Physiotherapy Preventive Examination

Screening and preventing physical injuries/disabilities in asymptomatic adults

Speaker: Jean-Louis Larochelle, PT PhD Public Health Clinical Assistant Professor
5 steps to good oral health:

1. Brush your teeth and tongue twice a day using fluoride toothpaste and floss every day.
2. Eat a well-balanced diet.
3. Check your mouth regularly for signs of gum disease and oral cancer.
4. Don’t smoke or chew tobacco.
5. Visit your dentist regularly.

Recommendation*

Adults aged 20 to 39 years should undergo an eye examination every 2 to 3 years.

Adults aged 40 to 64 years should undergo an eye examination every 2 years.
Have you shown your latest moves to your physio?

Visit your physiotherapist annually for your preventive examination.
Physical health promotion and preventive initiatives in physiotherapy

- Fairly developed in the athletic and geriatric settings
  - Ex. athletic: Functional Movement Screen (FMS) – Cook, G et al. 2006
  - Ex. geriatric: falls screening and prevention programs
- Rare in the clinical and research settings for healthy adults
- Increased awareness/relevance with advanced practice
  - Annual checkup – APTA, 2013 (http://www.apta.org/AnnualCheckup/)
- Need to develop, implement and evaluate preventive physiotherapy examination programs
Preventive Physiotherapy Examination (PPE)  
Our own clinical/research project

• One hour session
• Online screening questionnaire for risk factors
• Global physical examination: mobility, walk, posture, balance, functional strength
• Standardized procedures to detect early signs of deterioration in follow-ups
• Preventive/corrective education & exercises
Objectives and methods

1. **Measure perception and impact from clinician’s perspective**
   - 4 PTs (*always willing!*) ≥ 5 examinations
   - Semi-structured interview analyzed with the Theoretical Domain Framework (TDF) for behaviour change in healthcare professionals

2. **Measure perception and impact from client’s perspective**
   - 27 adults without symptoms or rehabilitation treatments
   - Received a FREE preventive physiotherapy examination
   - Online survey before, 24h & 4 weeks after
Results: physiotherapist’s point of view

• Less cognitive load and duration than usual curative examination
• Main decision-making challenges: determine the best tests to use and the best follow-up frequency
• ↑ Competences/awareness/interest in prevention with asymptomatic AND symptomatic patients
• Main worries: people won’t be willing to pay for it and may develop inappropriate fear of injury
Results: client sample

<table>
<thead>
<tr>
<th>Characteristics (n = 27)</th>
<th>%</th>
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<tbody>
<tr>
<td>Women</td>
<td>56</td>
</tr>
<tr>
<td>18 – 29 year-olds</td>
<td>18</td>
</tr>
<tr>
<td>30 – 49 year-olds</td>
<td>41</td>
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<tr>
<td>50 – 65 year-olds</td>
<td>41</td>
</tr>
<tr>
<td>Physical activity (\leq 1x/) week</td>
<td>30</td>
</tr>
<tr>
<td>Physical activity (2-4x/) week</td>
<td>59</td>
</tr>
<tr>
<td>Physical activity (\geq 5x/) week</td>
<td>11</td>
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</tbody>
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Results at immediate follow-up (n = 25)

- 72% highly satisfied
  - Best aspects = postural tips & corrective exercises
  - 56% perceived exercises as « highly relevant »
  - No negative aspects reported
- Suggested follow-ups: 56% annually and 36% ≥ twice/year
- Safety of examination (pain afterwards)
  - 32% light pain, 10% moderate pain, no severe pain.
Results at 4-weeks follow-up (n = 17)

• 47% significantly modified their work/leisure habit (ITT analysis = 32%)
• Patients did their exercises, whom 36% « as recommended » (ITT analysis = 24%)
  – Main reason for non-adhesion: lack of time and motivation
Preventive physiotherapy examination (PPE)  
What’s next?

– Screening questionnaire for everyone
– Automated recall for follow-ups
– Attractive and informative preventive report cards
– Accessible app for clients and clinicians
– Implementation to all clinics and clinicians
– Graduate level courses
– Validation with longitudinal studies using electronic records databases
– Adaptations to other populations (ex.: ped, elder …)
Any questions for the research team?

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Disclosure of potential conflicts of interest

• This research project is a partnership between University of Montreal (physiotherapy master project) and Physio Extra, a private practices network which
  – developed the Preventive Physiotherapy Examination
  – funded the research project
• I am a part time physiotherapist and scientific consultant for Physio Extra
• I received no salary or compensation from Physio Extra for my involvement in the study, preparation of the presentation nor participation to the congress.
• Protocol approval by two independent reviewers and Ethic committee.
• Conclusions validation by one independent reviewer
References

• 5 steps to good oral health. Canadian dental association. https://www.cdaadc.ca/files/about/news_events/health_month/pdfs/5_steps_factsheet.pdf


• File:Disco ball4.jpg - Wikimedia Commons

• Set goals, get fit > Ramstein Air Base > Display
References

• File:Elderly Shanghai woman practices tai chi.jpg - Wikimedia Commons
• my first steps | Gustavo Devito | Flickr
• Tablet computer - Wikipedia