

INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE
04th International Conference on Marketing, Technology & Society 2020



Adoption of E-Healthcare Services: Consumers' Preferences and Problems

Dr Sridevi K B¹

Abstract

Indian Healthcare sector is recognized as one of the most potentially developing sector. The sector based research has identified the potential and scope of this sector to reach USD 280 Billion by this year 2020, by achieving a CAGR of 22.87 per cent. Indian healthcare market is forecasted to be one of the predominant players in the global level. United Nation has undergone a research and inferred that India is going to be emerged as the most populated country by reaching 1.45 billion by the year 2028. The drastic growth of population, newly evolving health issues, and ever growing customer expectations will result in significant challenges, such as extensive demand - supply gap in healthcare services and also the delivery of 'Quality Healthcare'. As a result, a paradigm shift is the need of the hour in the health sector for redesigning the policies, tools, techniques and approaches to ensure a quality health care. The implementation of e-healthcare services is gradually penetrating in all the domains of healthcare, in order to fulfill the changing phases of Indian consumers' preferences and life style changes. Thus the researcher has taken an endeavor to analyze the consumers' preferences and problems in adopting e-healthcare services in India.

Keywords: e-healthcare services, quality healthcare, consumers' preferences, consumers' problems, demand – supply gap

1. Introduction

Indian Healthcare sector is recognized as one of the most potentially developing sector. The sector based research has identified the potential and scope of this sector to reach USD 280 Billion by this year 2020, by achieving a CAGR of 22.87 per cent. Indian healthcare market is forecasted to be one of the predominant players in the global level. United Nation has undergone a research and inferred that India is going to be emerged as the most populated country by reaching 1.45 billion by the year 2028. The drastic growth of population, newly evolving health issues, and ever growing customer expectations will result in significant challenges, such as extensive demand - supply gap in healthcare services and also the delivery of 'Quality Healthcare'. As a result, a paradigm shift is the need of the hour in the health sector for redesigning the policies, tools, techniques and approaches to ensure a quality health care.

The introduction of e-healthcare services is one such paradigm shift which is facilitating the healthcare service providers to match with the growing demand in terms of quality and quantity of services. The implementation of e-healthcare services is gradually penetrating in all the domains of healthcare, in order to fulfill the changing phases of Indian consumers' preferences and life style changes.

E-healthcare services include a wide range of services in the virtual mode without even meeting the doctor and get examined. The most included services are such as:

- First consultation
- Second / Subsequent opinion
- Online ordering of lab tests
- Availing homecare services such as doctors, nursing and physiotherapist
- Placing orders for medicines and medical devices such as glucometers/ BP machine
- Fixing up appointments for surgery either within the country or overseas

¹ Professor-School of Management, Sri Krishna College of Engineering and Technology, Coimbatore
sridevikb@skcet.ac.in

Thus the researcher has taken an endeavor to analyze the consumers' preferences and problems in adopting e-healthcare services in India.

1.1. Scope of the study

The researcher has studied about the implementation of e-healthcare services in Indian context. The consumers' preferences towards adoption of e-healthcare services are focused in the study in order to gain insights on the existing consumers' perception towards the process of adopting e-healthcare services. The study has also included the consumers' problems towards e-healthcare services adoption.

1.2. Objectives of the study

1. To evaluate the consumers' preferences towards the adoption of e-healthcare services.
2. To examine the consumers' problems in adopting e-healthcare services.
3. To analyze the consumers' satisfaction towards e-healthcare services.
4. To provide suggestions to the policy makers for the successful implementation of e-healthcare services.

2. Literature Review & Hypotheses:

Gloria L. Krahn, Laura Hammond, and Anne Turner (2006) studied about the recent conceptualizations that differentiate health from disability; it consolidates the literatures from the year 1999 to 2005 in the perspectives of the force of disparities, reviews intervention problems and ensuring practices, and offers suggestions for further research. The integration and implementation of ICT in health care is found as poor and commonly failure by Hannele Hypponen (2007). He has analyzed the challenges in the development e-healthcare services. Manolis Tsiknakis and Angelina Kouroubali (2009) presented an application 'Fit between three components such as Individuals, Task and Technology' and it highlights the optimal interface between all the three components. Health literacy and quality have been emphasized by Graham D. Bodie and Mohan Jyoti Dutta (2008) in the context of American culture and suggested as important factors while designing e-healthcare services. Such disparities to be give due importance by the e-healthcare service developers, in order to successfully implement the same, Ekaterina Vasilyeva, Mykola Pechenizkiy, Seppo Puuronen et al (2010). Shilpa Srivastava et al (2015) have presented the scope for the research in the field of e-healthcare services. They have highlighted the medical benefits of e-healthcare services provided beyond national boundaries and that too in a cost effective method. Sojib Bin Zaman et al., (2017) insisted on the strategic approaches to be followed for the successful planning to evaluation stage of e-healthcare services. They analyzed the implications of e-healthcare services and also the further scope prevailing in this domain. Line Lundvoll Warth and Kari Dyb (2019) have studied the e-health initiatives in the perspective of the relationship between e-healthcare project and the core institutional practices. The failure of such relationship will lead to serious problems in the implementation of e-healthcare and by avoiding such flaws; the facilitators could be identified for the successful implementation, Bjorn Schreiweis et al (2019). Hence the research has proposed the following hypothesis to understand the consumers' preferences and problems in using e-healthcare services.

H1: There is no association between the age of the consumers and their preference for e-healthcare services.

H2: There is no association between the gender of the consumers and their preference for e-healthcare services.

H3: There is no association between the Marital status of the consumers and their preference for e-healthcare services.

H4: There is no association between the qualification of the consumers and their preference for e-healthcare services.

H5: There is no relationship between the monthly income of the consumers and their preference for e-healthcare services.

H6: There are no differences between the consumers' expectations and their satisfactions towards e-healthcare services

3. Research Methodology

3.1 Method

A descriptive study has been conducted to analyze the preferences and problems faced by the consumers in adopting e-healthcare services. The study has considered the demographic factors of the respondents as the independent variables. The respondents' preferences, problems, expectations and satisfaction towards e-healthcare services are considered as dependent variables.

3.2 Study participants and procedure

The study has included 383 respondents based on stratified random sampling method. The strata are the government hospitals' patients and private hospitals' patients. 195 customers (patients) who visit Government hospitals and 188 customers (patients) who visit Private hospitals have been included in the study. The data is collected through survey method. The questionnaire was constructed for collecting primary data from the consumers regarding their demographic factors, preference towards e-healthcare services, problems faced in adopting e-healthcare services and their expectations and satisfaction towards e-healthcare services.

3.3 Independent Variables

The study has considered the demographic factors of the respondents such as age, gender, Marital status, educational qualification and monthly income as the independent variables.

3.4 Dependent Variables

The respondents' preferences, problems, expectations and satisfaction towards e-healthcare services are considered as dependent variables. The respondents' preferences towards e-healthcare services are measured by using a 5-point Likert scale ranging from 1 (highly unimportant) to 5 (highly important). The respondents' problems experienced towards e-healthcare services references are measured by using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The respondents' expectations towards e-healthcare services are measured by using a 5-point Likert scale ranging from 1 (highly unimportant) to 5 (highly important). The respondents' satisfactions towards e-healthcare services are measured by using a 5-point Likert scale ranging from 1 (highly dissatisfied) to 5 (highly satisfied).

4. Conclusion

Indian consumers are roughly aware of the e-healthcare services, whereas thorough awareness level needs to be created. The fullest range of e-healthcare services offered and its benefits could be oriented to boost up their preferences towards e-healthcare services.

The penetration of internet is at drastic pace and this could be integrated with the healthcare services by the providers to facilitate the preferential rate of consumers towards e-healthcare services.

Out of the respondents, one-fourth proportion of them was found to be interested in adopting the online healthcare services. The less exposure restricts their adoption. This can be eradicated with the continuous negotiations over the beneficial aspects of online healthcare services will improve its usage.

Reliability is an extra tool that will boost up the process. The safety measures of high authority can improvise the utility of the service.

The integral programs over the promotion of the system and the online medical applications will enhance the progress.

The simplified methodologies in using the technique will equip the user for easy-handling.

5. References

1. Krahn, G. L., Hammond, L., & Turner, A. (2006). A cascade of disparities: Health and health care access for people with intellectual disabilities. *Mental Retardation and Developmental Disabilities Research Review*, 12(2), 70 - 82.
2. Hannele Hypponen (2007), eHealth services and technology: challenges for co-development, *Human Development*, 3(2), 188-213

-
3. M Tsiknakis, A Kouroubali (2009), Organizational factors affecting successful adoption of innovative eHealth services: A case study employing the FITT framework, *International journal of medical informatics* 78 (1), 39-52
 4. Graham D. Bodie, Mohan Jyoti Dutta (2008) Understanding Health Literacy for Strategic Health Marketing: eHealth Literacy, Health Disparities, and the Digital Divide, *Health Marketing Quarterly*, 175-203
 5. Ekaterina Vasilyeva, Mykola Pechenizkiy, Aleksandra Tesanovic, Evgeny Knutov, Sicco Verwer, Paul De Bra (2010), Towards EDM Framework for Personalization of Information Services in RPM Systems. *EDM* 331-332
 6. Shilpa Srivastava, Millie Pant, Ajith Abraham, and Namrata Agrawal (2015), The Technological Growth in eHealth Services, *Computational and Mathematical Methods in Medicine*, 1-18
 7. Sojib Bin Zaman Naznin Hossain Shad Ahammed Zubair Ahmed (2017), Contexts and Opportunities of e-Health Technology in Medical Care, *The Journal of Medical Research and Innovation (JMRI)*, Vol 1 No 2
 8. Warth, L.L., Dyb, K. (2019), eHealth initiatives; the relationship between project work and institutional practice, *BMC Health Services*, 520
 9. B Schreiweis, M Pobiruchin, V Strotbaum, J Suleder, M Wiesner, B Bergh (2019), Barriers and Facilitators to the Implementation of eHealth Services: Systematic Literature Analysis, *Journal of Medical Internet Research* 21 (11), e14197