EVALUATION OF A RESPIRATORY EDUCATION OUTREACH PROGRAM DURING COVID-19

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Original Abstract

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Background: In 2016, our institution developed an Outreach Education Program (OEP) that provides pediatric medical education to hospitals in the region (Pennsylvania, Delaware, New Jersey, and Maryland). The OEP goal was to increase pediatric critical thinking skills in a fully interdisciplinary, non-judgmental, hands-on fashion by providing pediatric education, pediatric mock codes and debriefings. After noticing a growing need to include a respiratory-type critical care scenario, Respiratory Therapists (RTs) were asked to join the OEP to perform respiratory education and pediatric mock codes. RTs began providing education as part of the OEP in 2017. We aimed to evaluate the impact of RT involvement on the program by reviewing number of RTs in attendance at OEP external pediatric mock codes and overall satisfaction of offerings.

Method: RTs began accompanying intensive care physicians to outside facilities for outreach education in 2017. In addition, RTs were involved in scenario planning, education, and debriefing in relation to all OEP activities. The OEP coordinator marketed RT involvement to partner facilities in 2017. The OEP began tracking attendance by discipline in 2018. In 2021, an IRB approved, retrospective review of surveys and data collected from the Nemours OEP was completed.

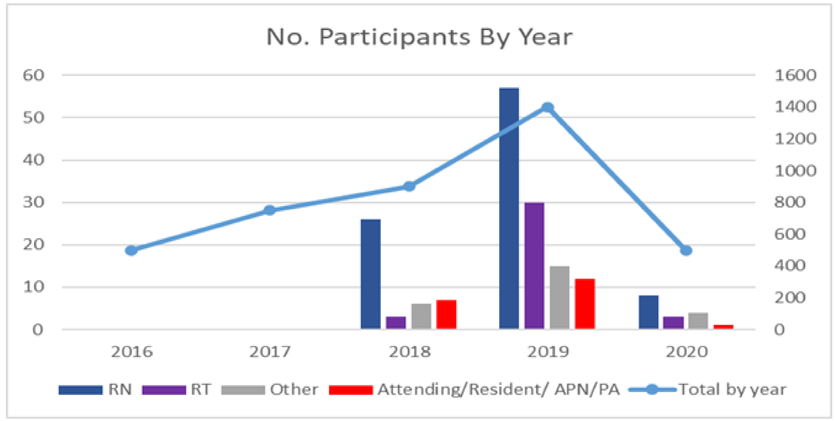
Results: RTs provided mock code simulations with the OEP in 8 different facilities, with over 14 offerings from 2018-2020. Post OEP event survey responses (n=2,916) indicated that all participants (RNs, RTs, MDs), felt the activity was appropriately challenging, was fit for their level of training, that they would participate in the program again and they plan to incorporate learnings into practice. RT attendance increased 900% from 2018-2019. All offsite, in person, OEP activities were halted as of March 31, 2020, secondary to the COVID-19 pandemic.

Conclusion: RT involvement in the OEP significantly increased RT attendance at educational offerings from 2018 to 2019. There was no statistically significance different in OEP satisfaction. COVID-19 impacted the number of OEP offerings available in 2020. Virtual education was provided for lectures, but we were unable to successfully complete full pediatric mock-codes in a virtual atmosphere. Further research must be completed to fully understand RT impact in outreach education.

BACKROUND: In 2016, our institution developed an Outreach Education Program (OEP) that provides pediatric medical education to hospitals in the region (Pennsylvania, Delaware, New Jersey, and Maryland). The OEP goal was to increase pediatric critical thinking skills in a fully interdisciplinary, non-judgmental, hands-on fashion by providing pediatric education, pediatric mock codes and debriefings. After noticing a growing need to include a respiratory-type critical care scenario, Respiratory Therapists (RTs) were asked to join the OEP to perform respiratory education and pediatric mock codes. RTs began providing education as part of the OEP in 2017. We aimed to evaluate the impact of RT involvement on the program by reviewing number of RTs in attendance at OEP external pediatric mock codes and overall satisfaction of offerings.

METHOD: Respiratory therapists began accompanying intensive care physicians to outside facilities for outreach education in 2017. In addition, respiratory therapists were involved in scenario planning, education, and debriefing in relation to all outreach education program activities. The outreach education program coordinator marketed respiratory therapy involvement to partner facilities in 2017. The outreach education program began tracking attendance by discipline in 2018. In 2021, an IRB approved, retrospective review of surveys and data collected from the Nemours outreach education program was completed.

Graph 1



Graph 1: Displays the number of survey responses by year by different disciplinaries.

RESULTS: RTs provided mock code simulations with the OEP in 8 different facilities, with over 14 offerings from 2018-2020. Post OEP event survey responses (n=2,916) indicated that all participants (RNs, RTs, MDs), felt the activity was appropriately challenging, was fit for their level of training, that they would participate in the program again and they plan to incorporate learnings into practice. RT attendance increased 900% from 2018-2019. All offsite, in person, OEP activities were halted as of March 31, 2020, secondary to the COVID-19 pandemic.

Image 1

Nemours.

Post-Simulation Evaluation

Date: _____

Site: _____

Provider Type:

☐ Attending ☐ Fellow ☐ Resident ☐ Medical Student
☐ CRNP/APN ☐ Nurse ☐ Respiratory ☐ Other

Please rate the following statements on a scale of 1 through 5.

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree

Objectives and Realism						
The learning objectives of the activity were clear or became evident during the debriefing	1	2	3	4	5	
The equipment and set-up helped me achieve the learning objectives	1	2	3	4	5	
The equipment and setting was realistic	1	2	3	4	5	
The scenario (medical story underlying the simulation) was realistic	1	2	3	4	5	
The facilitator used the simulation equipment effectively	1	2	3	4	5	
Debriefing						
The discussion of my performance was useful	1	2	3	4	5	
The discussion of the group's performance was useful	1	2	3	4	5	
The facilitator/faculty was supportive and created a safe learning environment	1	2	3	4	5	
The facilitator/faculty enhanced the educational value of the learning experience	1	2	3	4	5	
Overall						
I found the activity to be appropriately challenging	1	2	3	4	5	
The activity was appropriate for my level of training	1	2	3	4	5	
I would like to participate in this type of learning experience again	1	2	3	4	5	
I plan to incorporate what I learned into my practice	1	2	3	4	5	

Comments:

_____

Image 1: Survey completed by participants of educational learning sessions.

CONCLUSIONS: RT involvement in the OEP significantly increased RT attendance at educational offerings from 2018 to 2019. There was no statistically significance different in OEP satisfaction. COVID-19 impacted the number of OEP offerings available in 2020. Virtual education was provided for lectures, but we were unable to successfully complete full pediatric mock-codes in a virtual atmosphere. Further research must be completed to fully understand RT impact in outreach education.