

## Can Artificial Intelligence be Used Against the Potential Risks of Short Examination Times in Hospitals?

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Received: 2024-06-26

Accepted: 2024-07-07

Published Online: 2024-08-12

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Dear Editor,

The reason why we wrote this letter is to address the risks that short examination times in our country may pose for patients and doctors and to initiate a discussion on what can be done to find a solution. The recent increase in hospital admissions and the decrease in the number of physicians have created pressure to examine a large number of patients in a short time. Studies show that the general physical examination time of the patient is 20 minutes [1]. This examination period may be longer for some branches. For example, examination time may be longer in cardiology patients due to some procedures, such as effort echocardiography. For psychiatric patients, the first examination can take up to 45 minutes, including the meeting with the patient's relatives. It is reported that as this period shortens, the likelihood of the physician in question facing a malpractice lawsuit in the future increases [2]. Currently, in public hospitals, the system provides an appointment every 10 minutes on average. When we include patients who are taken without an appointment to avoid disruption of their treatment, the examination time per patient sometimes reaches 3-5 minutes. In some hospitals, the number of patients examined by cardiologists per day exceeds 100. The current situation brings with it many problems. First of all, since this period is short, doctors have great difficulty making a diagnosis. There is not enough time for the physician to make a differential diagnosis. Some diseases may be overlooked. If something happens to the patient, the doctor may regret it for life. Additionally, many legal cases can be filed. In short, psychological problems may arise in the physician as a result of many material and moral losses. Short examination times are not good not only for the doctor but also for the patient. Due to the short examination period, the diseases of patients who do not receive adequate and effective treatment may increase. Patients may be dissatisfied because less time is allocated to them. Or he may go from doctor to doctor in search of healing. This situation also leads to a waste of public resources.

In other countries, the examination time allocated per patient is longer than in Turkey. A study conducted in the USA reported that doctors spend an average of 20 minutes per patient and see 11–20 patients a day [3]. On the other hand, the use of artificial intelligence in health is inevitable today, and it is known that it is taught as a course in some medical faculties [4,5]. Artificial intelligence and machine learning can be used to prevent these problems. Studies



have shown that artificial intelligence and machine learning can be useful in the diagnosis of diseases, differential diagnosis, treatment selection, and identification of risky patients [6,7].

As a result, it is extremely important for the relevant authorities to review the inspection periods in consultation with professional organizations due to possible risks. In addition, since we cannot reduce the number of people applying to the hospital and increase the number of doctors in the short term, it would be appropriate to carry out the necessary studies to make artificial intelligence and machine learning a part of the examination for some branches.

Best Regards,

**Informed Consent:** There is no situation that requires patient consent

**Conflict of Interest:** There is no conflict of interest.

**Funding:** This research has received no financial assistance from public, commercial, or non-profit funding organizations.

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### *How to Cite;*

İmre G, İmre O (2024) Can Artificial Intelligence be Used Against the Potential Risks of Short Examination Times in Hospitals?. *Eur J Ther*. 30(5):768-769. <https://doi.org/10.58600/eurjther2253>