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Research Article

THE LASTING CHANGES ON PEDIATRICIANS' INVOLVEMENT IN CHILD HEALTH ACTIVITIES AFTER EFFECTIVE TARGETED TRAINING IN COMMUNITY PEDIATRICS

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ABSTRACT

To understand how much the Dyson Community Pediatrics Training Initiative (CPTI) affected community engagement among pediatricians, compared to the engagement of those with usual training. Surveys were given to CPTI alumni who graduated before 2008 and again five years after completing their residency, between 2008 and 2010. Their answers were measured against a group of children seen by pediatricians in 2010 that had similar demographics. Demographic information, details about their practice environment, how much time they spend on general pediatrics, community child health involvement over the year, the use of advocacy methods and confidence in six areas of community health were all collected by the survey. Careful testing of groups was done with chi-square methods, followed by logistic regression to control for other influences. Pediatricians working under CPTI took a more active role in community child health initiatives (43.6% versus 31.1%, $P < .01$) and they generally felt moderately or very skilled in five of six main advocacy functions ($P < .05$). Most groups used a similar amount of advocacy strategies (52.2% vs 47.3%, $P > .05$). Following adjustment for personal and work traits, CPTI-trained pediatricians continued to show higher odds of taking part in community activities (2.4, 95% confidence interval: 1.5–3.7). After finishing training, CPTI participants reported taking part in more community health activities, as well as showing greater skill, than did other pediatricians. From these findings, we can say that community pediatric residency programs might encourage more community-minded work by pediatricians.

Keywords: - Growing the workforce in pediatrics, taking care of kids in their local environment, Training on how to support child health advocacy, public health pediatrics specializes in caring for children's health, Community healthcare benefits when pediatricians become involved.

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INTRODUCTION

Noticing the great impact that environmental, social and political factors hjave on kids, physicians must combine their analysis of health with preventive measures from public health and encourage change. Pediatricians and other health specialists must join forces with public health, schools, child welfare agencies and local organizations to provide children with better healthcare support. Together, these groups can do much to help children thrive both within the community and in their homes and schools. because of this, training programs in many places place greater emphasis on community pediatrics in their curriculum. Such programs regularly consist of time spent in the community, residential projects led by residents and adding community health concerns to many learning sessions. Some of the main supports for these educational models include engaging patients, skill development during

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workshops and experience with different aspects of health services outside hospitals. The same standards for graduate medical education state that residents should learn community engagement and child advocacy during their ambulatory training. Even with these programs, we are still unclear about the lasting impact on pediatricians' community effort. Older studies have pointed out that learning to live in different environments, especially as residents, could affect future activities in community or at school, even though data from these studies often isn't separated by order of training. Although CPTI has shown that involving the community in residency programs might help lead to future involvement, previous studies were based only on a quick-term outcome and did not include groups for comparison. The purpose of this study is to measure whether doctors who finished enhanced community-oriented residency programs are still more actively involved in their communities five years later, versus peers who trained in different ways.

METHODOLOGY

The study is based on information collected during an evaluation of the Dyson Community Pediatrics Training Initiative (CPTI) and through a professional medical survey done in 2010. Only pediatricians who had finished their residency between 2003 and 2005 at one of ten CPTI-supported institutions and were still accessible five years later were part of the study. A group of pediatricians early in their careers was taken from a national survey of clinicians younger than 40 who specialized solely in pediatrics.

Three sets of data were mined: a survey when residents entered the program, a follow-up questionnaire to CPTI grads five years later and the national survey. In these instruments, workers provided information about their work environments, whom they served, their hours, their traits and their feelings about community child health responsibility. Participants also shared details about recent community work and methods they use to affect child health, including joining alliances and speaking in public. Researchers reached out several times and offered rewards to increase the number of completed forms. Demographic, practice and involvement indicators were compared between different groups. Training experience and its effect on community involvement and skills in public health–focused pediatric care were studied using logistic regression. All the research was done using ethical research guidelines.

RESULT

Married and aged individuals were noticeable in both the Dyson CPTI and comparison surveys, but the amount of Dyson respondents with children was higher and they were slightly younger on average. Among the survey group, participants believed they had increased responsibility for their children's health. In both groups, most participants were women. There were no big differences in community child health mentorship between the two groups. Observes that parent involvement in community child health activities was notably higher among Dyson CPTI participants, reflecting increased effort in promoting child health in the last year. Even so, strategies to promote child health were very similar among groups. Supplies odds ratios to illustrate which factors are important in cases involving child health. Individuals who take on a larger responsibility for child health were much more likely to achieve positive outcomes. The odds of getting better results were greater for patients in the Dyson CPTI program, in both basic and advanced analysis. Adjusting for these factors, neither gender, being underrepresented, nor the type of practice made a difference.

Table 1: Personal and Practice Characteristics – Reworded Format (n, %)

Characteristics	Dyson CPTI (n = 234)	AAP Survey (n = 243)	P-Value
Personal Characteristics			
Female	158 (67%)	181 (75%)	0.06
Underrepresented in healthcare	26 (11%)	18 (8%)	0.18
Median Age (Years, SD)	35.5 (±3.0)	35.0 (±2.8)	0.001
Married	207 (50%)	205 (50%)	0.12
Has Children	182 (78%)	165 (68%)	0.02
Perceived Responsibility for Child Health			0.008
– High (Moderate/Substantial)	165 (71%)	198 (82%)	
– Low (None/Minimal)	66 (29%)	44 (18%)	
Mentorship in Community Child Health			0.50
– Yes	103 (44%)	30 (40%)	
– No	129 (56%)	45 (60%)	

Table 2: Participation and Strategies to Promote Child Health in the Community

Characteristic	Dyson CPTI (n = 234)	AAP Periodic Survey (n = 243)	P-value
Participation in activities to promote child health in community (past 12 months)			0.005
– Yes	102 (43.6%)	75 (31.1%)	
– No	132 (56.4%)	166 (68.9%)	
Use of ≥1 strategies to influence child health			0.29
– Yes	117 (52.2%)	115 (47.3%)	
– No	107 (47.8%)	128 (52.7%)	

Table 3: Odds Ratios (OR) for Factors Associated with Outcome

Characteristic	Bivariate OR (95% CI)	Multivariate OR (95% CI)
Personal characteristics at end of residency		
Gender, female	1.15 (0.76–1.73)	1.14 (0.71–1.83)
Underrepresented in medicinea	1.30 (0.69–2.44)	0.83 (0.40–1.73)
Has children	1.00 (0.66–1.52)	0.91 (0.56–1.48)
Age	1.02 (0.96–1.10)	1.03 (0.95–1.11)
Extent of responsibility for child health	2.20 (1.68–2.87)	2.57 (1.89–3.51)
Practice characteristics		
Setting (rural/not rural)	1.51 (0.70–3.26)	1.10 (0.45–2.65)
General pediatrics ≥50%	1.53 (1.02–2.29)	1.44 (0.90–2.29)
Residency exposure		
Dyson CPTI participant	1.71 (1.17–2.49)	2.37 (1.50–3.74)

Figure 1: Personal and Practice Characteristics Comparison, Dyson CPTI (n=234) vs AAP Survey (n=243)

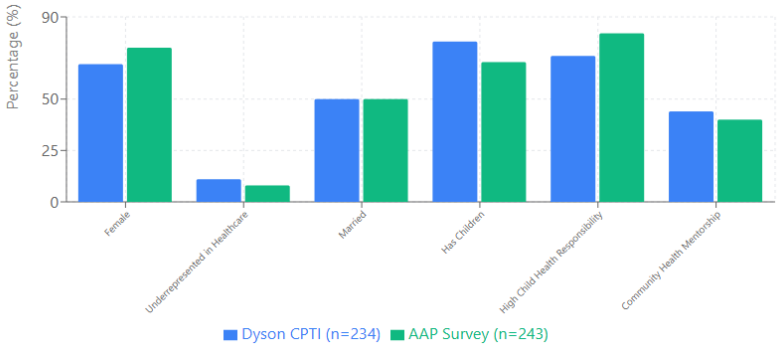


Figure 2: Community Child Health Participation and Strategies, Dyson CPTI (n=234) vs AAP Periodic Survey (n=243)

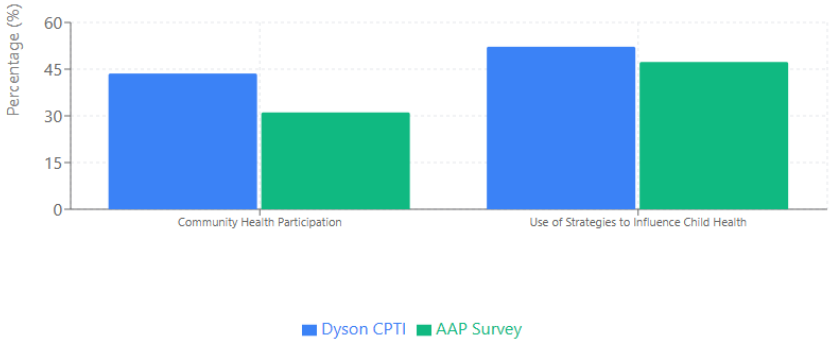
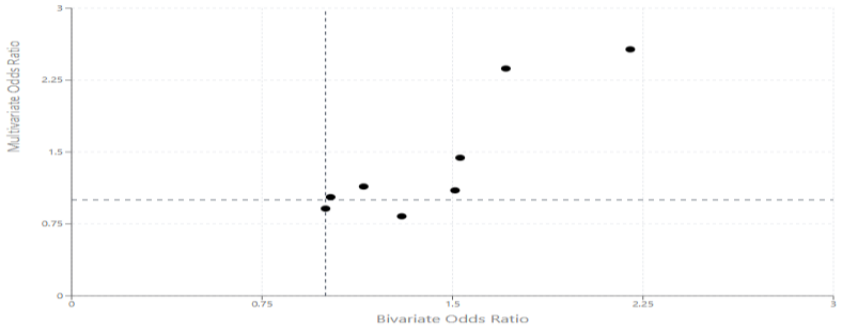


Figure 3: Odds Ratios: Bivariate vs Multivariate Analysis, Factors Associated with Community Health Participation



DISCUSSION

Five years after finishing their residency, participants in the CPTI program have higher community involvement and are more active in child health activities than other graduates. We were the first to assess if extended training in community pediatrics during residency leads to more involvement after a few years. As most pediatricians are early on in their careers, these results hint that they may help out with population health earlier than we believed before. This is more important now as healthcare systems want providers to be active in community prevention and improving population health. Because training programs have shifted, having more CPTI graduates is especially meaningful, thanks in part to efforts such as toolkits, more advocacy opportunities and visiting faculty. Community child health promotion is now being addressed in fresh, updated curricula at many residencies. Even though the changes in pediatric traffic participation were not large, this is significant because the CPTI approach did not focus on the common problem of more pediatricians part-time and having high workloads. Surprisingly, even though respondents outside the CPTI group felt their responsibility for community child health was greater, the CPTI graduates showed greater involvement. Such results might be due to different notes on responsibility seen in residents trained in environments that put strong emphasis on community pediatrics. JUDP coaches and CPTI participants used much the same strategies, though CPTI graduates thought their skill levels were higher which may result in more engaging work because of efficiency, satisfaction or praise from the community. Most graduates are not expected to participate in community pediatrics greatly, because programs had diverse community emphases and many residents started training before CPTI was well known. Moreover, most learners expect less involvement in their community unless they are encouraged throughout their residency program. Groups using similar skills might do so because of similar challenges in their role or because highly interested members are more likely to respond to surveys. Differences in how people assess their skills may either be because of their formal training or because they want to seem good. Issues exist, including the fact that students interested in community pediatrics may be more selected for these studies and that there's a chance doctors report their experience in community services more than they truly have it. On the other hand, responses and methods have stayed the same as in previous surveys and nothing points to groups reporting differently. In addition, not all community child health interventions were included and the training information for the comparison participants is missing. At the same time, many CPTI graduates reporting high skills and involvement in their communities indicates that better residency training leads to better community involvement.

CONCLUSION

It was found that residency training in community pediatrics through the CPTI program helps pediatricians be more active in child health activities several years following graduation. According to these findings, practicing early, targeted training helps keep developing professionals interested in population health for many years to come. Because keeping people healthy and offering care is a top concern for healthcare, pediatricians can respond effectively with such training. Even with the difficulties of many patients and changes in staffing, those who graduate from CPTI tend to be more involved, possibly thanks to their improved confidence in handling community pediatrics and the strong backup they get in the program. The survey suggests that viewing community health entirely as a responsibility is not always enough to lead to involvement; thus, skills training should be a priority. Even though selection bias and insufficient data on non-CPTI participants are issues, the similarity in surveys and wide differences between participants provide strong evidence for improving CP training. Giving residents

concentrated exposure to community health issues can help them provide for the health of large groups of children and advocate for their wellness in the community.

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