THE IMPACT OF
A PHARMACIST-LED MEDICATION REVIEW
ON THE MEDICINE RISK SCORE:
A NONRANDOMISED CONTROLLED STUDY

Background

- Pharmacist-led medication reviews can reduce and prevent drug-related problems
- Medication reviews require great economic resources
- Pharmacists need to prioritize who would benefit from a medication review
- An algorithm called the Medicine Risk Score\(^1\) (MERIS) can be used
- MERIS identifies patients who are in high risk of experiencing medication errors
- The impact of pharmacist-led medication review on the patients’ MERIS-scores has not yet been investigated

Aim

- To investigate the impact of a pharmacist-led medication review on the MERIS-score for hospitalised patients

Design

- A nonrandomised controlled, prospective study, November – December 2020

Participants

- Patients without a medication review the last month and a MERIS score \(\geq 14\), admitted to a medical or cardiology department at two local hospitals (hospital A and B)
- Intervention group: patients who underwent a pharmacist-led medication review at hospital A
- Control group: patients who did not undergo a pharmacist-led medication review at hospital B

Outcome

- Change in MERIS-scores calculated as the difference in MERIS-score before medication review and 1½ days after
- Drugs involved in the identified drug-related problems and their influence on the MERIS-score

Materials and methods

<table>
<thead>
<tr>
<th>Participants</th>
<th>Outcome</th>
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<tbody>
<tr>
<td><strong>Intervention</strong></td>
<td><strong>Control</strong></td>
</tr>
<tr>
<td>Sex</td>
<td>Age</td>
</tr>
<tr>
<td>Male</td>
<td>31 (75%)</td>
</tr>
<tr>
<td>Female</td>
<td>24 (55%)</td>
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No statistically significant difference in the MERIS-score between the two groups

Of the drugs included in 43 identified drug-related problems, 55% had a potential risk of harm or interaction, which influenced the MERIS score

However only 17% of the drugs would, if the recommendations were implemented, influenced the MERIS scores

Conclusion

- A pharmacist-led medication review does not seem to have an impact on the MERIS-score for hospitalised patients.
- Further studies are needed to identify interventions that can reduce patient risk of medication errors.

Reference