

**PROGRESS AND CONSTRAINTS OF HEALTH IN INDIA**  
**A CROSS COUNTRY ANALYSIS**

**A SYNOPSIS**

**SUBMITTED TO THE FACULTY OF ARTS, JADAVPUR UNIVERSITY**  
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# **PROGRESS AND CONSTRAINTS OF HEALTH IN INDIA**

## **A CROSS COUNTRY ANALYSIS**

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### **Synopsis:**

After committing Right to Health in 1948, United Nations Organisation adopted Health as an integral part of the development in 1979, and subsequently the strategy 'Health for all by the year 2000' was taken by the World Health Assembly in the same year. To make the World more healthier, the World Health Organisation adopts four strategies which are to create Active Societies, to create Active Environment, to create Active People and to create active system.

Non-communicable diseases are accountable for 74% of all the Global deaths. Presently 81% adolescent and 27.5% adult fail to meet the guidelines for physical activity recommended by the WHO. Globally, We stepped into the mission 'Transforming our World: the 2030 Agenda for sustainable development. Physical activity is considered as a significant indicator to achieve SDG 3.4 (By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being ), SDG 3.6 ( To halve the number of global death and injuries from road traffic accident.), SDG 3.8 ( To achieve universal health coverage.) and SDG 3.9 (To reduce number of deaths and illness from environmental pollution and illness.).

India emerged as the 6<sup>th</sup> largest economic country in respect of GDP growth in 2019, 2020 and also in 2021 as per report of the World Bank. But as per Sustainable Development Report 2022, India's SDG-Index rank is 121 out of 163 countries in the World and India's SDG Score is only 60.3. Less than one decade is in hand to achieve the all of the SDGs by 2030. Major challenges also remain in good health and wellbeing as it is the core of all human development. So there is an urgencies to evaluate the present health status of India emphasizing physical activity.

Going through the several related reviews on cross country analysis on health it is found that Physical activity and Healthy Life Expectancy are less emphasized. Present study investigates the current status of health in India, how much progress is made , where the constraints are and how far its health status remains from the Global target fixed by WHO, in respect of selected health indicators, comparing with the health status of other twenty three counties having highest GDP(more than 5 lacks million US\$) in the World in 2021. Emphasis is given on the Physical Activity

as a fundamental means of behavioural health. Countries selected for the present study are United States, China, Japan, Germany, United Kingdom, India, France, Italy, Canada, Korea Republic, Russian Federation, Brazil, Australia, Spain, Mexico, Indonesia, Netherlands, Saudi Arabia, Turkey, Switzerland, Poland, Sweden, Belgium and Thailand.

**The main Objectives of the study is** to compare, analyse and evaluate health status of India with the other 23 countries having highest GDP(more than 5 lacks million US\$) in the World in 2021, to assess the feedback of India towards the global targets fixed by WHO/UNO, to find out India's advancement and dis-advancement in health outcomes and to assess the future dimensions of Health and wellbeing emphasizing behavioural health and to seek national awareness and attention to physical activity as an important behavioural health determinant.

Geographical regions are not considered for the present study. Data of different health indicators along with Socio-economic data are continuously being updated by WHO and World bank. So the findings of the study have been prepared only based on the data retrieved on the particular duration.

Both quantitative and qualitative approaches are adopted to conduct the study. Health and health related data selected for the study are: Prevalence of Insufficient Physical Activity (IPA), Deaths from Non-communicable diseases(NCDs), Children and adult mortality rate, Healthy Life Expectancy, Stunting, wasting, underweight and overweight prevalence, health expenditures, Out of Pocket expenditure and related indicator Sustainable Development Goal Index Score. Qualitative indicators regarding the different policies/Strategies, programmes to promote physical activity are selected for the study.

All the data collected for the study is secondary. Most of the data are collected from the open sources of website of the World Health Organisation(WHO), the World Bank, Ministry of Health and Family Welfare (MoHFW), Government of India and Sustainable Development Solution Network, A Global initiatives for the United Nations.

Arithmetic Average, Average Annual Growth Rate (AAGR) , Average Annual Rate of Reduction(AARR), Growth rate, Reduction rate, Projected or predicted value (based on AAGR and AARR) of different health indicators and Correlation among health expenditure and other indicators are conducted for the present study. Representation of available data is done through table and figure to compare the status of health indicators selected for the study. Most the quantitative data are computed with the help of Microsoft excel 2010.

India's health status, comparing with other countries, is poor in respect of most of the health indicators selected for the study. Poor performances are observed in average number of Deaths from NCDs/Year(4828004,ranked as the 2<sup>nd</sup> highest country, from 2010-2019), average Under five Children Mortality rate/1000 population(43.11,Ranked as highest one, from 2010-2021), avg. Children Mortality rate 5-14 Yrs.( 7.034, Ranked as highest country, from 2010-2019), avg. Adult Mortality (15-60 Yrs.)/1000 population (185.91, 2<sup>nd</sup> Highest, 2010-2016), Healthy life expectancy at Birth(Yrs.) (Ranked as Lowest in 2010, 2015 and 2019, 57.3 yrs., 59.1 yrs. & 60.3 Yrs. respectively), Healthy life expectancy at 60 yrs.(Ranked as Lowest in 2010, 2015 and 2019, 12.57 Yrs. 13.06 & 13.25 Yrs. respectively), average Prevalence of stunting children under 5 yrs. of age (Highest from 2010-2020, 37.59%), avg. prevalence of thinness among children and adolescent (5-19 yrs.), and in adult (20 yrs. or older) (Highest from 2010-2016, 27.11% & 24.7%). Finally, India earns the poorest SDG Scores.

India's average annual current health expenditure (% of GDP) from 2010 to 2019 is just 3.32% and ranked as 2<sup>nd</sup> lowest country, above Indonesia which ranks as the lowest (2.91%) countries among all the selected countries. India's average annual growth rate is -0.66%).

Among all the selected countries, Average annual Per Capita Health Expenditure and Average annual Domestic General Government Health Expenditure (%CHE) are lowest in India from 2010 to 2019 having values 55.70 US\$ and 28.30 respectively. On the other hand, India's average annual Out-Of Pocket Expenditure (%CHE) from 2010 to 2019 is highest, having values 61.96.

But, India's progression in Average Annual Rate of Reduction is much better in prevalence of Insufficient Physical Activity (11-17 Yrs.), stunting children under 5 yrs. of age , in Children mortality rate in under 5 yrs. and 5-14 Yrs.. Growth rates in HALE at birth in between the years 2010, 2015 and 2019 are also better.

India also made progress in Average annual Growth Rate in per capita health expenditure, in Domestic general government health expenditure and in Average Annual Rate of Reduction in Out-Of-Pocket expenditure during 2010 to 2019.

Present study establishes positive or negative association between health expenditures and most of other health indicators selected for the study. A negative correlation is observed among children and adult mortality rate with current Health expenditure and Domestic general government health expenditure, but somewhat strong relation are found between Out Of Pocket (OOPE) expenditure and prevalence of children and adult mortality. Weak negative association between Domestic General Government Health Expenditure (% CHE) and number of NCD deaths, and positive relation

between OOPE and number of NCD Deaths exist. Moderate positive correlation is found between current Health expenditure and HALE and also between Domestic general government health expenditure and HALE. Negative Association exists between HALE and Out of Pocket Expenditure. Negative correlations are also noticed among prevalence of stunting children(Under 5 Yrs.) and prevalence of underweight (among Children & adults) with current health expenditure (%of GDP) and with Domestic General Government Health Expenditure, but strong positive correlation exists with Out-Of-Pocket Expenditure(OOPE).

India's position is better than other selected countries in annual average Prevalence of Insufficient Physical Activity (IPA) in 11-17 yrs. having ranked as lowest in female category and 2<sup>nd</sup> lowest in both sex (values 76.38% and 74.48% respectively) but it is very much concerning that the average prevalence of IPA is considerably high in India and for all the selected countries the prevalence is more than 70%. Average Annual Growth Rate in Overweight prevalence among children and adolescent (5-19 Yrs.) is highest (7.53%) in India and tendencies of positive growth is also found in most of other countries selected for the study. WHO suggested different policies/strategies and programmes for promoting physical activities. India has taken most of the strategies and policies to promote physical activities selected for the present study, except 'Existence of tax incentive to promote physical activity'.

Niyantrita Madhumeha Bharata (NMB) 2017 (phase-I), a nationwide study on 233805 adult individuals (18+ yrs.), reported that that 57% of surveyed population in India do not meet the physical activity regimen recommended by World Health Organisation.

No significant direct correlation is observed between current Health expenditure and IPA, between GGHE-D and prevalence of IPA, and between Out of Pocket Expenditure and IPA by computing the selected present data, but different socio-economic data should be considered to find out the actual relationship, as Zhao et al. (2022) and Carlson et al.(2014) observed association between Physical inactivity and OOPE and between inadequate physical activity and health care expenditure respectively.

**To WHO, Insufficient physical activity is considered as 4<sup>th</sup> leading risk factor for mortality. Every year, near about 3.2 million deaths and 32.1 million Disability Adjusted Life Years (DALYs) are accountable for insufficient Physical Activity. World-wide 81% of adolescent and 27.5% of adult currently do not meet the recommended level of physical activity given by WHO. Between 2020 to 2030 almost 500 million new cases of preventable Non-communicable Diseases will occur which**

**will incur the treatment cost over US\$ 300 billion or approximate US\$ 27 billion annually if the trend of current prevalence of physical inactivity does not change.**

Globally, preventive health care is being encouraged by WHO. WHO fixes up the targets for member countries to 10% relative reduction of insufficient physical activity, through 'Global Action Plan for the prevention and control of non-communicable diseases, 2013 -2020,' and finally 15% relative reduction of IPA through 'Global Action Plan on Physical Activity, 2018-2030'. India has started its 3<sup>rd</sup> National Health Policy in 2017 for achieving highest possible health for all ages and adopted several missions like 'Balanced, healthy diets and regular exercise' 2017, Ayushman Bharat in 2018, and FIT India Movement in August, 2019, and Mission 'LiFE' 2022 to promote physical activities.

India has already joined the Global Mission 'Transforming our World: the 2030 Agenda for Sustainable Development' for people, planet and prosperity. The obtained data and the rate of improvements of selected health indicators reflect that India is far away from the global targets such as 15% relative reduction in prevalence of insufficient physical activity, to reduce one third of the premature deaths from non-communicable diseases (SDG target 3.4.1) by 2030, to end preventable deaths of children under 5 years of age (SDG 3.2.1) by 2030 and to end all forms of malnutrition by 2030 (SDG 2.2) in spite of having possibility to remain very close to the internally fixed Global targets adopted by WHA(2012, Resolution 65.6) which are reduction of stunting children under five by 40% and not to increase childhood overweight by the year 2025.

Different studies establish the positive role of physical activity on health outcomes influencing many health indicators such as NCDs, child mortality and Nutrition and Healthy life expectancy. Children and adult mortality rate, deaths from Non-Communicable Diseases, prevalence of stunting and underweight prevalence are negatively correlated with current health expenditure and Domestic General Government Health Expenditure (GGH-D) and are positively correlated with Out of Pocket Expenditure(OOPE). Healthy Life Expectancy is positively correlated with health expenditure and GGH-D, and is negatively correlated with OOPE.

Healthy life-style management and practice throughout life-course having guided physical activities, action plans and programmes, increased Domestic General Government Health expenditure and finally the awareness regarding growing healthy habits and adopting healthy guidelines and strategies to compel the every people as well as every nation to follow the standard guidelines can change the scenario of Health status in future.