Preliminary evaluation of an advanced practice physiotherapy model of care for patients with musculoskeletal disorders presenting to an emergency department.
Research Team
Matifat, E.¹, Mequignon, M.¹,², Perreault, K.³,⁴, Roy, J.-S.³,⁴, Aiken, A.⁵, Gagnon, E.⁶, Carlesso, L.¹,⁷, Lowry, V.¹, Décary, S.¹, Hamelin, B.⁶, Lasalle, A.¹, Farley, N.⁶,⁷, Pelletier, D.⁸, Desmeules, F.¹,⁷

1-Maisonneuve-Rosemont Hospital Research Center, University of Montreal Affiliated Research Center, Montréal, Québec, Canada,
2-Université de Picardie Jules Verne, Amiens, France,
3-Center for Interdisciplinary Research in Rehabilitation and Social Integration (CIRRIS), Québec, Québec, Canada,
4-Departement of Rehabilitation, Faculty of Medicine, Laval University, Québec, Québec, Canada,
5-Faculty of Health, Dalhousie University, Halifax, Canada,
6-Maisonneuve-Rosemont Hospital, Montréal, Québec, Canada,
7-School of Rehabilitation, Faculty of Medicine, University of Montréal, Montréal, Québec, Canada,
8-Ordre Professionnel de la Physiothérapie du Québec, Montréal, Québec, Canada.

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Background & Relevance

• Background
  • Physiotherapists have extensive training to treat patients with musculoskeletal disorders (MSKD) and are emerging as key providers in primary care models.
  
  • Advanced practice physiotherapy (APP) is emerging in new settings, such as emergency departments (ED), but there is limited evidence on the specific benefits of these models.

• Relevance
  • Implementation of APP models has the potential to increase access and quality of care for patients with MSKD.
Research Objectives

1. Determine diagnosis interrater reliability between physicians and APPs;

2. Compare medical imaging requests, treatment options and discharge plans for patients with MSKD consulting in an ED.
Methodology

• Participants were recruited at the Maisonneuve-Rosemont Hospital’s emergency department (Montréal, Canada).

• Inclusion criteria:
  ✓ Adults with minor MSKD.

• Exclusion criteria:
  ✗ Previously treated by one of the providers,
  ✗ Significant trauma or major MSKD or injury,
  ✗ Red flags,
  ✗ Patients with diagnosed inflammatory arthritis,
  ✗ Active/unstable non-MSKD conditions.
Methodology

- Screening by triage nurse
- Independent assessment by APP
- Visit Specific Satisfaction Instrument (VSQ-9)
- Confirmation of eligibility by research assistant
- Independent assessment by ED physician
Results – Patients characteristics (n=60)

- 50% men
- 50% women
- Mean age: 52 ± 16.9 years
- Traumatic: 27
  Atraumatic: 33

- Spine: 36.4%
- Upper limb: 24.2%
- Lower limb: 39.4%
Results

**Imaging Request Agreement**
- PABAK: 0.60
- 95% CI: 0.35 – 0.78
- Physicians prescribed significantly more imagery (p<0.05)

**Diagnostic Agreement**
- Kappa: 0.75
- 95% CI: 0.62 – 0.87

**Discharge Plan Agreement**
- PABAK: 0.83
- 95% CI: 0.59 – 0.95

*High Satisfaction for both providers (P≥0.05)*
Conclusions

• Preliminary results show **significant concordance** between ED physicians and physiotherapists regarding diagnosis as well as discharge plans for patients with **MSKD presenting to the ED** and **satisfaction** with APP care was high.

• Physiotherapists could provide **appropriate care** to those ED patients, but further **prospective evaluations** of the efficiency of these models are warranted.

• **Evidence-based** development of APP models of care in an ED setting has the potential to profoundly impact care for patients with MSKD and is a novel model that may alleviate **increasing health care demands**.
Thank You.

Eveline Matifat, pht, M.Sc.

eveline.matifat@gmail.com