceleration in improving certain aspects of children’s health.

References

UNICEF. Datasets. data.unicef.org

UNICEF. Protect the Progress: Rise. Refocus. Recover.
<https://data.unicef.org/resources/protectthe-progress-rise-refocus-recover-ewec-2020/>

UNAIDS. HIV estimates 2020.
https://www.unaids.org/en/resources/documents/2020/HIV_estimates_with_uncertainty_bounds_1990-present