



G20 Nations' Global Initiative On Digital Health (GIDH) To Meet Global Health Challenges In Inaccessible Rural Geography Of Developing Nations

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Abstract:

This study has been undertaken to study the initiatives taken by Go20 Nations to reach out to the most vulnerable class of populace for their healthcare needs. The divide between urban and rural is a never-ending phenomenon in most developing countries including India. It is a big challenge for the authorities to reach out to the people in small towns and villages with conventional healthcare models. This paper elaborates the initiatives taken by G20 Nations to counter the Global Health Challenges in general, and through Global Initiative on Digital Health (GIDH). Along the high-level G7 intergovernmental forum, world needed a bigger forum to involve more nations for better coordination that resulted into the formation of G20, 24 years ago, and it initially focused more on global economy, such as international financial stability, climate change mitigation and sustainable development. But only after 18 years of its formation, the member countries felt the need of a focused sub-committee to deal with the global health challenges resulting into carving out a Health Working Group. This paper dwells into what have been the landmark achievements of this group, extent of their reach and future goals of high priority. Eighth edition of G20 HWG meeting under presidency of India kickstarted many healthcare deliverables including the digital healthcare to reach out to more beneficiaries. Besides the concerted efforts on treatment of disease, G20 nations should focus more on other co-morbid factors like Health & Wellness, Aging and Disability-Adjusted Life Year. Further, GIDH carries the utmost significance as highly-populated countries like India has one-third of its population living in rural geography where the secondary and tertiary healthcare is still a distant fulfilment. Undoubtedly, the next level of right combat to global healthcare challenges is digital healthcare.

Key words:

Global Health Challenges, GIDH, G20, G7, Health Working Group, Covid19, Disability-adjusted life years, Aging and health challenges.

The Prelude:

World War II necessitated the countries to come together for international coordination of economic policy resulting into the formation of International Monetary Fund (IMF) and World Bank (WB) which were collectively known as Bretton Woods twins. This further led to the formation of G-7 with top-7 developed economies such as intergovernmental political & economic forum consisting of Canada, France, Germany, Italy, Japan, United Kingdom and United States that came together to give a coordinated strategic direction for world cooperation. With other developing nations catching up fast making the world trade further spread across the nations, G20 was formed, but was initially foreshadowed as the member countries of G-7 only handled the formative efforts of G20. Many years down the line, G20 came a long way in bringing a perceivable coordination between the countries to make it a

uniformed world. Nearly after 18 years of its formation in 1999, in the years 2017, G20 felt the necessity of a niche coordination of health ministers of the stake holders for a better transformation of healthcare accessibility.

It has been the universal premise that alleviating global disease burden is first step for annihilating the poverty. But, all that traditional linkage between poverty and health turned inconsequential with Covid19 emerging as the biggest global health challenge to all the nations, not getting relented to the financial and economical tenacity of the countries, since every country on the globe suffered its onslaught equally. In a global scenario, whenever there is any epidemic, rest of the globe comes forward and rescues the affected geography, subject to certain geo-political equations between the nations. But, in case of a pandemic, every country has to deal with its own struggle, may be in consequence to the intensity of challenge.

G20 Nations:

With 19 sovereign countries, European Union and African Union, an intergovernmental forum called G20 was formed in the year 1999 in parlance with the G7 that had the history of culminating the shared values of pluralism, liberal democracy and representative government. G20 was aimed as the extension to G7's agenda with aim to take more countries for participation into this global integrity. The then finance minister of Canada headed the first G20 summit¹, since then the forum had come a long way while delivering a spectrum of schemes of global importance. Global healthcare was recognized as the main focus in G20 Germany summit in the year 2017. With the gathering of all health ministers of member countries, this particular forum focused on prevailing health challenges such as antimicrobial resistance (AMR), public health emergencies, and universal health coverage². Work module proposed at the meet was basically sharing the experiences on dealing with aging and non-communicable diseases, reducing their CO2 emissions, prohibiting the production of low-quality medicines, and using standardized health check-up formats for migrants and refugees to transfer their own health information.

G20 Health Working Group:

G20 member nations unanimously adapted the proposal of the then presidency nation Germany for formation of Health Working Group (HWG) to develop a shared international agenda on issues such as strengthening health-care systems, reducing malnutrition, health-crisis management and scaling up the fight against pandemics³. With a spirited participation of member countries, G20 summit under the presidency of Argentina in 2018 took the health challenges further to strengthen with more focus on Antimicrobial Resistance (AMR) and Health System Strengthening, and introduced childhood obesity. In the year 2019, Japan Presidency continued the efforts of HWG by engaging the global healthcare stakeholders like Organisation for Economic Co-operation and Development (OECD).

G20-HWG 2020: With sudden onset of Covid19 pandemic, the G20 meet under the presidency of Saudi Arabia in 2020 had to fire all the guns towards tackling the pandemic. The pre-determined agenda of (i) Pandemic Preparedness and Response; (ii) Improving Value in Health Systems; (iii) Digital Health (iv) Patient Safety and (v) Antimicrobial resistance had too little attention⁴.

G20-HWG 2021: Under the Italian Presidency of the G20, the HWG dealt with key issues such as (i) The impact of COVID-19 on the sustainable development goals (SDG) of the 2030 Agenda; (ii) Preventing, preparing and responding to future pandemics; and (iii) Tools to counter the COVID-19 pandemic⁴.

G20-HWG 2022: Under the presidency of Indonesia in 2022, G20 HWG dealt with (i) Action to Strengthen Global Health Architecture; (ii) Building Global Health System Resilience; (iii) Harmonizing Global Health Protocols and (iv) Expanding Global Manufacturing and Research Hubs for Pandemic prevention, preparedness and response (PPR)⁴.

Pre and post Covid19:

Covid19 exposed the vulnerability of global health preparedness to the sudden onset of the challenges, even to the advanced nations that had best of the healthcare infrastructure in place. Covid19 also challenged the compassion that existed between the diseased and society. At one point of time, all the infrastructure that existed before the onset of pandemic looked so outdated and so helpless. This pandemic, before spreading its wings across the nations gave very little time to the healthcare professionals to understand it and design the remedial measures. Besides the unexpected healthcare setback, this pandemic resulted into economic slowdown of all economies throwing the countries into negative GDP growth and joblessness. Pandemic prevention, preparedness and response (PPR) proved to be either underinvested or grossly ignored by all the economies in general and low-and-middle income economies in particular⁵.

Health & Wellness:

Health and Wellness are neither interchangeable nor synonyms to each other. Health is not just absence of any disease or disorder, it is in fact the state of being invulnerable to the factors that cause the diseases or disorders. So healthcare is not just a treatment to remove the disease or disorder, it is also for ensuring the low-risk eco-system for a disease-free life. On the other hand, wellness is a state-of-mind in which the individuals are capable of leading a life with physical, mental, spiritual, emotional, social and environmental coherence. So, wellness may not need the medical treatment, but it constantly needs the guidance to make-up the choices to lead a life without physical and mental stress, which should be the focus for G20 HWG.

Disability-Adjusted Life Year:

A concept of healthcare parameter developed in mid-90's, Disability- Adjusted Life Year (DALY) is a measure of overall disease burden, expressed in number of years lost due to untimely death or tertiary illness or ambulatory disability. Mortality rate alone does not represent the extent of impact of the diseases as morbidity greatly reduces the active life years. DALY is used to estimate the loss of active life years due to morbidity or permanent disability with respect to the near-fatal diseases. Hence, DALY is considered as a time-based measure that combines years of life lost due to premature mortality (YLLs) and years of life lost due to time lived in states of less than full health, or years of healthy life lost due to disability (YLDs)⁷. For example, Asthma which is technically a disorder may not necessarily lead to high rate of mortality, but it leads to severe loss of active life. In pre-pandemic year 2019, almost 3.4% of world population, i.e. 262 million people in the world were affected by asthma and 0.46 million lost their lives⁸. But, out of many who survived asthma continue to live with loss of active life. So, global health challenges do not necessarily come with a death count, they are more worrisome with permanent or partial disability. G20 nations' Health Working Group shall coordinate with member nations to actively work on DALY and ensure that the loss of active life and productivity are minimized in a time-bound program.

Aging and health challenges

Aging proved to be the most vulnerable population for healthcare challenges. Besides the clinical manifestations, the disease burden in the world largely rests with aging population that has the major cause for concern in chronic lifestyle diseases and non-communicable diseases. 71% of elderly population lives in G20 countries, and because of the huge population, China homes the maximum number of elderly population with 24% followed by 13% in India. However, Japan with almost 85 years of life expectancy has 33% of elderly people, whereas the world elderly population percentage stands at 12.7%⁶. Other than the financial burden, aging is further complicated due to lack of corporeal and psychological support. As the age progresses and physical activity decreases, and age-related diseases catching up, there is a considerable effect on YLLs and YLDs. This phenomenon is more disquieting in the mid- to late older adults than that in the early older adults⁸. There are as many as 92 diseases with age as the main etiological factor, increasing the risk probability with age. Improving the quality of life in elderly, so as to reduce the DALY should be the top priority of G20 nations, to reduce the disease burden on both human and economic factors.

Global Initiative on Digital Health (GIDH):

The urban-rural divide has been a consistent challenge to all developing countries as this divide widens the gap between need and feed of the healthcare facilities, more importantly in speciality healthcare. Further, Universal Health Coverage (UHC) and the health-related Sustainable Development Goals (SDGs) can be achieved only with right implementation of digital healthcare system. G20 Nations in their recent meeting in India proposed Global Initiative on Digital Health (GIDH) to consolidate and amplify recent and past gains in global digital health while strengthening mutual accountability to enhance the impact of future investments⁹. World Health Organisation (WHO) in close coordination with G20 Nations will manage the GIDH agenda, with close focus on four foundational pillars, viz. Country Needs Tracker, Country Resource Portal, Transformation Toolbox and Convening and Knowledge Exchange. While Country Needs Tracker and Country Resource Portal focus on resource optimization and alignment with country priorities, Transformation Toolbox and Convening and Knowledge Exchange work towards building the quality-assured digital solutions and strengthened local capacity.

Role of G20 Nations in implementing GIDH:

G20 shall ensure that member-countries use the Country Resource Portal to document their commitments towards digital health transformation. It is the responsibility of the member nations to patronize GIDH through political, financial, technical support of the G20 member-countries with direct involvement of present and future G20 presidencies.

Road ahead for G20 Health Working Group:

In G20-2023 summit under the presidency of India, Prime Minister Narendra Modi asserted India's preparedness to face the global health challenges as "Health and the environment are organically linked. Clean air, safe drinking water, sufficient nutrition, and secure shelter are major factors of health". In the roadmap to achieve the healthcare goals, four meetings of G20 Health Working Group (HWG) were held in different cities from January 18 to August 17, 2023. The HWG discussed threadbare on three vital points, viz. (i) prevention, preparedness and response to health emergencies; (ii) Strengthening Cooperation in Pharmaceutical Sector with focus on Access and Availability to Safe, Effective, Quality and Affordable Medical Countermeasures; and (iii) Digital Health Innovations and Solutions to Aid Universal Health Coverage and Improve Healthcare and Service Delivery¹⁰. Point to be noted here is the intention to make the healthcare available to masses and marginalized classes through innovative digital healthcare platforms. This carries the utmost significance as highly-populated countries like India has one-third of its population living in rural geography where the secondary and tertiary healthcare is still a distant fulfilment. Undoubtedly, the next level of right combat to global healthcare challenges is digital healthcare.

References

1. <http://www.g20.utoronto.ca/g20whatisit.html>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7731051/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9690014/>
4. <https://www.oecd.org/els/health-systems/g20-health-ministerial-meetings.htm>
5. <https://www.forbesindia.com/blog/health/g20-are-we-prepared-for-inevitable-global-health-crises/>
6. https://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015_Highlights.pdf
7. <https://www.who.int/data/gho/indicator-metadata-registry/imr-details/158#>
8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6124149/>
9. [global-initiative-on-digital-health_executive-summary-31072023.pdf \(who.int\)](https://www.who.int/publications/m/item/global-initiative-on-digital-health-executive-summary-31072023)
10. <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2023/jan/doc2023130155801.pdf>