

UNAUTHORISED MEDICATION USE IN ESTONIAN HOSPITALS

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BACKGROUND AND IMPORTANCE

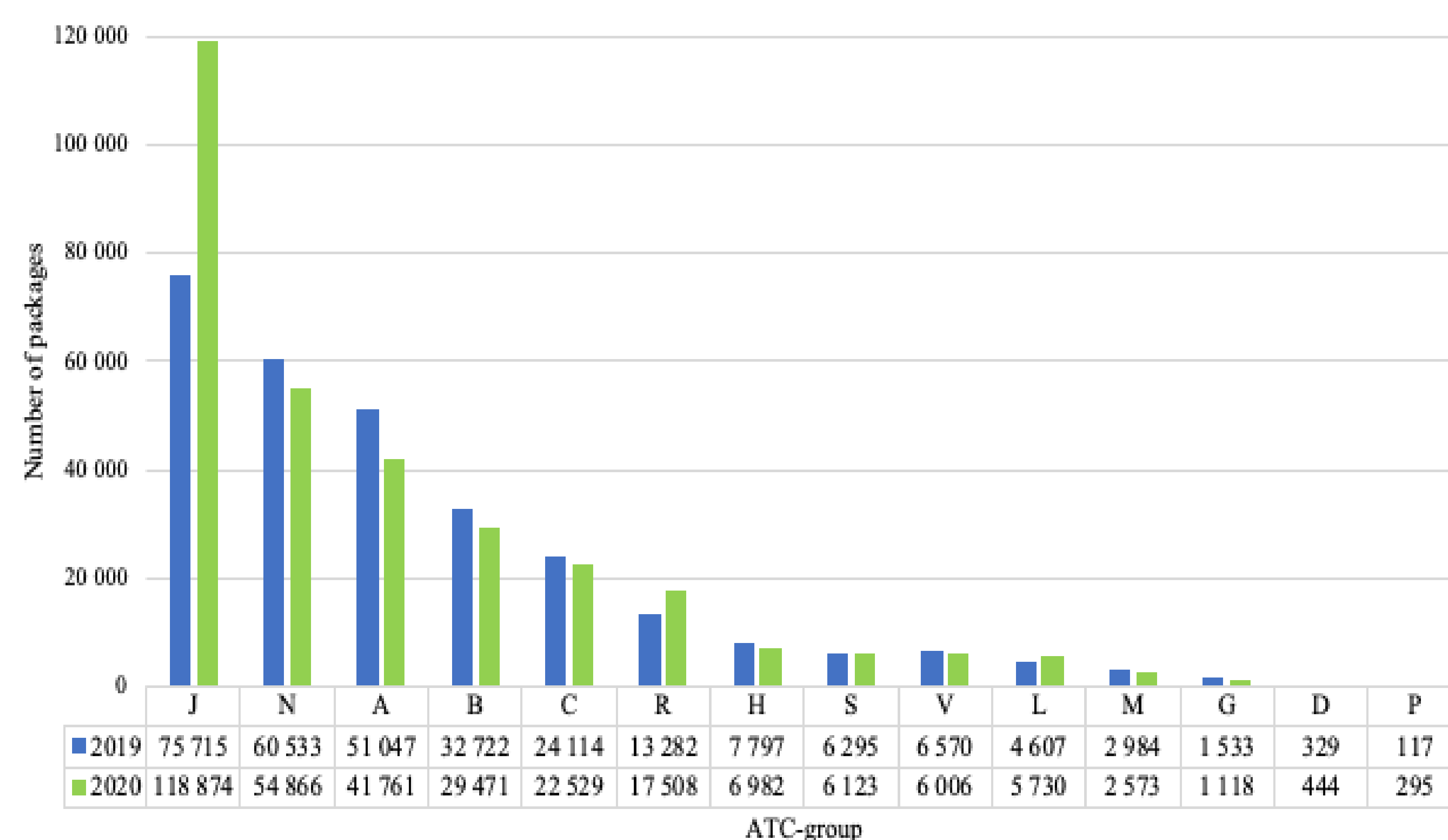
- Small local pharmaceutical market, supply difficulties etc → unauthorised medication (UM) use is often inevitable in Estonia.
- Due to **absence of summary of product characteristics** in Estonian language and **foreign language package** of UM, several problems related to the use of UM may arise.
- No research on that topic has been carried out in Estonia.

AIM AND OBJECTIVES

The aim of this study was to find out **how much** and **which** UM were used in Estonian hospitals in 2019-2020.

The objectives were:

- 1) How many packages of UM were used;
- 2) Which were the most used Anatomical Therapeutic Chemical (ATC) groups;
- 3) What was the most used active ingredient;
- 4) What were the most used administration routes and dosage forms.



Graph 1. The number of packages of unauthorised medications issued to hospital pharmacies in 2019-2020, arranged by ATC-groups.

MATERIALS AND METHODS

- Data regarding the use of UM in Estonian hospitals in 2019-2020 was obtained from Estonian State Agency of Medicines.
- Data was analysed by the **number of packages** using Microsoft Excel software.

RESULTS

- In 2019 → 286 719 packages of UM
In 2020 → 313 793 packages of UM
- That constitutes approx. **12%** of all imported medications in Estonian hospitals in both years.
- The most used **ATC-groups** in 2019–2020: anti-infectives for systemic use (**J**), nervous system (**N**), alimentary tract (**A**).
- The most used active pharmaceutical ingredient - **oxacillin** (both years).
- UM in hospitals were administered mainly **parentally** (approx. 75% of all packages).
- The most used dosage form – **solution for injection**.

CONCLUSION AND RELEVANCE

- The use of UM was studied for **the first time in Estonia**, similar studies from other countries were also not found.
- → there is **information which UM are used the most** in Estonian hospitals and more focus can be put on better handling of these medications
 - For example, using labels with the most important information in Estonian language.

