COMPREHENSIVE MEDICINE

Formerly İstanbul Kanuni Sultan Süleyman Tıp Dergisi

EDITORIAL

The medical practice has undergone a radical alteration with the development of technological advances changing the knowledge of scientists in current years. The practice of medicine deviates from the general approach to a more customized and specific paradigm. This change of approach, often referred to as personalized medicine also referred to precision medicine, stands for a dramatic change in the strategy of the medical field is practiced and hascrated new opportunities for diagnosis, treatment, and prevention of the diseases.

The genomic revolution constitutes the center of personalized medicine. The genetic basis of the diseases has been explained intensely with the ability to sequence the human genome efficiently and cost-effectively. Genomic information of patients provides useful information about a patient's predisposition to specific circumstances for physicians. These details of genomic data help medical practitioners to offer customized therapies and tailored treatment options. Genetic science has reformed medical management of disorders, from oncologic diseases to rare disorders.

The evolution of targeted therapies is one of the most considerable successes of personalized medicine. The identification of specific genetic mutations and biomarkers for diseases allow researchers in the field of drug design and development to discover pharmaceuticals that exactly target the underlying causes of the disorders. Personalized medicine not only improves the effectiveness of medical approaches, it also reduces adverse reactions and improves the overall quality of life of patients.

The prediction and prevention of diseases are another aim of personalized medicine besides treatment. Persons may be informed about their predisposition to specific diseases before beginning symptoms and occurence of signs through advanced genetic screening and risk assessment. This quick reaction allows early interventions including lifestyle changes and prophylactic drugs. These preemptive actions reduce the burden of diseases on both patients and healthcare systems.

Although personalized medicine provides several benefits, it has a set of disadvantages. The inclusion of large quantities of genetic information in the medical field requires robust genomic infrastructure and trained medical staff. Ethical concerns about personal information, consent, and equal accessibility to these technologic opportunities are other disadvantages. The collaboration of basic scientists, physicians, politicians, and ethicists are essential to overcome these challenges successfully.

In conclusion, tailor-made medicine is a monument to the notable development of medicine science and presents a view into a future where medical practice is truly customized to the distinct genetic characteristics of each person.

Respectfully yours,

Mustafa Kadihasanoglu, MD, FEBU, FACS
Associate Professor of Urology,
İstanbul University-Cerrahpaşa
Editors-in-Chief