Evolution Of Social Media Impact On Patient's Perspective Towards Oral Health In India: An Overview

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Abstract:

Background:

Social media has been witnessing a revolutionary shift in its usage due to the sudden impetus provided by the pandemic. Its utilization has increased many folds to gain relevant information related to general as well as once neglected oral health. This provided people an incredible platform to gain and share their wisdom and awareness towards oral health and understand its importance in the long run. The changes observed in patient's perception towards their oral hygiene before and after the pandemic were hugely evident on the social media. The sheer opportunity paved by social media in abridging the connectivity once lost between the patients and their dentists led to a significant effect on patient's attitude and thus creating awareness about their oral health in the time to come.

Method:

Review articles, systematic reviews, original research articles, published news reports and authentic surveys relevant to the topic were searched and duly taken into consideration from PubMed and Google scholar databases etc.

Result:

Social media connectivity has been on a rise with ease of access to internet and smartphones.

Dentistry too has undergone a colossal shift in marking its dominance over social media and thus

helping to increase awareness about one's oral health. This has indeed led to an increased knowledge and motivation to maintain one's oral health through self-oral examination. To top it all, communication link between the patients and their dentists too achieved an impetus due to the enormous connectivity offered by the social media.

Keywords:

Social media, oral health, covid-19, pandemic, tele-dentistry, tobacco use

INTRODUCTION

With the advent and revolution in information technology, our lives have slowly progressed from offline to online mode. Social media platforms such as Facebook, Whatsapp, Instagram, YouTube etc have empowered us to connect worldwide with the blink of an eye. Since past few years a tremendous shift in the spectrum of social media use has been witnessed. These platforms have been blooming not just for recreational uses but for educational & professional purposes as well. To top it all, covid-19 pandemic has only provided an impetus to this everevolving domain, for all intents and purposes(1)(2). Similarly, the healthcare professionals too have been indulging in providing medical resources and information to educate the masses(1). With easy access to smartphones and having endured a deadly pandemic, people have now begun to seek and imbibe the healthcare knowledge currently being imparted on social media platforms. Likewise dentistry too has not remained unaffected with this dynamic shift in patient education and care(3). As dentists, we routinely witness in our dental practices that a general awareness has significantly increased regarding oral healthcare in the country. Patients are now being conscious and self-aware of the importance of maintaining a good oral health and the drastic effects it can have, if neglected otherwise. This review article has attempted to highlight the past and present perspective behind this drastic change in social media use and an overall influence on the ever- evolving patient's perception towards their oral health. In this regard, it also highlights the immense opportunity being paved for the current and budding dental professionals to utilize this technological advantage for mutual benefit of patients as well as dentists, thus strengthening the oral healthcare backbone of our country(3).

Pre-Pandemic Perspective

The brutal pandemic changed our lives in unprecedented ways. We now commonly refer to our lifetime as pre and post pandemic times. The former period witnessed an expanding digital era due to ease and affordability of the internet and smartphones over past few years.

The beginning of 2020 globally saw more than 3 billion social media users accounting for 49 % of the world's population. In India, the number of social media users stood more than 376 million with a population of more than 1.36 billion(4). A huge proportion of these users were the younger population commonly referred in modern day term as Gen-Z(born between 1997-2012) and the millennials (born between 1987-1996)(5). Social media use was gathering momentum in the arena of providing medical information regarding various healthcare fields. It was no longer considered a mere leisure tool and soon expanded for a greater outreach to healthcare services in the gamut of other uses. People began to follow and connect to doctors through social media websites and apps to get hold of the latest healthcare updates. Amongst them dentistry witnessed a surge in providing and exchanging oral health knowledge and occupying a widespread reach to the prospective patients. Use of tele-dentistry methods was not so common in this era though, it was observed that females tend to follow dentists more as compared to males on social media platforms(6). A gradual shift has been evident in the perception building of oral health by the general population.

The positive aspect was very much witnessed on children. From a tender age, they are being educated about the importance of oral hygiene by a much-needed curricular addendum, simultaneously augmenting it with live demonstrations and videos/pictures available on various social media platforms. This has surely simplified the collective work of parents, teachers as well as dentists since it provides an early insight into inculcating good oral health practices in

initial years of their childhood(7)(8). Avid social media use led to an increased awareness regarding various oral health problems such as cavities in teeth, gum diseases, mobile teeth to name a few. This was not limited to just learning and implementing oral health facts; the perception to enhance dental esthetics slowly began to rise(3). This can be said about the younger lot but the impact amongst older population varied dramatically. With limited presence in the rural areas, the urban elder population had gained an upper-hand in terms of accessibility to internet and getting acquainted with the world of online social media. Elderly population relies heavily on the facts and information made available to them through social networking sites. Thus they too imprinted on the vast amount of knowledge made readily available to them(9). All in all, a general understanding regarding oral health and perception towards dental treatment was on a rise but lacked the much-needed momentum.

Perspective during the Pandemic

The beginning of the year 2020, witnessed an emerging threat, gradually kick-starting an "era of pandemic" in the face of novel coronavirus disease 2019(COVID-19 disease). Nationwide lockdowns in countries all across the world prompted people to stay safe in their homes while the healthcare workers struggled to tackle an enemy unknown to mankind. The sheer suddenness of the situation and its extent of magnitude, exemplified the unpreparedness of the medical infrastructure, which ultimately led to its collapse worldwide. Healthcare services were bound to rapidly adapt to the "new normal".

Late 2020 saw 4.5 billion people connected to the internet with 3.8 billion active on social media worldwide(10). In India, there has been an 87% increase in social media use during the lockdowns(4). There has been a 45% growth in active internet users in rural India since 2019(11). Telemedicine services gained a huge momentum during this period and doctors all across the specialties tried to communicate, treat and educate the patients in an online mode(2).

This rapid change in the usage of social media platforms for gaining information regarding one's health led to a dramatic increase in social media users.

As most of the dental procedures involved the risk of contamination through aerosol production, dentistry came to a standstill for a brief period of time. All the procedures were halted and only the emergency procedures were treated after classifying patients' needs through triage and following proper SOPs. Tele-dentistry was very much prevalent in other developed nations but many countries including India got a firsthand experience only during the pandemic, ultimately becoming the need of the hour(12). During such harsh times, healthcare workers were reminded of their ethical duties in its purest form and to essentially affirm their oath taken long back. The sudden barrier which was created between the dentists and the patients made the patients realize about the true essence of oral health and the havoc it could create, if not paid attention at the right time. All this prompted the patients to reconnect with their dentists through social media apps and platform such as WhatsApp, Facebook, Zoom, etc. and seek the best possible treatment suitable at that time. It boosted and re-established the patient-doctor communication and this led to an increase in admiration and respect towards the oral health and other healthcare professionals. People became more conscious of their oral health status and ever since then; self oral examination has been on a rise. Since the tobacco cessation plays a pivotal role in re-establishing a good oral health, an incredible window of opportunity opened up in substantiating the new found knowledge regarding a direct correlation between smoking and covid-19 involved risk. Through social media campaigns, the precarious effects of tobacco were once again brought to limelight, this time on a much wider scale. It was highly evident from the 2021 theme of World No-Tobacco day held every year on 31st may aptly titled as "Commit To Quit" (13). It was based on the recent findings which linked tobacco smokers to an increased susceptibility to Covid-19(14)(15). These facts spread through a wildfire in our tech savvy world and self-willingness to quit emerged through an already panic-

stricken society. The anxiety and fear of losing and endangering the lives of their loved ones over a futile habit prompted many to quit smoking. It even triggered a chain reaction to enlighten others who were oblivious of the devastating repercussions of tobacco consumption(16). This reflected another positive usage of social media amongst many other things such as increased awareness of mask usage, hand-hygiene and social distancing norms. Each coin has two aspects, so the downside of excessive usage of social media and internet surfing led to an increased anxiety and panic amongst people in such perilous times(4). To add to its woes, the misleading information and rumours surrounding this novel disease was spread to such a huge extent that infodemic (rapid spread of false and unreliable information) was evolving along with the actual pandemic. Self diagnosis and its medication proved to be an unforeseen menace for our society. The injudicious use of steroids led to a catastrophic epidemic in India evident in the form of fulminant fungal infections mainly mucormycosis/ black fungus etc among others(17). Thus, health professionals made people wary of the 'double edged sword' that is steroid, if not used cautiously, through social media outreach. The pandemic helped the patients build an everlasting perception towards their oral hygiene maintenance and seeking timely intervention to an earlier commonly neglected dental health. This period witnessed a huge change in people's behavior as well. They became cooperative and empathetic than ever before. It was evident through various links available on different social media platforms for emergency needs such as oxygen cylinders, essential medicines, food supplies, hospital availabilities etc. Thus, social media presence was perceived in the most valuable form during this critical period for obtaining reliable resources and information.

POST PANDEMIC PERSPECTIVE:

Having endured three agonizing waves of the pandemic and the fear of a fourth wave still looming at large, people have now found comfort and solace in an online world through social media lives. The knowledge acquired throughout the pandemic has made them realize the true importance of a healthy living and mutual cooperation. After enduring such hard times, patients have now begun to realize that overall health is incomplete without a good oral health.

The pandemic had flipped the whole scenario in multitude of ways. Through exchange of vast social media information related to Covid-19 spread, people understood the nitty-gritty of basic oral hygiene such as the need to change one's toothbrush after having suffered a major infective illness in order to prevent re-infection. The use of mouthwashes and oral betadine gargles became very much popular in post pandemic era. With time these preventive measures could eventually prove to be a milestone for achieving better oral health and an overall general health among the masses. Patients are surprisingly motivated of getting self-acquainted to the common problems of dentistry such as painful carious lesions, periodontal pockets, the need of root canal treatment, teeth discoloration etc. Powered toothbrushes and dental flosses have been a part of dental care since a long time but it became popular only during the recent years due to the hype surrounding it on social media. In general, now people have become more selfconscious and choose to get preventive treatment done rather than late intervention. The oral self-examination along with the immense knowledge of social media dentistry empowers them to seek early treatment in a preventive and conservative approach. One such example is the root canal treatment where patients now willingly prefer to opt for this more conservative treatment done rather than an extraction. The dental pain and its sufferings along with the inaccessibility of oral healthcare during the pandemic have opened people's eyes. Patients have now begun to understand the importance of procedural intervention in dentistry as compared to medications

alone. The dental procedures halted voluntarily during the lockdowns leading to relapses and associated pain have compelled patients to reestablish the lost connection to their dentists via social media and other means to get the appropriate treatment done at the earliest. The social media contents have also enabled the users to become familiar with various dental procedures and alleviate their anxiety associated to once dreaded dental procedures prior to their appointments. The informative scrolling of social media during the lockdowns has also made people apprise of the nature of work in different specialties of dentistry.

The enormous connectivity offered by social media boosts travel dentistry, allowing a patient residing in a far state to consult a doctor online and chalk out various plans to get the desired treatment done in near future. The treatment seeking attitude have become highly influenced due to various social media posts made freely available by practicing dentists which magically highlight the before and after transformations. The obvious reason for it is the increased esthetic demand of the young population in a socially driven digital era. The life-changing transformation videos present in the form of Instagram Reels, YouTube Shorts often raises one's expectations about a particular treatment outcome.(18) The only pitfall observed in these trends is the undue exaggeration of one's expectations. Patients are oblivious of the multiple factors playing a crucial role behind such transformations and are unaware that results vary based on an individual's diagnosis, treatment planning and its prognosis. This issue can also be tackled by the communication made easy through social media networking where patients can easily solve their queries by directly interacting with the concerned dentist and getting their desired treatment plan.

CONCLUSION:

Social media presence has become an unspoken cultural norm in today's technological era. The past years encircling around the pandemic has highlighted its novel aspect to gain knowledge and information and not just rather serve as a medium of entertainment. Oral healthcare has too been afflicted by its vast arena of usage, surely on a positive note. Change in patient's attitude has been evident pertaining to dentistry, thankfully on the brighter side. Earlier it was evident that people did not take much effort to inculcate good oral hygiene habits and patients were least bothered to visit the dentist.

The credit goes to the vast amount of social media content made freely available and readily shared by the masses which highlighted the importance of a good oral hygiene amidst a full-blown pandemic. Among other things, most significant contribution of the social media platforms had been to regain the lost connection between the patients and their dentists. The result is evident as seen today in the post-pandemic era where dental operatories are witnessing an increase in number of patients visiting dentists after

self-oral examination. Be it for esthetics or other oral health concerns, it can be concluded that awareness and the self motivation to keep one's oral cavity clean has fairly increased. The powerful impact of the social media outreach can highly be attributed behind this staggering positive change but it is surely a long way to mark its presence in all strata of the society by steadily bridging the technological gap throughout the population. Thus in the time to come, an ever increasing use of internet and social media could eventually prove to be a

stepping stone towards the vision of 'Digital India' which can put us into the much desired league of developed nations.

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