Perception of Health: Student Perception vs. Patient Perception
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Purpose of Study
The purpose of this study was to compare health perceptions of actual patients to those of health professional students.

Methodology/Setting
All first year students in medicine, pharmacy, nursing, occupational therapy, physical therapy & couple and family therapy at a Northeastern urban health science university participate in a two-year interprofessional education mandatory curriculum (Health Mentor Program).

Interprofessional Curriculum
Health Mentor (HM) Program Goals
1. Students will articulate the roles of their colleagues and be prepared to function as members of effective health care teams.
2. Students will value the point of view of individuals with chronic conditions, and be prepared to provide patient- and family-centered care.

Focus of Health Mentor Visits
- Placing chronic condition in life context
- Obtaining a comprehensive health history
- Client-Centered Care/Professionalism
- Wellness plan
- Appropriate use of medications
- Patient safety

Perceptions of Patients Health Scale
- During the orientation for the HM program, students (578) were asked to complete the “Perceptions of Patients Health Scale” developed by Diamond et al. (578).
- Normative data on 314 adult patients for each of the subscales of the tool exist in a database.

Study Questions
- Will first year students, prior to the Health Mentor Program, rate patients’ perceptions of health similarly to actual patients’ perceptions of health?
- Do any first year health professions’ students rate patients’ perceptions more similarly to actual patients than others?

Subscales of Tool
- A higher score on the control subscale indicates more internal locus of control
- A higher score on the self subscale indicates more awareness of actions to stay healthy
- A higher score on the certainty scale indicates more certainty (less confusion) about the information on health that they hear and read about.
- A higher score on the importance subscale indicates more importance attached to staying healthy.

Sample Items From Tool
Imagine that you are a “typical” person with a chronic health condition. Complete this form as that person would respond (5 pt. SD – SA)

- **Control**
  - Being healthy is largely a matter of good fortune.
  - No matter what I do, if I am going to be healthy or not, it is just going to happen.

- **Awareness of self management**
  - If I exercise and eat right, I’m almost certain to stay healthy.
  - It is up to me whether I am healthy or not.

- **Certainty about information**
  - I am often confused about what I should do to stay healthy.
  - I would like to be healthier, but I just can’t get myself to do what is necessary.

- **Importance of health**
  - I think about my health a lot.
  - My health is an important consideration in my life.

Analyses
- Comparison of scores of students by discipline
  - Comparison of scores of students to normative patient scores

Results/Discussion
When comparing student POH subscales by profession to normative patients, the effect size was either moderate or large for:
1. Medical and OT students in self awareness (underestimating pt awareness of actions to stay healthy)
2. Medical, nursing, pharmacy, PT (all students except OT) in importance (underestimating pt importance placed on staying healthy).

Implications/Questions
- Could this discordance affect patient care and patient education?
- Will student perceptions of a person with chronic condition(s) change at the end of year 1 and year 2 of the IPE curriculum?
  - What will be the direction of that change (closer to the patient perception or more divergent)?
- Will this vary by discipline and/or exposure to hospitalized patients or other variables?

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**Table 1: Comparison of baseline means on Perception of Health subscales for Health Mentor Program students, normative patients, and 3rd and 4th year medical students.**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Patients Mean (SD)</th>
<th>Health Mentor Mean (SD)</th>
<th>3rd &amp; 4th year Medical Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>12.2 (2.1)</td>
<td>11.3 (2.0)</td>
<td>9.5 (2.3)</td>
</tr>
<tr>
<td>Certainty</td>
<td>12.4 (3.0)</td>
<td>12.1 (3.0)</td>
<td>11.2 (3.3)</td>
</tr>
<tr>
<td>Control</td>
<td>17.7 (5.0)</td>
<td>17.3 (3.7)</td>
<td>16.3 (4.0)</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>10.9 (2.5)</td>
<td>9.9 (2.4)</td>
<td>9.9 (2.0)</td>
</tr>
</tbody>
</table>

**Table 2: Comparison of Perception of Health subscales by student profession (all first year students) to normative patients: mean (SD)**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Medicine</th>
<th>Nursing</th>
<th>Pharmacy</th>
<th>PT</th>
<th>OT</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>17.3(3.7)</td>
<td>17.7(3.7)</td>
<td>16.9(3.6)</td>
<td>17.4(3.6)</td>
<td>16.6(3.3)</td>
<td>17.7(5.0)</td>
</tr>
<tr>
<td>Certainty</td>
<td>12.1(3.7)</td>
<td>12.9(3.3)</td>
<td>11.6(3.0)</td>
<td>11.6(3.0)</td>
<td>11.2(3.1)</td>
<td>12.4(3.6)</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>9.3(2.4)</td>
<td>10.2(2.1)</td>
<td>10.2(2.3)</td>
<td>10.7(1.8)</td>
<td>9.8(2.6)</td>
<td>10.9(2.5)</td>
</tr>
<tr>
<td>Importance</td>
<td>11.1(2.1)</td>
<td>11.4(1.9)</td>
<td>11.4(1.9)</td>
<td>11.2(1.8)</td>
<td>11.9(1.7)</td>
<td>12.2(2.1)</td>
</tr>
</tbody>
</table>

**ES (Effect size): small (0.00-0.33), moderate (0.34-0.50) or large (> 0.50)**

A greater ES = greater discordance

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**Table 3: Comparison of Perception of Health subscales: 1st year medical students, 3rd and 4th year medical students, and patient group.**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1st year medical students</th>
<th>3rd &amp; 4th year medical students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>17.7 (5.0)</td>
<td>17.3 (3.7)</td>
</tr>
<tr>
<td>Certainty</td>
<td>12.4 (3.0)</td>
<td>12.1 (3.0)</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>10.9 (2.5)</td>
<td>9.9 (2.4)</td>
</tr>
<tr>
<td>Importance</td>
<td>12.2 (2.1)</td>
<td>11.1 (2.1)</td>
</tr>
</tbody>
</table>

**Participants**
- *1st year medical students prior to beginning their first year of medical school
**3rd and 4th year medical students who did not participate in Health Mentor Program.
ES (Effect size): small (0.00-0.33), moderate (0.34-0.50) or large (> 0.50) A greater ES = greater discordance.

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