

臺北市立聯合醫院松德院區

【Pharmacokinetics and therapeutic drug monitoring of antipsychotics】

壹、課程內容：

- 一、主辦單位：臺北市立聯合醫院松德院區
- 二、課程地點：臺北市立聯合醫院松德院區 3 樓第二講堂
- 三、課程日期：2025 年 3 月 7 日（星期五）15:00-17:00
- 四、主講人：林式穀醫師（台北長庚醫院）
- 五、主持人：陳柏妤主任（臺北市立聯合醫院松德院區）
- 六、授課對象：精神科醫師及相關醫療專業人員、全院同仁、本院各專業職類之見實習學生等

七、課程表：

時間	主題	主講人/主持人
15:00-17:00	Pharmacokinetics and therapeutic drug monitoring of antipsychotics	林式穀醫師

八、課程摘要：

Pharmacokinetics (PK) refers to the movement of a drug into, through, and out of the body—the time course of its absorption, bioavailability, distribution, metabolism, and excretion—and is sometimes described as what the body does to the drug. In contrast, pharmacodynamics (PD) refers to the body's biological response to drugs, or what the drug does to the body. In recent years, drug liberation has also become a technique to manipulate the half-life of a medication. Clinically, the prescription of a medication requires consideration of the drug's parameters, including time to peak concentration, elimination half-life ($T_{1/2}$), area under the curve (AUC), volume of distribution, and steady-state concentration.

In psychopharmacology, therapeutic drug monitoring (TDM), which measures the blood concentrations of certain medicines, is routinely applied to mood stabilizers such as lithium, valproic acid, and carbamazepine. However, TDM for antipsychotics is not widely applied due to the greater difficulty in measurement methods.

In this talk, the PK of haloperidol, clozapine, and remoxipride, as well as the TDM

of risperidone, paliperidone, aripiprazole, quetiapine, and lurasidone, will be delineated using studies from the Taipei City Psychiatric Center from the past few decades. Additionally, ethnic differences between Oriental and Caucasian populations will be compared and discussed. The future study of TDM of brexpiprazole will be introduced also.