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EDITORIAL POINT OF VIEW

# Tele-Doctor

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Just one year ago and all the time till then, if you made a medical consultation by phone or Skype and the patient went wrong, you had great chances to be accused of medical malpractice. When you met a patient for the first time, it was compulsory to discuss with him/her face to face and then touch him/her during the clinical examination.

After this terrible year, telemedicine not only got the right to exist but became the main way to examine and follow-up most of the patients during pandemic.

However, the question raised above remains. If a patient has a bad evolution, who is to blame: the doctor or the electronic means that failed to give him/her everything necessary? Putting this question at the overall meeting of the Standing Committee of European Doctors (CPME), the panel's answer was: "We are not sure".

However, technology progresses and occupies place despite the ethic discussions around. We have to mention that in any case, if there is an emergency, the doctor cannot offer a distance consultation. He/she can only advise for an emergency call to the ambulance or to an available local doctor. Only chronic illnesses may be monitored at a distance.

We have also to analyse the medical team. Almost no doctor can cover by his/her knowledge everything that is needed for the diagnosis and treatment of an illness which is just slightly more complicated than the standard disease. Of course, there is the principal doctor, who takes the main responsibility for the patient. But to make more progress, he/she has to ask for an expert opinion from specialists in different complex imaging techniques, immunology, and sometimes genetics, not to mention those in various comorbidities which are often seen in numerous patients. Sometimes, a huge medical team is necessary. Most of discussions between these specialists take place online. The existence of a medical team raises the following problem: which is the degree of responsibility of each team member regarding the general evolution of the illness?

These days, a review published in the *European Heart Journal* brought even more attention to this issue (1). The authors discuss the importance of "Contact-free sensor signals as a new digital biomarker" (1). In this respect, they analysed the possibility and importance of "object sensors,

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wearable sensors, or contact-free sensors including cameras, pressure sensors, non-contact capacitively coupled electrocardiogram (cECG), radar, and passive infrared motion sensors" (1). And the cited paper deals only with cardiovascular disease!

In this case, it develops a close combination between tele-patient and tele-doctor. You may imagine how the lessons of Clinical Semiology at the University will be double or triple as large when trying to teach how to use all this information.

Science – particularly medicine – evolves in an exponential manner. Continuous medical education is sometimes not enough to facilitate a profound adaptation of doctors, which makes many of them evade towards an easy to cover sub-sub-speciality and often become tele-sub-specialists.

Clearly, the "robo-doctor" speciality is on horizon, making tele-diagnosis and tele-therapy by default. Unfortunately, it has to serve a living patient, not a robo-patient.

In this context, the question raised above becomes more stringent: who will be responsible for a potential mistake – the software designer, the data introducer or, maybe, the hardware robo-doctor? The new science of medical ethics will face great challenges.

Fortunately, I think that, in each case, the care of a living patient will be the responsibility of his/her personal living doctor.

However, this poor doctor will be obliged to speak not only English but all languages spoken by the new members of the Robo-tele-medical Team… ❑

## References

1. **Saner H, Knobel SEJ†, Schuetz N, Nef T.** Contact-free sensor signals as a new digital biomarker for cardiovascular disease: chances and challenges. *European Heart Journal –Digital Health* 2020;1:30-39. doi:10.1093/ehjdh/ztaa006.