From Day One: Promoting Clinical Skills Self-Reflection for 1st Year Medical Students through a Comprehensive Evaluation and Mentoring Program

Kambria M Hooper, MEd; Preetha Basaviah, MD; Madika M Bryant, MA; Erika Schillinger, MD; Clarence H Braddock, III, MD, MPH

Introduction

• Medical interviewing, reflection and self-assessment skills are essential for future physicians
• Students bring to medical school ideas, habits, and values about their interpersonal and communication skills
• Students' self-assessment is variably accurate and insightful
• In quarter 1 of Practice of Medicine (POM), MS1 develop reflection, interpersonal and communication skills through a curriculum using simulated medical encounters with Standardized Patients (SP)
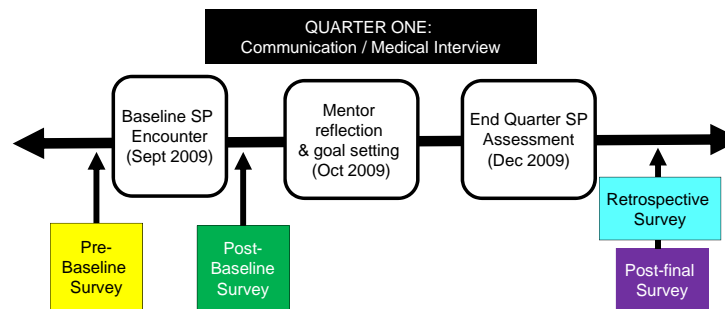
Statement of Problem or Question

Does a baseline SP interview prior to the start of the medical communication curriculum, along with mentored reflection and performance data, **increase students' self awareness** regarding their interviewing knowledge, skills and attitudes, and does this **increase the salience of subsequent curriculum**?

Description of Program

<u>Objective</u>: **We implemented a comprehensive program in communication skills development, evaluation, self-assessment, and feedback for students to improve skills in interviewing, reflection, and self-directed learning**

• In 2009, we aimed to measure medical students' (n=63) self-assessments of their developing communication skills, knowledge, and attitudes both before and after their first year medical communications curriculum
• To assess learners' insights, we used the Patient-Physician Interaction (PPI) instrument, administered at three points during the quarter
• Students rated confidence and competence in patient communication, and SPs evaluated students using the PPI checklist
• Educators for CARE (E4C) consists of 15 faculty mentors in multiple disciplines committed to developing medical students as skilled and compassionate physicians
• Faculty mentors in E4C are responsible for 5-6 students longitudinally
• Mentors facilitated mid-quarter reflection with students to develop learning goals

Timeline

QUARTER ONE: Communication / Medical Interview

Baseline SP Encounter (Sept 2009) → Mentor reflection & goal setting (Oct 2009) → End Quarter SP Assessment (Dec 2009)

Pre-Baseline Survey
Post-Baseline Survey
Retrospective Survey
Post-final Survey

Findings to Date: Student Self-Assessment

Communication Confidence and Competence

Legend: Pre-Baseline, Post-Baseline, Retrospective posttest, Post-Final

• Decreases in mean confidence and self-reported competence in communication skills between pre-baseline and post-baseline ratings

• Retrospective posttest and post-final ratings show significant ($p \leq 0.00$) increases in self-reported confidence and competence

Thematic Analysis of Student Comments

• Students value the baseline exercise

"This experience was valuable to show how much I don't know."

• Students' lack of medical knowledge inhibits them
• Students value process and flow
• Students struggle with understanding their professional identity

"It was tough to assume a new role when I don't know how to play it well."

Patient-Physician Interaction Categories

Significant increases ($p \leq 0.00$) by end quarter in mean self-reports of performance in all 9 PPI categories
• professional competence
• opening the encounter
• gathering information
• active listening
• established rapport
• exploring the patient's perspective
• patients feelings
• addressing the patient's needs
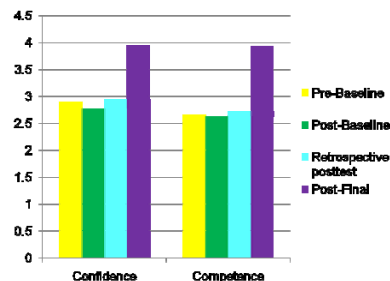• closing effectively

Key Lessons Learned

• Self-assessment of communication skills following an SP encounter, along with facilitated reflection with mentors, may focus and motivate student learning, create a nidus for reflection, and potentiate student attention to the medical interviewing curriculum
• Decreases in confidence and competence in communication skills between pre-baseline and post-baseline ratings may reflect students' new insights into areas for improvement, and illustrate the value of the baseline exercise and facilitated reflection with mentors
• Strengths and areas for improvement direct personal learning goals and curricular reform

<u>Possible limitations</u>
• Pedagogically, we chose not to withhold curriculum from a subset of students, and therefore did not have a control group
• We also have a great diversity of student knowledge and skill sets coming into medical school. We did not stratify our data by prior experience

Questions for Future Research

• Do MS1 self-assessments of PPI correlate with SP ratings?
• How do student and SP ratings compare with those of physician preceptors who observed the final exercise?
• Do MS1 perceptions of strengths and areas for improvement correlate with performance ratings?
• Can student reflection be enhanced through review of their video encounters?
• Observing development of knowledge and skills through medical school, are early insights addressed over time?

References

1. Shapiro SM, Lancee WJ, Richards-Bentley CM. Evaluation of a communication skills program for first-year medical students at the University of Toronto. BMC Med Educ. 2009;9:11.
2. Hilton SR, Slotnick HB. Proto-professionalism: how professionalisation occurs across the continuum of medical education. Med Educ. 2005 Jan;39(1):58-65.
3. Fadlon J, Pessach I, Toker A. Teaching medical students what they think they already know. Educ Health (Abingdon). 2004 Mar;17(1):35-41.
4. Pitkala KH, Mantyranta T. Professional socialization revised: medical students' own conceptions related to adoption of the future physician's role--a qualitative study. Med Teach. 2003 Mar;25(2):155-60.