

## Positive and Negative Aspects of Artificial Intelligence in Psychiatry

*Psikiyatride Yapay Zekanın Olumlu ve Olumsuz Yönleri*

Okan İMRE<sup>1</sup> 

<sup>1</sup>Department of Psychiatry, Karamanoglu Mehmetbey University, Faculty of Medicine, Karaman, Türkiye

Dear Editor.

The reason why I wrote this letter is to draw attention to the positive and negative aspects of increasingly developing artificial intelligence applications and machine learning in psychiatry and to start a discussion. As we know, psychiatric diseases worldwide have tended to increase in recent years. On the other hand, since the number of psychiatrists does not increase in correlation, the number of patients per psychiatrist is high(1). There is no doubt that the workload of psychiatric physicians will decrease with the introduction of artificial intelligence and machine learning applications(2). For example, artificial intelligence applications can make the psychiatrist think of a preliminary diagnosis about the patient before the examination by performing various survey-based tests(3). It can assist the physician in differential diagnosis in complex cases during the examination(4). Or, when prescribing medication after the examination, polypharmacy and drug interactions can be prevented with various artificial intelligence applications. When we think from the patient's perspective, artificial intelligence has many uses. For example, it may have positive aspects such as appointment time, reminding people to take their medications on time, and even making various psychotherapy suggestions. Another potential area of use of artificial intelligence applications and machine learning, which is not mentioned much in the literature, is that they can provide early intervention by detecting some of the precursor symptoms, such as insomnia and mobility, during the attack periods of some chronic diseases. As it is known, since manic and psychotic patients generally do not have insight, their relatives and psychiatrists may not notice the symptoms of the disease in the early period before they become fully evident. It is probable that patient-specific artificial intelligence applications will be beneficial in this regard. However, artificial intelligence applications and machine learning may also have some risks. For example, it may cause many legal problems by violating personal data(5). Artificial intelligence and machine learning may not be able to detect when some antisocial people involved in criminal offenses are lying. The probability of misdiagnosis is high in this case.

As a result, although some psychiatrists are worried that artificial intelligence and machine learning will replace humans and bring about the end of the profession, in my opinion, the physicians who will be least harmed by these applications in terms of job loss are psychiatrists. Because psychiatric patients require an emotional and empathetic approach that is not available in machines but is available in psychiatrists.

In summary, the right approach would be for psychiatrists to put aside all their prejudices, take into account the possible risks of artificial intelligence and machine learning, learn about these technologies, and turn them into an advantage. We are in the age of artificial intelligence and machine learning . We cannot remain indifferent.

Kind regards.

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