Nursing students’ perception of the clinical learning environment

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Learner objectives

The learner will be able to:

- Identify the important domains which affect students’ perception towards the clinical learning environment
- Acknowledge the differences between students’ expectation and their experience in the clinical learning process
Facts

- Area: 31.3km²
- Population: 614,500
- 3 hospitals, 1354 beds
- Total number of nurses: 1,751
- 2 institutions offering UG nursing courses
  - Clinical learning hours constitute of > 50% of the total learning hours
Clinical placement

- Get to know the environment
- Apply skills and knowledge
- Develop competencies
- Establish professional identity
The clinical learning environment

- Supportive
- Provide well organized learning activities
- Provide extensive learning opportunities
- Involve student in practice
  (Chan and Ip, 2007; Perli and Brugnolli, 2009; Chuan and Barnett, 2012)
- Not primarily designed for educational purposes
How do students think?

- They would like to have a better clinical learning environment than what they had experienced (Chan, 2001, Chan, 2002a, Ip and Chan, 2005, Midgley, 2006, Brown et al., 2010)
The Clinical Learning Environment Inventory (CLEI)

- Assesses students’ perception of the clinical learning environment in six psychosocial aspects (Chan, 2002b)
- What student perceive to be important in the clinical learning environment (Ip and Chan, 2005)
<table>
<thead>
<tr>
<th>Subscale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalization</td>
<td>Emphasis on opportunities for the individual student to interact with clinical teacher/clinician and on concern for student’s personal welfare</td>
</tr>
<tr>
<td>Student Involvement</td>
<td>Extent to which students participate actively and attentively in hospital ward activities</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>Extent to which ward activities are clear and well organized</td>
</tr>
<tr>
<td>Innovation</td>
<td>Extent to which clinical teacher/clinician plans new, interesting and productive ward experiences, teaching techniques, learning activities and patient allocations</td>
</tr>
<tr>
<td>Individualization</td>
<td>Extent to which students are allowed to make decisions and are treated differentially according to ability or interest</td>
</tr>
<tr>
<td>Satisfaction (Chan, 2001)</td>
<td>Extent of enjoyment of clinical field placement</td>
</tr>
</tbody>
</table>
The Clinical Learning Environment Inventory (CLEI)

- Preferred and actual form
- 42 statements, 6 subscales
  - Individualization, innovation, involvement, personalization, task orientation and satisfaction
- 4-point Likert Scale
  (Strongly agree, agree-strongly disagree)
- Translation and back translation
Translation and back translation

Figure 1. The translation and back translation process of the CLEI
Placement selection criteria

- Took place in Macao
- Took place in hospital settings
- Last for at least two weeks
- Medical wards, surgical wards, mixed wards, and AED
Data collection

- Academic year 2012-2013
- 1 institution
- 2nd, 3rd, and 4th year nursing student
- Pre-placement questionnaire (preferred form)
  - 5 days before the placement start date
- Post-placement questionnaire (actual form)
  - On the last day of placement
Data analysis

- SPSS version 21
- Descriptive statistics
  - Mean score
  - Mean difference
- Paired-samples t-test
- Cohen’s d (Effect size)
- Multiple linear regression
Results

- Response rate
  - Preferred form: 88%, n=147
  - Actual form: 89%, n=150
- Age: 19-24
- Gender: 13% Male, 87% Female
<table>
<thead>
<tr>
<th>Subscales</th>
<th>Mean score (standard deviation)</th>
<th>Mean difference</th>
<th>t-value</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preferred</td>
<td>Actual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personalization</td>
<td>23.44 (3.04)</td>
<td>20.66 (3.09)</td>
<td>2.78</td>
<td>8.19*</td>
</tr>
<tr>
<td>Student Involvement</td>
<td>21.21 (2.15)</td>
<td>20.22 (1.89)</td>
<td>0.99</td>
<td>4.90*</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>22.33 (2.95)</td>
<td>20.07 (2.35)</td>
<td>2.26</td>
<td>7.66*</td>
</tr>
<tr>
<td>Innovation</td>
<td>19.71 (3.15)</td>
<td>16.22 (2.68)</td>
<td>3.49</td>
<td>8.62*</td>
</tr>
<tr>
<td>Individualization</td>
<td>20.11 (3.02)</td>
<td>17.41 (2.73)</td>
<td>2.7</td>
<td>10.74*</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>23.41 (2.86)</td>
<td>21.23 (2.95)</td>
<td>2.18</td>
<td>8.29*</td>
</tr>
</tbody>
</table>

*p<0.001
Multiple linear regression

- Student involvement
- Task orientation
- Individualization

→ 54% of the variance of student satisfaction in the actual clinical learning environment
Conclusion

- Significant differences between the expected and actual clinical learning environment
- Students’ satisfaction comes from
  - Engagement and participation
  - Clear and well-organized activities
  - Mentors who respect students’ autonomy and individual differences
- The CLEI is overall a reliable tool, but further work is needed
Implications

- Students’ and mentors’ perception of the clinical learning environment
- Supernumerary status
- The community of practice
  - Engagement
  - Participation
  - Identity establishment
Thank You

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Reference


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