## Innovations in Family Medicine Education \_

#### Joshua Freeman, MD Feature Editor

*Editor's Note:* Send submissions to jfreeman3@kumc.edu. Articles should be between 500–1,000 words and clearly and concisely present the goal of the program, the design of the intervention and evaluation plan, the description of the program as implemented, results of evaluation, and conclusion. Each submission should be accompanied by a 100-word abstract. You can also contact me at Department of Family Medicine, KUMC, Room 1130A Delp, 3901 Rainbow Boulevard, Kansas City, KS 66160. 913-588-1944. Fax: 913-588-1910.

# The BELIEF Instrument: A Preclinical Teaching Tool To Elicit Patients' Health Beliefs

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Purpose: The BELIEF Instrument is a cultural interviewing tool for preclinical medical students that does not require diagnostic or therapeutic skills. Methods: An expert panel developed and taught the instrument to 200 first-year medical students in (1) a didactic session, (2) standardized patient interviews, and (3) clinical correlation sessions with community physicians and third-year medical students. Standardized patients evaluated students on the BELIEF questions in a graded interview. Results: A total of 93.5% (range 86% to 97%) of 197 students elicited information on each of the BELIEF items. Conclusions: The BELIEF instrument works as a cultural interviewing tool. It is unknown if students' interviewing behavior generalizes to real patients in clinical settings.

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Culturally competent health care enhances the physician-patient relationship, allows respect for the patient's health beliefs, and encourages collaborative management of the patient's illness.<sup>1,2</sup> In addition, culturally effective health care may improve patient health outcomes, save health care dollars, and reduce ethnic disparities in health, Goal 2 of Healthy People 2010.<sup>3,4</sup> The Liaison Committee on Medical Education (LCME) requires that medical schools train culturally competent physicians to meet the needs of the increasingly diverse US population,<sup>5</sup> yet in 1994 only 13 of 126 medical schools (10%) offered cultural sensitivity courses.<sup>6</sup> By 2000, students at 87% of medical schools received some cultural content, but the number of schools that provided dedicated courses had fallen to only 8%.<sup>7</sup>

The movement toward incorporating cultural issues into medical education began in the 1970s, when Kleinman et al and Demers et al began investigating integrating anthropological and cross-cultural research into clinical practice.<sup>8,9</sup> Since clinicians primarily demonstrate cultural efficacy while interviewing patients, it seemed logical for medical educators to teach interviewing skills that fostered cultural competency. Since the early 1980s, several tools to teach culturally competent interviewing have emerged<sup>10-12</sup> (Table 1).

While planning a longitudinal curriculum in cultural competency at the University of Texas Health Science Center at San Antonio, we reviewed the LEARN and ETHNIC models for the first-year course. We concluded that these tools were

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#### Table 1

#### **Culturally Relevant Interviewing Instruments**

Instrument	Date	Authors	Comments		
LEARN L: Listen (to patient's perspective) E: Explain (your own perspective) A: Acknowledge (differences and similarities) R: Recommend (treatment) N: Negotiate (agree on a treatment plan)	1983	Berlin, Fowkes	Simple, effective, patient-centered approach not confined to cross-cultural encounters. Use require diagnostic and therapeutic skills.		
BATHE B: <b>Background</b> (What is going on in your life?) A: <b>Affect</b> (How do you feel about what is going on?) T: <b>Trouble</b> (What troubles you most?) H: <b>Handling</b> (How are you handling that?) E: <b>Empathy</b> (This must be very difficult for you)	1993	Stuart, Leibermann	Developed to elicit the psychosocial context of any encounter, not specifically cross-cultural interviewing Use does not require clinical skills.		
ETHNIC E: Explanation (How do you explain your illness?) T: Treatment (What treatment have you tried?) H: Healers (Have you sought any advice from folk healers?) N: Negotiate (mutually acceptable options) I: (Agree on) Intervention C: Collaboration (with patient, family, and healers)	1997	Levin, Like, Gottleib	A framework for culturally competent clinical practice Suitable for clinical students since use requires diagnostic and therapeutic skills.		
BELIEF B: Health <b>beliefs</b> (What caused your illness/problem?) E: <b>Explanation</b> (Why did it happen at this time?) L: <b>Learn</b> (Help me to understand your belief/opinion) I: <b>Impact</b> (How is this illness/problem impacting your life?) E: <b>Empathy</b> (This must be very difficult for you) F: <b>Feelings</b> (How are you feeling about it?)	2000	Dobbie, Medrano, Tysinger, Olney	Developed from early work on explanatory models, LEARN and ETHNIC. Suitable for preclinical or early clinical students since use does not require diagnostic of therapeutic skills.		

unsuitable for first-year students because their use requires clinical diagnostic and therapeutic skills. Therefore, we designed a new tool, the BELIEF instrument (Table 1) to teach preclinical medical students (who possess basic medical interviewing skills but lack skills in diagnosis or therapeutics) to elicit a patient's health beliefs. This paper describes the development, implementation, and preliminary results obtained from piloting the BELIEF instrument.

### Methods

#### Development of the BELIEF Instrument

An expert panel consisting of two physicians, a program evaluation specialist, a research nurse with a Master's degree in biostatistics, and a behavioral psychologist devised the tool. Robert Like, MD, author of ETHNIC, consulted with us. We developed the BELIEF instrument from early work by Dr Like<sup>13</sup> and others<sup>14</sup> on eliciting patients' explanatory models and from the "E" (explanation) domain of the ETH-NIC framework (Table 1). The project was supported by the Hispanic Center of Excellence and by a grant from the Society of Teachers of Family Medicine Foundation.

#### Implementing the BELIEF Instrument

The BELIEF instrument was a first-year component of the institution's longitudinal cultural competency curriculum. The firstyear goals were to enhance students' understanding of how health beliefs may affect patient care and to broaden students' perspectives about health beliefs different from their own. We introduced the BELIEF instrument in a series of interventions followed by clinical reinforcement sessions and evaluation by a standardized patient interview.

Step 1. Introduction of the BE-LIEF Instrument. As part of the first-year Introduction to Patient Care (IPC) course in July 2000, the two physicians from the expert panel taught the BELIEF instrument to the class of 200 students in a 2-hour lecture-discussion, "Health Beliefs in the Physician-Patient Encounter." The BELIEF instrument proved to be straightforward to teach and easy to integrate into clinical case vignettes. One example was a devout but "noncompliant" diabetic woman who ignored her physician's instructions because she believed that her diabetes was the will of God.

Step 2. Practice Sessions Using the BELIEF Instrument. In the week following the lecture-discussion, students discussed culturally relevant patient cases in small groups and practiced using the BELIEF tool in interviewing sessions with standardized patients.

Step 3. Clinical Correlation Sessions. Between July and November 2000, the first-year students spent four sessions in clinical settings with a community physician or senior medical student. The plan was that, among other clinical activities (for example, practicing basic physical examination skills), students would practice interviewing using the BELIEF instrument and observe modeling of culturally competent clinical care.

Step 4. Evaluation. In November 2000, we tested students' use of the BELIEF instrument in a 30-minute graded standardized patient interview. Standardized patients of Hispanic ethnic origin played a patient who believed she had *empacho* (a condition in which food is stuck in the stomach or intestines) and rated students on whether they asked about or elicited information on the BELIEF questions.

## Standardized Patient Empacho

*Case Description.* A 20–40 year old Hispanic woman presented with reflux-type abdominal pain that the

patient feared might be the result of a neighbor's curse. The neighbor had accused the patient of trying to steal her boyfriend. The patient's cousin, a traditional healer, had diagnosed *empacho* and prescribed *estafiate* (wormwood tea) and pork lard compresses. The patient was unsure if she believed in *empacho* and presented for a second opinion when the traditional remedies failed to relieve her pain.

#### Results

Out of the class of 200, 197 students participated in the graded standardized patient interview. An average of 93.5% of students (range 86% to 97%) asked or elicited the information on five of the six BE-LIEF items. Standardized patients assessed the sixth item, "E" (empathy), on their standard communication skills checklist. To avoid grading students twice on the same behavior, we did not include empathy for a second time on the BE-LIEF checklist. Table 2 shows the results from the graded standardized patient encounter checklist.

#### Discussion

The BELIEF instrument has shown under the testing conditions of a standardized patient interview that it works as a tool to teach culturally competent interviewing skills early in the preclinical years. Although we piloted the BELIEF instrument in only one medical school, we believe it has widespread generalizability to other institutions whose students and patients represent multiple cultures and belief systems.

We welcome more-extensive studies using the BELIEF instrument to investigate the extent to which behaviors displayed by medical students under graded test conditions generalize to interviewing real patients in clinical settings. Also, since our simple checklist recorded only the presence or absence of the BELIEF questions, further studies could address the degree of cultural competence demonstrated by students. Other studies could involve different learners, such as nursing and pharmacy students. Finally, the BELIEF Instrument could be introduced to practicing physicians to investigate whether its use improves physician-patient communication and patient satisfaction across cultures.

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#### Table 2

#### BELIEF\* Checklist Results From the Graded Standardized Patient Encounter

<ul> <li>Item—Student asked you or discussed:</li> <li>B: What you BELIEVE your illness is (empacho)</li> <li>E: What empacho is</li> <li>L: How you normally seek health care How you would normally treat empacho</li> <li>I: What kind of impact these symptoms have in your life</li> </ul>	Yes 191 (97%) 187 (95%) 170 (86%) 182 (92%) 192 (97%)	<i>No</i> 6 (3%) 10 (5%) 23(12%) 12 (6%) 4 (2%)	Not sure 0 (0%) 0 (0%) 4 (2%) 3 (2%) 1 (1%)	<i>Total</i> 197 197 197 197 197
E: *	192 (97%)	4 (2%)	1 (1%)	197
F: Your physical or emotional discomfort/feelings	185 (94%)	11 (6%)		197

\* Standardized patients assessed the "E" (empathy) component of the BELIEF instrument on their standard communication skills checklist. Students again scored over 90%.

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