Pharmacoepidemiology –
a discipline in rapid progress in Norway

An epidemiological approach to drug issues can be used to assess how drugs function in the real world. The limitations of the pre-marketing studies warrant continuous post-marketing surveillance of drug effects as well as of drug dissemination in the society. These are the core elements of pharmacoepidemiology, which can be viewed as a bridge science, spanning both pharmacology and epidemiology. Pharmaco-epidemiological research may be divided into two main fields. The first includes studies of variation in drug utilisation in populations, drug use patterns, identification of predictors for use and generation of explanatory hypotheses. The other field includes case-control and cohort studies of for example side effects, adverse drug effects, and post-marketing studies investigating long-term effects of specific drugs in a population. In addition, whereas epidemiological research traditionally has dealt with data from populations, pharmacoepidemiological studies quite often are based on clinical data acquired by use of a bedside approach. Thus pharmacoepidemiology also has much in common with the discipline of clinical pharmacology.

In Norway drug utilization research dates back to the 1970s when the WHO Drug Utilization Research Group, later renamed EuroDURG, was established. At present a closer collaboration between EuroDURG and the International Society of Pharmacoepidemiology (ISPE) is being developed. The Norwegian branch was initially named Pharmacoepidemiology Forum and from 2004 the Norwegian Society of Pharmaco-epidemiology.

In 2000 the Norwegian Society for Pharmacoepidemiology organised a satellite symposium, in connection with the 1st Nordic Epidemiology Conference in Bergen, where experiences with prescription databases in the Nordic countries were discussed. This provided the impetus to the process of establishing a prescription database in Norway and to the making of the first special issue of the Norwegian Journal of Epidemiology dealing with pharmacoepidemiology (1). The present issue is the second special issue on this topic.

The establishment of the Norwegian Prescription Database (NorPD) in 2004, located at the Norwegian Institute of Public Health, has had a major impact upon the ability to conduct research. As a result, scientific production within pharmacoepidemiology, and accompanying drug research, has increased significantly.

The first article in this issue, focused on pharmaco-epidemiology, gives an overview of the collection and content of the Norwegian Prescription Database and includes some key figures and findings obtained during the first four years after establishment of the database. The other papers are presented in two sections, the first dealing with overviews of general drug topics and the second with studies investigating specific drug issues. The articles provide a representative cross section of the drug research activities taking place in Norway. We hope that also the international scientific community would find this special issue of interest.

As guest editors, we want to thank each of the authors who have contributed to the present issue. All the papers have been reviewed by external referees, and we want to thank the reviewers who have greatly assisted in improving the quality of the papers. We also express our thanks to the Norwegian Epidemiological Association for inviting us to act as guest editors for this issue. Furthermore, we thank Trond Peder Flaten, the editor of the Norwegian Journal of Epidemiology, for his invaluable advice in assisting us in the making of this special issue.

REFERENCE

1. Eggen AE, Straand J. Pharmacoepidemiology – a bridge science. *Nor J Epidemiol.* 2001; **11** (1): 3-4.

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