CORRESPONDENCE

Problematic Medication With Benzodiazepines, “Z-Drugs”, and Opioid Analgesics

An Analysis of National Health Insurance Prescription Data From 2006–2016

by Dr. phil. Sven Buth M. A., Dr. med. Rüdiger Holzbach, Dipl.-Psych. Marcus-Sebastian Martens, Dipl.-Psych. Eike Neumann-Runde, Dipl.-Inf. Ommo Meiners, and PD Dr. phil. Uwe Verthein in issue 37/2019

A Trend Towards Causal Therapy

Buth et al. discussed an important topic, using a good research method and adequate case numbers (1). They drew attention to the fact that action is needed. In addition to the listed causes for long-term use of benzodiazepines and zolpidem and zopiclone, a dissertation by Bierhals (2) showed that primarily patients with dependent or depressive personality traits, manifest depression, or abnormal anger expression lean towards long-term use. It also reflected the important role of general practitioners, who are usually the first prescribers (77%) and ongoing prescribers (90%), but during the study period 2008 all too rarely discussed with their patients the indication (42%), the potential for dependency (45%), the duration of intake (2%), and cessation methods (21%). Benzodiazepine dependency was the higher the greater the degree of satisfaction with and confidence in the general practitioner. This illustrates the huge responsibility that lies with GPs and also the necessity to weigh up a patient's personality structure against the indication before issuing a prescription.

In this context Buth et al. sent a positive signal with the decrease in prescriptions and the duration of intake of benzodiazepines and zolpidem and zopiclone, which they explained with increasing awareness of the risk potential among doctors. The concomitant increase in opiate prescriptions could be an indication of a trend towards causal rather than symptomatic therapy. In this setting it would be interesting to look at data on how

during the same time period, prescribing behaviors have developed with regard to (a)typical neuroleptic drugs and tricyclic antidepressants or selective serotonin reuptake inhibitors, especially in older patients (3).

An additional group of effective substances of interest for using monitoring approaches is laxatives, for which a high rate of misuse can be assumed especially in older persons.

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Description of Problematic Medications Alone Is Not Enough

Statistical information about the use of medications with the potential for addiction/dependency and misuse and prescribing behavior (1) can draw attention to values from medical ethics, such as avoidance/prevention of harm, and can thus indirectly stimulate changes in doctors' behaviors. But to deduce causal relationships or treatment recommendations from these notices is a rather questionable approach. Unfortunately, many publications—including the article by Buth et al. (1)—which recommend not to prescribe opioid analgesics, Z-drugs, or benzodiazepines in the long

term—do not include any suggestions of how to improve matters. One example: chronic pain and opioid analgesics. Pain disorders can as a rule be treated, but often not cured, and in some, no notable improvement occurs, which means that ethical considerations take over (2).

My own fundamental experiences in some 30 000 pain patients have shown that getting to the bottom of the cause of pain, the importance, the effects, and affected patients' coping strategies requires a great deal of time, and that matters are often highly complex, so that conventional explanations according to the stimulus-response scheme, according to the model of nociception-experience of pain are not appropriate.

An improvement was achieved in 1996 with the introduction of the official qualification “specialized pain therapy”. Further progress might be made by introducing a medical specialty “pain medicine,” such as has been established within the EU in Ireland since 2014. According to the German Society for Pain Medicine, some 3.4 million people in Germany are affected by severe chronic pain (3). All that is available to these patients are about 1100 qualified pain therapists working in outpatient services, which is not enough for individual, personal care.

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Explanation of Methods Is Needed

Some explanations regarding the methods are needed for the study reported by Buth et al. (1). The defined daily dose (DDD) is not—as misleadingly presented—a recommended daily dose but an “assumed mean daily dose for the main indication.” The DDD is a merely technical unit of measurement.

Table 1 in the article shows for recipients of the individual substance group the proportion with a prescription of the selected relevant active substance from this group. In my opinion it is misleading to term this a prescription prevalence. Also, the proportion of patients taking lorazepam has not more than doubled between 2006 and 2016 but has increased 1.4 times. What has changed is the rank of lorazepam in all patients treated with benzodiazepines. The definition of long term use in Figure 3 is also misleading. According to the *eMethods*, long-term use was assumed if at least one relevant prescription was issued in each quarter of the patient year under observation.

The study, which is based on data from four regions, shows the pressing importance of routine monitoring for topics relevant for public health on the basis of a nationwide dataset that includes all national health insurance funds, since biases arise for all data sources, for example as a result of regional particularities or the

In Reply:

We thank our correspondents for their remarks. Dr. Hummel rightly points out the role of GPs and the discrepancy between trust and insufficient information on the duration of drug treatment and the risk of dependency in Z-drugs and benzodiazepines. The decrease in prescriptions is, however, put into perspective in view of the private prescriptions that Dr. Schubert points out. Undoubtedly, Dr. Wörz is correct to mention the great effort involved in managing relevant groups of patients properly.

Furthermore we are grateful to Dr Schubert for her clarification, that the DDDs correspond to the assumed mean daily doses for the main indication. This is particularly relevant for opioid analgesics, since the

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type of data collection (in the case of Buth, incomplete data collection from pharmacies). In theory, such a dataset is available in the shape of DIMDI healthcare data (3), so that reliable data are feasible for members of statutory health insurance funds (with underestimates because of private prescriptions). But to be able to use these data, organizational hurdles will need to be cleared in order to facilitate more current data and timely analyses, which are urgently required for managing healthcare.

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therapeutically necessary dose for a pain patient may differ notably from the DDD, depending on the disease. In benzodiazepines and Z-drugs, this problem is of lesser importance, as the dosages recommended for “non-restful sleep/sleep disorders” in the S3 guidelines (1) mostly correspond to the DDDs.

The phrase “Prevalence of prescriptions . . .” in the title of Table 1 in the article refers, as explained in the legend to the table, to the proportion of patients who received a particular active substance in the relevant year, relative to all patients in the substance group (2).

Furthermore, a critical comment relates to the fact that because of the incomplete coverage of pharmacies, generalizing statements are possible to a limited degree only. Because of the weighting we undertook, these

limitations are likely to have only minor effects on the results of the analysis, as it is unlikely that pharmacies with far above or far below average amounts of drugs dispensed were systematically not included in the dataset. Analyses based on data from large pharmaceutical data centers also have the substantial advantage that evaluations are done in a timely manner and across all health insurance funds. Setting up annual monitoring would thus be feasible at a justifiable effort and expense.

Wörz notes that many studies criticize the long-term use of benzodiazepines, Z-drugs, and opioid-analgesics, but do not offer suggestions for alternatives. As regards benzodiazepines and Z-drugs, however the relevant S3 guideline includes several options for helping affected patients with sleep disorders without the use of hypnotic drugs. Opioid analgesics need to be considered in a more differentiated manner. As regards chronic non-tumor disorders, the S3 guidelines (3) recommend a prescription period of more than three months for very few indications. However, for many patients with chronic pain, and even more so for patients with cancer, there is no alternative to the long-term use of opioid analgesics. We unreservedly agree

with the argument that in such cases, ethical considerations take priority. DOI: 10.3238/arztebl.2020.0098b

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