

# Validating the health communication assessment tool (HCAT©)\* INACSL Journal Club January 2017



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\*INACSL Award for Excellence: *Clinical Simulation in Nursing Journal*  
*2015 Best Research Paper Award*

# Acknowledgements - Teamwork

- Michael P. Pagano, Eileen R. O'Shea, & Christopher A. Pates – Fairfield University, Fairfield, Connecticut USA
- Suzanne H. Campbell, Leanne M. Currie, & Elizabeth Chamberlin – The University of British Columbia, Vancouver, BC Canada
- Validating the health communication assessment tool (HCAT©). (2015, September) *Clinical Simulation in Nursing*, 11(9), 402-410.  
<http://dx.doi.org/10.1016/j.ecns.2015.06.001>.

# Disclosure

- Suzanne Hetzel Campbell
  - Co-editor of *Simulation Scenarios for Nursing Educators: Making it Real* (2<sup>nd</sup> Ed., 2013) New York, NY: Springer Publishers, Inc. (3<sup>rd</sup> Ed. In press 2017)
  - Sit on Editorial Board of *Clinical Simulation in Nursing*
- Other authors: nothing to disclose

# Background

- Communication is critical to safe, quality-focused, patient-centric health care delivery.
- Clinical simulations provide an opportunity to assess students' patient-centered communication.
- The purpose of this study was to further validate the Health Communication Assessment Tool (HCAT) with international and interprofessional health care educators.

# Goal in developing HCAT

- (a) An instrument for faculty to assess students' communication skills, provide feedback and guidance in developing their provider-patient relationships,
- (b) Offer a tool for health care students and professionals to use in assessing their own and/or colleagues' health communication in patient simulations,
- (c) Create an instrument that allows health and interpersonal communication assessments in addition to simulation objectives that include technical and non-technical skills.

# Effective Interpersonal Communication

- Derives from power-sharing
- Requires mutual Information-sharing
- Enhances trust
- Relies on interdependence
- Succeeds only with shared symbols
- Improves with feedback

# Goals in Developing HCAT

- Educational tool for assessing providers' health communication (verbal and nonverbal)
- Beneficial to faculty and students alike
- Expands simulation beyond clinical skills evaluations
- Does not require unique simulation scenarios

# Methods - Sampling

- N = 218 educators - online video used HCAT to assess student's communication behaviors
- Criteria: Health care faculty who teach using clinical simulation.
- Recruitment via e-mail: October 21, 2013 to February 28, 2014.
- Snowball sampling by sending e-mail requests for participants to randomly selected Deans of 60 professional schools (RN, MD, PA, PT) in the United States, Canada, and internationally.
- Researchers also contacted educational directors in several professional associations including:
  - Society for Simulation in Healthcare;
  - International Nursing Association for Clinical Simulation and Learning;
  - Physician Assistant Education Association;
  - Royal College of Physicians and Surgeons Simulation Summit;
  - U-21 Health Sciences Group; and
  - American Physical Therapy Association.



# Simulation Video

- 5-minute “High risk newborn simulation”
- Three female students: RN; nursing assistant; and postpartum mother
- Laerdal SimBaby<sup>®</sup> in an open incubator
- Monitor visible with vital signs of infant
- Student RN performed clinical skills and communicated with mother

# Methods – Measurement HCAT

- Respondents watched a short video of a student interacting with a patient or their family.
  - Completed 22-item HCAT - rate student behaviors
  - Rated behaviors via a five-point, Likert-type scale
    - 1 (Strongly Disagree) to 5 (Strongly Agree)
- The midpoint of the scale, 3 = “unsure”
- Higher scores = more effective health communication behaviors.

# HEALTH COMMUNICATION ASSESSMENT TOOL©

**For each behavior listed below, circle the number which represents your response based on this scale:**

**NOTE: This assessment is only of the student playing the role of Health Provider (HP) in the simulation.**

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1. The HP introduced her/himself to the patient (and/or family).	1	2	3	4	5
2. The HP shook the patient's and/or family member's hand.	1	2	3	4	5
3. The HP explained the reason for her/his visit in appropriate terms.	1	2	3	4	5
4. The HP used positive communication including a smile to encourage interactions.	1	2	3	4	5
5. The HP maintained eye contact when talking with patient and/or family.	1	2	3	4	5
6. The HP communicated what s/he was about to do PRIOR to doing it.	1	2	3	4	5
7. The HP asked the patient or family member if it was okay to touch the patient before doing a procedure or test (blood pressure, auscultation, IV, NG, etc.).	1	2	3	4	5
8. The HP touched the patient appropriately.	1	2	3	4	5
9. The HP spent the majority of time near the patient.	1	2	3	4	5
10. The HP sat when talking with or educating the patient and/or family member.	1	2	3	4	5
11. The HP listened more than talked.	1	2	3	4	5
12. The HP consistently leaned toward the patient or family member who was speaking.	1	2	3	4	5
13. The HP effectively educated the patient and/or family member about the procedure, disease, and/or treatment.	1	2	3	4	5
14. The HP asked questions to encourage feedback and enhance clarity.	1	2	3	4	5
15. The HP recognized and responded appropriately to the patient's and/or family member's nonverbal (frowns, tears, hysteria, silence, etc.) and verbal behaviors.	1	2	3	4	5
16. The HP used appropriate vocal tone and volume for the situation.	1	2	3	4	5
17. The HP avoided judging patient/family behaviors (re: economic status, abuse, drug use, sexual orientation, religion/cultural differences, etc.).	1	2	3	4	5
18. The HP spent equal or more time on psychosocial aspects of patient/family care as on clinical (biological) aspects.	1	2	3	4	5
19. The HP inquired about the patient's/family member's feelings regarding the situation.	1	2	3	4	5
20. The HP recognized conflict and tried to gain information and find opportunities to minimize or manage it.	1	2	3	4	5
21. The HP maintained, enhanced, or developed an interpersonal relationship with the patient &/or family member (via communication and professionalism)	1	2	3	4	5
22. The HP avoided healthcare jargon (vital signs, respiratory, etc.) [include specific words below]	1	2	3	4	5

If jargon was used, please list specific word(s)/terms(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Profession \_\_\_\_\_

Date \_\_\_\_\_

# Prior Studies

- Using 19 diverse clinical simulations we
  - Identified common communication behaviors/topics across scenarios, students, and clinical assessments
- Created the HCAT to evaluate identified behaviors/topics
- Tested HCAT with faculty and students

# Table 1 Participant Demographics

Variable N (%)

Age in years, mean (SD) 49 (9.6)

Sex, female 185 (84.9)

Role

- Assistant professor 48 (22.0)
- Associate professor 36 (16.5)
- Instructor 45 (20.6)
- Lecturer 20 (9.2)
- Professor 19 (8.7)
- Senior instructor 10 (4.6)
- Other 40 (18.3)

Clinical domain

- APRN/NP 21 (9.6)
- MD 26 (11.9)
- PA 7 (3.2)
- PT 3 (1.4)
- RN 134 (61.5)
- Other 26 (11.9)
- Missing 1 (0.5)

Country of origin

- Australia 11 (5.0)
- Canada 59 (27.1)
- Chile 1 (0.5)
- China 5 (2.3)
- Denmark 2 (0.9)
- Hong Kong 3 (1.4)
- Iceland 1 (0.5)
- New Zealand 1 (0.5)
- Norway 11 (5.0)
- Qatar 1 (0.5)
- United Kingdom 5 (2.3)
- United States of America 118 (54.1)

Years teaching

- <1 year 17 (7.8)
- 1-3 years 19 (8.7)
- 3-5 years 31 (14.2)
- >5 years 151 (69.3)

# Results

- Exploratory factor analysis revealed a five-factor model.
- Average intraclass correlation of these factors was high (intraclass correlation coefficient [ICC]  $\frac{1}{4}$  0.99)\*
- Single-measure consistency ICC was moderate (ICC  $\frac{1}{4}$  0.41)\*\*
- Consider rater training for assessment

\*3 raters scores averaged for acceptable level of agreement

\*\* 7 raters scores averaged for acceptable level of agreement

# Factor Analysis Results

## **Five-factor model that was classified into the following constructs:**

Factor 1: Empathic Behaviors,

Factor 2: Introduction Behaviors,

Factor 3: Trust Building Behaviors,

Factor 4: Patient/Family Education Behaviors, and

Factor 5: Power-Sharing Behaviors.

All of the factors retained despite some with low Cronbach's alphas, because they contributed to the model.

- Item 4, "Used positive communication including smile to encourage interaction,"
- Cross-loaded in Factor 2, Introduction Behaviors + Factor 4 (primary), Patient/Family Education Behaviors. Perhaps overlap of the constructs in the model and the role of smiling in promoting interactions and being considered a positive form of communication in many cultures.

# Limitations

- Importance of utilizing a multi-cultural lens when assessing health communication behaviors internationally.
- Possible that a scenario observed in real-time might be scored differently than one viewed on the Web.
- Study was done in English – language barrier in understanding statements possible.
- Only one respondent from several of the countries identified – so grouped US, Canada, and “Other” which may not reflect cultural complexities.



# Conclusions

- HCAT was assessed using Web-based methodology and an international, interprofessional sample.
- The respondents were restricted to health care faculty who teach using clinical simulation.
- Analysis of the HCAT with this sample provided further evidence of the instrument's reliability and validity.
- Appeared to be no difference in reliability of assessment according to country, profession, or years of experience teaching

# Implications for Future Research

- Translation of HCAT into Portuguese was difficult.
- S. Campbell Developed a new Global Interprofessional Therapeutic Communication Scale (GITCS©).
- Train-the-trainer mode of educating faculty to use GITCS© developed through the use of professionally developed videos.
- Reliability and Validity testing of GITCS© presently underway.
- Provincial study testing GITCS© with students at different stages.
- Translation of GITCS© into Portuguese, French, Spanish, Mandarin and Punjabi is planned in 2017.

# Publications

- Campbell, S. H., Pagano, M. P., O'Shea, E. R., Connery, C., & Caron, C. (2013). Development of the Health Communication Assessment Tool: Enhancing Relationships, Empowerment, and Power-Sharing Skills. *Clinical Simulation in Nursing*, 9(11): e543-e550.  
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