Telemedicine and Digital/Online communication

Introduction:

21st-century challenges in medical communication

Doctor-patient communication is undergoing a significant transformation thanks in large part to recent advances in digital technologies. Today, new skills are needed to cope with the increasing use of the internet, various social media platforms and other digital tools intended for medical purposes.

In consideration of the rapidly growing number of patients dependent upon *telemedicine* and the *internet* for information, there is an increasing need to use websites and social forums more effectively in doctor-patient communication. The aim is to provide both doctor and patient with reliable and the most creditable information available.

Admittedly, the transparency of medical information is transforming the doctor-patient relationship. Today, the informed patient is actively involved in communication and decision-making. The doctor-patient relationship is becoming far more partner-like, requiring greater cooperation from both parties (Meskó et al., 2017).

The course aims to encourage medical students to exercise communication strategies in specific situations while effectively preparing them for upcoming technological and digital communication challenges.

The use of digital tools, e-health, and m-health technologies in healthcare is a new phenomenon. The opportunities and difficulties offered using these tools will be fleshed out and presented in the module.

The use of information resources provided by telemedicine and telecommunication development is crucial for the success of healthcare in several aspects. It is essential whether the patient understands and makes appropriate use of the information they obtain or the information provided by the doctor.

This understanding is significantly influenced by what is today referred to as health literacy.

Consequently, the doctor-patient relationship is qualitatively changing including the basic communication patterns and platforms: the doctor's role is not only to provide information and educate the patient but also to understand the expectations and the patient's perceptions of the disease/treatment.

Additionally, it is essential to screen out problem patients (those who do not understand or refuse to accept the doctor's guidance) and to aid patients in understanding and how best to use medical advice and information more effectively (Győrffy et al., 2020).

A. A new communication model: patient-web-doctor

In consideration of the increased use and dependency of the internet, the Google or e-patient, the informed or misinformed patient, has emerged and poses new challenges for doctors. The

Google patient acquires information using the internet, feels more knowledgeable than the doctor, self-diagnoses and overrides the doctor's opinion, while compared with the e-patient, who seeks cooperation (Meskó, 2014). In the new model, the patient's information and participation in shaping treatment are considerably paramount to healing and well-being.

The patient-web-doctor triangle has a significant impact upon the dynamics of the doctor-patient relationship. Internet use can usher many benefits, but it can also present challenges for the doctor.

According to a recent survey, a significant proportion of Hungarian doctors now consider patient use of the internet problematic. This negative attitude is primarily exemplified by misinformed, ill-informed patients who possess unrealistic medical and physician expectations (Wald et al., 2007). Therefore, the role of the doctor is to aid patients while navigating through the vast trove of information and recommend viable sources of information deemed reliable to enable more effective and faster consultations. This includes websites, blogs and online patient communities.

A well-informed patient is an active and responsible participant in the treatment process, and the doctor-patient relationship becomes more of a partnership.

The rapid spread regarding internet use is changing the previous model of doctor-patient relationships. Patients who are "empowered" with knowledge are more eager to develop a partnership with the doctor. In some cases, doctors may face increased levels of conflict when communicating among patients who are not well informed or with more assertive patients.

However, in the new relationship model, a well-informed patient can help develop shared decision-making and proactive forms of communication. The benefits of a collaborative relationship model include more effective communication and time management, shared decision-making, better use of health information and health awareness (Wald et al., 2007).

B. Doctor-patient cooperation and health literacy

Health literacy can be defined in practical terms as health competence. Several studies have shown this type of competence is strongly associated with healthy outcomes. For example, it has a strong positive association with mortality. It is a better predictor of subjectively and objectively assessed health status than when compared with age, income, employment status, education or membership of a racial or ethnic group. Individuals with low levels of health literacy spend longer duration in hospitals and use the health system more than patients with high health literacy and have more difficulty following the doctor's orders while judging the credibility of effective and genuine health information.

Providing tools or sources of information within the patient's competence can go a long way towards raising the level of health literacy, which reduces the burden on the doctor and the health care system and leads to greater patient involvement in their recovery.

Summary

- 1. Information management and communication in the 21st century doctor-patient relationship
- 2. New challenges and communication strategies; Google patient, e-patient, reliable sources
- 3. Telemedicine, eHealth, mHealth tools in medicine

Literature

Győrffy Z., Radó N., Mesko B. (2020) **Digitally engaged physicians about the digital health transition**. PLoS One. 28;15(9): e0238658.

Herrmann-Werner, A., Weber, H., Loda, T., Keifenheim, K. E., Erschens, R., Mölbert, S. C., Nikendei, C., Zipfel, S., & Masters, K. (2019). "But dr google said..." – training medical students how to communicate with e-patients. *Medical Teacher*, *41*(12), 1434–1440. https://doi.org/10.1080/0142159x.2018.1555639

Meskó, B., Drobni, Z., Bényei, É., Gergely, B., & Győrffy, Z. (2017). **Digital health is a cultural transformation of traditional healthcare.** *MHealth*, *3*(9).

Meskó, B. (2014). The guide to the future of medicine: technology and the human touch. Webicina Kft.

Singh, Sukanya & Banerjee, Amitav. (2019). **Internet and Doctor–Patient Relationship:** Cross-Sectional Study of Patients' Perceptions and Practices. *Indian journal of public health.* 63. 215-219.

Wald, HS, Dube, CE, Anthony, DC. 2007. **Untangling the Web—the impact of internet use on health care and the physician-patient relationship**. Patient Educ Couns. 2007;68(3):218–224.