Nature and Effect of Patient-Initiated Consultations in Community Pharmacies

Man Qing LIANGAB, Daniala WEIR, Annabelle LAMY, Marie-Pierre MOREAULT, Tibor SCHUSTER, Stéphanie BOULENGER, Guy PARE, Aude MOTULSKY

1 Research Center, Centre hospitalier de l’Université de Montréal, Montreal, Canada
2 Department of Family Medicine, Faculty of Medicine, McGill University, Montreal, Canada
3 Center for Interuniversity Research and Analysis of Organizations, Montreal, Canada
4 Research Chair in Digital Health, HEC, Montréal, Canada

mar.qing.liang@umontreal.ca, daniala.weir@mail.mcgill.ca, aablamy@icloud.com, marie-pierre.moreault@umontreal.ca, tibor.schuster@mcgill.ca, sboulanger@hotmail.com, guy.pare@hec.ca, aude.motulsky@umontreal.ca

Background

Improving access to clinical expertise for minor ailments and chronic conditions

Methodology (Motulsky et al., 2020)

Real-time observational study with triangled pharmacists’ and patients’ data

1. Pharmacy and Patient Recruitment

- All pharmacies of the province of Quebec (approx. 1900) were invited to participate in the project
- Final sample of 11 pharmacies (out of 65 interested) selected based on the following criteria: chain of the pharmacy (with an aim for diversity), region, proximity to a medical clinic, and number of dispensed prescriptions per day

2. Data collection in mobile application

- During a 4-week period for every pharmacy (October to December 2017)
- All pharmacists on duty were asked to compile in the app the patient-initiated consultation
- After the patient-initiated consultation, all adult patients were approached by a research assistant for informed consent to participate in the study (included 18+ years, French or English speaking, not suffering from a cognitive disorder)

Mean Cost per Consultation

- ED (£147.09)
- Medical Clinic (£82.34)

3. Structured Interviews with Patients

- On Day 1 (In Person)
  1. Patient characteristics (gender, age, prescription medication use, number of chronic conditions, access to a general practitioner)
  2. Reason for the consultation
- On Day 7 (Phone)
  1. Self-care seeking behavior following the consultation
  2. Perceived impact of the consultation
  3. Satisfaction

Results (Motulsky et al., 2020)

- Total consultations entered in app by 55 pharmacists in 11 pharmacies (in person and by phone)
- In person consultations (81%)
- By phone consultations (19%)

Factors associated with avoiding an ED visit

<table>
<thead>
<tr>
<th>Type of health care resource</th>
<th>(A) Resources recommended as reported by pharmacists n (%)</th>
<th>(B) Patient behavior – resources used n (%)</th>
<th>(C) Patient perception of resource avoided (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>512 (85)</td>
<td>509 (85)</td>
<td>137 (23)</td>
</tr>
<tr>
<td>Emergency department</td>
<td>7 (1)</td>
<td>8 (1)</td>
<td>103 (18)</td>
</tr>
<tr>
<td>Walk-in clinic</td>
<td>35 (6)</td>
<td>31 (5)</td>
<td>251 (42)</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>34 (6)</td>
<td>30 (5)</td>
<td>275 (44)</td>
</tr>
<tr>
<td>Calling info-centre</td>
<td>1 (0)</td>
<td>1 (0)</td>
<td>292 (49)</td>
</tr>
<tr>
<td>Other health care professional</td>
<td>8 (1)</td>
<td>0 (1)</td>
<td>29 (5)</td>
</tr>
</tbody>
</table>

Pharmacy Characteristics

- No ED visit avoided (n = 495) N (%) | ED visit avoided (n = 105) N (%)
- Urban (6) | 240 (48) (36) | 100 (44)
- Suburban (1) | 100 (36) | 55 (11)
- Rural (3) | 278 (58) | 72 (49)

Patients were more likely to report that the consultation with the pharmacist prevented them to go to the ED in rural regions or when the pharmacy was not close to a medical clinic

Word cloud for reasons consultation according to patients

Factors associated with avoiding an ED visit

Patients seek consultations with pharmacists for diverse reasons

Conclusion

- Reasons patients are seeking consultations with pharmacists are diverse
  - Health concern: Pain, cold, cough, etc. (75%)
  - Medication concerns (22%)
  - Pharmacist are equipped to manage most of these consultations without referring to another healthcare resource.

References


Disclaimer: The research presented in this poster has been published in Research in Social and Administrative Pharmacy (Motulsky et al., 2020)

Perspectives

- How can we improve pharmacists’ integration into formal primary care organizations?
  - Care continuity, documentation system
  - Investigate experience of patients who are not regular users of pharmacists and not inclined to use medications

Acknowledgements

This project was funded by the Association québécoise des pharmaciens propriétaires (AQP)

For every consultation, the pharmacists would enter in the app:
1. Type: in person or by phone
2. Nature of the recommendation: health concern (pain, cough, cold, medication, interaction, side effect, etc.
3. Action taken: recommendation, information, other
4. Perceived impact (avoided resources): ED, GP, walk-in clinic, telephone consultation with nurse, other healthcare professional

The app would also extract characteristics of the consultation from the logs of the app (day and time, user ID, pharmacy ID) and from female patients (Watson et al., 2015).