R in clinical practice - summarizing pharmacological data

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Knowledge of physicians about previous medications is an important basis for making decisions concerning the next therapeutic steps.

In 1994 Powsner and Tufte developed a complete, challenging and well reasoned system for presenting information of patients with about 11000 spreadsheet cells [1, 2]. In contrast to this very comprehensive and elaborate method, we focussed on a clear and effective presentation of relevant key information such as pharmacotherapy and laboratory findings.

Healthcare professional has just to key in each medication including dosage, first and last day of treatment in a concise matrix. With this compact database our R function visualizes the documentation as a timeline graph. This overview not only includes the time information, but also enables the physician to evaluate the past treatment, to display ongoing ineffective medication and develop remaining therapeutic options.

Although the computing and visualisation task could have been done using other programming languages, "R" provided flexible and high end output with minimal and simple coding. Thereby this tool is qualified to increase the therapeutic and time effectiveness in medical long-term treatment.

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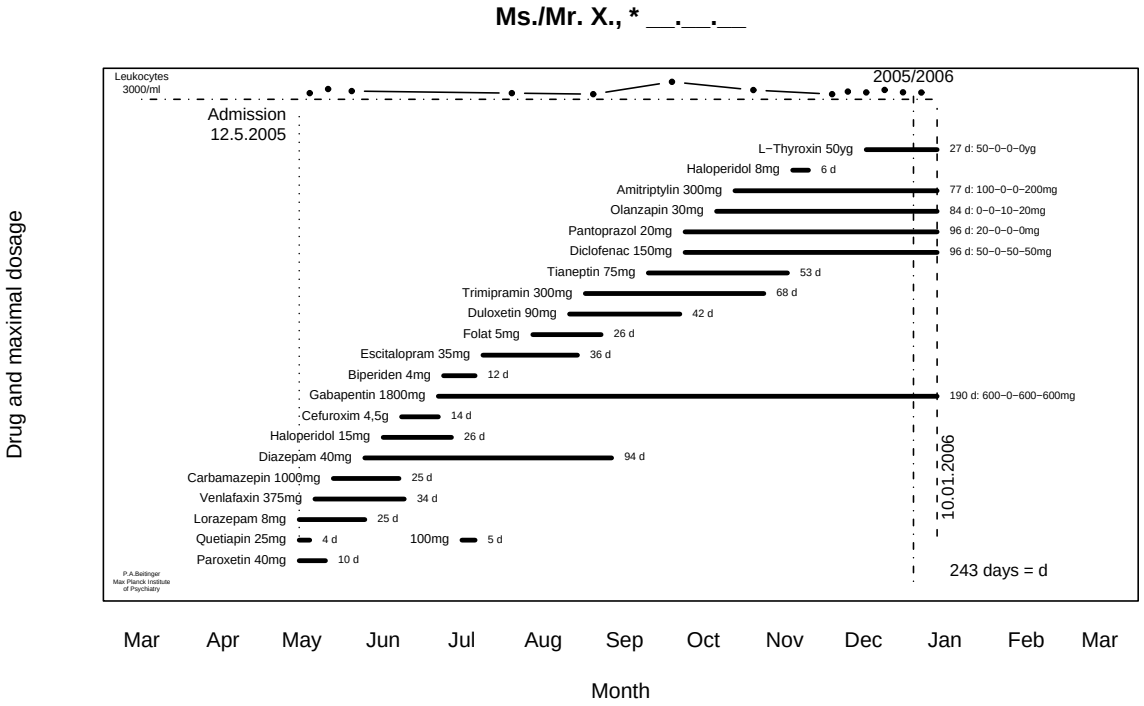

Literatur

[1] S. M. Powsner and E. R. Tufte. Graphical summary of patient status. *The Lancet*, 344(8919):386–389, 1994.

[2] S. M. Powsner and E. R. Tufte. Summarizing clinical psychiatric data. *Psychiatr Serv*, 48(11):1458–1461, 1997.