Cultivating Empathy in the Anatomy Lab

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October 2019
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Disclosures: none
INTRODUCTION

- Gradual paradigm shift in anatomy education over the past 50 years:

<table>
<thead>
<tr>
<th>Away From...</th>
<th>Towards...</th>
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<tbody>
<tr>
<td>Cadaver as a learning tool/ object</td>
<td>Donor as a first teacher/ patient</td>
</tr>
<tr>
<td>Objective distance</td>
<td>Empathetic Connection</td>
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<tr>
<td>Place to learn anatomy only</td>
<td>Place to build emotional intelligence</td>
</tr>
<tr>
<td>Teaching of scientific absolutes</td>
<td>Teaching ‘the art of science’</td>
</tr>
</tbody>
</table>

- Studied almost exclusively in medical schools. What’s happening in programs like PA and PT?

Sources: 1–11
INTRODUCTION

Our home institution: Elon University School of Health Sciences

• includes both Physician Assistant (PA) and Physical Therapy (PT) programs but no medical school.

• Anatomy taught separately to PA/PT by faculty who collaborate on creating atmosphere designed toward this paradigm shift

• Curricular elements geared toward empathy and creating intentional connection between student and donor.
  • “Alpha” session: Ethics/ spirituality in the anatomy lab, with University Chaplain (non-denominational) prior to starting in lab
INTRODUCTION

Our home institution: Elon University School of Health Sciences

Curricular Elements, ctd...

• Anatomic donors (cadavers) are all first-person consent
• Student groups are primary caretakers of their donor
• Donors always referred to by name, never table number
• Some donor information shared with students (age @ death, occupation, COD, sometimes more)
• “Omega” session: Donor Service of Appreciation and Thanks, after last lab
Alpha to Omega
PURPOSE OF THE STUDY

- Assess the emotional responses of PA/PT students on the first and last days of anatomy lab.
- Use qualitative measures + brief Likert-like quantifier
- Look for trends: what changes in the students?

STUDY HYPOTHESIS

- Students’ responses will reveal a trend:
  - toward expressions of “connection” with the student’s anatomical donor
  - away from expressions of “detachment” from the donor.
- This trend will also be present in the adjectives used by students to describe their reactions to donor dissection.
METHODS

Anonymous survey distributed to, and completed by, first-year PA and PT students after first day of lab and last day of lab (Jan 2018 → July 2018)

- designed to assess respondents’ emotional responses to working with their anatomical donors in lab
- asked participants to give adjectives describing their feelings regarding the time spent with their donors
- also included one spectrum/continuum-style question regarding participant’s “detachment” vs “connection” to their donor

3. Which statement below best describes your overall feeling about actively participating in an anatomy lab that includes human cadaver dissection?

<table>
<thead>
<tr>
<th>JANUARY CHOICES</th>
<th>JULY CHOICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am looking forward to it</td>
<td>I am happy to have had this experience</td>
</tr>
<tr>
<td>I am not looking forward to it</td>
<td>I regret having had this experience</td>
</tr>
</tbody>
</table>

4. Please describe your feelings in regards to the time spent with your donor using 3 adjectives, and explain your adjectival choices. Did you find your time with your donor to be more comfortable than you expected, less comfortable, or about as expected?

8. Please place an “X” at the point along this line that best applies to you. Feel free to explain your placement below.

I felt the need to distance myself from the “human-ness” of my donor in order to complete my anatomy tasks.

I found that the “human-ness” of my donor enhanced my understanding of the anatomy tasks I was working on.
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METHODS

- Data entered into database
- Qualitative data coding of adjective responses performed based upon grounded theory
- Sample of convenience (available student cohorts) was used, so data pool not assessed for adequacy of sample size.
- Coding of adjective responses: responses aggregated into six major descriptive categories*: 
  - Detachment from donor
  - Discomfort, fear or anxiety (Anxiety);
  - Surprise or curiosity (Surprise);
  - Excitement, interest or comfort (Excitement);
  - Respect, appreciation or gratitude (Respect);
  - Connection to donor.

*categories of detachment and connection were created by necessity to adhere to the study hypothesis.
RESULTS-- Qualitative Coding of Adjectives:

• Both cohorts trended from adjectives describing \textit{discomfort, fear, and anxiety} toward those describing \textit{respect, appreciation, and gratitude}.
• Both cohorts commonly expressed excitement, interest and comfort about the learning experience.
• Responses describing detachment from the donor were very few on Day 1 (n = 7) and = 0 on last day.
• Responses describing connection were also few (n= 8) on the first day of lab and even lower on the last day.
RESULTS— Likert- type assessment:

• PT cohort data saw increase in feelings associated with “connection” to donors over time.
• PA cohort did not.
• When adjectives were assessed as an internal validator, they found that feelings of both ‘connectedness’ and ‘detachment’ rarely were mentioned by students at all.
CONCLUSIONS -- In this non-medical-school setting:

- An anatomy curriculum stressing donor empathy/appreciation and sharing donor information with students decreases student anxiety and increases student respect and gratitude about the anatomy learning experience while maintaining student excitement about the lab learning process.

- Assessment of whether students move from feelings of detachment to feelings of connection with their donors could not be reliably assessed:
  - These feelings were expressed only minimally by students in free response, and
  - Free responses are inconsistent with findings from the Likert assessment.
DISCUSSION

- One of very few studies assessing the humanistic aspect of cadaveric dissection within PA or PT education.
- The Likert-type scale: what went wrong?
  - Just inadequate to sum up complex feelings?
  - A False dichotomy? Do ‘detachment’ and connection’ frequently coexist in the lab?
- The study is limited by:
  - small sample size
  - use of a sample of convenience in a qualitative assessment
  - absence of a validated survey instrument
  - absence of individual participant tracking
REFERENCES


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What questions do you have?