Educational Tool to Improve Caregiver Role

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New needs and challenges in looking for health care

Increase in chronic diseases; Increasing number of elderly

Health professionals need to seek new solutions to enhance the quality of life of individuals and family
Context

- There is some evidence of the impact of the application of information technologies on the quality of care (Chaudhry, 2006)

- The use of information and communication technologies in health constitutes as essential to the promotion of safer, affordable and efficient healthcare (ACS, R. et al, 2010)
Study purpose

- Develop and evaluate an interactive tool to improve family caregiver role
Material and Method

- Development of interactive tool
  - The methodology for developing the tool was based on Addie (analysis, design, development, implementation and evaluation) model based on Contextualized Instructional Design (CID)
  - Support of the Institute of Engineering – Polytechnic of Porto (ISEP)- master`s degree student
Material and Method

- Contents were built focusing on basic needs of caregivers' lives allowing to overcome difficulties in caring of dependent person, with dependency on self care feeding, transferring and turning.

- The interactive educational tool was supported by videos demonstrating procedures and audio documents.

- Videos were built and carried out taking into account the most frequent types of care developed by family caregivers, attempting to meet the needs of carers for dependent persons.
Material and Method

- Evaluation by an expert group composed of specialists in the subject areas studied, consisting of:
  - Teachers in the area of adult health and the elderly
  - Assessing interactive tool questionnaire: page load speed, design, objective information, ease of navigation, clear and logical organization, photography, and pictures, content and links correctly written.
Development of interactive tool

Learning object

Care for dependent persons
- Home page
- Areas
- Gallery
- Contacts
- Links

Multimedia resources
- Pictures
- Texts
- Audio
- Videos

Conceptual Map
Bem vindo ao recurso tecnológico de aprendizagem:

Cuidar de Pessoas Dependentes
Participants characterization

- N=6: Male (1) Female (5)
- Age: $M$- 49,83 years (Mn-43; Mx-53) (Dp± 3,7)
- Professional category: associate professor- 66,7% (4) coordinator - 33,3 % (2)
- Time of profession: $M$- 26,83 years (Mn- 20; Mx- 32); (Dp±4,3)
- Academic qualifications:
  - Degree (6): nursing science 16,7% (1), public health 66,7% (4), economic health 16,7% (1)
  - Post degree (6): community health 66,7% (4), medical-surgery 33,3% (2)
  - Master (5): nursing science 50% (3), psychology of health 33,3% (2)
## Results

<table>
<thead>
<tr>
<th>Feature</th>
<th>Mean (Mn; Mx)</th>
<th>(Dp±)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td><strong>M- 9,5</strong></td>
<td>(Mn-7; Mx-10)</td>
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<tr>
<td>Ease of navigation</td>
<td><strong>M- 8,8</strong></td>
<td>(Mn-7; Mx-10)</td>
</tr>
<tr>
<td>Design</td>
<td><strong>M- 8,3</strong></td>
<td>(Mn-6; Mx-10)</td>
</tr>
<tr>
<td>Quality of videos</td>
<td><strong>M- 7,8</strong></td>
<td>(Mn-6; Mx-10)</td>
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<tr>
<td>Relevance of videos</td>
<td><strong>M- 9,6</strong></td>
<td>(Mn-8; Mx-10)</td>
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<tr>
<td>Accuracy of videos</td>
<td><strong>M- 8,8</strong></td>
<td>(Mn-7; Mx-10)</td>
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<tr>
<td>Audio</td>
<td><strong>M- 8,2</strong></td>
<td>(Mn-6; Mx-10)</td>
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</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>M</th>
<th>Mn</th>
<th>Mx</th>
<th>Dp</th>
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</thead>
<tbody>
<tr>
<td>Page load speed</td>
<td>8.8</td>
<td>8</td>
<td>10</td>
<td>0.8</td>
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<tr>
<td>Objective information</td>
<td>8.8</td>
<td>6</td>
<td>10</td>
<td>1.6</td>
</tr>
<tr>
<td>Clear and logical organization</td>
<td>9.5</td>
<td>7</td>
<td>10</td>
<td>1.2</td>
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<tr>
<td>Interactivity</td>
<td>8.5</td>
<td>8</td>
<td>10</td>
<td>0.8</td>
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<tr>
<td>Global assessment</td>
<td>8.5</td>
<td>7</td>
<td>10</td>
<td>1.2</td>
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</table>
### Results

**Found a bug or problem?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>2</th>
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<tbody>
<tr>
<td>No</td>
<td>4</td>
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One movie demonstration of caregivers disappear all commands, including allowing return to the home page

The audio sometimes fails
### Results

**Plans to contribute any suggestions for improving the educational resource?**

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<tr>
<td>No</td>
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<tr>
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</table>

- Simplify the language
- Improve the synchrony between sound, image and text
The experts consider this educational tool innovative, interesting and very helpful to family caregivers.
Conclusion

We develop a trusted and user-friendly site. The major innovative element will be the platform interactivity’ conception meeting with users’ needs, helping them in their decision making and allowing family caregivers to decide which information they want to know and learn about.
Thank you

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