การประเมินความสามารถในการปฏิบัติงานโดยหัวหน้างานและการประเมิน ตนเองของกุมารแพทย์ที่สำเร็จการศึกษาจากมหาวิทยาลัยสงขลานครินทร์

Work Director's Evaluations and Self-Evaluations of Professional Performance of Pediatricians Graduated from Prince of Songkla University

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บทคัดย่อ:

วัตถุประสงค์: เพื่อเปรียบเทียบผลการประเมินความสามารถในการปฏิบัติงานของกุมารแพทย์ที่สำเร็จการฝึกอบรมหลักสูตร วุฒิบัตรกุมารเวชศาสตร์จากมหาวิทยาลัยสงขลานครินทร์ ในปี พ.ศ. 2543–2556 จากการประเมินโดยหัวหน้างานในสถานที่ ที่ปฏิบัติงานและจากการประเมินตนเอง

วัสดุและวิธีการ: กุมารแพทย์ที่สำเร็จการฝึกอบรมหลักสูตรวุฒิบัตรกุมารเวชศาสตร์ ในปี พ.ศ. 2543-2556 มีจำนวน 78 คน โดย 52 คน (ร้อยละ 66.7) ปฏิบัติงานในระบบราชการ และ 26 คน (ร้อยละ 33.3) ปฏิบัติงานในระบบเอกชน ผู้วิจัยได้ส่งแบบสอบถาม การประเมินความสามารถในการปฏิบัติงาน จำนวน 10 ข้อ ไปยังหัวหน้างานในสถานที่ที่ปฏิบัติงานและแบบสอบถามการประเมิน ตนเอง การให้คะแนนเป็นลักษณะรูบิค 1−10 (1 หมายถึง น้อยที่สุด และ 10 หมายถึง มากที่สุด) แบบสอบถามที่ส่งให้หัวหน้างาน มีคำถามปลายเปิดให้ตอบ 1 ข้อของความสามารถของกุมารแพทย์ที่ "ดีที่สุด" และ 1 ข้อของความสามารถที่ "ควรปรับปรุง" ผลการศึกษา: แบบสอบถามที่ได้รับการตอบกลับจากหัวหน้างาน 45 คน (ร้อยละ 57.7) และจากการประเมินตนเอง 63 คน (ร้อยละ 80.8) คะแนนความสามารถโดยรวมเฉลี่ยของกุมารแพทย์ที่ประเมินโดยหัวหน้างานและการประเมินตนเองมีค่ามากกว่า 8 หัวข้อการประเมินที่ได้คะแนนสูงสุดทั้งจากหัวหน้างานและการประเมินตนเองคือ จริยธรรม∕คุณธรรมในการดูแลสุขภาพ ผู้ป่วย (9.11±0.88 จากการประเมินโดยหัวหน้างาน และ 9.01±0.92 จากการประเมินตนเอง) หัวข้อการประเมินที่ได้คะแนนน้อย ที่สุดคือ การคำนึงถึงเศรษฐศาสตร์สาธารณสุข (8.37±0.93 จากการประเมินโดยหัวหน้างาน และ 8.04±0.97 จากการประเมิน ตนเอง) ไม่มีความแตกต่างอย่างมีนัยสำคัญทางสถิติของคะแนนการประเมินจากหัวหน้างานและการประเมินตนเอง

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สรุป: กุมารแพทย์ที่สำเร็จการฝึกอบรมหลักสูตรวุฒิบัตรกุมารเวชศาสตร์จากมหาวิทยาลัยสงขลานครินทร์ มีความสามารถ ในการปฏิบัติงานเป็นอย่างดีทั้งจากการประเมินโดยหัวหน้างานและจากการประเมินตนเอง

คำสำคัญ: การประเมินความสามารถในการปฏิบัติงานโดยหัวหน้างาน, การประเมินตนเอง, กุมารแพทย์, ประเมินความสามารถ ในการปฏิบัติงาน

Abstract:

Objectives: To compare the work performance of 2004–2013 Prince of Songkla University (PSU) pediatric residency training graduates as evaluated by their workplace directors and the graduates self-evaluation.

Material and Method: All 78 pediatric graduates from PSU 2004–2013 were located: 52 (66.7%) were in the public sector and 26 (33.3%) in the private sector. Ten-item performance evaluation questionnaires were sent to both the graduates and their workplace directors. A rubric scale was used for rating each item from 1 to 10 (1=very poor, 10= excellent). The workplace director was asked to give an open answer for one "outstanding performance" item of the graduates and suggest one "performance that should be improved" item.

Results: Forty-five directors (57.7%) and 63 graduates (80.8%) returned their questionnaires. The workplace directors rated the PSU graduates more favorably than the graduates' self-evaluations in 8 of the 10 items, but without significant differences. The average overall scores for professional performance by both the directors and the graduates were over 8.00, with the highest ratings in ethics/morals in medical care (directors 9.11±0.88 and graduates 9.01±0.92), and the lowest ratings for "concerns in health economics" (directors 8.37±0.93 and graduates 8.04±0.97).

Conclusion: Most of our pediatric graduates have achieved career success as most of them were rated by their directors as showing very good performance in their workplaces. The workplace directors tended to rate the PSU graduates slightly more favorably than the graduates' own self-evaluations.

Keywords: work director's evaluation, self-evaluation, professional competency evaluation, pediatricians

Introduction

Standards for professional competency evaluation delineate patient care, medical knowledge, communication skills, professionalism, system-based practice including health economics and teamwork, and other aspects of practice that cannot be accurately measured such as morality, ethics, and doctors' emotions. The professional performance evaluation is one method for physician competency evaluations in practice. Evaluation of physician performance and competency in medical practice is greatly important to physician organizations but challenging.

Recently, there has been an increasing interest in evaluating doctors' professional performance and behavior in medical practice. Such evaluations are for ensuring that physicians are competent in their medical practice and deliver good—quality care to their patients. In view of demands for high quality care, many health care systems assess their physicians to ensure they meet modern high professional performance standards. Some common methods of evaluation include video observation, medical chart audit, critical incident analysis, self-evaluation, multisource feedback, and workplace-based assessment (WBA).²⁻⁴

The Department of Pediatrics of the Prince of Songkla University (PSU) Hospital and Medical Faculty has been certified for pediatric residency training since 1985 with 5–9 residents trained per year. From 1988–2013, 138 residents completed PSU pediatric residency training. In 2004, the Postgraduate Unit of the Department of Pediatrics, PSU, began to track our graduates who had graduated more than 2 years. The aim of this study was to contact as many graduates as possible, and give the graduates and their employers questionnaires to provide rating scores of our graduates in their professional performance, both in their own opinion, and in the opinion of their workplace director.

Material and Method

The pediatric graduates from PSU during the 2004–2013 pediatric residency training (n=78) were tracked for their workplace. The medical directors of our PSU graduates' workplaces were contacted and asked to evaluate the professional performance of our PSU pediatric graduates. Professional performance evaluation questionnaires (10 items) were sent to both the graduates and their workplace directors on separate occasions, 6 months apart. A rubric scale was used for rating each of 10 questions from 1 to 10 (1=very poor, 10=excellent). The workplace director was also asked to give an open answer for at least 1 item of the "outstanding performance" of the graduates and suggest one item of a "performance that should be improved".

Questionnaire content and scoring

The questionnaire was designed and pre-tested for validity by 5 staff members of the Postgraduate Unit of the Department of Pediatrics, PSU, with an index of item-objective congruence score of 0.80 and reliability by test-retest in 30 graduates, 6–10 weeks apart, with a high internal consistency of Cronbach's alpha of 0.85–0.95.

Statistical analysis

Frequencies and percentages were used for descriptive analyses. Student t-test was used to compare the variable differences in continuous data of the rating scores between the administrative directors and the graduates. Statistical differences were deemed significant at a p-value<0.05.

The study was approved by the Institutional Review Board and the Ethics Committee of the Faculty of Medicine, Prince of Songkla University, Hat Yai, Thailand.

Results

All 78 graduates of 2004-2013 could be tracked for their workplaces, which were classified into 4 categories: medical schools (n=30, 38.5%), medical education centers (n=11, 14.1%), public hospitals (n=11, 14.1%) and private hospitals (n=26, 33.3%) (Table 1). The response rate of the questionnaire from the graduates (n=63, 80.8%) was significantly greater than the response rate from their workplace directors (n=45, 57.7%) (p-value<0.01). For the response rate from the directors, the highest response rate was from the medical schools, followed by the medical education centers and public hospitals, and the lowest response rate was from the private hospitals. (Table 1) The average age of the graduates was 35.90±1.50 years (range 31–39 years) with average years of clinical practice 4.22±1.81 years (range 2-9 years). The average age range of the workplace directors who rated our graduates was 40-45 years.

For the professional performance evaluation, both the workplace directors and the graduates gave the highest rating scores for ethics/morals in medical health care (9.11±0.88) and the lowest scores in concern for health economics (8.37±0.93). The workplace directors gave the PSU graduates more favorable ratings than the graduates' self-evaluation in 8 of the total 10 items, but without significant differences. The 2 items that the

workplace directors rated the graduates lower than the graduates' self-evaluation were communication skills with patients and communication skills with medical personnel. (Table 2) There were no differences in rating scores by the directors between the public and private sectors.

"Outstanding performance" ratings were given to our graduates by the 33 directors from medical schools (n= 22) medical education centers (n=8) and public hospitals

(n=3) in the areas of responsibility in patient care (n=21, 63.6%), social relations/activities (n=20, 60.6%) and medical knowledge (n=16, 48.5%). The "performance that should be improved" question was completed by 7 of the 33 directors (21.2%), and were mainly concerned with some defects in communication skills with some medical personnel (n=4, 57.1%), and skills in manuscript writing (n=3, 42.9%).

Table 1 Numbers of respondents classified by workplace and response rates from graduates and their directors

Workplace	Number of PSU graduates Number	Number of director's assessments Number (%)	Number of self- assessments Number (%)
Medical school	30	26 (86.7)	27 (90.0)
Medical education center	11	7 (63.6)	10 (90.9)
Provincial/community hospital	11	6 (54.6)	7 (63.6)
Private hospital	26	6 (23.1)	19 (73.1)
Total	78	45 (57.7)	63 (80.8)

Table 2 Assessment items and scores by directors (n=45) and graduates' self-evaluations (n=63). Data shown are mean±standard deviation

Competency	Directors' evaluations (n=45)	Self-evaluations (n=63)
1. Medical knowledge/clinical reasoning	8.63±0.83	8.30±0.71
2. Skills in patient care	8.62±0.86	8.48±0.72
3. Communication skills with patients	8.65±0.90	8.90±0.76
4. Communication skills with medical personnel	8.56±0.96	8.86±0.76
5. Continuing professional education	8.69±1.10	8.48±0.88
6. Ethics/morals in medical health care	9.11±0.88	9.07±0.71
7. Teamwork/leadership	8.74±0.97	8.71±0.66
8. Social relations/activities	8.92±1.02	8.79±0.77
9. Participation in organization activities	8.75±0.93	8.32±0.86
10. Concerns for health economics	8.37±0.93	8.06±1.00

Discussion

Over recent years, there has been an increasing interest in evaluating the professional performance of doctors in medical practice. Such evaluations aim to ensure that the doctors are delivering good-quality care to their patients. ²⁻⁴ Although there is agreement on the need for evaluation of doctors' performance, there is no consensus about the best method for such evaluations. In the United Kingdom, a process of 'revalidation' was introduced across the country in 2012 which all doctors were required to pass in order to retain their medical license by the General Medical Council (GMC). In this GMC process, the senior supervisor of each doctor collects data from other medical personnel and the doctor's patients about the doctor's suitability for revalidation.

At present, multisource feedback (MSF, also known as 360 degree evaluation), is deemed to be the most appropriate method in the health care system to assess multiple aspects of professional performance of practicing doctors.^{2,3} In the process of MSF evaluation, physicians also complete a self-evaluation questionnaire about their own performance and these rating are compared with the other ratings. Many studies have shown that selfevaluation is an important aspect of professional selfregulation. Self-evaluation functions both as a mechanism to identify one's weaknesses and also to identify one's strengths. However, self-evaluation has been shown to be limited and there is a need for external evaluation as well.5 In 2007, a questionnaire-based MSF evaluation was introduced in the Department of Pediatrics, PSU, during pediatric residency training with an aim to improve the professional performance of our residents. 6 Each year, each resident is rated by 12-18 faculty, 20-30 nurses, and 20-30 patients' parents. The faculty evaluates our residents in 6 core competencies (professionalism, communication skills, patient care/clinical reasoning,

procedural skills, medical knowledge, and teamwork). The nurses and patients' parents evaluate our residents in 3 core competencies (professionalism, communication skills, and teamwork). The study of the resident's competencies during the training year of 2007–2011 showed that overall scores of our residents as rated by the faculty correlated well with the scores of the national examination both of multiple choice questions (r=0.42, p-value 0.04) and constructed response questions (r=0.71, p-value<0.001) of the Thai Board of Pediatrics.⁶

In this current study, our graduates were rated by the workplace directors, whom we expected would give reliable ratings of the professional performance of our graduates. The ratings by the directors were generally higher than the graduates' self evaluations, which was similar to the findings of other studies which found that directors tended to give a positive evaluation of a doctor's performance.3,7-9 In our studies, both the directors and the graduates gave the highest rating to "ethics/morals in medical health care", which could be explained by noting that the return rate of questionnaires was highest from the directors of medical schools and medical education centers, institutions in which the doctors are expected to be role models for their medical students. The lowest scores given in "concern for health economics" could be explained by noting that our graduates had less experience in making appropriate decisions in health economics. Again, the outstanding ratings of our graduates in the area of "responsibility in patient care and medical knowledge", and the most common suggestions concerning performances that should be improved as stated by the directors were "communication skills with some medical personnel" and "skills in manuscript writing" could be explained by the same reason that personnel in medical schools and medical education centers are expected to have good communication skills and academic achievement.

WBA is another of the evaluation systems, this one with the major advantage of being used to assess professional performance in the clinical context. WBA refers to "the assessment of day-to-day practices undertaken in the working environment" or more simply "assessment of what doctors actually do in practice". The WBA is probably an ideal evaluation for clinical practice. However, this evaluation needs close observation in real situations which is practical during training but was not practical for the directors in our study for evaluation of performance in real clinical practice settings.

Our study has some notable strengths and limitations. The main strength was that the questionnaire developed by our staff was tested for validity and reliability and showed a high internal consistency. Second, we evaluated the performance of our graduates at an average time of 4 years of clinical practice, a time which ensured that the workplace directors had worked with and knew our graduates well enough to give accurate rating scores. Third, the response rate of the graduates for selfevaluation was high at 80.8%. The notable limitation of our study was that the response rate from the directors was only 57.7%, mostly from medical schools and medical education centers and only a few responses from private hospitals. Hence, the high scores in professional performance may not have been representative of all our graduates due to the bias from the incomplete return of questionnaires from the workplace directors.

Conclusion

Most of our pediatric graduates have achieved career success as most of them are rated by their directors as showing good performance in their

workplace. The pediatrician graduates from PSU are competent in their clinical professional practice. The workplace directors gave the PSU graduates more favorable ratings than the graduates' self-evaluations.

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