THE POWER OF NETWORKING IN INSTIGATING HEALTH REFORM

OVERVIEW

This report uses the ADB dataset to show the effectiveness of increased network coverage in the Asia-Pacific (APAC) and its positive impact on health care that has led to improved medical technology. This includes better medical infrastructure and training of workforce to adopt new technology.

PREPARED BY

MARYAM ATHAR
LAIBA ZAHID
MUHAMMAD YOUNIS
SHAHMEER NAVEED

MOTIVATION AND RESEARCH

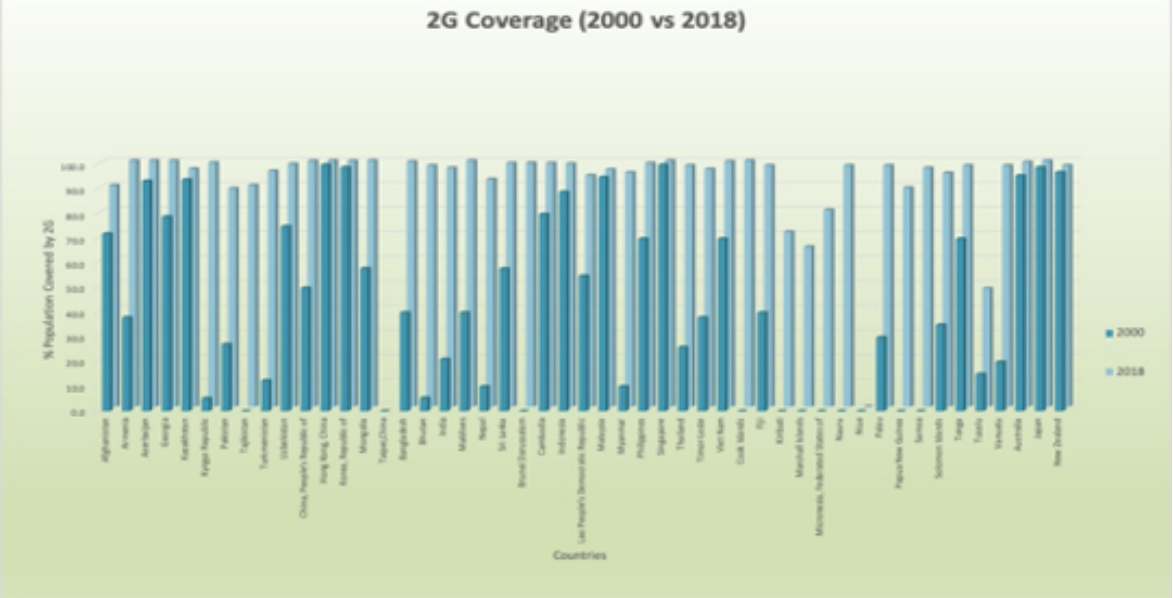

FIGURE 1

COVID-19 pandemic and other fatal diseases (TB and HIV) have posed a threat to people's good health and well-being. Although, these diseases and viruses take time to find a cure for, there has been major improvement in healthcare since 2000. Figure 1 shows that APAC has experienced major increase in the 2G network coverage from 2000 to 2018.

Similarly, Figure 2 shows the upward trend of network coverage for many developing countries in the APAC with more people having access to high-speed internet after 2008. While developed countries, like Australia, Singapore, and Japan had widespread availability of 3G even in 2008, developing countries in South Asia such as Nepal, India, and Pakistan adopted the technology much later.

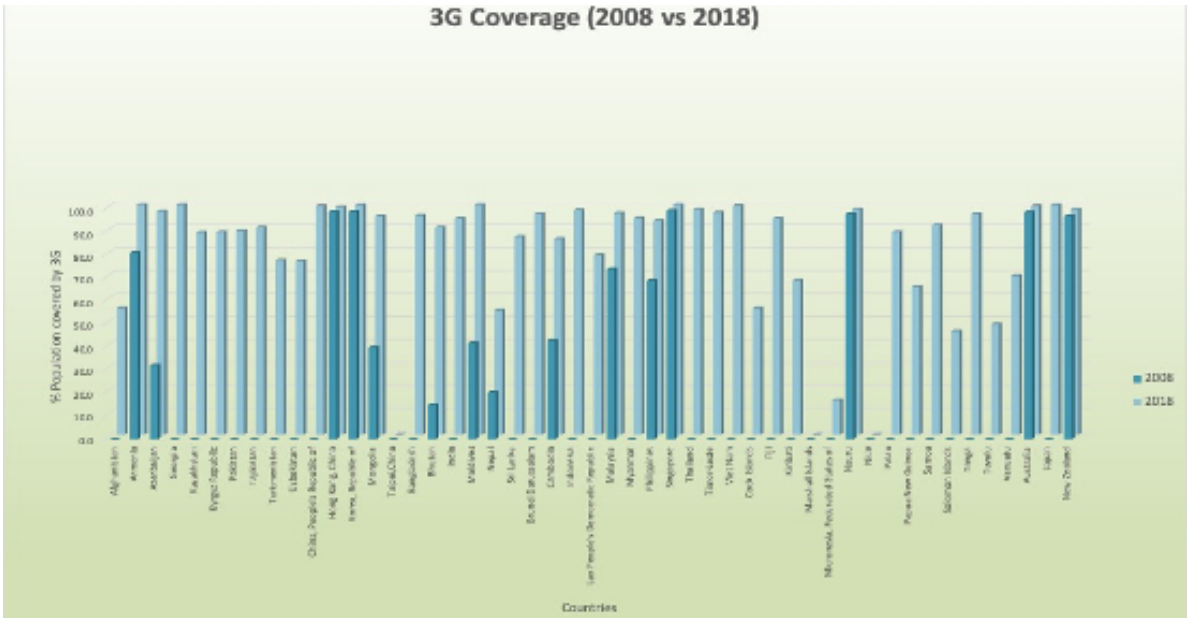

FIGURE 2

High-speed and reliable internet access has led to increase in the coverage of essential health services as med-tech companies are adopting new technology to expand infrastructure and train medical personnel. Figure 3 shows developing countries, including India, Bangladesh, Pakistan, and Afghanistan that are struggling to invest inmed-digitalization due to inadequate infrastructure and limited financial resources. Reports suggest that India will take 85 years to achieve OECD physician density. The developing countries need to hence adapt automation and invest in med-tech to increase the coverage of Essential Health Services, like Japan, Malaysia, and Singapore.

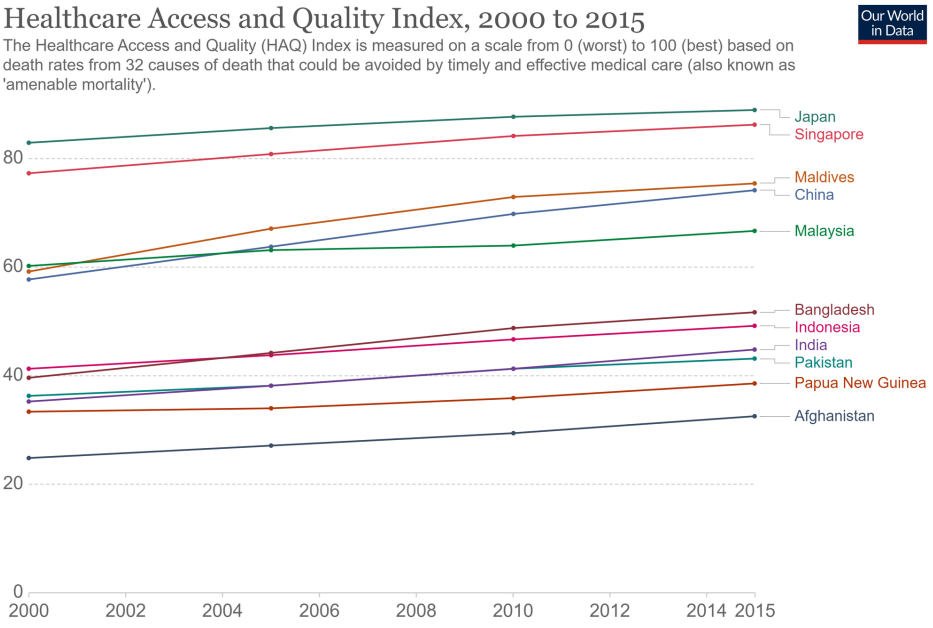

FIGURE 3

THE APAC MEDICAL DEVICES MARKET IS PREDICTED TO GROW MORE THAN

10% **OVER THE NEXT THREE YEARS**

THIS IS HIGHER THAN THE PROJECTED GROWTH FOR GLOBAL MARKET

With increased internet coverage, Medical education has also improved as APAC countries make use of technology to enhance pace and quality of medical education. With increased network coverage, new healthcare delivery paradigms, such as Home Care, are being adopted across APAC. Japan and Singapore's tech-partnership has led to expansion in services, including medication information systems, radiology and medical imaging solutions. Ageing population has been a threat to Japan, thus improved home care services have shown positive results as life expectancy increases in APAC. Japan and Singapore both have almost 100% network coverage which positively reflects on their performance in the Life Expectancy indicator, with almost 85 years in 2019 (highest in APAC).

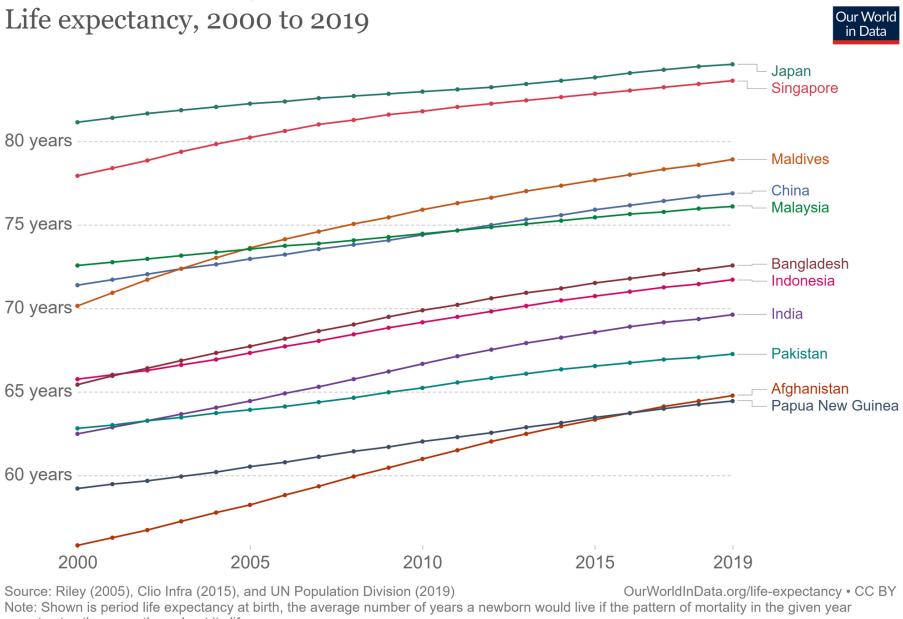

FIGURE 4

Healthcare infrastructure has been inadequate under COVID-19, as physician density and hospital beds are insufficient to cater the increase in demand owing to the pandemic. Thus, with increased Network coverage and technology, tele-health has been widely adopted by medical personnel and governments across APAC, as it has proved helpful in recovering from COVID-19 and flattening the curve. Spreading medical awareness, health concerns, and self-care procedures help people both recover from the virus and reduce its spread. As shown in Figure 5 tele-health has also proved helpful in reducing the incidence of HIV as countries with high network coverage have little to no incidences of HIV or other communicable diseases. On the other hand, countries with relatively low network coverage, like Pakistan and India, are experiencing a higher number of incidences of HIV and other communicable diseases.

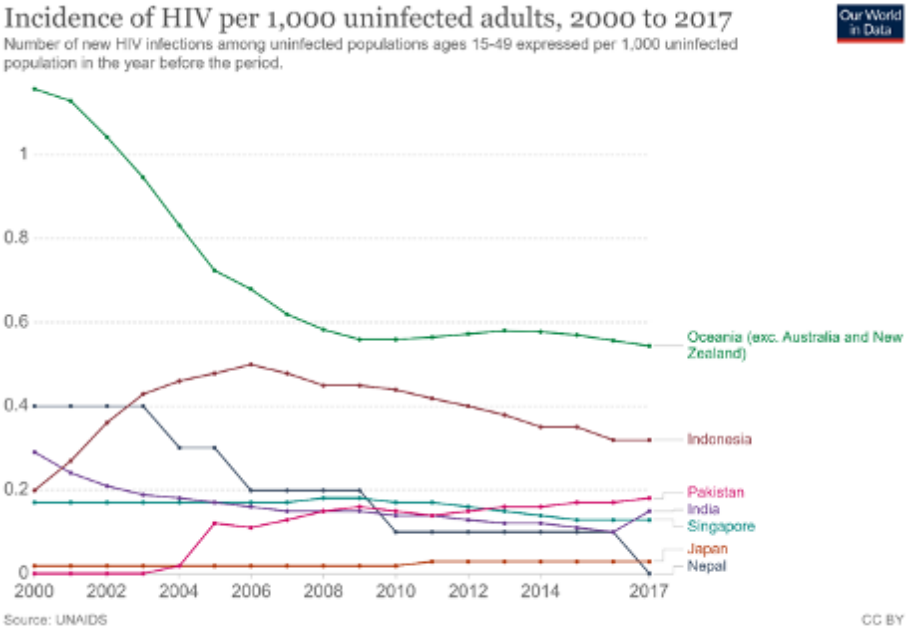

FIGURE 5

Figure 6 shows the overall decline in child mortality rate in APAC. The disparity is the result of different periods in which countries adopted network coverage that slowed down medical technology and automation in developing countries suh as Pakistan and Afghanistan.

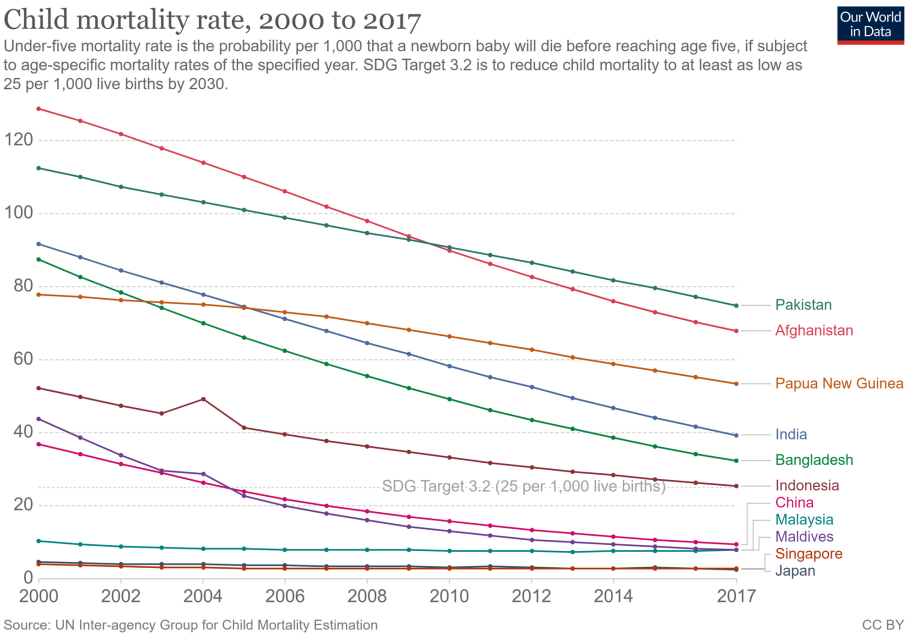

FIGURE 6

Evidently, it can be concluded that increased network coverage has led to investment in medical technology and automation that has in turn led to improved health care and well-being of the APAC population.