

HOSTED BY

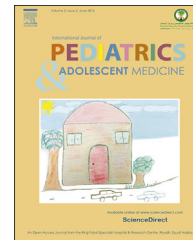


ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://www.elsevier.com/locate/ijpam>



ORIGINAL RESEARCH ARTICLE

Research training, productivity and challenges among trainees of pediatric residency programs across Saudi Arabia



S.A. Alhaider ^{a,b,*}, H.A. Alshehri ^c, S.A. Almedhesh ^d

^a Department of Pediatrics, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia

^b Faculty of Medicine, Alfaisal University, Riyadh, Saudi Arabia

^c Department of Pediatrics, College of Medicine, Al-Imam University, Riyadh, Saudi Arabia

^d Department of Pediatrics, College of Medicine, Najran University, Saudi Arabia

Received 18 May 2015; received in revised form 20 May 2015; accepted 28 May 2015

Available online 23 July 2015

KEYWORDS

Research;
Curriculum;
Pediatrics;
Training;
Needs assessment

Abstract *Background and objectives:* Research provides skills for lifelong learning and promotes patient care. In Saudi Arabia, until recently, research training has not been integrated effectively in postgraduate medical education. The aim of this study was to investigate the factors involved in research training, productivity, challenges, and attitude among trainees in pediatric residency programs across Saudi Arabia.

Materials and methods: This is a cross-sectional, multicenter study using a questionnaire designed to assess several aspects of research training among trainees of the national pediatric residency program in Saudi Arabia from September to December 2013.

Results: Eighty-three residents from seven training centers participated (response rate of 65.5%). Ninety percent of participants agreed that research training must be mandated in each residency program. The majority of participants (85.5–89.2%) agree that research is beneficial because it improves patient care, enhances the pursuit of academic careers, and improves fellowship acceptance rates and success. More than half (51.8%) of participants believe that research training will interfere with their efforts to become a medical expert in their fields. The survey indicated low research involvement by trainees, with 86.7% of participants having never published scientific manuscripts. The majority of participants (73.5%) reported a lack of regular, structured research activity in their training curriculum. The main challenge in research training was the lack of protected time (according to 86.7% of respondents). The majority of participants (85.6%) agreed that training in research methodologies represents their top educational need.

Conclusion: This study represents a “needs assessment” phase in the development of a research training curriculum for the Saudi pediatric residency program. The majority of

* Corresponding author. Department of Pediatrics, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia. Tel.: +966 114427784.

E-mail addresses: shaider@kfshrc.edu.sa, sami.alhaider@gmail.com (S.A. Alhaider).

Peer review under responsibility of King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia.

participating residents have a positive attitude toward research. Research productivity and training were found to be low. A dedicated research curriculum within the residency program represents an effective and evidence-based solution.

Copyright © 2015, King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Research activity represents an important aspect of residency training by enhancing learning, critical thinking, patient care, and satisfaction with the training program [1–4]. Experts suggest that properly mentored participation in research, over and above clinical training, has merit during general pediatric residency training [5]. Research competencies have been recognized as one of the key competencies (scholar) in post-graduate medical education [6–9]. Conducting research during the residency program is a challenge for many reasons related to the trainees themselves, their institutions, and the overall training curriculum [10–12].

In Saudi Arabia, despite advances in tertiary care and medical education, research activity and training do not meet expectations [13]. In addition, until the time of this study, research training was not sufficiently incorporated into the curricula of medical schools or residency programs. A literature review shows that little is known regarding the research knowledge, attitudes, and practices among trainees of residency programs in Saudi Arabia.

1.1. Aim of the study

The aims of this study were to assess the aspects related to “research” among trainees in “pediatric residency programs” across Saudi Arabia. The aspects investigated, but they are not limited to baseline knowledge and attitudes toward clinical research. In addition, barriers preventing residents from engaging in research were also investigated. Finally, a needs assessment for research curriculum development is presented.

2. Materials and methods

This is a cross-sectional study using a multi-item questionnaire. The study was commenced after obtaining ethical approval from the institutional research advisory committee. The questionnaire consisted of 35 items in five parts: the first part captured demographic data (age, gender, training center and level of training), the second part assessed the attitude of the residents toward research, the third part addressed the challenges in conducting research during residency, the fourth part evaluated the productivity of trainees in research, and the last part assessed the requirements for implementing a proposed research curriculum. The collected questionnaires were entered into a computerized database and analyzed for descriptive outcomes. We targeted seven accredited pediatric residency

training centers, which were distributed across the country (four in Riyadh city, one in Dammam city, one in Buraidah city, and one in Abha city) and of different institutional backgrounds (one tertiary, two military, and four Ministry of Health). Hard copies of the questionnaire were distributed and collected by chief residents in each center. The anonymity of participants was maintained to avoid any bias.

3. Results

A total of 83 residents completed the questionnaire with a response rate of 65.5%. The data were obtained from seven pediatric residency training centers across Saudi Arabia. All of these centers are accredited by the Saudi Commission for Health Specialties (SCFHS). Males predominated this population (62.7% male compared to 37.3% female). There was a balanced representation from all different levels of training (R1: 20.5%, R2: 34.9%, R3: 22.9%, and R4: 21.7%) (see Table 1: participants characteristics).

Ninety percent of participants agreed that research training must be mandated in each residency program. The majority of participants (85.5–89.2%) agreed that research is beneficial because it leads to better patient care, enhances the pursuit of an academic career, and improves fellowship acceptance and success. More than half (51.8%) of trainees believe that research training will interfere with their efforts to become a medical expert in their fields (see Table 2). The main barrier to research training was the lack of protected time according to the majority (88%) of respondents. Other challenges were a lack of research skills and knowledge, a lack of mentorship, a lack of research ideas and a lack of research questions (see Table 3).

Participants had low levels of research involvement, and 86.7% had never had a scientific publication, 92.8% had never applied for or received a research grant, and 78.3% had never presented an oral or poster research study in a conference. The majority (78.3%) of residents indicated that regular structured activity in their residency program was needed to enhance research training (see Fig. 1). Multivariate analysis did not show any significant impact of the participants’ characteristics (gender, training level, and training center) on these results.

In relation to any proposed research curriculum, the majority (81.9%–89.2%) of participating residents preferred a curriculum with hands-on practice, which also follows a longitudinal format throughout the training program period as opposed to short-term activities (see Fig. 2). The top priority in terms of content to include in the proposed research curriculum was research methodology, followed by literature review and critical appraisal skills, scientific

Download English Version:

<https://daneshyari.com/en/article/4153673>

Download Persian Version:

<https://daneshyari.com/article/4153673>

[Daneshyari.com](https://daneshyari.com)