

Teaching Pediatric Residents about Health Literacy to Improve Communication Skills

Project Description:

This is a medical education project involving aspects of curriculum development and program evaluation. The goal of this project is to develop and evaluate the impact of a health literacy curriculum for residents.

Rationale:

Low health literacy has been associated with poorer health outcomes, including increased utilization of emergency services and decreased asthma control. (Sanders, Federico et al. 2009, Shone, Conn et al. 2009) Physicians admit to insufficient knowledge of health literacy and advanced communication techniques. (Turner, Cull et al. 2009) They also tend to overestimate their ability to communicate effectively with patients with low health literacy. (Teutsch 2003, Howard, Jacobson et al. 2013) Educating residents will better prepare the next generation of physicians to communicate effectively with a diverse patient population.

Specific Educational Aims:

1. To increase resident knowledge of health literacy and how low health literacy may affect health outcomes.
2. To enable residents to communicate effectively with patients/caregivers of all health literacy levels.
3. To establish an effective and feasible method to teach residents fundamental tools of health literacy that can be disseminated to other programs and used in various scenarios of provider-patient communication.

Pilot Data: none available

How the project supports/promotes diversity: This project aims to educate residents about low health literacy as well as teach residents to communicate effectively with a diverse patient population of all backgrounds and literacy levels. This not only emphasizes the importance of considering diversity in the patient population that we care for, but shows residents how to move towards providing more culturally-competent, patient-centered care.

Methods of Design:

We first developed an evidenced-based, health literacy focused communication assessment tool. Face validity was established with input from experts in the field of medical education and health literacy. The study will be a randomized control trial with pediatric residents of all years. They will be randomized into either a control or intervention group. Each resident will complete a written self-assessment to determine baseline knowledge, attitudes, and perceived skill level in relation to health literacy and communication. They will then complete a scenario where they will be prompted to communicate a pre-determined diagnosis (persistent asthma) and treatment plan (based on established treatment guidelines) to a simulated "parent." The resident's performance will be evaluated based on fundamental principles of health literacy and provider/patient communication, including: limiting medical information, checking for understanding, using plain verbal and written language. Each scenario will be videotaped and assessed using the aforementioned assessment tool.

Residents in the intervention group will then participate in a one (1) hour long health literacy communication curriculum where they will have interactive exercises and simulation based on the best

practices for effective communication. They will also be given a small “cheat sheet” about asthma management. The control group will receive a one (1) hour long teaching session on asthma pathophysiology and management. They will receive a “cheat sheet” of effective communication techniques based on health literacy principles.

After the session, the simulated scenario will be repeated and the resident performance videotaped and assessed. The residents will then be asked to complete an evaluation of the exercise. Repeat testing will occur 6 months after to assess for skills retention.

Timeline and Implementation Plan:

June-July 2016 – IRB application; research assistant recruitment

July – August 2016 – Research Assistant Recruitment/Training

August 2016 – Pilot Data Collection (Testing, Intervention, Simulation)

Early September 2016 – Data Analysis

Late September 2016 – December 2016 – larger study execution and data collection (testing, intervention, simulation)

November 2016 – abstract and workshop proposals to various national meetings/organizations (outlined below)

December 2016 – data analysis of later data analysis.

Anticipated work product: 1) curriculum toolkit. 2) Workshop at national meeting 3) published work in peer reviewed journal

Evaluation Plan:

Will Assess: 1) Resident performance and application of health literacy communication principles, 2) Resident attitudes regarding health literacy and communication with families, 3) Resident satisfaction with the intervention itself.

Dissemination of results: My goal is to disseminate the results of this project at national conferences and peer reviewed publications. I hope to present the project in the format of a workshop or discussion and will submit abstracts/proposals to the following meetings: Pediatric Academic Society (PAS), American Thoracic Society (ATS), and Association of Pediatric Program Directors (APPD). Abstracts will be submitted to the following peer reviewed journals: Journal of Graduate Medical Education, Journal of Academic Pediatrics, and Journal of Pediatrics.

Anticipated impact of the project on education and/or mentoring: This project would create a curriculum that could be disseminated to other residency programs in the form of a toolkit, it would an important addition to the education of residents in the communication of patients and families.

References:

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2. Sanders, L. M., S. Federico, P. Klass, M. Abrams and B. Dreyer (2009). "Literacy and child health: A systematic review." Archives of Pediatrics & Adolescent Medicine **163**(2): 131-140.
3. Shone, L. P., K. M. Conn, L. Sanders and J. S. Halterman (2009). "The role of parent health literacy among urban children with persistent asthma." Patient Educ Couns **75**(3): 368-375.
4. Teutsch, C. (2003). "Patient-doctor communication." Med Clin North Am **87**(5): 1115-1145.
5. Turner, T., W. L. Cull, B. Bayldon, P. Klass, L. M. Sanders, M. P. Frintner, M. A. Abrams and B. Dreyer (2009). "Pediatricians and Health Literacy: Descriptive Results From a National Survey." Pediatrics **124**(Supplement 3): S299-S305.