

COVID-19 PANDEMIC AND CONSUMER ADOPTION OF DIGITAL HEALTHCARE IN INDIA: A QUALITATIVE STUDY

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ABSTRACT

The study aims to explore the influence of the Covid-19 pandemic on consumer adoption of digital healthcare solutions in India. Researchers used qualitative research method involving depth interviews and literature review for the study. A convenience sampling technique was used to identify the 15 consumers of digital healthcare for the interview during January-February 2021. Qualitative content analysis was performed on data gathered from interview transcripts of the respondents. The usage of digital healthcare solutions was not new to the respondents of this study. Still, during the pandemic, it was observed that various other digital healthcare devices, services, and applications got added into the respondent's routine. In fact, the adoption of digital healthcare mobile applications increased exponentially during the pandemic. The research suggests that digital healthcare was the most effective alternative for Indian consumers given social distancing and isolation in the Covid-19 pandemic. The consumers overcame their privacy and security concerns and embraced digital healthcare solutions. The study sheds light on the adoption of digital healthcare by Indian consumers through qualitative research design.

Keywords: Digital Healthcare, Covid-19 Pandemic, Consumer Behavior, Telehealth Services, Virtual Consulting.

INTRODUCTION

Covid 19 has disrupted the global society and negatively affected health but has positively led to the rapid digitization of healthcare. Digital Healthcare is emerging as an enabler for transforming consumer behavior by giving them more personalized care, adding value, and reducing the cost. Technology innovations are supporting a wide range of healthcare solutions (The Digital Collaborative, 2016). Digital health comprises wearable devices, diagnostic devices, mobile health applications, telemedicine, and technological tools to personalize healthcare delivery for consumers.

Consumers are increasingly taking charge of their health and researching online to be more informed about their prognosis and treatment alternatives. Consumer's proactive approach in managing health is accelerated due to the Covid-19 pandemic. They communicate with the caregivers and doctors about their health risks and problematic issues. They track their health data to monitor and actively engage in decisions making (Betts et al., 2020).

Covid-19 also created fear and anxiety due to social distancing norms and financial worries due to lockdowns. The economic slowdown created hardships and increase the distress among the consumers.

The low-cost and affordable digital healthcare solutions appealed to the changing consumer who wants to make informed decisions. The paper explores the Covid-19 pandemic that led to changing consumer behavior towards the adoption of digital healthcare. We study the concerns and challenges consumers encounter in using digital healthcare solutions. We also look at the implications of digital healthcare for healthcare providers and stakeholders. Thus, the objectives of this study are:

1. To explore the influence of the Covid-19 pandemic in advancing digital healthcare solutions among consumers in India
2. To study the changing consumer behavior towards adoption of digital healthcare during the Covid-19 pandemic.
3. To study the concerns and challenges faced by the Indian consumers when using digital healthcare solutions.

REVIEW OF LITERATURE

The digitization of healthcare would have taken decades to be available to the masses across countries if the Covid-19 pandemic had not necessitated the adoption of alternatives due to social distancing norms. The consumer began consciously exercising and eating healthy, and taking initiatives for a healthier lifestyle. They actively engaged with technology platforms for self-diagnosis, access to health information, and disease management (Kao & Liebovitz, 2017). The digital, physical, and social ecosystem is integrated to deliver a superior consumer experience on health (Bolton et al., 2018). Consumer behavior and decision-making on healthcare progressed towards self-care and prevention due to the Covid-19 pandemic.

Rise of Digital Healthcare

Accenture 2020 Consumer Research on Digital Health Report from seven countries revealed that consumer concerns over data security and privacy were acting as barriers to adopting digital healthcare devices and applications. However, Covid-19 pandemic led to a surge in the adoption of digital healthcare services such as virtual care and consultation, telemedicine, and mobile applications (Safavi & Kalis, 2020). The consumer adoption of Telehealth in India also gained massive acceleration to mitigate the risk of the spread of the virus during healthcare delivery. India has high teledensity of 90% that ensures connectivity for masses (Bhatia, 2021).

Covid 19 Influence on Digital Healthcare and Consumer Behavior

Glaser et al. (2020) conducted a roundtable discussion with the chief information officers from the leading health systems on the importance of digital healthcare and highlighted that virtual care in the form of telehealth visits witnessed a dramatic rise during the pandemic as patients sought safe options. The video consultations by doctors surged from 2 to 7 percent to 60 percent during the Covid-19 pandemic. The digital contact tracing apps were widely used to check health status and information (Koh, 2020). Digital healthcare emerged as the most viable solution to tackle the medical emergency, surveillance systems, diagnostic, and clinical decision-making services in India (Kapoor et al., 2020). However, the lack of regulations and audits on the quality of applications inhibits its growth and momentum.

Consumer Concerns and Digital Healthcare

Consumers often do not trust the organizations to keep their health information secure in digital. It also creates a distance between care providers and consumers. Digital platforms have to be consumer-centric in their care delivery. Lack of synergy across different digital touchpoints creates confusion on the credibility of information being shared (Swan et al., 2019). There is a vast array of digital healthcare to make choices, and consumers are vulnerable to data breach and secondary use of the health information they share. Their technological concerns comprise of concerns for privacy, ethical considerations, social bias in Artificial Intelligence algorithms (Wykes & Schueller, 2019).

RESEARCH METHODOLOGY

A qualitative research method involving depth interviews and literature review was adopted in this exploratory study. The extant literature in the area of changing consumer behavior towards adoption of digital healthcare due to the Covid-19 pandemic was considered in this study to gain theoretical insights and was sourced from Pub Med, Scopus and ProQuest digital library. Industry reports on Digital Healthcare by World Health Organisation (WHO), Accenture, and McKinsey were accessed for detailed consumer trends analysis.

A convenience sampling technique was used to identify the 15 respondents for the interviews in India. As a selection criterion, it was ensured that the respondent was using at least one digital healthcare-related device or an application or service. Interviews were conducted using a mix of an in-person interview, video calls, and telephonic interviews due to Covid-19 pandemic-related constraints. Qualitative content analysis was performed to analyze the data related to the interview transcripts of the respondents. The data analysis involved understanding and interpretation of the interview transcripts and presenting it in the findings based on different patterns or themes.

DATA ANALYSIS AND FINDINGS

Sample Demographics

In this study total of 15 people had participated, out of which 53% were female respondents. Regarding their age group: 40% of respondents were from above 60 years, the next 40% were from 41-60 years, and the remaining 20% from 21-40 years.

Digital Healthcare Devices/Services/Applications Used by the Respondents

Before the Covid-19 pandemic, most respondents were observed to be habitual with using healthcare-related digital devices and services. Digital devices such as digital thermometers, blood pressure measuring devices, blood sugar measuring devices, hand wearable devices such as smartwatches like Fitbit, along with digital services including telemedicine and teleconsultation, were commonly used by most of the respondents before the pandemic. With the onset of the pandemic, it was observed that various other digital healthcare-related devices, services, and applications got added into the respondent's routine. The new additions in digital healthcare devices included a digital infrared thermometer, oximeter, and glucometer; in digital healthcare services such as teleconsultation with the family doctor and video consultation; and in digital healthcare applications included Aarogya Setu app, Cowin app, Breathe app and Healthify app.

The Facebook communities acted as support groups and provided independent information. The below quote by a young consumer from the interview supports this fact:

“I go to ‘second opinion’ in Facebook for medical advice as after recovering from Covid-19, I wanted to know how much time should I wait to take the vaccination. I always got a prompt response from the Doctors in the group”.

It was clearly observed digital healthcare applications became reliable tools during the Covid-19 pandemic. The below quote of a respondent from the interview supports the popularity of one such digital app:

“We enrolled in the Aarogya Setu app early on to get all information being given by the center and state government. It keeps us informed and gives direction on what actions are essential to take”.

Experience of using Digital Healthcare Devices/Services/Applications

Overall, it was observed that respondents steadily adapted to use digital healthcare-related devices, services, and applications. Most of the respondents admitted that these digital healthcare-related devices, services, and applications were reliable in monitoring their health, such as tracking their daily walking, sleeping, calories burned, ECG, pulse rate, etc. Some of the respondents liked these devices and applications due to their ease of use, convenience, time-saving, and accuracy of results. Some respondents became fans of these devices due to their feature of immediate and quick display of results. Few respondents also found these services to be cost-effective. One such quote from the interview is as follows:

“The cost has reduced as Doctors no longer ask for a battery of tests. Instead, they focus on symptoms and advise”.

Concerns and Challenges of using Digital Healthcare Devices/Services/Applications

The market has a profusion of digital healthcare tools, but only a few are evidence-based quality applications. They have limited ability to assist in medical diagnosis and treatment. The challenges included installation and setting-up issues, anxiety towards digital technology, unable to understand all the features in the device or app, re-setting issues when the same devices were to be used from one person to another, and lack of awareness. It was observed that some of the respondents, specifically the above 60 years age group, did not get stuck up with these challenges and seek help from their younger family members. The quotes from the interviews supporting this fact are as under:

“We seek help from young family members to teach us and do troubleshooting”.

Some respondents had concerns about the accuracy of results when using teleconsultation and video consultation over an in-person visit to the doctor. Few respondents expressed their distrust towards using video consultation and preferred home remedies. Very few respondents admitted concerns related to safety and privacy for using digital healthcare-related devices, services, and applications. They were already feeling isolated, distanced, and vulnerable and relied on digital solutions to support them in remaining safe from infection and managing their health.

MANAGERIAL IMPLICATIONS AND CONCLUSION

This study reviews prevailing research related to the influence of the Covid-19 pandemic on consumers related to digital health care solutions. As a result, the present study highlights a sense of concern the respondents possess for their safety, ease of use, convenience, and result accuracy while using digital healthcare solutions. The demand for medical devices such as blood pressure monitoring device, glucometer, oximeter, digital thermometers, smartwatches has increased enormously along with telemedicine/teleconsulting/video consulting services during the Pandemic in India. This paves the way for the medical device marketeers/service managers/pharmaceutical companies/hospital administrators to understand the strategy for scaling their business by providing prompt services to the customers/patients/users of the devices. The Indian consumers have adopted digital healthcare transformation to improve convenience, quality, and accessibility.

India is experiencing exponential growth in the adoption of digital healthcare technologies. The consumers had to face social distancing, isolation, and lockdown in India due to Covid -19 pandemic. Healthcare providers and consumers looked for digital alternatives to improve access and provide quality care. However, the regulatory standard for digital health and protection of privacy has yet to be framed. The challenges remain as consumers would prefer in-person consultation if assured of safety from Covid-19 infection. The development of Smart Health solutions could provide a swift personalized diagnosis in real-time. In fact, digital healthcare applications, aka health and fitness apps, became very popular during the pandemic. They improved consumer engagement by providing expert advice and information. Digital healthcare is emerging as an empowering tool to promote the health and wellbeing of Indian consumers.

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