International Journal of Home Science 2018; 4(2): 288-291

International Journal of Home Science

**ISSN:** 2395-7476
IJHS 2018; 4(2): 288-291

www.homesciencejournal.com
Received: 19-03-2018
Accepted: 20-04-2018

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# Telemedicine and health seeking behavior of people in a rural area: An assessment of 'Sehat' initiative

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**Abstract**
This paper discusses about the health seeking behavior of people in villages of Ghaziabad district of Uttar Pradesh. The study examined the health seeking practices, perceptions and attitude of people in identified villages. It documented the strengths, weaknesses, opportunities and challenges of 'Sehat' scheme. The study was carried out in four villages namely Sultanpur, Loni Dehat, Bhowapur and Razapur. 'Sehat' scheme was majorly used by youth and male population of the villages who come to CSC (Common Service Centers) to avail other services than 'Sehat'. VLEs played a vital role in penetrating the use of telemedicine among the youth of the villages. But there were families and residents of the villages who did not find CSC, specifically telemedicine reliable. Hence, they remained the non-users of the scheme. To get in depth understanding of the scheme, SWOC analysis was conducted. Strengths that immerged from the study were that 'Sehat' saves user's time, energy and money, Weaknesses were lack of awareness among non-users. Opportunities were better infrastructural facilities for better access to doctors and creating awareness among non-users, and challenges that were identified were defying the notions and myths around the scheme created by non-users and convincing them to become the beneficiary of the initiative.

**Keywords:** Telemedicine, Ehealth, Mhealth, 'Sehat' scheme, common service centers, healthcare, socio-cultural practices

## Introduction
Telemedicine, a term coined in the 1970s, which literally means "healing at a distance" (Strehle & Shabde, 2006) [4], signifies the use of ICT to improve patient outcomes by increasing access to care and medical information. According to WHO, 2010 [7], telemedicine is "The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities". Telemedicine applications can be classified into two basic types, according to the timing of the information transmitted and the interaction between the individuals involved—be it health professional-to-health professional or health professional-to-patient (Craig & Patterson, 2005) [1]. According to WHO (2008), 65% of India's population does not have access to modern healthcare. Since 80% of out-patient care and 60% of in hospital care occurs at private facilities in India, households are exposed to a private-sector market to buy drugs. (Public health Foundation of India, 2012). According to NSO estimates, up to 79% of healthcare expenses in rural areas are due to the cost of medicines. This problem gets aggravated further as almost 80% of expenditure on health care is out-of pocket to the patients. Thus, access to low-priced generic drugs is very critical in ensuring healthcare at affordable prices.

'Sehat' is one of the telemedicine initiatives taken by the Ministry of Communication and Information Technology under Digital India Programme in 2015 to reach rural population of India. Quality and affordable health care is one of the emerging needs for citizen in Rural Areas. Common Service Centres (CSC) is a strategic cornerstone of the National e-Governance Plan (NeGP), approved by the government in May 2006 (Redefining Governance in India though CSC). CSCs and Apollo hospital have come together to address this issue and design a workable solution.

CSC has been delivering tele-consultation services with support from Apollo and Medanta hospital in some areas and now with this initiative the tele consultation services are being extended to 60,000 CSCs across the country (Department of Electronics and Information Technology, 2015) [2]. A Common Service Centre is operated by a VLE (Village Level Entrepreneur), who manages the CSCs, deliver and facilitate telemedicine service at their centers. VLEs are selected based on the criteria laid by the government and most eligible person who is the resident of same village is selected as the VLE. (Sehat Booklet, 2015) [2]

**Rationale**

The study was based on intention to conduct the SWOC analysis of this telemedicine initiative 'Sehat'. The scheme created a conducive environment for the private sector and NGOs to play an active role in implementation of the CSC scheme, thereby becoming a partner of the government in development of rural India (Department of Electronics and Information Technology, 2015) [2]. Through assessing strengths, weaknesses, opportunities and threats, study aimed to assess the role of 'Sehat' scheme and examined the usage pattern of the family members and gender dynamics if any in accessing the health services. The study allowed us to draw inference on the use, penetration and acceptance of technology for healthcare services in remote areas.

**Methodology**

The study aimed at gaining information about health seeking behaviour of people in rural area. The general objective was to assess the influence of 'Sehat' initiative on the health seeking behaviour of the people in the identified villages. The specific objectives of the study were to examine the kind of health services people generally seek from the CSC (Common Service Centre) made available under the 'Sehat' initiative, to understand the motivation of the users of the health service available and their satisfaction, to ascertain the reasons for not using the health services of CSCs (Common Service Centres) by non-users, to gain the insights into the operational dimensions of this initiative using stakeholder's analysis, and to assess the strengths, weaknesses, opportunities and threats of the recently initiated telemedicine scheme 'Sehat'. Rural area of Ghaziabad district in Uttar Pradesh state was identified as locale of the research. Muradnagar, Loni Bhojpur and Razapur are the four blocks from which one village from each block was selected. The sampling method used was purposive non-probability sampling. To research about health seeking behaviour, 48 users and 48 non-users of 'Sehat' Scheme were interviewed. In addition four VLEs from the four centres, one from each village was included in the study to get the insights of the operational dimensions.

**Findings and Conclusion**

**Literacy and Occupation of respondents:** The data collected provided the sharp contrast between the literacy rate of users and non users of 'Sehat' scheme. According to the literacy level of users and non-users it could be interpreted that most of the users had higher educational level than the non-users. So literacy can be considered an important aspect of using e-health as most of the users were young and literate, they were more comfortable in using the service provided at CSC while most of the non-users had only completed primary education or secondary education, they were not so comfortable in using the technology provided by the Common Service Centers.

**Occupation of the respondents:** Amongst the users of the 'Sehat' scheme, most of the respondents were students who came in Common Service Center to avail different services like skill building and computer classes, while others were farmers, shop keepers, government employee or worked in private sector. In comparison to that, non-users are quite evenly spread among all categories of the occupation provided. It could be interpreted that most of the students had become users of the 'Sehat' scheme because they visited to the CSC for various reasons and 'Sehat' scheme was one of them. It could be concluded that respondents constituted of heterogeneous group in terms of age, sex, caste and occupation. The main trend which was shown was that users of the 'Sehat' scheme were majorly youth population of the villages and students who visited centers for skill building and computer learning. While the non-users constituted of older people of the villages mainly 36 years and above.

**Purpose of using 'Sehat' scheme by users:** Through data it could be inferred that all respondents were using 'Sehat' scheme for treatent of general illness only. None of the respondents were using scheme for serious illness or emergency or accidents. It could be said that people relied on face to face appointment for cases of serious illness and accidents and prefered to go to the hospital instead. As people were not availing the health services of 'Sehat' scheme for serious illness or in times of injury or accident, they were not referred to any hospital. The reference services of 'Sehat' scheme was not availed by the people of rural area.

**Purpose for not using 'Sehat' scheme by non-users:** Most of the people said they didn't use the service as doctors were not physically available, and they could not rely upon virtual conversations. While other respondents constituting of 27.08% said that they did not feel comfortable while sharing information through computers. Other reasons for not using the scheme which were answered by the respondents were that they were unable to understand the technology and poor infrastructures of internet and electricity. None of the respondents said that they did not find VLEs non-supportive.

In the study, one of the important stakeholder in the 'Sehat' scheme other than users and non-users were the VLEs (Village Level Entrepreneurs) of the Common Service Center. The VLEs were considered as important as they acted as a bridge between the scheme formulators and scheme users. They were the facilitating agent without whom execution of the scheme on ground level becomes difficult. To understand the operational dimensions and working of the scheme, VLEs were identified as important stakeholder of the scheme.

According to the VLEs of the Common Service Centers people used the 'Sehat' scheme because it overcame the distance between the doctors and patients. It provided good healthcare services in the same village. Telemedicine scheme 'Sehat' had really impacted the lives of the people in the village as they could seek better and quality health services without going to doctors in reality. It not only saved time and energy but also it was financially viable for people who were dependent on the agrarian economy.

According to the VLE of Sultanpur village, he has never faced any problem in contacting doctors under 'Sehat' scheme, other VLEs also agreed to the statement that they never faced any problem in contacting any doctor under 'Sehat' scheme. According to the VLEs, Common Service Centers were made to make facilities and services easily available and there was no group and person who was

deprived in availing these services including women, girls, old people and disabled people. Contrary to this the VLE of village Loni Dehat said that most of the girls and women and old people came to avail CSC centre if any male member of the family was associated to the CSC for availing any service. And mostly male members of the village came to avail these services.

**SWOC Analysis of 'Sehat' scheme**

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| **STRENGHTS**<br>• Ease to access doctors<br>• Save money<br>• Save time<br>• Save energy | **WEAKNESSES**<br>• Difficulty in using technology<br>• Language barrier between users and doctors<br>• Shyness in sharing information through virtual doctors. |
| **OPPORTUNITIES**<br>• Better internet speed<br>• Better availability of electricity<br>• Creating awareness among non-users. | **CHALLENGES**<br>• Lack of awareness<br>• Lack of faith and reliability on telemedicine<br>• Increasing usage of other private and government health services. |

**Fig 1:** SWOC Analysis of 'Sehat' Scheme

**Strengths:** Amongst of all 48 respondents, 31.25% respondents said they found 'Sehat' scheme an easy way to access the doctors while other majority said it was a good way to save money. Other respondents found that this scheme was a reliable way to get prescription from a qualified doctor. In particular, telemedicine can aid communities traditionally underserved – those in remote or rural areas with few health services and staff – because it overcomes distance and time barriers between health-care providers and patients (Craig & Patterson, 2005) [1].

**Weaknesses:** Majorly the reason for facing difficulty in using the scheme was when doctors did not understand their language and when they had a very personal problem which they did not find easy to share it through virtual conversation.

**Opportunities:** In the study the majority of respondents said that better availability of electricity could be a good suggestion to improve 'Sehat' scheme while other said that better internet speed and increasing user's number through awareness generation could improve the 'Sehat' scheme.

**Challenges:** Users of the 'Sehat' scheme were also availing health services from private centers and hospitals which again became a threat to the 'Sehat' scheme users as if affect the number of people using the scheme. Users used private hospital services as unlike 'Sehat' scheme doctors were available to consult in evenings and late nights. As one need to take an appointment and wait till the doctor was available in telemedicine scheme, the waiting time for doctors was less in private hospitals. Also if one had some serious problem, respondents mostly opt for private or government hospital nearby.

With the data and observations it was concluded that the scheme was majorly penetrating service among the youth population of the villages. The youth was acting as catalyst and helping in diffusion of scheme to other age groups and section of the society. Poor infrastructures, lack of electricity and internet were identified as major push factors of dissatisfaction among users while non-users preferred to rely upon other government and private health services as they did not find 'Sehat' scheme reliable.

**Summary and Conclusion**

**Profile of the respondents:** The rate of involvement, enthusiasm and interest fop coming and accessing the 'Sehat' scheme was maximum among youth. The male population of the villages is majorly involved in availing the scheme and female users came from the families of male users majorly.

**Frequency of 'Sehat' usage:** Among the CSC visitors, very few people came for availing 'Sehat' scheme. Majorly youth of the villages visited centers for skill building and computer learning and with the help of VLEs they became the users of the 'Sehat' scheme and helped diffusing the scheme in the entire village among all age groups.

**Motivations of using 'Sehat' scheme:** User's motivation to use the 'Sehat' scheme was helpful VLEs who helped them in orientation with the scheme and technology. A very small ratio of respondent said they were guided by the other workers of the CSC than VLEs. Being the operation head of Common service centre, VLEs were responsible for guiding the people who came to avail services. The study also helped to understand how well the VLEs were performing in facilitating the services. Some respondents found 'Sehat' scheme an easy way to access the doctors while other majority found that it was a good way to save money. Other respondents found that this scheme was a reliable way to get prescription from a qualified doctor.

**Reasons for dissatisfaction among users:** Most of the respondents were satisfied while a few respondents were not satisfied using the 'Sehat' scheme. The common reasons for the dissatisfaction of the 'Sehat' schme among users were lack of electricity and slow internet. Others didn't opt for telemedicine, when they had some serious illness, as it couldn't provide immediate relief.

**Reasons for not using 'Sehat' scheme by non-users:** Most of the respondents didn't use the service as doctors were not physically available, and they could not rely upon virtual conversations. Remaining respondents did not feel comfortable while sharing information through computers. Other reasons for not using the scheme which were answered by the respondents were that they were unable to understand

the technology and poor infrastructures of internet and electricity. None of the respondents said that they did not find VLEs non-supportive.

ICTs are recognized as a catalyst for development but in reality there is a deep digital divide across urban and rural regions. Especially tribal and rural are cut off and deprived from these catalysts for development. Government systems though well intended are not able to reach to the people living in the core rural areas. Government agencies are not able to meet the specific needs and requirements of the rural areas and therefore their well-intended programs are not necessarily accessible by them. To bridge the gap of accessibility ICTs come into play. 'Sehat' is a telemedicine scheme which was launched by Ministry of Communication and Information Technology in 2015. To provide healthcare facilities in rural areas, the government launched a telemedicine initiative in collaboration with Apollo Hospitals BSE under which people can consult doctors through video link. As part of the service named 'Sehat', people in rural areas can consult doctors online and also order generic drugs. This initiative of 'Sehat' connects the largest population of our country on a common network to avail telehealth services. 'Sehat' means Social Endeavor for Heath and Telemedicine.

This research helped in understanding the impact of 'Sehat' on health seeking behavior of people in rural areas. It was found that youth population was the focal point of 'Sehat' scheme who are availing the scheme in majority. They are acting as catalyst and diffusing the scheme among other age groups and sections of the society. It was found that there was a gender differential in access and use of the scheme. Female users are majorly those who are from the families of male users. However, easy accessibility and availability of services has helped in the overall better health seeking behavior in the rural area of Ghaziabad. But for deeper impact and sustained model of growth it is important to address these challenges in future programme planning.

**Some Suggestions and Recommendations**

- To make a significant impact on the overall population and deeper penetration of scheme in remote rural areas, opportunities and challenges of the scheme are important aspects that need to be addressed in future programme planning.
- This initiative is still at an informal level could reflect the fact that to be technically feasible they must be scaled to parallel the available infrastructure and ICT capacity.
- To create awareness among non-users and increase the number of beneficiaries VLEs should start awareness campaign and start dialogue in community and panchayat meetings. Involvement of Ministry of Panchayat Raj and Ministry of MSMI in enhancing ownership of CSCs among panchayats.

**References**


1. Craig J, Patterson V. Introduction to the practice of telemedicine. Journal of Telemedicine and Telecare. 2005; 11(1):3-9.
2. Department of Electronics and Information Technology. *SEHAT*- Social Endeavour for Healthcare and Telemedicine A unique initiative for rural care, 2015. retrieved from https://www.csc.gov.in/images/Sehat_Booklet_2015.pdf
3. Department of Electronics and Information Technology. Redefining Governance in India though CSC retrieved from https://www.csc.gov.in/images/csc_brochure_new.pdf
4. Strehle EM, Shabde N. One hundred years of telemedicine: does this new technology have a place in paediatrics? Archives of Disease in Childhood, 2006; 91(12):956-959.
5. Stutchfield BM, Jagilly R, Tulloh BR. Second opinions in remote surgical practice using email and digital photography. ANZ Journal of Surgery. 2007; 77(11):1009-1012.
6. WHO. *A* health telematics policy in support of WHO's Health-For-All strategy for global health development: report of the WHO group consultation on health telematics, 11–16 December, Geneva, 1997. Geneva, World Health Organization, 1998.
7. World Health Organisation. Telemedicine Opportunities and developments in Member States. retrieved from http://www.who.int/goe/publications/goe_telemedicine_2010.pdf, 2010
8. http://wforc.in/: last accessed 21st march, 2018
9. http://www.webmd.com (The website provides the opportunity to post questions in an online discussion forum and the consultants affiliated with the website will reply): last accessed 8th February, 2018
10. http://www.who.int/goe/publications/goe_telemedicine_2010.pdf: last accessed 15th March, 2018
11. Indian Central Bureau of Health Intelligence. 2007. Policy Reform Options Database. Available at http://www.cbhi-hsprod.nic.in/searnum.asp: last accessed on 2nd April, 2018