Physiotherapists’ representations about physical activity

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Background and goals of the study

There appears to be a linear relation between physical activity and health status (Warburton, Nicol & Bredin, 2006)

Even if widely explored in literature, knowledge of PA concept and its positive impact on health are not easily transferred to local actors of PA promotion (USDHHS, 1996)

Clinicians as physiotherapists are at the front line of PA promotion and should be aware about the foundations of their actions in order to act effectively (Verhagen & Engbers, 2008)

This study aimed to analyze the knowledge and representations of physiotherapists about the PA key concepts

Methods

Study sample: 185 physiotherapists

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean ± SD or %</th>
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</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>185</td>
<td>40 ± 12</td>
</tr>
<tr>
<td>Seniority (years)</td>
<td>185</td>
<td>16 ± 12</td>
</tr>
<tr>
<td>Gender</td>
<td>M</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>83</td>
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<td>Principal Workplace</td>
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</tr>
<tr>
<td>Hospital</td>
<td>69</td>
<td>37.3</td>
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<tr>
<td>Nursing home</td>
<td>21</td>
<td>11.4</td>
</tr>
<tr>
<td>Online questionnaire (n = 163) (SurveyMonkey®)</td>
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Pen-and-Paper questionnaire (n = 22)

- 25 open-ended, multiple choice or Likert scale questions
- Reliability: 84% inter-analyst, 90% intra-analyst
- Data processing by Statistica®

Results

1. "Any bodily movement... (2) produced by skeletal muscles... (3) that substantially increases energy expenditure... (4) over the resting level" (Bouchard & Shephard 1994)

- Frequency of each item citation (n = 130): 1: 49.2%, 2: 13%, 3: 26.5%, 4: 8.1%
- Most of the subjects had a partial (68.7%) or a full unawareness (30.3%) of the PA official definition
- Number of items proposed (%): 1: 1.1%, 2: 47.6%, 3: 18.4%, 4: 11.1%

Physiotherapists’ answer

- 5 dimensions of physical activity (Sallis & al., 2006):
  - Sport
  - Leisure time
  - Occupational activities
  - Active transport
  - Household activities

- 17% of the subjects identified «sport» as the exclusive type of PA
- Only 1.6% of the subjects mentioned the 5 dimensions of PA
- Subjects ratio mentioning each category (%):
  - Heart rate: 95.1%
  - Respiratory rate: 24.9%
  - Sweating: 68.1%
  - Benefits encountered after 10 minutes of practicing PA (DeBusk, 1990): 23.8%
  - 56% of them proposed 30 to 60 minutes periods of PA

PA definition?

PA dimensions?

Effective PA signs?

PA recommendations?

Discussion and further work

Most of the physiotherapists are unaware of the PA official comprehensive definition

These findings highlight the difficulty faced by practitioners to verbalize this concept

If health professionals are not able to explain what is PA, general population will certainly not

It seems crucial to remind to the practitioners the “official” definition and underline its implications for intervention with their patients

Moderate effort recommended for health is characterized by a feeling of heat and rapid acceleration of respiration and heart rate (Pate et al., 1995)

Potential outcome of promotion campaigns?

It therefore seems important for the physical therapist to inform their patients about these signs in order to help them to reach the right level of PA when exercising

One subject out of six gets a good score

The current lack of knowledge of primary recommendations should not facilitate the process of PA promotion

This finding underlines that it is necessary to put an emphasis on the physiotherapists’ education

References

- USDHHS (1996)
- Verhagen & Engbers (2008)
- Bouchard & Shephard (1994)
- Sallis & al. (2006)
- DeBusk (1990)
- Pate et al. (1995)
- Alexandre.mouton@ulg.ac.be