

Teleconsultation Services in Dermatology During Covid-19 Era: Patient's Perspective

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Abstract

Background: Because of lockdown during Covid-19 era, the health care delivery system was shaken. In order to follow the norm of social distancing and to ensure proper healthcare delivery, teleconsultation services gained popularity. With widespread accessibility to smartphones and computers, healthcare services are literally just a touch away. During Covid-19 pandemic, as the daily outpatient services were reduced, a quite high proportion of patients had opted for teleconsultation services. Also, teleconsultation services provided advantage of zero social contact, easy accessibility and no risk of hospital acquired infections. This observational study was conducted to know the patient's perspective regarding how they rate teleconsultation in relation to physical consultations.

Objective: To study the patient's perspective regarding teleconsultation services in dermatology during Covid-19 era.

Methods: 100 patients willing to give consent to get included in the study were selected for the study. One of the prescribed questionnaires depending on whether they have used teleconsultation service or not was filled. The result was statistically analysed and compiled.

Results: Out of 100 enrolled patients, only 15 (15%) patients had used teleconsultation services in the past. The most important reasons quoted for preferring teleconsultation included easy accessibility; less time consuming, no travel issues, lockdown. The few important reasons for patients not preferring teleconsultation were lack of knowledge; no doctor-patient interaction, etc.

Conclusion: Teleconsultation is an adjunct to physical consultation and not a total replacement of physical consultation because the understanding and comfort level of a physical doctor-patient relationship/interaction is difficult to be achieved through telecommunication.

Keywords: Teleconsultation, Telemedicine, Health Care, Tele Dermatology

Introduction

Telemedicine may be defined as a modern way of medicine that combines communication technologies and medicine in order to provide health care at a distance; thus, allowing the patient to remotely gain access to health care services [1-3]. According to the World Health Organization, a broad definition 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 diag-

nosis, 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" [4]. In India, the doctor: patient ratio, as per 2017 figures, was 1.34:1000 [5]. As per the data available from Indian Association of Dermatologists Venereologists and Leprologists (IADVL), which is the largest official society of Indian Dermatologists, there are more than 12,500 members who cater to the 1341.0 million population i.e., there is one der-

matologist against 1,30,000 population' [6]. Also, the specialists are predominantly concentrated in the urban areas. India, which is one of the most populous countries, harbors more than one third of its population in rural areas. So, telemedicine can prove beneficial in providing health care to all the regionally backward population. Dermatology, being inherently visual specialty, can be considered suitable for telemedicine. The application of telemedicine in the context of dermatology is referred to as "teledermatology".

Covid 19 pandemic had created an emergency situation in the country. During lockdown, the delivery of health care was influenced the most. Telemedicine has been considered as an appropriate method of health care delivery for consultations which do not involve any emergency situations, surgical interventions, or complex investigations.

Disease monitoring via teleconsultation has provided relief to patients with chronic diseases during the Covid-19 pandemic. The use of this modality has allowed them to decrease the number of hospital visits and helped them in provision of regular monitoring of their disease in the comfort of their home [7-10].

Within the recent years the teleconsultation services seen a boost in their use and demand, and is a rapidly growing sector of healthcare services. Telemedicine has gained a wide acceptance following the direction by Medical Council of India (MCI) for delivering health care through telemedicine.

This observational study was conducted to know the patient's perspective regarding how they rate teleconsultation in relation to physical consultations.

Methods

This is a prospective observational study which enrolled 100 patients attending the outpatient dermatology department of a tertiary care institute after taking approval from the Institutional Ethics Committee (IEC NO.GMC/IEC/TK21/008). This study was conducted in order to understand the patient's perspective regarding teleconsultation services for better understanding of the needs and expectations of the patients. For this, two types of questionnaires were prepared: one for the patients who have used or prefer to use teleconsultation and other who have not used or do not prefer to use teleconsultation. The data was compiled and analyzed to have a peek into patients' perspective regarding teleconsultation.

Results

Out of 100 enrolled patients, only 15 (15%) patients had used teleconsultation services in the past. Among 85 patients, who had never used teleconsultation services, 29 (34.12%) were willing to try out these services in future while 56 (65.88%) were not at all willing to use these services. On questioning them further, only 40 (40%) patients had knowledge of existing teleconsultation apps. This shows that out of total patients (100), 44 patients i.e., 44% either used or wanted to use teleconsultation. Whereas remaining 56 patients (56%) had not used and never wanted to use teleconsultation. (Figure 1)

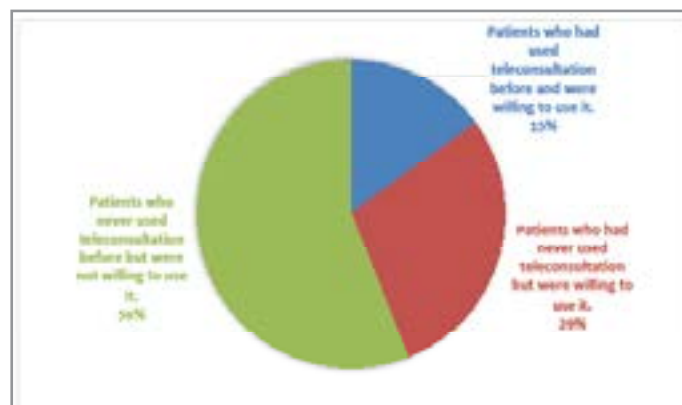


Figure 1: Figure showing number of patients with their preferences regarding teleconsultation services

On questioning them further, the popular teleconsultation apps in this region are – Medlife, Netmeds, AskApollo, Practo etc., with Medlife being the most widely known app among patients.

The most important reasons quoted for preferring teleconsultation included easy accessibility, less time consuming, no travel issues, lockdown, with most common reason being easy accessibility. (Figure 2)

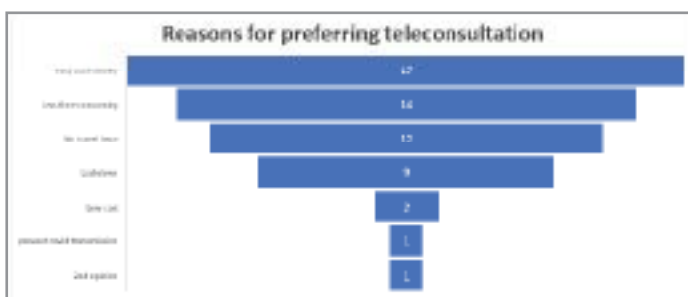


Figure 2: Figure showing the reasons the patients quoted for preferring teleconsultation

The few important reasons quoted for not preferring teleconsultation were lack of knowledge, no doctor-patient interaction, etc. (Figure 3)

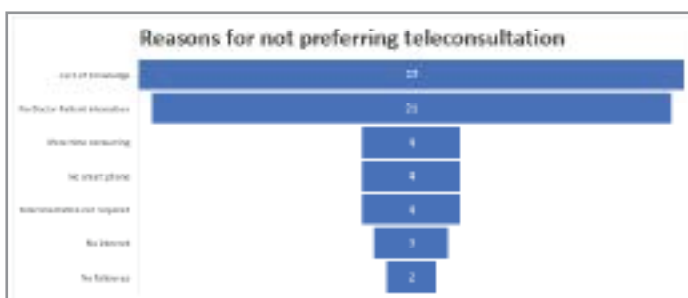


Figure 3: Figure showing the reasons the patients quoted for not preferring teleconsultation

Among the 44 patients who preferred or had used teleconsultation, few questions were based so as to obtain an insight into their experiences and expectations regarding various aspects of teleconsultation services. 26 out of 44 patients (59%) patients preferred to use audio calling as means of communication with

the doctor. Majority of the patients (i.e., 38 patients) wished to use these teleconsultation services for both dermatological as well as non-dermatological complaints. Most of the patients (26%) got or expected a response within a period of 1 day. (Table 1)

Table 1: Table showing the experiences or expectations of the patients regarding teleconsultations

			No. of Patients
Preferred mode of communication for teleconsultation [Note:- Few patients selected multiple options.]	For Patients who never used teleconsultation before but were willing to use it	Audio	16
		Video call	9
		Chat	4
	For Patients who have used teleconsultation before	Audio	10
		Video call	2
		Chat	5
Various uses of teleconsultation according to patients	For Patients who never used teleconsultation before but were willing to use it	Dermatological	1
		Non dermatological	Nil
		Both	28
	For Patients who have used teleconsultation before	Dermatological	4
		Non dermatological	1
		Both	10
Time expected by patient's to be taken by a doctor to respond	For Patients who never used teleconsultation before but were willing to use it	<1day	16
		>1day	13
	For Patients who have used teleconsultation before	<1day	10
		>1day	5

Out of 15 patients who had used teleconsultation services, 12 got the prescribed drug while 3 did not get the prescribed drug. 10 patients were satisfied with the teleconsultation fees they were charged as well as the treatment while 5 patients were not satisfied.

Out of 15 patients, 7 had received the facility of follow ups with extra fees being paid by 2 patients for their follow up facilities.

Out of 15 patients who had used teleconsultation services, 5 patients rated these services as 8/10; while 4 rated these as 9/10. There were only few patients who were not happy with the services and rated below average.

44 patients who preferred or had used teleconsultation were questioned regarding their preference in future, and it was found that 24 would like to go for physical consultation because of the benefit of "face to face interaction" and "doctor patient interaction".

Discussion

There are a wide range of applications in smartphones which can help in improving the practice of general medicine as well as dermatology. The development of telecommunication has been seen to strongly affect comprehensive scientific disciplines, including the medical sciences. There are some studies available in literature which deal with the efficacy of mobile apps. A study by Wang et al has shown high level of satisfaction with teleconsultation service [11]. A study by Gilmore et al compares face to face teleconsultation with teleconsultation and infers that wrong diagnosis were made by teledermatologists in 4% of cases [12]. Face-to-face consultation provided more definitive diagnosis

when compared with teleconsultations. Overall, both types of consultation had almost identical follow up rates [5].

In this study, we aimed to study the patient's perspective regarding teleconsultation services in Dermatology during Covid-19 era.

Out of total patients (100), 44 patients i.e., 44% either used or wanted to use teleconsultation. Whereas remaining 56 patients i.e., 56% hadn't used and never wanted to use teleconsultation. This shows that almost 44% of patients accepted the idea of teleconsultation and supported the concept of teleconsultation, thereby showing that there is good scope in using teleconsultation services in health care.

The most common reason quoted for using teleconsultation was easy accessibility in this study. It helps in health care delivery to a wider population because of its easy accessibility. With its help, healthcare can be delivered even too hard to reach areas. It has proved to be of great help to patients with chronic diseases and patients under isolation during the covid-19 pandemic [7-10]. The doctor can also easily access the patients' medical history if it is stored in an online database thus enabling the doctor to better understand and treat the patient.

In the times of covid pandemic, when risk of hospital acquired infections is high, teleconsultation has also proved beneficial to prevent transmission of covid infection among patients and to the healthcare workers [14,15]. And has also helped the doctors with mild covid infections to provide continuous services even from isolation [16,17].

With increased patient load on the hospitals during the covid-19 pandemic teleconsultation plays a major role by providing remote healthcare to the patients and thus decreasing the patient load on already overwhelmed hospitals [18,19]. Teleconsultation can also act as a tool for triage [7].

The major drawback being absence of a physical “doctor-patient interaction” and absent “face-to-face interaction” as observed in our study. Various technical issues can also arise in the online platform used for teleconsultation, thus making healthcare delivery difficult. Also many times during teleconsultation the patient may misinterpret/misunderstand what the doctor is trying to convey. Teleconsultation requires a stable fast internet connection, which may not be possible to achieve at all the times [20].

Patients have an understanding and bond with their own healthcare provider, to whom they go to for regular healthcare services and interacting with a new healthcare provider online on teleconsultation might take some time to adjust.

Lack of knowledge about smartphones, healthcare apps, how online chats & video calls works, etc. presents as a challenge in using teleconsultation apps [21].

Areas in Teleconsultation that need Improvement

The ultimate goal is to identify the areas where improvement is needed so as to improve the overall experience of both the patient and the doctor. Improvements like facilities for follow-ups should be provided free of cost, addressing Adverse Drug Reactions in teleconsultation should be made mandatory; availability of prescribed drugs to the patients should be kept in mind; consultation fee should be kept in a justifiable range.

Overall satisfaction of the patient should be made a priority so that the patient doesn't feel the lack of “doctor-patient relationship/ face to face interaction”

The teleconsultation staff should be well trained and IT-support should be available.

“The Medical Council of India” has also prepared “Telemedicine Practice Guidelines” [22].

Awareness about Teleconsultation among Patients

As seen in study, in India, lack of awareness among patients about teleconsultation is a major reason for underutilization of this service. In order to achieve the full potential of teleconsultation services and provide medical care at the door step, it is very essential to spread awareness regarding how to use and what are the benefits of using teleconsultation. Taking steps to increase the patients trust in teleconsultation services is very important.

Various methods can be used to spread awareness among population such as informational how to videos, pamphlets, posters, posts on social media and reviews of patients who used teleconsultation services.

The education status of the patient also plays a role in his/her willingness to use teleconsultation services [23].

Conclusion

Teleconsultation is a relatively new, but widely accepted and growing method of providing health care. But it needs continuous improvement in various areas like follow-ups; Adverse Drug Reactions, prescriptions, etc. With main goal being providing quality medical care experience to the patient through teleconsultation and to build patients trust in this method.

It is important to understand that teleconsultation is an adjunct to physical consultation and not a total replacement of physical consultation because the understanding and comfort level of a physical doctor-patient relationship/interaction is difficult to be achieved through telecommunication [20]. Also at times when physical examination of the patient is required we cannot use teleconsultation. Taking steps to improve the patients trust in teleconsultation, providing a sense of security to the patient and making the technical experience of teleconsultation easy for the patient, will help in making the overall experience of the patient almost similar to a face to face interaction [24].

The scope for teleconsultation is very promising in the coming future because of the easy access and time saving benefits it offers to a patient and a physician in a busy modern-day life and thus allowing healthcare to reach a large number of patients.

But most importantly it has proved beneficial in the era of covid-19 as a great way to deliver medical care to the patients in the safety of their homes and preventing the risk of covid-19 infection in these patients [19-25].

Thus, there is no doubt that teleconsultation will be a major way of providing sustainable healthcare services in the upcoming years [26, 27].

Conflict of Interest

Nil

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