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Diversity, Inclusion and Cultural Competency in Pediatric Hospital Medicine Fellowship Programs

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ABSTRACT

OBJECTIVES: The objectives with this study were to describe the current state of Pediatric Hospital Medicine (PHM) fellowship programs with regards to (1) diversity of fellows and programs' leadership, (2) current diversity and inclusion (D&I) programs and measures of their success, and (3) the state of cultural competency training.

METHODS: In 2018, fellowship directors of the 35 active PHM fellowship programs were invited to participate in a survey of diversity, inclusion, and cultural competency at PHM fellowship programs. Participants were invited via in-person invitations at the annual PHM fellowship directors meeting and through e-mail invitations from July to September to complete an online survey.

RESULTS: There was an 89% response rate of the survey. Most fellows, faculty, and program directors in PHM were female (74%, 70%, and 70%, respectively) and white (53%, 67%, and 60%, respectively). There were no African American, American Indian or Alaskan Native, or Native Hawaiian or other Pacific Islander program directors. Forty-five percent of programs reported that neither the fellowship program nor their hospital had a strategic plan that addresses D&I. Approximately 61% of programs had cultural competency training for fellows.

CONCLUSIONS: This is the first survey to report on the state of D&I in PHM fellowship programs. There is lack of racial and ethnic diversity in programs fellows, faculty, and directors. Although most programs have cultural competency training, strategic planning to promote D&I is not widely implemented among PHM fellowship programs.

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The demographic landscape of the United States continues to shift toward one that is increasingly ethnically and racially diverse, a change that is most notable in the growth of the pediatric population. The number of first- and second-generation immigrant children has grown by 51% from 1994 to 2017.[1] The United States is showing an increase in the number of children who are from races and/or ethnicities underrepresented in medicine.[2] Per the Association of American Medical Colleges (AAMC), people underrepresented in medicine include those from racial and ethnic populations that are underrepresented in the medical profession compared with their numbers in the general population.[3] Multiple studies over the past 2 decades have revealed the importance of representation and culture competency in patient care and medical education.[4,5] Despite research revealing the importance of diversity in physicians, the number of physicians in the United States continue to be majority white men.[6]

Both the AAMC and American Academy of Pediatrics (AAP) have embraced diversity as a fundamental value and priority in medical education.[7,8] In July 2019, the Accreditation Council for Graduate Medical Education began requiring training programs along with their sponsoring institutions to engage in a "mission-driven, ongoing, systematic recruitment and retention of a diverse and inclusive workforce of residents, fellows (if present), faculty members, senior administrative staff members, and other relevant members of its academic community."[9] In 2019, Pediatric Hospital Medicine (PHM) became an American Board of Pediatrics–certified pediatric subspecialty. In 2018, the AAP Section on Hospital Medicine (SOHM) established a diversity and inclusion (D&I) Task Force to better understand and promote D&I in the AAP SOHM and the field of PHM. One important goal of the Task Force was understanding the state of D&I in PHM fellowship programs especially because they are now accredited through the Accreditation Council for Graduate Medical Education. The objectives with this study were to describe the current state of PHM fellowship programs with regards to (1) diversity of fellows and leadership, (2) current D&I programs and measures of their success, and (3) the state of cultural competency training.

METHODS

Study Design

Fellowship directors of the 35 active PHM fellowship programs in 2018 were invited to participate via announcement at the annual PHM Fellowship Directors meeting and through e-mail invitations from July to September 2018 in an online survey looking at diversity, inclusion, and cultural competency at PHM fellowship programs. One director from each of the 35 active PHM fellowship programs was asked to complete the survey. Two follow-up e-mails were sent during this time from the AAP SOHM D&I Task Force and the Fellowship Directors Council to encourage participation in the survey. An 8-question survey via Research Electronic Data Capture hosted at one of the researcher's institution was adapted from the D&I survey of US Pediatric Chairs by Mendoza et al (Supplemental Table 5).[10,11] The institutional review board at the institution the survey was hosted approved the study as exempt. The survey used in the Mendoza et al study was developed by the Federation of Pediatric Organizations-Diversity and Inclusion Working Group and aimed at assessing departmental diversity, diversity measures, perceived success in diversity, and presence of cultural competency training. The Mendoza et al study survey had face validity but did not have additional validity or reliability testing performed.[11] Members of the AAP SOHM D&I Task Force adapted this survey to focus on PHM fellowship programs (Supplemental Table 5). Although the survey was reviewed for clarity by several members of our research team, no pilot testing or validation was performed. The results of the survey were analyzed by using descriptive statistics and percentages.

Study Setting and Inclusion Criteria

All surveys were done online and no in-person interviews or surveys were completed. Surveys that were completed by each program were included in the study.

RESULTS

Of the 35 active PHM programs at the time of the survey, there were 31 respondents (89% response rate). Most programs (94%, $n = 29$) were affiliated with an academic institution (ie, a university) (Table 1). Seventy-one percent of the programs ($n = 22$) were freestanding children's hospitals associated with an academic institution, and 23% ($n = 7$) were children's hospitals within a larger hospital system associated with an academic institution (Table 1). Program directors considered multiple groups in their D&I efforts including sex, race and ethnicity, sexual identity, people with disabilities, and people who were socioeconomically disadvantaged (Table 1). The demographic makeup of fellowship programs (fellows, faculty, and program directors) is shown in Table 2, and programs overall reported low racial and ethnic diversity. Most PHM fellows were female (74%, $n = 50$) and identified as being white (53%, $n = 36$) (Table 2). Also, 70% ($n = 40$) of fellowship program directors were female and 60% ($n = 34$) were white (Table 2). There were no African American, American Indian or Alaskan Native, and Native Hawaiian or other Pacific Islander program directors (Table 2). For faculty in the fellowship programs, 69% ($n = 508$) were female and 67% ($n = 491$) were white (Table 2). African American, Latinx, and American Indian individuals each made up less than 5% of fellows, faculty and program directors (Table 2). Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex and Asexual or Allied (LGBTQIA) members made up 12% ($n = 8$) of fellows and less than 4% of faculty ($n = 18$) and program directors ($n = 2$) (Table 2).

TABLE 1 Types of Diversity Programs at PHM Fellowship Programs

Variable	No. (Percentage)
Institution type	
Children's hospital within a larger hospital system associated with an academic institution	7 (23)
Children's hospital within a larger hospital system not associated with an academic institution	1 (3)
Free standing children's hospital associated with an academic institution (ie, university or medical school)	22 (71)
Free standing children's hospital not associated with an academic institution	1 (3)
Plan to address diversity	
No. Neither our hospital nor our program has a strategic plan that addresses D&I	14 (45)
Yes. Our department and/or division has a plan, but our program has not yet implemented it	8 (26)
Yes. Our department and/or division has a plan and our program has implemented it	9 (29)
Which diverse groups are considered in the D&I activities	
African American or non-Hispanic Black	29 (94)
American Indian or Alaskan Native	26 (84)
Asian American	18 (58)
Latino or of Spanish origin	28 (90)
Native Hawaiian or other Pacific Islander	22 (71)
People who are Lesbian, Gay, Bisexual, Transgender	28 (90)
People who have physical disabilities	24 (77)
People who are socioeconomically disadvantaged	20 (65)
Women	16 (52)
Other	3 (10)
Level of success of D&I in program	
Not successful	1 (4)
Neither successful nor unsuccessful	21 (91)
Very successful	1 (4)
Programs to help trainees improve their linguistic abilities in other languages	9 (29)

Regarding D&I strategic planning, nearly half of programs (45%, $n = 14$) reported that neither the fellowship program nor their hospital had a strategic plan that addresses D&I (Table 1). Twenty-nine percent ($n = 9$) stated their department or division had a strategic plan, and the program was implementing it, whereas for 26% ($n = 8$) of programs, departments or divisions had a strategic plan but the plan was not implemented by the program (Table 1).

TABLE 2 Demographics of PHM Fellowship Programs

	Fellows ($n = 68$), *n* (%)	Faculty ($n = 734$), *n* (%)	Program Directors ($n = 57$), *n* (%)
Sex			
Female	50 (74)	508 (69)	40 (70)
Male	16 (24)	210 (29)	15 (26)
Other	2 (3)	16 (2)	2 (4)
Race			
African American or non-Hispanic Black	3 (4)	23 (3)	0
American Indian or Alaskan Native	2 (3)	6 (0.8)	0
Asian American	20 (29)	88 (12)	13 (23)
Latino or of Spanish origin	1 (2)	21 (3)	2 (4)
Native Hawaiian or other Pacific Islander	0	2 (0.3)	0
White	36 (53)	491 (67)	34 (60)
LGBTQIA	8 (12)	18 (3)	2 (4)
Disability	0	4 (0.5)	0

Twenty-nine percent of programs ($n = 9$) relied on numbers of individuals in diversity categories to measure success of D&I efforts (Table 3). Less than 20% of programs used faculty or fellow assessments of the climate of inclusion, promotion success of faculty, or exit interviews to measure their D&I efforts (Table 3). Most programs (65%, $n = 20$) reported these measures used to determine success of D&I efforts were either not being implemented or they were unaware of them (Table 3). Furthermore, 91% ($n = 21$) of programs found their efforts of D&I to be "neither successful nor unsuccessful" (Table 1).

Approximately 61% ($n = 19$) of programs had cultural competency training for fellows (Table 4). A little >50% ($n = 16$) had training for faculty and staff, whereas only 42% ($n = 13$) reported training for program directors (Table 4). These cultural competency trainings were varied in delivery and included online modules, lecture series, and case-based learning. Online modules were the most common type of training reported.

TABLE 3 Types of Measures Used to Assess Success of Diversity Efforts in PHM Fellowships

Measures	No. Programs (%)
Numbers of individuals in diversity categories	9 (29)
Faculty assessments of the climate of inclusion	5 (16)
Fellow assessments of the climate of inclusion	6 (19)
Assessments of promotion success among faculty by diversity categories	4 (13)
Exit interviews conducted with fellows at graduation or faculty who leave the institution	3 (10)
Not aware of any of these measures, or these measures are not currently implemented	20 (65)

DISCUSSION

PHM is the newest pediatric subspecialty recognized by the American Board of Medical Specialties. This survey is the first to report data describing the current state of diversity including racial, ethnic, sex, disability, and LGBT status in PHM fellowship programs. Using the AAMC's definition of underrepresentation in medicine, we find that PHM fellowship programs are lacking in racial and ethnic diversity among their fellows, faculty, and program directors when compared with the general population of the United States.[1,3,6] PHM fellowship program representation of racial and ethnic diversity, disability, and sex inclusivity are similar in comparison with data reported by Mendoza et al with 1 exception; LGBT representation among PHM fellows and faculty is higher as reported in our survey.[11] Lack of diversity in fellowship training programs is reported across multiple disciplines.[12–14] Efforts to successfully implement and maintain fellowship program membership diversity have been reported by Auseon et al, who describe a deliberate and stepwise approach in recruitment and selection of fellowship candidates from groups underrepresented in medicine.[15] More than half of the responding PHM fellowship programs reported having no institutional strategic plan to address D&I, whereas half of the programs that reported having a plan stated it was yet to be implemented. These findings support previous reports suggesting institutions need guidance in their efforts to develop D&I programs.[11,16,17] In their Diversity 3.0 framework, Nivet et al describe a thorough approach medical education institutions can follow to broadly integrate D&I.[18]

Pervasive and long-standing racial health disparities are well documented in the literature.[19] When compared with non-Hispanic white children, African American children and Latinx children in the United States suffer from worse health outcomes.[19] Racial and ethnic disparities have been reported in the rate of infant mortality, perioperative outcomes, pain management, and antibiotic use.[20–23] These racial and ethnic disparities in health outcomes are not explained by inherent genetic or biological differences but rather by socioeconomic determinants such as institutionalized racism and societal allocation of privilege status based on race.[19,24] Lack of physician workforce diversity, specifically the underrepresentation of African Americans and Latinx as compared with the general population in the United States, physician implicit bias and deficits in cultural competence and cultural humility are also reported as key driving factors perpetuating these health disparities.[11,25–27]

When considering why training programs are not diverse, it is also important to evaluate institutional culture and the educational efforts focused on cultural competence or cultural humility.[11,16] Researchers in 1 survey found that cultural competency training is offered at more than half of PHM fellowship programs with considerable variability in their target audience, frequency, and delivery methods. These findings are similar to those previously reported by Mechanic et al on cultural competency education in Emergency Medicine fellowship programs.[28] Tervalon and Murray-García describe some of the challenges in defining and delivering a cultural competency curriculum while offering a more holistic approach to physician training focused on the concept of cultural humility.[25] It is well documented that institutional efforts to improve D&I should be broad at all levels and include transparent conversations

TABLE 4 Cultural Competency Training in PHM Fellowships

Cultural Competency Training	Fellows, *n* (%)	Faculty, *n* (%)	Staff, *n* (%)	Program Directors, *n* (%)
No	12 (39)	15 (48)	15 (48)	17 (55)
Yes, 1 time	13 (42)	8 (26)	9 (29)	6 (19)
Yes, more than once	6 (19)	8 (26)	7 (23)	7 (23)

about racism, implicit bias, curricular changes, recruitment, retention, and promotion of faculty with data-driven assessment and accountability.[11,15–18]

Our study has limitations. The data reported in this study are based on self-reporting from fellowship programs and may contain inaccuracies. The survey had an 89% response rate, indicating some fellowship programs were not included and some trainees were missed. The data are from 2018, so they do not include data from new fellowship programs started since that time and possible changes in some of the institutions' responses. Because this is the first survey of PHM fellowship programs, we have no comparison data and are therefore unable to make any examinations of trends over time. Although data on representation are informative, they do not fully describe the state of D&I. Some program directors may not be aware of the D&I strategic plans at their institutions. Representation alone is not a signifier of sex equity or of the D&I climate within a program, institution, or specialty. In our survey, LGBTQIA representation was an aggregated category; therefore, we are unable to draw further conclusions on specific representation and diversity within this category. Although we report on the existence and implementation of strategic planning and cultural competency training, our survey does not address their content or effectiveness.

Further investigations are necessary to determine the impact of interventions designed to increase diversity in PHM fellowships. More research in the future needs to be dedicated on interventions to increase those underrepresented in medicine in PHM, particularly in leadership positions, and the impact of cultural competence and humility interventions on patient care and outcomes.

CONCLUSIONS

With this study, we are the first to report on the state of D&I in PHM fellowship programs. PHM fellowship programs lack in racial and ethnic diversity. Most PHM fellowship programs have not implemented strategic plans to increase diversity and promote inclusion. Cultural competency training is inconsistently delivered in PHM fellowship programs.

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