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Exploring the possibilities of implementing the Medication Use Review service in Eastern Europe and Iran

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Background

- Medication Use Review (MUR) is a structured evaluation of a patient's medicines for detecting drug-related problems and recommending interventions to optimize patient's medicine use and improve health outcomes.
- MUR is considered one of the key strategies for ensuring medication safety in polypharmacy patients and is offered in pharmacies in more than half of European countries.
- The international MUR pilot project lasted from January 2019 – March 2021 in community pharmacies in Eastern Europe and Iran.

Aim: The aim of this study was to gain insights into developments of the community pharmacy sector and map factors encouraging and hindering MUR service in Eastern Europe and Iran.

Methods:

- By November 2019, MUR framework countries performed document analysis and qualitative interviews to define community pharmacy sector indicators, current and future competencies and roles of community pharmacists, and factors encouraging and hindering MUR service in a particular country.
- The Socio-Economic Model (SEM), which includes five domains, was used for the inductive thematic analysis of the results.
- The collected information together with the results of the piloting of MUR service enables the evaluation of the possibilities of implementing the service in the future.

Results

- The average expenditure on health as a percentage of GDP was 6.3% and was lower in all network countries compared to EU average.
- On average, there were 2897 inhabitants per community pharmacy, 711 inhabitants per pharmacist or assistant pharmacist, and 2.2 pharmacists and 1.9 assistant pharmacists per pharmacy, which indicates that there are many pharmacies but lack of workforce.
- Current community pharmacist competencies in MUR network countries were more related to traditional services such as dispensing and counselling of prescription and OTC medicines and compounding of extemporaneous medicines.
- In most network countries reporting of adverse drug reactions, patient education on disease prevention and health promotion, and some point-of-care testing were available.
- The identified future competencies included provision of different extended services such as MUR, but also vaccination services, new medicines service, smoking cessation, and diabetes screening.

The SEM analysis of barriers and facilitators of MUR

Domain	Barriers	Facilitators
Individual	MUR service is unfamiliar among physicians and pharmacists	Increased understanding about importance and effectiveness of MUR service among pharmacists and physicians
Intrapersonal	Insufficient collaboration between GP-s and pharmacist	Improvement of pharmacist role in healthcare team
Organizational	Lack of private rooms and electronical resources in community pharmacies High workload of pharmacists	Developed MUR service tool on a national level
Community	MUR is unfamiliar for patients	Increase in polypharmacotherapy and pharmaceutical waste
Healthcare system and policies	Financing model of MUR service Pharmacists have no central system for documentation of patient's data and pharmacists' interventions	Access to electronic list of medicines and medical record/ electronical prescriptions by pharmacists

Summary

- As increase in polypharmacotherapy and pharmaceutical waste are increasing concerns in MUR framework countries, it is important to routinely assess patients' medication use.
- More health professionals need to be introduced to MUR and interprofessional practice which supports pharmacists working together with GPs.
- It is necessary to gain government support and financing for the service in Eastern Europe and Iran.
- Several organizational barriers such as high workload and lack of private consultation rooms need to be addressed for continuing with MUR.

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