

Rational Prescription of Drugs: The Role of Chronopharmacology

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Modern medicine and the prescription of pharmaceuticals have gone far beyond the basics of drug selection by recognizing the critical role of timing in drug administration. Chronopharmacology, in recent studies, has revealed that it has a significant impact on circadian rhythms on pharmacological efficacy and safety. This article studies the relationship between circadian rhythms and drug interactions, emphasizing the significance of timing in drug administration with the body's internal clock. Circadian rhythms play a role in drug absorption, distribution, metabolism, and elimination, as well as individual factors such as age, genetics, and lifestyle, add to the uniqueness of each person's circadian rhythm. Chronopharmacology has been taken into account in medical domains by improving therapeutic outcomes in cancer therapy, cardiovascular treatments, asthma management and prevention, and sleep disorders. However, it is true to say that chronopharmacology has challenges that need to be overcome, such as patient compliance and implementation in structured healthcare settings, the potential benefits indicate a future of personalized, effective, and patient-centered medical care, resulting in a new era of rational drug prescription.

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