



Changes to pediatric resident medical education during COVID-19

Les changements apportés dans l'éducation médicale des résidents en pédiatrie en raison de la COVID-19

Eleny Romanos-Sirakis

Volume 12, numéro 2, 2021

URI : <https://id.erudit.org/iderudit/1077211ar>

DOI : <https://doi.org/10.36834/cmej.71042>

[Aller au sommaire du numéro](#)

Éditeur(s)

Canadian Medical Education Journal

ISSN

1923-1202 (numérique)

[Découvrir la revue](#)

Citer ce document

Romanos-Sirakis, E. (2021). Changes to pediatric resident medical education during COVID-19. *Canadian Medical Education Journal / Revue canadienne de l'éducation médicale*, 12(2), e127–e128. <https://doi.org/10.36834/cmej.71042>

© Eleny Romanos-Sirakis, 2021



Ce document est protégé par la loi sur le droit d'auteur. L'utilisation des services d'Érudit (y compris la reproduction) est assujettie à sa politique d'utilisation que vous pouvez consulter en ligne.

<https://apropos.erudit.org/fr/usagers/politique-dutilisation/>

érudit

Cet article est diffusé et préservé par Érudit.

Érudit est un consortium interuniversitaire sans but lucratif composé de l'Université de Montréal, l'Université Laval et l'Université du Québec à Montréal. Il a pour mission la promotion et la valorisation de la recherche.

<https://www.erudit.org/fr/>

Changes to pediatric resident medical education during COVID-19

Les changements apportés dans l'éducation médicale des résidents en pédiatrie en raison de la COVID-19

Eleny Romanos-Sirakis^{1,2}

¹Division of Pediatric Hematology/Oncology, Staten Island University Hospital Northwell Health, New York, USA; ²Zucker School of Medicine at Hofstra Northwell, New York, USA

Correspondence to: Eleny Romanos-Sirakis, MD, Pediatric Hematology/Oncology, Staten Island University Hospital Northwell Health 475 Seaview Avenue, Staten Island, NY 10305; phone: 718-226-6435; fax: 718-226-6434; email: eromanos@northwell.edu

Published ahead of issue: March 18, 2021; published April 30, 2021. CMEJ 2021, 12(2). Available at <http://www.cmej.ca>

© 2021 Romanos-Sirakis; licensee Synergies Partners

<https://doi.org/10.36834/cmej.71042>. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (<https://creativecommons.org/licenses/by-nc-nd/4.0>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

Introduction

Reports of electronic learning (“e-learning”), especially in asynchronous form, have increased over the last decade and vary in effectiveness.¹⁻⁴ Many potential benefits to e-learning have been documented.⁵ Electronic and remote learning offers the opportunity to access educational materials even in resource-limited settings. The Coronavirus Disease 2019 (COVID-19) pandemic altered medical education formats and practices across the nation. Starting in March 2020, social distancing recommendations and policies led to limitations on gatherings, and led training programs away from traditional in-person lectures. During this time, programs made various changes to embrace technology and distance learning in order to limit disruptions in education. Published reports have described changes to medical student education⁶ implemented during this unprecedented time, however, little is known regarding the changes to pediatric resident education and the perspectives of the efficacy of these changes by the faculty.

At our institution with 24 pediatric residents, ZOOM technology was utilized to continue didactic sessions for pediatric residents, which included the general pediatric noon lecture series taught by faculty. The residents rated the effectiveness of the remote lectures as compared to in-person lectures with a mean score of 3.12 out of 5, with approximately 65% of residents indicating that the remote

lectures were the same as in-person lectures in terms of effectiveness of teaching and learning (rating 3 out of 5). Seventeen residents and 17 members completed the survey and rated the level of resident engagement with education during the pandemic with mean scores of 3.65 (SD 0.6) and 3.06 (SD 0.96), respectively. The majority of both pediatric residents (82.4%) and faculty (94.1%) both recommended a hybrid model for future post-pandemic resident education.⁷

Based on our data from a single institution, we aimed to describe the changes to medical education put forth by pediatric residency programs across the nation as well as the perceptions of efficacy of these changes by the programs. We also aimed to describe how programs planned to change medical education going forward post-pandemic.

Methods

Evaluation by the local Institutional Review Board granted exemption status to the project. A survey was created to assess the changes made to educational formats for pediatric residents, the satisfaction and perceptions of efficacy and learner engagement, and the plans for educational formats moving forward post-pandemic. The survey includes multiple choice questions describing the types of technology used for educational sessions, concerns regarding education during the pandemic, and

plans for education post-pandemic. Satisfaction, success, and engagement are rated on a 5-point Likert scale. The survey was submitted for dissemination via e-mail to pediatric program directors, associate program directors, and pediatric fellowship directors across the United States. We plan to email the potential study participants twice with the survey information. The surveys would be submitted anonymously and completion of the survey would indicate consent. Summary statistics will determine the trends of data across the programs.

Summary

Data from our own pediatric program suggest that pediatric residents were engaged with remote learning sessions and found the sessions equally as effective as traditional in-person sessions. Interestingly, both the faculty and residents at our program advocated for a hybrid model of remote and traditional in-person education sessions post-pandemic. This survey is an opportunity to learn from and share the experiences and endeavors of pediatric programs with regard to medical education innovations during this unprecedented time of the COVID-19 pandemic.

Conflicts of Interest: None

Funding: None

References

1. Lew EK, Nordquist EK. Asynchronous learning: student utilization out of sync with their preference. *Med Educ Online*. 2016;21:30587, <https://doi.org/10.3402/meo.v21.30587>
2. Wittich CM, Agrawal A, Cook DA, et al. E-learning in graduate medical education: survey of residency program directors. *BMC Med Ed*. 2017; 17:114. <https://doi.org/10.1186/s12909-017-0953-9>
3. Jordan J, Jalali A, Clarke S, Dyne P, Spector T, Coates W. Asynchronous vs didactic education: it's too early to throw in the towel on tradition. *BMC Med Ed*. 2013;13:105. <https://doi.org/10.1186/1472-6920-13-105>
4. Curran VR. Tele-education. *J Telemed Telecare*. 2006;12:57-63. <https://doi.org/10.1258/135763306776084400>
5. Cook D, Levinson AJ, Garside S, Dupras DM, Erwin PJ, Montori VM. Internet-based learning in the health professions: a meta-analysis. *JAMA*. 2008; Sep 10;300(10):1181-96. <https://doi.org/10.1001/jama.300.10.1181>
6. Wong RY. Medical education during COVID-19: Lessons from a pandemic. *BCM J*. 2020; 65(5):170-171.
7. Romanos-Sirakis E. Pediatric resident medical education during COVID-19: Resident and faculty perspectives at a single institution. 2020; *Journal of Internal Medicine: Science & Art*, 1(1), 48 - 50. <https://doi.org/10.36013/jimsa.v1i1.14>