## I. THE MEDICAL HUMANITIES COMPONENT OF PDII

#### A. PDII Modules

As Dr. Lie has pointed out, PDII consists of eight clinical modules, which or organ-based but also focus on a specific disease or medical condition. (SLIDE)

# A. Required Activities

## 1. Required Humanities Reading

For each module, we assigned a brief required humanities reading, which are included in your hand-outs. We have also included discussion questions for each reading, which coleaders also received.

Each reading was intended to underline the experience of illness from the patient's point of view, and to engage students in the subjective, psychological, emotional, and spiritual aspects of disease. This reading was to be completed by both students and small group co-leaders.

- 2. **Discussion** each reading was integrated into the small group discussion of the patient case. It was useful to compare and contrast the standardized patient with the patient perspective in the humanities reading. The reading also sometimes brought out issues not raised in the standardized patient interview.
- 3. **Journalling** For four of the eight modules, students were required to write a one-page essay reflecting on their reactions to the humanities reading. These were not graded, but were commented on extensively by co-leaders. Two examples of student journalling as well as co-leader comments are included in your packet.

# II. ANALYSIS OF THE HUMANITIES WRITING ASSIGNMENT

### A. Method of Analysis

- 1. We looked at the student writing samples in three ways:
  - a. Global rating
  - b. Emotional language
  - c. Coping strategies
- 2. Theoretical model based on work of James Pennebaker
  - a. Looked at writing samples describing personal traumatic events compared to writing samples describing average day
  - **b.** Used word counts of emotional and analytic language to identify relationships between writing and outcomes of physical and mental health

## B. Measures obtained from writing sample

- 1. Global rating (single score)
  - a. Ratings were made by a single faculty member (myself); identity of students was blinded
  - **b.** Range of 1-4
  - c. Criteria of empathy, range of ideas, and clarity of writing
  - d. Ratings made several months prior to quantitative analysis of the samples

- 2. Scoring of the writing samples was based on a coding schema which I developed, but was carried out by two undergraduate students, who were blinded as to the purpose of the study and the global ratings
- 3. Main point is to notice the breadth and depth of both the emotional expressiveness of students and of the coping styles they suggested
- 4. Emotional Language (high, moderate, and low based on arousal)
  - 1. Positive: High awe, hope, exhilaration; Moderate empathy, relief; Low acceptance, composure
  - 2. Negative: High desperation, shock; Moderate disappointment, troubled; Low useless; depressed

### 5. Coping Styles

- a. Active Attitude: focus on next patient; focus on past successes; did one's best; not responsible
- **b.Accepting Attitude:** acceptance, forgiveness, grieving, reflection; related measure **Theme**
- **c.Communicative:** talking to medical team, other colleagues, professionals (religious and psychotherapeutic), patient's family, own family, friends
- **d.Instrumental:** attend funeral, community education; improve techniques; study more (medline)
  - **e.Self-focused:** time off; relaxation; sleep; attend to personal health **f.Detached:** move on; don't get involved; don't personalize; objectivity
- 6. Additional Measures
  - a. Standardized patient ratings: 1) Communication 2) Professionalism
  - b. Faculty rating: Overall Professionalism (single score)

### III. RESULTS

# A. Relationship of Emotional Language and Coping to Global Rating

- 1. **Emotional Language -** Positive Moderate Emotion and Negative Moderate Emotion both correlated with Global Rating
- 2. **Coping -** Communicative Coping, Instrumental Coping, and Accepting Attitudinal Coping were all correlated with Global Rating
- 3. **Theme** (ability to see larger issues involved limits of physician ability, death with dignity, patient autonomy vs. benevolence etc) was also correlated with Global Rating score

# B. Relationship of Emotional Language, Coping, and Global Rating to Communication and Professionalism

- 1. Emotional Language:
  - a. Positive High Emotion was negatively related to Communication and Professionalism as judged by Sps
  - b. Negative Moderate Emotion was negatively correlated with Professionalism as judged by SPs
- 2. Coping:
  - a. Accepting coping was related to Professionalism as judged by SPs
- 3. Global Rating was not related to any Communication or Professionalism measures

#### IV. DISCUSSION

### A. Descriptive Data

- 1. **Emotional language**: In describing this poem, students demonstrated an impressive range and depth of emotional language, both positive and negative. They tended to favor moderate/high positive words and moderate/low negative words.
- 2. **Coping:** Students also demonstrated an impressive range and depth of ideas and strategies for coping with a difficult situation in medicine. The most frequently endorsed strategies were communicative. Students also favored both active and accepting attitudinal approaches, as well as instrumental coping. They were less likely to mention either self-focused or detached strategies.

## B. Relationship between Emotional Language and Coping Styles

- 1. Overall, we did not find much relationship between these two variables
- 2. Students who used more frequent expressions of positive moderate emotion also tended to adopt both active and accepting attitudes toward the situation described in the poem.
- 3. Negative lack of emotion, that is, students who wrote that they couldn't allow themselves to feel anything, were characterized by active coping attitudes, but also by detached and/or self-focused coping strategies.

## C. Global ratings of pov writing exercise

- 1. Emotional language: The more students used both positive and negative moderate emotional language the higher their global writing scores. The ability to express both negative and positive emotion of a moderate nature was judged to be characteristic of a superior essay.
- 2. Coping: The more students advocated coping strategies of communication, specific instrumental behaviors, and an attitude of acceptance, the higher their global scores. The ability to cope through communication with others, to take concrete remedial or compensatory action in the world, and to maintain an attitude of reflective acceptance were all judged to be characteristic of a superior essay.
- **3.** Theme: Finally, students who were able to note the implication of larger ethical and philosophical issues in the essay were also judged to have written better essays.

# D. Emotional Language, Coping, and Global Rating Related to Communication and Professionalism

## 1. Emotional Language:

- **a.** Students who used high positive language in their essays actually demonstrated a small negative correlation with standardized patients' global communication skills, thus suggesting that there may be a connection between patient discomfort with the physician and physician extreme positivity.
- **b.** On the other hand, students who used negative moderate emotional language in their essays were judged by standardized patients as being more professional. Thus, students who were able to recognize the negative aspects of the situation, but in a restrained manner, also tended to behave in a more professional manner in the eyes of both standardized patients and faculty.

### 2. Coping:

### SUMMARY OF FINDINGS – HUMANITIES EXERCISE

EMOTIONAL LANGUAGE AND COPING
POSITIVE MODERATE EMOTION RELATED TO ACCEPTING ATTITUDE (also dichotomized ACTIVE ATTITUDE (-) AND DETACHED ATTITUDE (-))
NEGATIVE LACK OF EMOTION RELATED TO ACTIVE ATTITUDE, DETACHED COPING, AND SELF-FOCUSED COPING (confirmed by dichotomized)

LANGUAGE, COPING AND GLOBAL RATING\
High global score related to POSITIVE MODERATE EMOTION, NEGATIVE
MODERATE EMOTION, ABILITY TO SEE LARGE THEMES, COMMUNICATIVE
COPING, INSTRUMENTAL, AND ACCEPTING COPING

LANGUAGE, COPING, AND COMMUNICATION AND PROFESSIONALISM POS HIGH EMOTION NEGATIVELY CORRELATED WITH COMMUNICATION NEGATIVE MODERATE EMOTION CORRELATED WITH PROFESSIONALISM (as was ACCEPTING COPING on dichotomized)
INSTRUMENTAL COPING CORRELATED WITH FACULTY PERCEPTIONS OF PROFESSIONALISM (as was POSITIVE LACK OF EMOTION on dichotomized)

### FINAL CONCLUSIONS:

Essays judged by raters as better were characterized by moderate emotion, both negative and positive; ability to see larger themes; endorsement of communicating coping strategies (and to a lesser extent instrumental and accepting coping strategies)

Negative lack of emotion is related to detached and self-focused coping

Negative moderate emotion was judged by SPs to be related to professionalism; as was Accepting coping when the variables were dichotomized

Positive high emotion was judged by SPs to be negatively correlated with communication skills and professionalism

Instrumental coping and Positive lack of emotion were related to faculty perceptions of professionalism