

An Introduction by Prof. MUDr. Jaroslav Rybka, DrSc., Doyen of Czech Diabetology

The Role of Statistics in Programme Care for Patients with Diabetes



foto © Karel Meister

Dear Readers,

Professor Syllaba made me undertake, in his characteristically kind manner, a statistical evaluation of my initial works on tuberculosis and diabetes and Professor Mikulecký later appreciated my endeavour by saying that I had managed, interestingly, to avoid most rules of statistics. But it was not until I came to Joslin clinic that Professor Andrzej Krolewski – who has in a substantial way influenced the monitoring of epidemiological data on diabetes and its complications up to now – taught me the real lesson. He definitely succeeded in persuading the medical community that one of the characteristic features of statistical data consists in it always stimulating thought.

The readers of this supplement to the periodical *Vnitřní lékařství* (Internal Medicine) are offered an opportunity to read ten interesting articles about how to best utilise data sources within the programme care for our patients with diabetes. It was not possible to approach all of those who would also enrich this supplement with their contributions, but quite a few of them have been referring

for guidance to the essential data in the studies by Professor Jan Škrha (it feels odd to add *Snr.*, although his sons have now been following in his footsteps in diabetology) from recent years. I had the honour to collaborate on earlier occasions with some authors of the supplement, who have been devoting themselves to this area involving the assessment of statistical data, i.e. economic issues concerning the therapy of diabetes, pharmacotherapy and other fields of diabetology. In this connection I would also like to mention the inspirational studies by, inter alia, Professor Švihovec, our colleague Tomáš Doležal, Senior Lecturer Dušek and Senior Lecturer Němeček.

All the published studies demonstrate that diabetology is interconnected with cardiology and other internal medicine and surgical specialties. In recent years a question has also been discussed that diabetes mellitus may be a generalized cardiovascular disease. This concept has many supporters who build their argument on the possibility of a common genetic basis: on the fact that both the diseases involve multifactorial environmental risks, progressive development and increasing prevalence, and similar preventive measures are applied for both diseases in the primary and secondary prevention. On the other hand, this theory has many limitations. The two diseases are complex disorders which determine a whole group of changes mutually difficult to separate, and it is just the statistical analysis of data which can contribute to the solution of this problem. Data analysis also completes the interconnection of information about diabetic patients and it is stimulating in interdisciplinary collaboration. The care for patients with diabetes is exacting in terms of both specialist care and cost and in order to implement the National Diabetes Programme of the Czech Republic, we need to succeed in the discussions over increasing the funding for our field, and support our argument with such figures and studies as are now presented to you.

I wish you good and thought-provoking reading,
Prof. MUDr. Jaroslav Rybka, DrSc.

Zlín, October 2015