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NEW IDEAS

Effectiveness of the 1-Minute Preceptor on Feedback to Pediatric Residents in a Busy Ambulatory Setting

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Setting and Problem

Learning during clinical practice is an integral part of physicians' graduate training.[1,2] While most preceptors are experts at clinical practice, few have received formal training in teaching, assessing, and supervising residents.[1] Lack of time in busy clinical settings is another factor that contributes to deficiencies in clinical teaching and feedback to trainees. Ambulatory pediatric care in teaching settings is demanding, and can prevent educators from providing adequate feedback to residents.[3,4] Use of methods designed for brief, meaningful, and actionable feedback, such as the 1-Minute Preceptor (OMP) may help trainees learn from their clinical experiences in a structured manner.[5–7] The OMP is a widely used method for improving structured case-based teaching.[6] The simple-to-administer nature of the OMP module (BOX) makes it useful in busy teaching settings.[7]

Intervention

We instituted the OMP as a workplace-based assessment in a busy pediatric clinic in South India. Ten faculty preceptors involved in teaching residents were trained in the OMP. Twelve second-year pediatric residents voluntarily participated in the study.

During an introductory workshop we explored the concept of OMP in four 15-minute sessions. The 5 micro skills were elaborated in a journal session, video, and live demonstration. In each session, we emphasized defining objectives and ensuring that defined objectives were met in the allotted time. Prior to the intervention, none of the participating faculty had been trained in the OMP. The participating faculty members then applied the OMP module during pediatric residents' daily clinical case presentations for 1 week in March 2016. Feedback was provided on commonly encountered cases, including febrile seizures, bronchiolitis, and urinary tract infection.

Our approach for applying the OMP is described below.

1. **Get a commitment:** On daily rounds, faculty asked residents to develop differential diagnoses after completing an independent patient history taking and physical examination.
2. **Probe for supporting evidence:** Once a diagnosis or differential diagnosis was reached, faculty prompted the resident to elaborate on the decision-making process.
3. **Teach general rules:** Faculty then discussed important relevant clinical concepts.

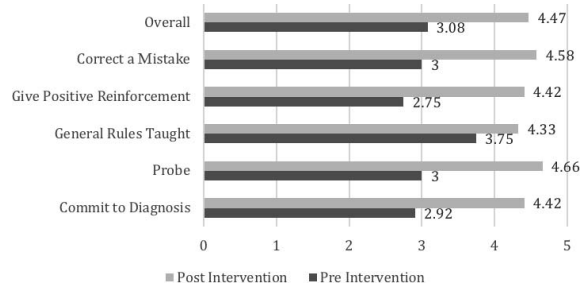

FIGURE
Comparison of Pre- and Postintervention Scores

4. **Reinforce what was right:** Faculty provided positive feedback to the trainee.
5. **Correct mistakes:** Faculty then reviewed and corrected errors made by the resident. During this step, the faculty emphasized that the trainee should not feel undervalued.

Residents completed an evaluation form that assessed faculty effectiveness on the micro skills teaching, whether the OMP-based feedback helped encouraged clinical reasoning and improved their confidence, and their perception of overall learning effectiveness after use of the OMP. Participating faculty evaluated the effectiveness of each OMP session, and their self-reported level of confidence in independently using the OMP, and a pre- and post-OMP evaluation that focused on OMP concepts, situations where it can be adopted, and use to obtain feedback.

Outcomes to Date

After OMP training, mean scores for the 4 parameters assessed increased from an average of 3.95 of 10 to 8.45 of 10, and 100% of faculty participants reported being confident in conducting OMP sessions independently. All residents agreed that feedback using the OMP was more effective, and that faculty making them commit to a diagnosis enhanced their confidence level. Limitations of this study include its small number of participants and short duration, with both reducing generalizability. Introduction of the OMP allowed faculty to adapt the teacher-learner interaction to the context of a busy pediatric ambulatory setting, offered feedback perceived to be effective by the trainees, and may ultimately improve residents' confidence in their clinical judgment.

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BOX The 5 Micro Skills of the 1-Minute Preceptor

1. Get a commitment
2. Probe for supporting evidence
3. Reinforce what was right
4. Correct mistakes
5. Teach general rules

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NEW IDEAS

Formation of Primary Care Competencies in the Ukrainian Evangelical Medical Project

Setting and Problem

Over the past 50 years, a number of residency programs have been established with medical missionary involvement in low- and middle-income countries across the globe. Current evidence supports the idea that faith-based organizations continue to play a part in health provision, especially in emerging economies and fragile health care systems.

In Ukraine, income levels are among the lowest in Europe at approximately US $110 per month. Ukrainian family physicians have insufficient training in practical skills, holistic care, and evidence-based medicine, and less than 1% of family physicians are proficient in English. In 2017, only 3% of young physicians succeeded in passing a standardized Western-style examination.

Intervention

The Ukrainian Christian Mobile Medical Team (UCMMT) is a faith-based medical ministry that has been operating in Ukraine since 2002 under the umbrella of the international humanitarian aid organization "Hope in Action." During this period, teams have conducted 300 outreach events across Ukraine, caring for approximately 80 000 patients. Currently, around 200 volunteers are involved with UCMMT, including 60 physicians. Assets of the program include 3 mobile units with medical equipment, including diagnostic ultrasound, a mammogram unit, an x-ray unit, and a laboratory providing hematological and biochemical analysis.

UCMMT's priorities include assisting remote, poor, and underserved communities and caring for populations in areas affected by war and the Chernobyl nuclear accident. In collaboration with local health authorities and the Ministry of Health of Ukraine, UCMMT empowers local physicians through education and medical seminars. In addition, a curriculum has been developed to provide more formal education for team members who wish to attend educational activities on a regular basis. Assistance in the educational efforts has been provided by Radiologists without Borders, a US organization that provides radiology equipment and training to developing economies, and In His Image International, a family medicine residency in Tulsa, Oklahoma, whose leaders assist medical residencies internationally, and which recently accepted the Ukraine program into its core group of 10 residency programs the organization supports worldwide. The *International Classification of Primary Care* and the WONCA Global Standards for Postgraduate Family Medicine Education are used as curriculum resources.

Outcomes to Date

Since early 2018, 5 Ukrainian physician trainees are mastering 150 competencies in 30 areas of medical science with the goal of improving their performance on standardized tests by at least 20% compared to baseline. During outreach activities, these trainees evaluate 12 patients per day under the preceptorship of a senior physician. Problem-oriented learning and evidence-based medicine are used to facilitate professional growth. Trainees attend an average of 20 full clinic days per year, 5 hours of formal lectures and didactic activities per month, and an additional 15 hours of self-education per month.

Due to the lack of financial support, only 30% of trainees can attend all available educational activities. A more formal scholarship award is being considered to sponsor some of the most active participants. The lack of a stationary clinic and an inpatient facility remains a barrier to broader educational opportunities for trainees. The funding of the existing work is sporadic and dependent on donations and grants from individuals and organizations.

This formal education program for family medicine trainees, with support from US medical outreach efforts, has been effective in enhancing the

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