

Medicine shortages in Norwegian pharmacies in 2019 and 2022

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Background information Shortage of medicines represents a great threat to patient safety. There is little knowledge about how extensive the shortage of medicines is in primary health care. Specifically, how it affects the pharmacy customer.

Purpose The purpose of the two surveys (2019 and 2022) were to investigate the extent of, and time used, to manage medicine shortages in community pharmacies and the outpatient department of hospital pharmacies.

Method Data were collected through an online survey in 47 (2019) and 36 (2022) pharmacies during a 4-week period. The pharmacy employees reported when they did not have the medicine on the prescription in stock, the time it took to manage the situation, if they needed help from a colleague or contact with the prescriber, if the wholesaler had the medicine, if they provided the patient with another medicine directly or what was the outcome if they did not. The data was analysed descriptively.

Results In 2022 (2019), 96.7% (96.4%) of the patients were immediately given the medicine on the prescription at the pharmacy. For 1.7% (1.3%) the prescribed medicine was ordered from the wholesaler and delivered within 24 hours. Another medicine was immediately given to 0.5 % (1.0%) of the patients, i.e., another package size. Among the remaining 1.1% (1.3%); 0.4% (0.2%) was sent to another pharmacy that had the prescribed medicine, for 0.3% (0.5%) the pharmacy did not find any immediate solution, and for 0.4% (0.6%) it is unknown if any solution was found. Common for the two surveys was that a few medicines accounted for a large proportion of the shortages. Medicines that are rarely missing are on the generic exchange list, are included in the step price system and have a high price. The pharmacy employees used 3.2 minutes (3.5 minutes) extra filling the prescription when managing a medicine shortage, rarely needed help from a colleague, and very rarely contacted the prescriber.

Conclusion The delivery rate in both surveys (97.2% and 97.4%) is nearly the same if you add the times the patient received another medicine immediately. This indicates that patients have almost the same risk of experiencing medicine shortages today versus three years ago. A pharmacy practise standard for management of medicine shortages was implemented in 2020. It may have contributed to pharmacist in 2022 being more likely to investigate nearby pharmacies' stock, before they had "tried everything". We purpose that the most clinically relevant description of medicine shortages is the 0.3% (0.5%) – 0.7% (1.1%) patients who the pharmacy did not find any immediate solution for. This may seem like a small number, while it amounts to 170 000 (250 000) – 400 000 (600 000) prescription fillings, if you extrapolate to the entire Norwegian market. Most medicines are not completely lacking in the pharmacies, but there are too few packages to meet the demand. This means that a viable measure during medicine shortage is rationing packages in the market; for instance, giving it only to patient groups in most need.