

Entrustable professional activities for undergraduate nutrition student clinical training: Development and implementation

Wang Wei Ning, Wang Ya Ling, Chen Chao Hsiu, Chan Yi Jui, Hsieh Hui Min
Department of Food and Nutrition, Taichung Veterans General Hospital, Taiwan
Address: 1650 Taiwan Boulevard Sect. 4, Taichung, Taiwan 40705, ROC
Tel: 886-4-23592525 Ext. 2610 e-mail: sherry@vghtc.gov.tw



Clinical Competency Committees

OBJECTIVES

Entrustable professional activities (EPAs) have been applied to postgraduate and undergraduate medical training, but the application of nutrition intern students is rare. The clinical training of nutrition intern students must be connected with the nutrition care ability after graduation. Outpatient diabetes nutrition care is an important job of hospital dietitian. Therefore, this is the good point for the development of EPAs evaluation. The objective of this study was to describe the development of EPAs for nutrition intern training in the nutrition department of a medical center.

METHODS

We chose the topic “Diet consultation and education for outpatients with diabetes” and set the EPAs framework. EPAs was developed through an iterative consensus process involving the advanced dietitians. The content includes **task description, competences (knowledge, skills, attitudes and behaviors), evaluation information, setting the trust level and validity period**. The evaluation was established through expert validity. Final EPAs revisions followed from the multisource feedback. The Clinical Competency Committees (CCC) was established for final evaluation and approval.

RESULTS

The EPAs was piloted for 19 intern students and 1 post graduated year (PGY) trainee in the Nutrition Department of the Medical Center during 2019-2020. The assessment methods include *test, mini-CEX, ad-hoc EPA, OSCE*. The assessment content includes the knowledge, skills, attitudes and behaviors. Students were evaluated during each period of training. Finally, all the evaluation results were summarized and the CCC gave each student a credit rating. Among intern students, 2 (11%) got level 2a, 13 (68%) got 2b, 4 (21%) got 3a and the PGY trainee got level 4.

CONCLUSIONS

Through multiple evaluations and timely feedback, the ability of intern students was defined in more precision. It allowed clinical teachers to achieve a teaching consensus. Combine competence with actual work, and integrate evaluation with authorization. We need to construct a complete information system to make evaluation more efficient in the future.

1 Title: Diet consultation and education for outpatients with diabetes.		Student name:	
2 Task description: Learners can collect information, establish diagnosis, develop personalized treatment plans for outpatients with diabetes, and conduct education and evaluation.			
3 Competences: Learners have patient-centered medical care competency, properly use medical expertise, interpersonal communication skills, work with teams, and be able to learn and improve themselves.			
Required knowledge, skills, attitudes and behaviors when perform this EPA			
Knowledge	Skills	Attitudes and behaviors	
1. Pathogenesis, diagnosis and classification of diabetes. 2. Complications and management. (blood sugar, blood pressure and blood lipids control targets) 3. Diabetes diet principles. 4. Diabetes-related medications (PGY)/and dietary adjustments. 5. Familiar with nutrition care process. (assessment, diagnosis, intervention, monitor and evaluation)	1. Collect dietary information by using 24 hours recall, food frequency questionnaire. 2. Calculate patient's nutritional requirement correctly. 3. Food exchange and individualized menu design. 4. Implement personalized diabetes diet education. 5. Familiar with communication skills and conflict handling. (PGY) 6. Complete nutritional record.	1. Can help patients face problems with empathy, reduce patient anxiety, and positively guide patients to face diseases. 2. Able to respect and accept the individual preferences and values of the patient or family. 3. Able to realize and respect the roles and responsibilities of other Professionals. (PGY)	
4 Evaluation information			
1. Test 2. Nutrition care process record	3. Mini-CEX 4. OSCE	5. ad-hoc EPA 6. 360-degree feedback (PGY)	
Setting the trust level			
Level 1: observation but no execution Level 2: execution with direct, proactive supervision 2a: as co-activity with supervisor 2b: with supervisor in room ready to step in as needed Level 3: execution with reactive supervision, i.e. on request and quickly available 3a: with supervisor immediately available, all findings double checked 3b: with supervisor immediately available, key findings double checked 3c: with supervisor distantly available (e.g. by phone), findings reviewed Level 4: supervision at a distance and/or post hoc Level 5: supervision provided by the trainee to more junior colleagues			
Validity period: 9-12 months (No need to reassess if keep performing this work.)			
Evaluation result:		Evaluation teacher:	

Fig.1 EPA evaluation sheet

日期: 10月17日 學員: 黃○ 教師: 謝○

學員等級: 116

1. 主題: 糖尿病門診病人飲食教育	2. 任務說明: [?]可針對門診糖尿病病人蒐集資料、確立診斷、擬定個人化治療計畫、並進行教育及評估	3. 相關等級(國際標準): 下述達到該信條時即為此學員應達之程度	信賴等級	合格	良好	優異	
4. 學習項目	(1) DM 疾病過程/分期/類/併發症及處理 (口試/筆試)	(2) DM 飲食原則 (筆試)	(3) 教育完整飲食資訊 (Mini-CEX, OSCE)	(4) 計算營養需求、飲食計畫、並實施指導 (筆試 Mini-CEX, OSCE)	(5) 執行個別飲食教育 (Mini-CEX, OSCE)	(6) 溝通患者問題/處理/完成照護紀錄 (Chart review)	(7) 同理心並尊重病人對於飲食需求/處理/指導 (Mini-CEX, OSCE)
5. 整體任務(必填)							
6. 使用之方式(可複選)	[?] [?] [?] [?] [?] [?] [?]						

謝○: 此項任務之執行已屬管理層(醫師/護士)之職責, 故在 Mini-CEX 中, 應以 OSCE 或 360-degree feedback 為主要評估方式, 且應加強與患者之溝通, 對於如何與患者溝通, 應加強與患者溝通, 加強與患者溝通, 加強與患者溝通。

Fig.2 ad hoc EPA