

**Commentary of the SMB panel of experts on the study
“Patterns of benzodiazepine prescription among older adults
in Switzerland: a retrospective analysis of claims data”
by Luta et al. (BMJ Open January 2020, 10:e031156)**

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The study by Luta et al. used routine data from 2017 on around one million individuals insured with a major Swiss health insurance fund. This data set was used to analyse the prescription of benzodiazepines for people aged 65 years and above. Data was used exclusively from those nine Swiss Cantons where self-dispensing by practice-based doctors is not permitted. Among other things, it investigated whether there is a link between the frequency of benzodiazepine prescribing and hospital admissions due to falls.

As reliable Swiss figures on the prescribing of benzodiazepines has not been available until now, this study closes a gap. It has shown that the use of such medications, usually prescribed to treat anxiety or insomnia, continues to be widespread – that was true, at least, for the reference year 2017. Benzodiazepines were prescribed to approximately one fifth of insured individuals aged 65 and above. The prescription frequency for older people and those with severe comorbidity had also risen and was twice as high among women as it was among men. Most patients over the course of the year received one to five prescriptions, but every tenth received ten or more. Forty percent of patients were prescribed 90 or more daily doses. Therefore, administration of benzodiazepines to them lasted for longer than three months. There are some striking cantonal differences. The frequency of prescription was three times higher in Valais canton than in Aargau, which was the canton with the lowest frequency in the study. Such obvious differences in prescribing practice should be the subject of more detailed analysis.

For years, international professional associations have been recommending that benzodiazepines should not be used as the remedy of choice for older people with sleep problems, restlessness or confusion, and should only be prescribed for a limited time. In addition to the addictive potential of psychoactive drugs such as these, the high risk of accidents is highlighted, for example at home or in road traffic. The Swiss professional association for geriatric medicine (Schweizerische Fachgesellschaft für Geriatrie) has placed benzodiazepines for the elderly among its "Top 5" list of unnecessary treatments (<https://www.smartermedicine.ch/de/top-5-listen/geriatrie.html>).

The risk of hospitalisation due to injury among patients who take benzodiazepines (also taking into account other influencing factors such as age, gender and canton of residence) is approx. 30 percent higher than among patients who do not take such medication. In 2017, in the nine cantons investigated, 760 patients taking benzodiazepines were hospitalised with injuries. Luta et al., however, quite rightly point out that this result cannot be interpreted automatically as a causal link, further (e.g. longitudinal) data would be necessary for this.

This study was deliberately restricted to the homogeneous substance class benzodiazepine. Of course, in practice, other medicines are prescribed such as the “Z drugs” Zolpidem (Stilnox ®) and Zopiclon (Imovane ®) for similar or identical symptoms. It would be informative, in follow-up studies, not only to show multi-year trends in benzodiazepine consumption, but also to compare these trends in the prescribing of other psychoactive drugs. This would make it possible to investigate whether the relevant recommendations to reduce benzodiazepine use merely result in doctors switching to other substance classes or whether an overall reduction can actually be achieved.

Unfortunately, for the 17 cantons in which all or just certain practice-based doctors are permitted to dispense medicines directly, no reliable analysis of prescribing practice is possible on the basis of data from insured individuals. Extrapolation of these results to the whole of Switzerland is therefore limited. Regardless of the discussion on the advantages and disadvantages of self-dispensing, it would be desirable, in the interests of making research into medical care, if, direct administration of medicines by doctors' practices were uniformly recorded in the cantons concerned. Without comprehensive data collection, however, many questions remain unanswered regarding the prescribing of psychoactive drugs to older outpatients.

Why do benzodiazepines continue to be prescribed so often in particular for people over 65 in Switzerland and for so long – despite the warning recommendations? It would be positive if the competent professional associations would intensively continue the efforts they have already begun to reduce benzodiazepine consumption. Other analyses regarding frequency, but in particular also the reasons for this prescribing practice, might support this work.