A prospective approach to examining medical students’ attitudes toward patient-centered care

Catherine R. Messina PhD  and Iris A. Granek MD MS

Department of Preventive Medicine, Stony Brook University, Stony Brook NY

Objectives

- Examine medical student attitudes toward patient-centered medical care.
- Determine whether participation in a 1st year curriculum which includes components focused on self-awareness and patient/physician communication influenced student attitudes toward patient-centered medical care.
- Determine if higher levels of patient-centeredness self-reported by students in their 1st year of medical school (preclinical year) are maintained through the 4th year (clinical year).

Background

Patient-centeredness among physicians is associated with greater patient satisfaction and better health outcomes. Medical schools recognize and underscore the importance of patient-centered care through the institution of curricula emphasizing professionalism, patient-physician communication, and the practice of compassionate medical care, generally during the pre-clinical years.

Although prior studies suggest that patient-centered attitudes and behaviors decline over the course of medical training despite pre-clinical efforts to foster and support these attitudes, this is not well understood and questions arise regarding which aspects of patient-centeredness are most responsive to the influence of pre-clinical efforts to foster patient-centeredness and potentially more likely to be maintained during students’ clinical years.

Methods - Measures

- Patient-Practitioner Orientation Scale (PPOS; Krupat et al. 1999)
  - Yields total scale score (min = 18, max = 108) and scores for two dimensions of patient-centered medical care: sharing (min = 9, max = 54) and caring (min = 9, max = 54)
  - 6 point Likert scale: response options range from Strongly Agree (1) – Strongly Disagree (6)
  - Higher scores correspond to more patient-centered attitudes
  - Acceptable psychometric properties (Krupat et al. 1999)

**Examples of Sharing items. (9 total)**
The doctor should decide what gets talked about during a visit.
Patients should be treated as if they were partners with the doctor, equal in power and status. (reverse scored)
When patients look up medical information on their own, this usually confuses more than it helps

**Examples of Caring items. (9 total)**
If doctors are truly good at diagnosis and treatment, the way they relate to patients is not that important.
A treatment plan cannot succeed if it is in conflict with a patient’s lifestyle or values. (reverse scored)
It is not that important to know a patient’s culture and background in order to treat the person’s illness.

Results

**Time 1**

<table>
<thead>
<tr>
<th>Student characteristics</th>
<th>Age, yrs (mean, SD)</th>
<th>% Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (n = 111)</td>
<td>23.3 (2.6)</td>
<td>46.8</td>
</tr>
<tr>
<td>Cohort 2 (n = 116)</td>
<td>23.4 (2.6)</td>
<td>49.1</td>
</tr>
<tr>
<td>Cohort 3 (n = 125)</td>
<td>23.8 (2.9)</td>
<td>46.4</td>
</tr>
<tr>
<td>Cohort 4 (n = 124)</td>
<td>23.7 (2.4)</td>
<td>45.2</td>
</tr>
</tbody>
</table>

- No significant diff. in age or % women by cohort (p’s > 0.10)
- Total PPOS correlated with age (r = 0.10, p = 0.045)
- Men: total PPOS and caring scores correlated with age (r’s = 0.13 – 0.15 , p’s < 0.04)
- Women: total PPOS and subscale scores not related to age

**Total PPOS score (SD)**

| Cohort 1 | 76.6 (6.9) | 37.2 (4.9) | 39.4 (3.9) |
| Cohort 2 | 72.6 (6.3) | 34.8 (3.9) | 37.8 (3.9) |
| Cohort 3 | 76.0 (7.0) | 36.5 (4.4) | 39.4 (3.9) |
| Cohort 4 | 75.8 (6.8) | 36.4 (4.8) | 39.3 (3.8) |
| Women    | 77.0 (6.7) | 37.3 (4.2) | 39.8 (3.8) |
| Men      | 73.7 (6.8) | 35.4 (4.7) | 38.3 (3.9) |

- Scores consistent across cohorts except Cohort 2 (p’s < 0.03; adjusted for age)
- Women’s scores higher than men regardless of cohort (p’s < 0.01, adjusted for age)

Conclusions

In general, favorable attitudes toward patient-centered medical care and specific attitudes reflecting the degree to which the physician cares about the patients were maintained through the 4th year among medical students (especially men). This suggests a positive effect of a pre-clinical curriculum emphasizing egalitarian rather than paternalistic approaches to health care, which may also extend through the clinical years. On the other hand, favorable attitudes toward power and control in the patient/physician relationship and the extent that the physician should share information decreased among men during the 4th year, a time when students are more engaged in clinical activities and the realities of patient care.

Student attitudes toward patient-centered medical care were examined rather than actual behaviors. Prior studies have linked physician/student patient-centered attitudes with positive patient outcomes (Haidet et al. 2001). Data suggest that attitudes predict behavioral intentions as well as actual behavior (Fishbein & Ajzen, 1975).

Findings have implications for designing curricula targeting specific student attitudes toward patient-centered care which may be more likely to decline over the course of their medical education.