

DIGITISATION OF HEALTH SERVICES - EMPOWERING CITIZENS

PROF. (DR.) ANUPAM SHARMA

DEPTT OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION, DOCTOR HARISINGH GOUR UNIVERSITY, SAGAR (CENTRAL UNIVERSITY) SAGAR, MADHYA PRADESH, INDIA

ABSTRACT: Empowerment means enabling the weak who lagged in the race of development due to so many factors. Empowerment equips the weak through legal, socio-cultural, educational and political measures. Steps have always been initiated for such social groups in constitutional, legal, political, and other positive ways to enable them to participate in the race for development with equal footing. In India since independence, successive governments have initiated several measures for such groups. In the 21st century changes are undergoing with the help of technology, especially digital technology. Digital technology is another measure to empower the citizens while dealing with governments and machinery of governance. Empowerment of citizens through digital technology is to make governance machinery efficient, effective, accessible, responsive, responsible, smart and accountable. Merely creating machinery with the help of technology is not sufficient. Empowering the citizens in real terms means that the citizens' interface with the governance should be faceless and transparent. In the second and present decade of the 21st century, it has seen that all govt departments have gone digital like railways, communication, education, finance including general administration (district and tehsil administration) and health are especially some examples. India is a leading country that delivers most of its services through e-mode and has jumped 22 ranks from the year 2010 to the year 2022 worldwide (eGDI). Though it is not possible to evaluate the functioning of all the departments which used digital technology as a case study, therefore, health services are taken to evaluate the impact of digital technology in India to empower the citizens. India has its main focus on creating digital infrastructure, resulting in India coming in third place in terms of digitisation of the economy as per State of India's Digital Economy Report, 2024 (www.digitalindia.gov.in).

Introduction

Concept of Empowerment:

Empowerment is an ongoing process that increases a person's or a group's ability to make their own decisions and supports them in converting those decisions into specific actions and results. World Bank in its World Development Report, 2000–2001 considered that empowerment means to enhance the capacity of an individual or group to make purposive choices and to transform those choices into desired actions and outcomes (documents1.worldbank.org). World Bank in its other report defines three domains of empowerment state, market and society, each with its own "subdomains" where a person or a group works as a civic, economic and social actor. World Bank defines three levels of empowerment like local level, the intermediary level, and the macro level, Within all three domains people operate and experience empowerment differently depending on the scope and reach (or "levels"). In the Indian context, the village may be considered local level, the district may be the intermediary level and the state for the macro level. In this case, the federal or national level could be said to constitute a fourth supra-macro level (documents1.worldbank.org).

The concept of empowerment has been widening in a changing scenario where things are being digitised. In the field of administration, public delivery of services and goods in different fields are being delivered to the people in a paperless and faceless manner and no consideration of boundaries and timing. These services and benefits should reach everyone as their entitlement. To ensure this, there should be an institutional mechanism and well-established process which can empower citizens where people can make their own choices, ask questions and make public officers accountable. Empowerment of citizens through digital technology is to make governance machinery efficient, effective, accessible, responsive, responsible, smart and accountable. Merely creating machinery with the help of technology is not sufficient. Empowering the citizens in real terms, the citizen's interface with the governance should be faceless and transparent.

The present research paper focused specifically in the Indian context, where delivery of services is being done in mission mode by the successive and more specific present government. The delivery of goods and services in India through e-mode is being implemented in various departments which empowers the citizens regarding



effective, responsible and accountable governance apparatus. Though, almost all departments are using digital technology to implement their programs for the weaker sections to ensure a faceless, paperless and transparent system of delivery of goods and services. Even after 2022, constantly government of India has made public services accessible and available to everyone and has been digitising at mission mode and ensuring peoples' participation in governance at various levels like policy formulation, implementation and evaluation.

All the above initiatives regarding the delivery of goods and services through e-mode have transformed the Indian administrative system and taken it to the next level empowering citizens. In this way of governance in the digital era, people are getting services at their doorsteps. Union Minister Jitendra Singh said in a conference on 22 December 2019 that the present Modi government did administrative reforms aimed at bringing socio-economic transformation and empowering citizens. He also said that the "government has its focus on empowering citizens and reaching the last person at the end of the line" (PIB 22, December 2019).

Digital health services enhance person- and people-centeredness of care, https://health.ec.europe.eu/) therefore, Digital health should be an integral part of health priorities (https://www.who.int, 2020-2025). In this way, India sets an example for other countries that are in the queue to digitise services. In the present research paper efforts have been made to analyse, assess and evaluate the impact of digital health services in empowering citizens of the country. During and after COVID-19 health services have been taken on priority through digital mode. Indian government initiated Ayushman Bharat Digital Mission (ABDM) in 2021 to ensure the availability of healthcare services through electronic means, particularly benefiting remote and rural areas where specialist care is often limited. ABDM is improving health services making them accessible, efficient, affordable and convenient for all. Ayushman - Apke Dwar 3.0: is bringing healthcare services directly to the doorstep of beneficiaries and empowering them.

The data of this research paper was collected from international and national organisations like reports of the World Health Organisation, and World Bank, Indian government reports, websites of digital India, NHA, PMJAY, books, journals and articles on different platforms. Collected data helped in theoretical framework building and knowing how citizens are empowered through these methods and what the challenges faced by all stakeholders. The present research paper deals with the concept of empowerment, initiatives taken by the Indian government in the health sector to empower citizens and how empowered citizens may have access to the benefits which are being implemented by the government in the health and other sectors.

Health Services in India:

The National Health Policy of 1983 and 2002 have served well in guiding the approach for the health sector. After NHA 2002, the latest National Health Policy, 2017 introduced objectives like the promotion of good health through cross-sectoral actions, and access to technologies (https://mohfw.gov.in/). This policy advocates the application of digital health through extensive deployment of digital tools for improving the efficiency and outcome of the healthcare system. It also aims at an integrated health information system which serves the needs of all stakeholders and improves efficiency, transparency, and citizen experience (pib.gov.in,18TH December 2017).

National Digital Health Blueprint (NDHB) recognizes the need to establish a specialized organization, called the National Digital Health Mission (NDHM) that can drive the implementation of the Blueprint, and promote and facilitate the development of the National Digital Health Eco-system (NDHE). NDHE outlined the fundamentals and an implementation strategy for digital health in India (https://abdm.gov.in/). Based on the NDHB, on August 15, 2020, the government unveiled the NDHM to build a digital health ecosystem. After a year of operation, it was renamed "Ayushman Bharat Digital Mission" (ABDM) and is currently applicable nationwide (www.nature.com).

AYUSHMAN BHARAT DIGITAL MISSION (ABDM)

India's health sector is undergoing a massive transformation with technology and digital services. Many initiatives have been taken to digitise health services and make them accessible and timely available to everyone. In this way, ABDM launched by Prime Minister Narendra Modi on September 27, 2021, aims to establish a robust digital health ecosystem through active collaboration between public and private sectors (PIB September 12, 2024). The Ayushman Bharat Digital Mission (ABDM), formerly known as the National Digital Health Mission, intends to promote universal health coverage in a way that is efficient, accessible, inclusive, affordable, timely, safe manner and convenient for everyone (PIB September 12, 2024). State and union territories' machineries are the frontrunners in implementing provisions of the ABDM. It brings together different stakeholders and the healthcare sector like patients, doctors, health facilities and digital health applications in an interoperable ecosystem. It also facilitates continuity of care across primary, secondary, and tertiary levels seamlessly. The ABDM launched with a vision to build the country's digital health infrastructure. (https://abdm.gov.in/articles). It seeks to develop the framework required to support the nation's integrated digital health infrastructure of the country. It will bridge the



existing gap among different stakeholders of the Healthcare ecosystem through digital highways (https://nha.gov.in/).

The ABDM established the digital health ecosystem which guarantees of accessibility of healthcare services electronically, especially advantageous in remote and rural areas where specialist care is often limited. This ecosystem also ensures the availability of healthcare services through electronic means, particularly benefiting remote and rural areas where specialist care is frequently restricted. Ayushman Bharat Health Accounts (ABHA), a key part of the ABDM. This ABHA number is key to availing digital health services under ABDM which is designed to support India's integrated digital health infrastructure. It is based on the foundations of ease of operating, inclusivity, and free consent streamlines interactions with verified healthcare providers and facilitates seamless access to lab reports, prescriptions, and other health records. This 14-digit unique ABHA number helps in connecting electronic health records making it easier to patient's medical history, helping doctors to make better diagnoses, and reducing the overall cost of treatment. This unique number provides an opportunity to consult doctors across the country and above all it enhances the level of affordability. As of September 12, 2024, 66.70 crore Ayushman Bharat Health Accounts have been created with 42.01 crore Health Records linked to it. (PIB September 12, 2024). A budget allocation of Rs. 200 crores for the Financial Year 2024-25 have been provided to this mission. (https://mohfw.gov.in/).

Many leading applications like Aarogya Setu, e-sanjeevani CoWIN e hospital (PIB January 15, 2024) Digi-locker and similar applications from the private sector have already integrated with ABDM. This integration of existing health systems with the ABDM enables standardisation and digitisation of health records and seamless data exchange. This means that people will be able to link and manage health records created on different platforms and share them digitally. Services like online appointments for OPD, lab tests, ambulance, hospital beds tele consultancies health insurance services etc multiple platforms can be availed using the app of users' choice. ABDM aims to change the face of health service delivery in India and ensure health care for all. Over all ABDM is a revolutionary initiative.

Applicability of ABDM:

The ABDM has set new standards in its journey of just three years which has been described by Dr. M. Srinivasan in his speech that now the most reputable hospital All India Institute of Medical Sciences (AIIMS) New Delhi, only through a scan of a QR code to patients can instantly share medical records with us. Within minutes, patients will get an automatically generated token number for their appointment on their phone. This Scan and Share' system we use at AIIMS was introduced by the government in 2022, under the ABDM. The system integrates all your medical records, files, prescriptions, and reports, and links them to an Ayushman Bharat Health Account (ABHA) Number. For hospitals, it allows us to quickly and accurately access patients' medical information with their consent and ultimately deliver a high standard of care. This means patients can effortlessly search for healthcare providers, conveniently access their health documents and easily register for appointments. Two years since the launch of this mission, nearly 4 crore scans and tokens have been created nationwide. Within the ABHA ecosystem, AIIMS Delhi remains the leader, with more than 18 lakh tokens, around 7.5 lakh ABHA IDs, and 6.4 lakh health records linked so far. The rapid adoption of the service speaks volumes about how useful patients find it to be (Srinivasan, 2024).

ABDM is moving to achieve the set goals behind it and had a success rate since its implementation in 2021. One major reason is that the country during and after the pandemic created digital platforms that used multiple. As per World Bank data over 572,000 villages out of 597,000 have mobile or network connectivity. In Pan India 800 million are internet users, and 510 million are smartphone users. This is happening due to the lowering price of internet connections and the cost of mobile sets due to a healthy competitive market. The government has provided 1.24 billion unique Aadhar digital IDs to the people which plays a base tool digitising health services. 2.64 billion Unified Payments Interface transactions take place monthly across the country making the system easier and more people-friendly. This infrastructure like Adhar, eKYC and online payment created in the country for multiple purposes, forms the basis of the Ayushman Bharat Digital Mission (ABDM). https://documents.worldbank.org/. The ABDM is steadily progressing toward its basic objectives (Mishra et al., 2024) transforming healthcare access in India. It has created a digital health care ecosystem which is connecting all stakeholders on one digital platform. This has a strong positive impact on the remote areas and weaker sections of society. People residing in remote areas and having the requirement to consult highly expert doctors of any domain may get consultation and take the treatment. It is a cost benefit to patients coming from a poor economic background. Overall, the Benefits of digitisation in health services improving the delivery of healthcare public services and empowering citizens to avail all of these on their doorsteps. With all its complexities and challenges in the country, under this umbrella program, the success rate is tremendous where a good number of ABHA accounts have already been created with 42.01 crore Health Records linked to it (PIB September 12, 2024). These linked accounts of health services minimise physical interaction between people and medical personnel and ensure good quality and affordable online healthcare to the country's vulnerable, underprivileged and people living in remotest areas. The first and



foremost Outpatient Department (OPD) registration process has been substantially simplified and transformed through the 'Scan and Share' feature, through ABDM. Through this QR-code-based system patients share their details quickly which maximises the system's faceless and paperless. This makes the system accessible where patients register through this code especially it is a great supportive initiative for people of old age, differently abled and pregnant ladies and reduces waiting time in registration queues. Apart from these provisions, ABDM empowers patients and above all improves patient experience. As health records are being shared by patients, therefore, security of all this personal information are major initiative of the government. Under the ABDM, secure sharing of all patient-related information is done in alignment with the Digital Personal Data Protection Act, 2023 (DPDP Act) which objective of a secure digital platform for the government, other organisations and citizens of India (Sharma, 2024).

Challenges:

Online access to Digital health records are helping people living in remotes of the country to avail of quality medical facilities and empowering people. Although this initiative has changed the scenario of health services and has made efficient, accessible, inclusive, affordable, timely, safe manner and convenient for all, there are certain challenges which need to be addressed to enhance its success rate. First and foremost, people need to be aware benefits of this mission. A good number of the ABHA accounts were created under this program but the major challenge is to activate all these accounts properly so people may be encouraged to avail all these digital facilities under ABDM. Another challenge is the way of digitisation of health services and making them accessible, and affordable to the people and creating strong reliable healthcare services by building ABHA, HFR, HPR, HCX and other building blocks.

Another big challenge to digitising health services in Indian society is to protect patient information and ensure privacy and confidentiality (*Paul et al, 2023*). In India, in 2021 total of 1,402,809 cyber security incidents were observed by the Indian Computer Emergency Response Team (GOI). Therefore, the information which helps healthcare organisations verify patients' identities while availing of health services needs to be well protected through a strong mechanism to avoid any fraud or misuse of identity. The users (patients) availing digitise health services might not be aware of using security measures on their smartphones, so there is a need to make aware them of security measures other side government institutions has to create a mechanism that all records of patients should be kept carefully on digital platforms and ensure their multiple uses safely. Users also need to be aware of all these security measures to protect their personal information, when they log in and work on their online account.

The northern and eastern parts of the country do not have enough quality hospitals to address Ayushman Bharat. Many highly rated private hospitals have not joined yet the mission and some have withdrawn from it. Bringing all quality hospitals into the Ayushman Bharat fold is pivotal for the success of the mission, as is promoting investments in quality hospitals in underserved areas. In general, States with good health status have more effectively used Aayushman Bharat resources, thereby worsening the already existing inequalities among States. India's health care ABDM initiatives have unique challenges where a large chunk of the population still faces easy access deficit of online health services like online appointments and consultancies at all three levels primary, secondary and tertiary. This is the time to assess these emerging technological challenges and infrastructure mechanisms due to which patients' care is less focussed.

India is one of the countries where users of smartphones for personal and official use are increasing. Availing these digital health services, in the form of different applications smartphones are required, but in practice, beneficiaries have to depend on the handsets of other family members because all are not in a position to have personal smartphones and charged with internet facilities. Good connectivity for consulting online treatment is needed which is a big hurdle in getting digital service.

India's public healthcare capacities have diverse and unique challenges (Basu, 2024) which need unique mechanisms to address these challenges and to make digital health services easier, available to everyone, save patients' personal information and be accessible to all.

Way Forward:

The ABDM has secured a high level of success in its implementation and a large number of beneficiaries have benefitted through this mode of health services. To enhance the quality delivery of health services of this mission, the following steps may be considered by all stakeholders:

The culture of working horizontally and vertically and sifting responsibilities needs intensive monitoring at all levels. It has seen during implementation process that few stakeholders have misused the facilities in their favour. Effective monitoring, evaluation and impact assessment will enhance its success and on this basis, mid-course correction will be taken. Schemes are always good but collective corruption has to be looked into.

A comprehensive strategy to spreading awareness and empower people about this health digital mission is the need of the hour. Various platforms such as video and audio media, print media, various platforms of social media,



public platforms like railways and bus stations, Television and radio and other sources of messaging may be utilised to ensure awareness of this mission. This media and outreach strategy of the government will ensure more success of this digital mission and empower citizens.

The ABDM is an umbrella program wherein various stakeholders are coming under it, but to make it more successful more and more private hospitals and laboratories should come forward to join this mission. This mission has shown significant success in a short span of time but still it needs that focus should be given to mass publicity, constant advocacy and more social acceptability among the people. Incentivization through different ways to all stakeholders may enhance the success rate of this digital mission.

The digital mission includes various stakeholders like patients, doctors, public and private hospitals, labs, techniques etc. The existing gap among these various stakeholders in the healthcare ecosystem needs to be removed, which is very much required to enhance the quality of healthcare digital services.

CONCLUSION

The pandemic brought unprecedented changes in the administrative process where more focus was given during and post-pandemic digitisation of public services. The health sector has become the fastest growing sector of all where digitisation has been taking place at every stage like OPD, consultation, exchanging digital records and other stages. The impact of all these measures of digitisation has empowered the citizens and health services are now comparatively more effective, efficient and accessible and have made the administration responsive. Though it is revolutionising the health services and its impact has been very positive still we have a long way to go. The man behind the machinery is not effectively responsive and accountable. A common citizen fails to access digital technology as rural India is not well equipped with the latest tools of digitisation. The health personnel are yet to be made responsive because the health sector comes under emergency services. This needs smartness and monitoring of the man behind the technology. The work culture needs to be improved. It is a measure of empirical research and grassroots level data collection to see the impact on empowerment but broadly digitisation has certainlymade a positive impact.

Digitisation is likely to be the central pillar of empowering citizens through the digitisation of goods and services and ensuring the availability of all these services in their hands. The availability of all these, empowers them, where they interact with the government faceless and transparent way. This way of governance equipping the weak and enabling them to participate in the process of development with equal footing. Citizens are empowered through digital technology and the governance process is becoming efficient, effective and accountable. Goods and services to the beneficiaries in a fixed time are ensured through digitisation in all sectors therefore, in India most of the departments have adopted a digitise governance process. Health services are considered emergency services so there is no chance of red-tapism and delay in delivering services. It requires immediate delivery of services and goods round the clock and in a qualitative manner. Actually, the work culture needs to be improved. It is a measure of empirical research and grassroots level data collection to see the impact on empowerment but broadly digitisation has certainly made a positive impact.

REFERENCES

- ❖ Ayushman Bharat Digital Mission's Integrated Digital Health Ecosystem is the Foundation of Universal Citizen-Centered Health Care in India: Case Study (English) available on https://documents.worldbank.org/
- ❖ Basu, Rumki 'The Ayushman Bharat Programme in India' Indian Journal of Public Administration, Sage Publications, India, April 2024.
- E-Government Development Index (EGDI) under Global Indices https://www.meity.gov.in/e-government-development-index-egdi-under-global-indices
- Empowerment in Practice: Analysis and Implementation A World Bank Learning Module May 2007, page -8, https://documents1.worldbank.org/).
- Empowerment in Practice: Analysis and Implementation A World Bank Learning Module May 2007, page-9&10, https://documents1.worldbank.org/)
- ❖ Government of India. (n.d.). Cyber security incidents were observed from 2019–2022, tracked by Indian Computer Emergency Response Team (CERT-In). https://sansad.in/getFile/loksabhaquestions/annex/179/AU2801.pdf
- ♦ https://www.digitalindia.gov.in/ ministry of electronics and information technology, digital India page −1 the report was unveiled by the Indian Council for Research on International Economic Relations (ICRIER).
- ❖ Inampudi, S. Rajkumar, E., Gopi, A. Mol, KSV and Sruthi, K.S 2024 Barriers to implementation of digital transformation in the Indian health sector: a systematic review Humanities and Social Sciences Communications, volume 11, Article number: 632 (2024) available on https://www.nature.com/

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- Mishra, U.S., Yadav S. and Joe, W. The Ayushman Bharat Digital Mission of India: An Assessment, digital health, volume 10, 2024.
- National Digital Health Blueprint, by Ministry of Health and Family Welfare, Government of India, page 17, available on https://abdm.gov.in/).
- National Health Policy, 2017 Ministry of Health and Family Welfare, Government of India available on https://mohfw.gov.in/).
- Paul, L. M., Ferrag, M. A., Almomani, I. (2023) Digitization of Healthcare Sector: A study on privacy and security concerns ICT Express Volume 9, Issue 4, August 2023, Pages 571-588, available on https://www.sciencedirect.com/science/article/pii/
- ❖ PIB, 18 DEC 2017 3:40PM by Delhi available on https://pib.gov.in/PressReleaseIframe
- ❖ PIB 22, December, 2019. Press Information Bureau Government of India, Ministry of Personnel, Public Grievances & Pensions available on https://pib.gov.in/newsite, Assessing The Impact of Digital Transformation of Health Services Report of the Expert Panel on effective ways of investing in Health (EXPH) 13 November 2018 available on https://health.ec.europa.eu/system/files/2019-11/022 digitaltransformation en 0.pdf
- ❖ PIB September 12, 2024 Ayushman Bharat Becomes Bigger Ministry of Health and Family Welfare,) available on https://pib.gov.in/
- * Revolutionizing Healthcare: Digital Innovations in India's Health Sector, Ministry of Electronics & IT, PIB January, 15, 2024, available on https://pib.gov.in/
- Sharma, Anupam (2024) Protecting Digital Assets: Government Initiatives and NGOS Participation, Indian Journal of Public Administration, Sage Publications, Special Issue, Page 1-14.
- Srinivasan, M. (2024) Impact of Ayushman Bharat Digital Mission (ABDM), September 02, 2024, AIIMS New Delhi. page 5, available on https://www.hindustantimes.com/ht-insight/public-health/impact-of-ayushman-bharat-digital-mission-abdm
- ❖ Technology is positively impacting lives and empowering citizens: PM, 06 March, 2023, available on https://www.pmindia.gov.in/en/news_updates/technology-is-positively-impacting-lives-and-empowering-citizens-pm/
- Update On Ayushman Bharat Digital Mission under department of health and family welfare. Available On https://mohfw.gov.in/), accessed on 27/12/2024.
- ❖ World Health Organisation on 'Global Strategy on Digital Health 2020-2025, page 8 available on https://www.who.int/docs/default-source/documents/ Digital health should be an integral part of health priorities.