





# INTERNATIONAL JOURNAL OF BUSINESS, MANAGEMENT

## AND ALLIED SCIENCES (IJBMAS)

A Peer Reviewed International Research Journal

## A STUDY OF ATTITUDE OF PATIENTS TOWARDS EMERGING TRENDS IN ICT BASED HEALTH CARE SERVICES

## Dr. GAGANDEEP KAUR<sup>1</sup>, Dr. MONIKA PATHAK<sup>2</sup>

1,2 Assistant Professor, Multani Mal Modi College, Patiala



## ABSTRACT

Information communication advancement has greatly influenced all sectors of society and health care is not an exception. The health sector has drastically changed and emerged as high tech system with capacity to serve more efficiently and conveniently.

The present study aims to analyse various initiatives through information communication technology in the medical health care. It also addresses how patient's attitude changes towards medical health care services. A survey was also conducted at city Patiala to access the attitude of patient's towards information available online about health care services. The study was conducted on patients who have accessed health care services online. Various questions were asked in the questionnaire to access the attitude of patients towards health care services which are being used by them. The study concluded that people nowadays are more aware about online services and have shown positive attitude towards health care through ICT.

Keyword: ICT, Health care, e health, Tele medicine.

## INTRODUCTION

Information and communication technologies have a strong impact on health care sector. It facilitates communication and coordination among health workers. It also reinforced the ability to monitor the relative frequency of public health threats and respond in the effective manner within a short span of time. The demand of health care system on the basis of complexity of the choice of technologies suggests that the best method is provide health care is to innovate, test and improve new technologies in those areas of health care where there is a sound belief that information and communication technologies can be effectively and efficiently used. Few emerging trends have been identified in this paper that suggest new opportunities in healthcare sector which includes wireless applications, increased use of mobile phones, radio, digital video and combinations of technology working together. To study the attitude of the patients, a survey was conducted in Patiala city. The respondents of the survey were those patients who have availed ICT based services.

There are various advanced technologies present in the health care sector for better information communication. As the opportunities in the health care sector are changing every day, so the technologies are also changing rapidly to meet these opportunities. The most difficult task in the



implementing these advanced technologies is the complexity of putting them into practice and side by side assure that the benefits are outspread to the patients, health care workers, citizens and health system.

#### SURVEY TO ACCESS ATTITUDE TOWARDS ICT BASED HEALTH SERVICES

Information and communication technology has influenced our life and also changes our attitude towards health care services too. Now patients want to access various web services and mobile based services in spite of traditional health care services. They don't want to stand in long queue to take appointment of doctor or to make payments. They want more and more services online as these services are more convenient and time saving. In order to access the attitude of the generic public of city Patiala, a survey was conducted on 150 patients who have access information communication method for treatment. Out of 150, 130 were male respondents and only 20 were female respondents. As per education background is concern, 95 respondents were graduate and 14 were post graduate and higher degree, 16 were only higher secondary, rest of the 25 were below matriculation level. As the selective sampling was performed, only those respondents were considered who have some experience with ICT based health care services.

The various questions are raised in the questionnaire to access the attitude of the patients. The following are few questions which were framed to access the attitude. Linked scale of five levels was used to record the responses which is stated as:5-Strongly Agree(SA), 4-Agree(A), 3-Neither agree nor disagree(NAND), 2-Disagree(DA),1-Strongly disagree(SDA)

	Statement	SA(5)	A(4)	NAND( 3)	DA(2)	SD(1)
1	Do you agree that online web based appointment system is a good option for seeking appointment from Doctor?	142	2	2	2	2
		94.67%	1.33 %	1.33 %	1.33%	1.33%
2	Do you agree that getting web based information regarding health care is	95	45	1	1	6
	good to get awareness about the various diseases?	64.19%	30.4%	0.67%	0.68%	4.05%
3	Do you think that web based payment system for health care is safe and all should use this method?	112	22	10	3	3
		74.67%	14.7%	6.66%	2%	2%
4	Do you think that mobile based application is a reliable media for getting timely information from the hospitals(such as appointment, reports, information about holidays in the hospitals)	146	2	2	0	0
		97.33%	1.33%	1.33%	0%	0%
5	Do you agree that that ICT based	89	30	12	12	2
	application not only save time and money but also help to serve people at large?	59.33%	20%	8%	8%	1.33%
6	I feel blogs and social media sites are	115	30	2	3	0
	useful to spread awareness about various health issues.	76.66%	20%	1.33%	2%	0%
7	I believe that healthcare services through ICT can improve the overall	85	55	5	2	3
	quality of healthcare.	56.66%	36.7%	3.33%	1.335	2%
8	As per my experience, I always find	34	17	5	50	44
	updated information on official web site of healthcare institutes.	22.66%	11.3%	3.33%	33.3%	29.33%

Table 1: Response of few Questions being asked during the survey



Dr. GAGANDEEP KAUR & MONIKA PATHAK ISSN:2349-4638

Vol.5. Issue.1.2018 (Jan-Mar)

9	I feel video conferencing should be provided at the rural side hospitals so that patients can seek treatment from experts residing in multi specialist hospitals	120	24	5	1	0
		80%	16%	3.33%	0.6%	0%
10	I like to use mobile based application rather than web based healthcare services.	123	22	5	0	0
		82%	14.6%	3.33%	0%	0%

It has been drawn from the data collected in the survey, that, majority of respondent gave their opinion in the favor of the ICT based applications. The responses are listed in the table. It also concluded from the study that patients are not so happy about the availability of current contents in the official sites of the hospitals, as only 22.66% gave positive response on availability of current information about the official sites. Whereas 80% strongly and 16% were agree that hospitals at rural placed must have provision to have video conferencing with expert at multi-speciality hospitals for treatment of rural people. The overall response regarding ICT based service is seemed to be more positive.

### ISSUES INVOVLED IN ACCEPTING ICT IN HEALTH CARE SECTOR

There are number of issues involved in accepting the information and communication technologies in health care sector which are as follows:

- > To what degree the problem-oriented and interdisciplinary technical work is required and implemented to address the complex problems?
- > Sometimes vision, aim, action plans, their outcomes and profits were not clearly defined.
- > The actions led by the government, public and private sectors are not successfully working to speed up the development and use of information and communication technologies in health care sector.
- Many times a regulatory and legal framework and data related standards are not found in one place.
- There are lesser number of options exist which ensures the continuity of ICT projects in terms of finance and partnerships between public and private sector.

## CONCLUSION

ICT has a strong impact on health care sector. Various emerging trends such as wireless access, telephony, radio, digital video etc were explained which provides new opportunities in health care sector. A survey was conducted at Patiala city to study the attitude of the patients. The respondents of the survey were those patients who have availed ICT based services. The survey helped to understand attitude of the patients towards the ICT based health care services. Issues involved in accepting ICT in health care sector were also discussed. The overall response regarding ICT based services seemed to be more positive in the survey. The patients were seen enthusiastic towards various services and also gave suggestions to improve the services. The majority of the respondents was concerned about the updated information on the site and demanded the use of mobile based application in health care.

## REFERENCES

- [1]. Ali EE, Chew L, Yap KY. Evolution and current status of mhealth research: a systematic review. BMJ Innovations. 2016 Jan 5:bmjinnov-2015.
- [2]. Berman P, Ahuja R, Bhandari L. The impoverishing effect of healthcare payments in India: new methodology and findings. Economic and Political Weekly. 2010 Apr 17:65-71.
- [3]. Das J, Holla A, Das V, Mohanan M, Tabak D, Chan B. In urban and rural India, a standardized patient study showed low levels of provider training and huge quality gaps. Health affairs. 2012 Dec 1;31(12):2774-84.
- [4]. Gangolli LV, Duggal R, Shukla A. Review of healthcare in India. Mumbai: Centre for Enquiry into Health and Allied Themes. 2005 Jul 21.



#### Dr. GAGANDEEP KAUR & MONIKA PATHAK ISSN:2349-4638

[5].	Islam SR, Kwak D, Kabir MH, Hossain M, Kwak KS. The internet of things for health care: a
	comprehensive survey. IEEE Access. 2015;3:678-708.

- [6]. Kaur G, Sharma D, Kaur V. Telemedicine in transient phase: emergence of M-health care services. Indian Journal of Science and Technology. 2016 May 4;9(15).
- [7]. Kher RK. Mobile and E-Healthcare: Recent Trends and Future Directions. Journal of Health & Medical Economics. 2016 Jul 10;2(3).
- [8]. Mathew D. Information technology and public health management of disasters a model for South Asian countries. Prehospital and disaster medicine. 2005 Feb;20(1):54-60.
- [9]. Rao SS. Bridging digital divide: Efforts in India. Telematics and informatics. 2005 Nov 1;22(4):361-75.
- [10]. Sabanayagam C, Yip W, Ting DS, Tan G, Wong TY. Ten emerging trends in the epidemiology of diabetic retinopathy. Ophthalmic epidemiology. 2016 Jul 3;23(4):209-22.
- [11]. Singh R. A proposal for mobile E-Care health service system using IOT for Indian scenario. Journal of Network Communications and Emerging Technologies. 2016 Jan;6(1).
- [12]. Sood SP, Bhatia JS. Development of telemedicine technology in India: "Sanjeevani"-An integrated telemedicine application. Journal of postgraduate medicine. 2005 Oct 1;51(4):308.