

Short Article

Telemedicine and Its Ethical Implications

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DOI: <https://doi.org/10.24321/2394.6539.202201>

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How to cite this article:

Vasudevan S. Telemedicine and its Ethical Implications. J Adv Res Med Sci Tech. 2022;9(1):1-3.

Date of Submission: 2021-09-13

Date of Acceptance: 2022-03-23

A B S T R A C T

Technology and science have been developing at a rapid pace and it has its influence on nearly all aspects of life. It is our responsibility to ensure that the rapid development in technology benefits mankind especially the health of the common man. Telemedicine utilises the advancement in the latest communication technology to promote the health care system. However due to the existing socioeconomic and cultural disparities in society practicing telemedicine has resulted in various ethical concerns.

We have to ensure that the basic ethical tenets are maintained lest it affects the doctor patient relationship. This relationship is a unique one as it is heavily dependent on trust and can be established and promoted by the highest possible standards of ethical behaviour and care by physicians.

Keywords: Telemedicine, Ethics, Trust, Policies

Introduction

World Health Organization defines telemedicine as, "The delivery of health-care services, where distance is a critical factor, by all health-care professionals using information and communications technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and the continuing education of health-care workers, with the aim of advancing the health of individuals and communities."¹

The latest technological advancements allow doctor-patient communication through texting, email and mobile phone apps. Telemedicine uses remotely controlled devices with programmed interfaces that allow patients to interact with doctors without actually visiting the doctor's clinic. This technology also enables communications between members of the care team thus resulting in better coordinated care. In a country like India where there is a huge divide between the health care facilities available in rural and urban areas this technology helps in increasing the outreach of the best medical care to the remotest of areas. However there are

reservations that the use of telemedicine may have an adverse effect on health care.

With the increased acceptance of telemedicine by both doctors and patients, several ethical dilemmas regarding its use have been surfacing. The ethical issues in telemedicine involve an evaluation of patients beneficence or maleficence, breach of privacy and confidentiality of data, the autonomy to accept or refuse this modality of service and how to react to inadequate services.

Beneficence

The beneficence of using telemedicine is that it increases the access to care and reduce costs. It also results in a higher quality of care by easy accessibility to more skilful professionals and also minimises the hurdles created by distance. However it is observed that the benefits of this technology are often confined to the rich and educated community.

Another benefit is that the control of data remains in the health care institutions dominion which can be easily

disseminated among the members of the team involved in health care of the patient.

Privacy and Confidentiality

One of the important fallouts of telemedicine is the privacy of patients and the confidentiality of the data. Patients are not aware who exactly is responding to the personal medical information and whether it being further shared with others. The data collected are stored on several electronic devices resulting in a huge possibility of breach of its security. The best example is in tele-radiology where the patient often has no information about who all are in possession of his scan images and who exactly will be reporting. This undermines the autonomy of the patients.

Confidentiality in telemedicine is a challenging issue because patients share their personal details and secret with the health care providers. It is the responsibility of the health care provider to maintain the privacy and confidentiality of patients' electronic data while accepting, storing, transporting and delivering it. The confidentiality of data has a great bearing on the relationships between the health care providers and patients. While security of technology is important in protecting patients' trust and maintaining the highest standard of medical care it is ultimately the responsibility of the health care provider to ensure the patients' rights. However with the development of new encryption and security tools the protection of information has vastly improved. It is essential to have strong privacy and security policies to enhance patient confidence and trust.

Equity and Justice

Another fallout is the access and ability to use the latest technology resulting in a huge technological divide between the haves and the have-nots which is most evident in rural India.

Several people are unable to avail the services of telemedicine due to their ignorance regarding the latest technology and their inability to use the requisite electronic devices. The high cost of the equipment required to avail the facilities of telemedicine acts a deterrent to the economically challenged patients which has to do with the justice and equality aspect.

There are geographical areas especially in rural India with inadequate internet connectivity which acts as a major hurdle to use of the electronic devices proficiently. These inconsistencies in the availability of technology may further worsen the existing patient care disparity based on regional, culture and socio-economic status of patients highlighting the equity, equality and justice concerns.

Doctor-Patient Relationship

One of the most important foundations of a robust doctor-

patient relationship is the importance of direct physical communication between the doctor and his patients. The training in medical schools which has imbibed in us the importance of physical examination and empathy expressed through physical touch stands curbed with telemedicine.

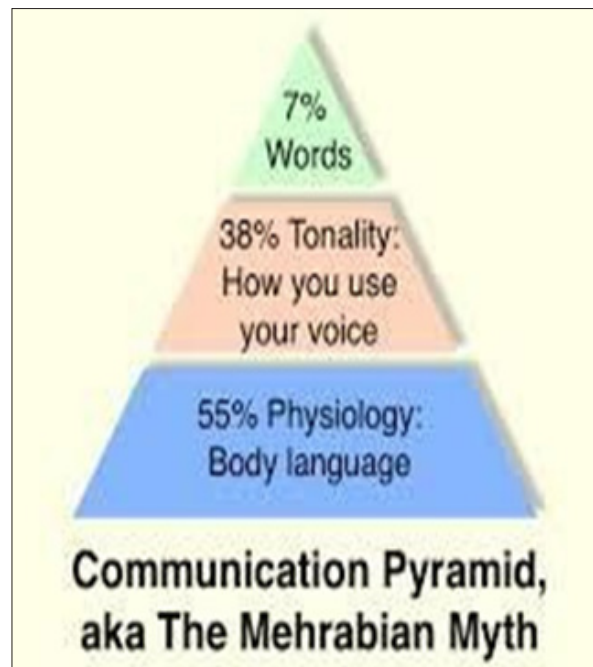


Figure 1

The communication pyramid, aka The Mehrabian Myth² highlights the importance of body language in any communication. With telemedicine, body language which forms 55% of the communication process is subdued which affects how a person (both health care provider & patient) has perceived the information conveyed to him.

There are potential reservations in the health care teams' duties, in terms of allegiance to patients or to the employer. If the team members do not have live contact with patients they are often not aware of patients' emotional aspects and cannot provide the necessary empathy towards them. This could result in the health care provider trying to treat the disease only and not the patient as a whole.

There could be jurisdictional problems associated with cross-border consultations because the rules and regulation involving the practice of telemedicine vary from country to country depending upon the local laws that govern the practice of medicine.

Government Policies

Just as technology has had several fallouts in the banking sector where many of its customers have been duped by the breach in its security, the use of telemedicine should be adopted with caution. There should be proper evaluation and not merely accepted being attracted by the blind belief that newer technology is better than the existing system.

To remove the concerns just mentioned, the government should publish definite guidelines so as to meet legal and ethical challenges. Till the guidelines are published, application of telemedicine should only be corollaries to face to face visits and only for those patients who have met the health care provider before. Despite the apparent importance of a previous doctor-patient meeting, telemedicine provides the right set of circumstances to substitute face-to-face encounters entirely, in places where accessibility and availability of physicians are limited.

With society becoming more acquainted with electronic communication, the concept that usage of telemedicine would result in the deterioration of the doctor-patient relationship should be overcome so that they do not act as a hindrance in the development of methodologies that can enhance the availability and quality of care. However it is of paramount importance to monitor the inefficiency of the health care providers and revamp the quality of healthcare amenities, which underline the importance of ethical concerns in telemedicine.

Conclusion

To successfully amalgamate telemedicine into the prevailing infrastructure, nations need to develop regulations, rules and strategies to mentor and control the health care providers in safeguarding the privacy and confidentiality of patients. Before the application of telemedicine is approved the health care providers, patients' right activists and patients should be convinced about its benefits.

Conflict of Interest: None

References

1. Dasgupta A, Deb S. Telemedicine : a new horizon in public health in India. Indian J Community Med. 2008 Jan;33(1):3-8. [PubMed]
2. Mehrabian's Communication Theory: Verbal, Non-Verbal, Body Language [cited: 2021 Oct 20]. Available from: <https://www.businessballs.com/communication-skills/mehrabians-communication-theory-verbal-non-verbal-body-language/>
3. MoHFW. Telemedicine Practice Guidelines [cited: 2021 Oct 20]. Available from: <https://www.mohfw.gov.in/pdf/Telemedicine.pdf>.