Opinion

Sustainable Development in Healthcare

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"Health for all" is one the most important Sustainable Development Goal of UNO. As per WHO The healthcare sector is responsible for approximately 5% of the global greenhouse gas emission and and has a carbon footprint equivalent to 514 coal-fired power plants.

SDG in Healthcare

SDG 3 promotes health and well-being for all and aspires to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030. It also aims to achieve universal health coverage (UHC) and provide access to safe and effective medicines and vaccines for all.

The sustainable healthcare goal is also interlinked with progress in other SDGs, like poverty reduction, education, nutrition, gender equality, clean water and sanitation, sustainable energy, safer cities and etc.: as mentioned in below wheel chart from UNO.

Currently, there is a huge gap in health facilities in developed and developing countries. The healthcare sectors in the developed world are energy- and resource-intensive operations, which lead to high carbon footprint and environmental pollution issues. On the other hand, in developing countries, health facilities lack access to basic infrastructure resources, including electricity, cleanwater supplies, medical waste management etc.

Figure 1

SDG case study - NHS, UK

Dr Chantelle Rizan, Lead researcher, in Sustainable Healthcare at Brighton and Sussex Medical School, published a research paper in the Journal of the Royal Society of Medicine, which revealed that. Two-third of the carbon footprints are related to single-use medical products. Only a small number of products (about 23%) were accountable for more than 80% of the product's carbon footprint. Predominantly large, single-use mainly plastic items include single-use surgical gowns, drapes, tubing, electrosurgical and multi-component surgical instruments.

On the other hand, switching to reusable where it's feasible, alongside optimising associated decontamination processes, waste segregation and recycling, could reduce products carbon footprint by one third in the health care industry. For details, visit to below mentioned link.

https://sustainablehealthcare.org.uk/news/2023/04/single-use-surgical-items-contribute-two-thirds-carbon-footprint-products-used-common

Way forward

Putting health services on a low-carbon development with a "Triple bottom line" approach,can help to achieve SDG-3 goals. The key initiatives would be :

Clean infrastructure

Net zero-energy building with infrastructure that supports water, sanitation, hygiene (WASH) and healthcare waste management systems. Millions of healthcare professionals and patients remain at risk till we achieve WHO's WASH recommended at healthcare setup.

- **Digital health**: Universal health coverage (UHC) can be achieved through digital healthonly. UHC would ensure Fast, cost-effective and quality health services to all. Paperless services (ERM) would ensure better environmental compliance along with transparency and safe healthcare services for everyone.

- **Use of Reusable instruments and Optimize use of medical equipment**: Sterilize, reusableconsumables and accessories would be environmentally friendly and cost effective.

- **Use of clean energy:** Switching from fossil fuels to renewable energy sources, such as solar energy, can help expand access to reliable and clean energy for better human and environmental health.

- **Holistic and Integrated health**: Integrated health facilities would ensure the best of the world from modern and alternate medicines. It would ensure long-term health benefits with lesser side effects. The holistic healthcare approach ensures a sustainable and cost-effectivehealthcare system.

The Covid 19 pandemic, which is once in a century, exposed the world's several healthcare truths, including the fact that borders cannot stop health threats in today's deeply connected world. Democratization of healthcare facilities is needed to ensure universal health coverage (UHC) and quality healthcare for all. Green health has the potential to mitigate climate risks and sustainable healthcare for everyone under One Earth One Health for the well being of individuals and the planet as a whole.