RESEARCH ARTICLE

Public Health Leadership Perceptions on Early Career Workforce in Ohio Post-COVID-19

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ABSTRACT

Introduction: The public health workforce changed as a result of the COVID-19 pandemic, shifting toward a younger and less experienced workforce. In response, research was conducted to capture the perceptions of local public health department leadership across Ohio. A survey was used to assess early career staff's preparedness, leadership, and development.

Methods: A survey was developed to collect the responses of members from prominent public health associations in Ohio, including the Ohio Public Health Association (OPHA) and Ohio Environmental Health Association (OEHA). Data from 100 responses were analyzed using descriptive statistics. Additionally, thematic analysis was conducted utilizing the survey's qualitative data.

Results: While the majority (58%) of respondents believe early career staff are prepared for roles at local health departments, only 36% reported that should an important role suddenly come open an early career employee is prepared to fill it. Respondents overwhelmingly agree that early career staff are provided opportunity to develop and demonstrate leadership skills both within and beyond their specific role in the agency. Additionally, respondents identified heavy workloads as the most common barrier to early career staff getting involved with their agencies beyond their daily role. Ultimately only 55% of respondents believe their agency is doing enough to prepare the next generation of public health leaders.

Conclusions: A disconnect was identified between the perceived degree of development and leadership opportunities for early career public health professionals and the perception of readiness for more significant roles within departments. Improving communication of these opportunities from the top down could improve readiness and development.

Keywords: Public health; Leadership; Survey; Communication

INTRODUCTION

The public health sector across the United States continues to face increasing degrees of uncertainty in the wake of the COVID-19 pandemic. According to some projections, if current workforce separation trends continue, the sector may lose over 100 000 employees from the beginning of the COVID-19 pandemic through 2025.[1] In the same study it was observed that nearly 77% of public health employees with 5 or fewer years of experience separated from their agency over that time frame.[1] The negative workforce trends are compounded by recent political uncertainty, highlighted by the US Department of Health and Human Services' (HHS) announcement to reduce federal public health spending by nearly $2 billion as well as reduce the public health workforce by 20 000 full-time employees across agencies such as the US

Food and Drug Administration, Centers for Disease Control and Prevention, National Institutes of Health, and Centers for Medicare & Medicaid Services.[2] While the impacts of federal workforce restructuring and funding cuts are difficult to predict, they will almost assuredly put stress on state and local public health departments to adapt. However, due to workforce challenges, state and local health departments will be forced to rely on fewer and less experienced workers. The current study considers the potential increase in reliance on less experienced public health workers as it attempts to capture perceptions of local health department leaders on their early career workforce's preparedness and leadership development. Moreover, to inform the current state of the early career public health workforce in Ohio,

perceptions of leaders from health departments of various sizes across the state were identified and compared.

METHODOLOGY

To capture the perceptions of public health department leaders regarding readiness of the new public health workforce, a survey was developed, pretested, and distributed by prominent public health associations (n=2) in Ohio including the Ohio Public Health Association and the Ohio Environmental Health Association. The survey, directed toward public health leadership, contained a mixture of Likert scale statements that captured the degree to which respondents agreed or disagreed with each statement. Additional multiple choice selection questions were created specifically for understanding perceptions toward early career staff. Additional opportunities to comment, using an "other" option, were provided to allow respondents to expand their answers (Appendix). In total, data from 100 responses spanning participants from 59 different local health departments and health organizations in Ohio were analyzed using descriptive statistics. Each response was then sorted into 1 of 3 categories. Health departments were considered a "small health department" (<25 employees), "medium health department" (between 25 and 75 employees), or "large and very large health department" (> 75 employees). The data were further evaluated and compared to identify differences in perception based on health department size. Further, thematic analysis was conducted utilizing the additional descriptive information provided as comments by survey respondents.

RESULTS

Sample Characteristics

The sample characteristics are presented in Table 1. Overall, 96 of the 100 participants were employees of local health departments while the remaining 4 respondents were either employees of public health associations, organizations, or retired from public health service. The sample consisted of responses from 25 different health commissioners, 49 directors, 13 supervisors/program managers/program coordinators,

and 13 respondents with unique roles different than those previously listed. The 59 different local health departments represented by respondents included 24 small health departments, 25 medium health departments, and 10 large and very large health departments.

Likert Scale Statement Distributions

A total of 6 different survey questions utilized a Likert scale with answers ranging from strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. However, to simplify the data analysis, the answers were condensed to either disagree, neither agree nor disagree, or agree as shown in Table 2. The first statement was *Early career staff are prepared to take on roles at your agency*. In total, 58% agreed, 18% neither agreed nor disagreed, and 24% of respondents disagreed with that statement. The largest difference in response occurred with large and very large health departments where 40% of respondents disagreed that early career staff are prepared for roles at their departments, while only 10% of medium health departments and 28% of small health departments disagreed that early career staff are prepared for roles at their departments.

Next, respondents shared their opinion on the statement *Early career staff are empowered to develop professionally through training and continued education*. Each health department size overwhelmingly agreed with the statement. Similarly, respondents from each sized health department predominantly agreed (89%) that *Early career staff have the opportunity to get involved with the organization beyond their daily role*. The next statement *Early career staff are provided opportunities to develop and demonstrate leadership skills*, drew nearly identical responses from each health department size. Specifically, 78% of small health department responses, 77% of medium health department responses, and 76% of large and very large health department responses all agreed early career staff are provided opportunity for leadership development.

Table 1. Description of Participant Summary Statistics

Participant Role	Number of Participants
Health commissioners	25
Directors	49
Project manager/Program coordinators/Supervisors	13
Other	13
Total responses	100
Health Department Size	**Number of Health Departments**
Small health departments (<25 Employees)	24
Medium health departments (Between 25 and 75 Employees)	25
Large health departments (Between 75 and 125 Employees)	4
Very large health departments. (>125 Employees)	6
Total number of health departments represented	59

Note: Health department sizes based on best publicly available information.

However, the final 2 statements differ significantly and will be the focus of further discussion later in the document. Question 12 read *If an important role were to suddenly come open, you are confident an early career professional at your organization is prepared to fill it*. To this statement, only 36% of total responses agreed, while 32% disagreed, and 32% neither agreed nor disagreed. Moreover, among small health departments and medium health departments 42% of respondents agreed while only 24% of large and very large health departments agreed that an early career employee could step into an important role if needed. This was the only question on the survey with which one of the health department categories disagreed more than agreed (Table 2).

The last Likert scale statement on the survey read *Your organization is doing enough to prepare the next generation of public health professionals*. Overall, only 55% of responses agreed that their organization was doing enough while 20% disagreed and 25% neither agreed nor disagreed. The medium health department responses agreed the highest at 62%, followed by the small health department responses at 59%, and lastly only 36% of large and very large health department responses agreed that their organization is doing enough to prepare the next generation of public health professionals. For additional context,

among large and very large health departments responses, 28% disagreed with the statement and 36% neither agreed nor disagreed (Table 2).

Multiple Choice Selection Question Response

The other category of questions asked in the survey were multiple choice response questions that allowed the respondent to select multiple answers for the same question. Where there was complete participation (100% response rate) from all respondents on the Likert Scale statements, there was less participation among the multiple selection questions. More specifically, while Question 6 received only a 42% response rate, Question 9 received a 100% response rate, and Question 11 reached a response rate of 93% (Table 3). The first multiple selection question read *In what ways can early career staff be better prepared to take on a role at your agency*? The most popular selection was "health department internships" with 34 responses followed by "shadowing opportunities" with 30 responses, and "role-centric college curriculums" with 22 responses. Other responses provided for this question highlighted the importance of on-the-job training. However, it was also mentioned that providing internships and shadowing take staff away from their normal duties.

Table 2. Public Health Leadership Perceptions of Early Career Workforce Likert Scale Response Summary

	Small Health Department N=32 Results	Percentage	Medium Health Department N=39 Results	Percentage	Large & Very Large Health Department N=25 Results	Percentage	Total Survey Response N=100 Results	Percentage
Question 4. Early career staff are prepared to take on roles at your agency.								
Disagree	9	28%	4	10%	10	40%	24	24%
Neither Agree nor Disagree	3	9%	10	26%	5	20%	18	18%
Agree	20	62%	25	65%	10	40%	58	58%
Question 7. Early career staff are empowered to develop professionally through training and continued education.								
Disagree	4	13%	0	0%	2	8%	7	7%
Neither Agree nor Disagree	2	6%	1	3%	2	8%	5	5%
Agree	26	81%	38	97%	21	84%	88	88%
Question 8. Early Career staff have the opportunity to get involved with the organization beyond their daily role.								
Disagree	1	3%	0	0%	2	8%	4	4%
Neither Agree nor Disagree	3	9%	1	3%	2	8%	7	7%
Agree	28	88%	38	97%	21	84%	89	89%
Question 10. Early career staff are provided opportunities to develop and demonstrate leadership skills.								
Disagree	2	6%	2	5%	2	8%	7	7%
Neither Agree nor Disagree	5	16%	7	18%	4	16%	16	16%
Agree	25	78%	30	77%	19	76%	77	77%
Question 12. If an important role were to suddenly come open, you are confident an early career professional at your organization is prepared to fill it.								
Disagree	12	38%	11	28%	8	32%	32	32%
Neither Agree nor Disagree	7	22%	12	31%	11	44%	32	32%
Agree	13	41%	16	41%	6	24%	36	36%
Question 13. Your organization is doing enough to prepare the next generation of public health professionals.								
Disagree	6	19%	6	15%	7	28%	20	20%
Neither Agree nor Disagree	7	22%	9	23%	9	36%	25	25%
Agree	19	59%	24	62%	9	36%	55	55%

Table 3. Multiple Selection Survey Question Results by Health Department Size

	Small Health Department		Medium Health Department		Large & Very Large Health Department		Total Survey Response	
	Results	Percentage	Results	Percentage	Results	Percentage	Results	Percentage
Question 6. In what ways can early career staff be better prepared to take on a role at your agency?								
Shadowing opportunities	12	46%	5	18.5%	12	31%	30	31%
Health department internships	11	42%	10	37%	12	31%	34	35%
Role-centric college curriculums	2	8%	7	26%	11	28%	22	23%
Other	1	4%	5	18.5%	4	10%	10	10%
Question 9. What barriers may prevent early career staff at your workplace from getting involved with the organization beyond their daily role?								
Limited opportunities	7	17%	17	29%	4	11%	31	21%
Limited support from supervisors	1	2%	2	3%	4	11%	9	6%
Limited support from peers	2	5%	1	2%	3	8%	7	5%
Heavy workloads	20	48%	22	37%	12	33%	58	39%
None	4	9%	4	7%	4	11%	12	8%
Other	8	19%	13	22%	9	25%	31	21%
Question 11. What opportunities are provided to Early Career Staff to develop and demonstrate leadership skills?								
Agency committees	21	40%	31	40%	20	37%	73	39%
Employee resource/Support groups	8	15%	11	14%	13	25%	32	17%
Leadership trainings	20	38%	29	38%	13	25%	64	34%
Other	4	7%	6	8%	7	13%	17	9%

The next multiple selection question asked *What barriers may prevent early career staff at your workplace from getting involved with the organization beyond their daily role*? To this question, "heavy workloads" were identified by respondents of each size health department the most with 58 responses, accounting for 39% of all responses. The next most selected response was "limited opportunities" while other barriers mentioned included a lack of funding and available time. The final multiple selection question asked *What opportunities are provided to early career staff to develop and demonstrate leadership skills*? Again, all 3 sizes of health departments shared the most common selection of "agency committees" with a total of 73 selections (39% of total responses) while "leadership trainings" was another common answer with 64 selections in total (34% of total responses). Other opportunities mentioned include special projects and participation with state public health associations.

DISCUSSION

Understanding Leadership Perceptions

Based on the responses collected, there appears to be a clear disconnect, according to local public health leadership, between the development and preparedness of their early career staff and the opportunities they are provided. While approximately 60% of responses show that public health leadership deem early career staff as prepared for roles at local health departments, those that disagree most often identify poor communication skills as the reason. As one respondent commented, "I think most are eager to learn! However, some need more training in communication, writing, organization, and critical thinking skills." The need to communicate with stakeholders and the general public is a

critical component of many public health roles and the frequency by which this challenge was identified highlights the need for targeted professional development. The disconnect, however, is shown as respondents overwhelmingly agree that early career staff at their agencies are empowered to develop professionally through trainings (88%) as well as provided ample opportunity to develop leadership skills (77%) and get involved with the agency beyond their daily role (89%), but early career staff are not taking advantage of these opportunities.

While respondents identified barriers including heavy workloads as one reason that early career staff may not be developing as leaders or getting involved, other reasons provided point to the early career professionals themselves. As commented by one respondent, the "Primary barrier would be themselves, and making the time commitment to achieve work success and time sacrifice for professional excellence." Opinions such as these were prevalent throughout the survey, with one respondent commenting, "Their work ethic is different than the older generations." And another stating, "You can lead a horse to water, cup some of the water in your hand and hold it up to the horse's mouth but you can't make them drink." General attitudes toward generational differences are certainly nothing new,[3] however the fact remains that the need for competent public health professionals will continue beyond the current generations in the profession, and it is up to the current leaders at Ohio's local health departments to find ways to prepare the next generation of leaders to ascend when the moment arises.

Bridging the Communication Gap

The survey showed that public health leaders believe the opportunities for development are present but there are challenges with getting early

career staff to engage with these opportunities. To bridge this gap, leaders must find ways to better communicate with early career staff to encourage engagement. Research shows that particularly with Generation Z, socializing to organizational culture may be best achieved through "developing a sense of belongingness, enhancing communication, overcoming self-doubt, and advancing learning in the depths of adversities." [4] This research corroborates additional perceptions expressed in the survey that early career staff are less independent and need greater degrees of reassurance. Additionally, enhancing communication not only leads to greater relational development among coworkers, but can provide insight to leadership of both the priorities of their staff and how to best engage with them to advocate for greater participation in professional development or leadership opportunities. While this may be different than previous generational communication needs in the workplace, it is essential that leaders adapt to the current needs of the workforce. Creating a greater sense of belonging and supporting early career staff can maximize the development, productivity, and retention of their teams.[5]

Supporting the Early Career Workforce

Supporting the development of early career staff, however, cannot be strictly a top-down process and actively requires participation from early career staff. While enhancing communication may make early career staff aware of opportunities to develop, it can be difficult for early career staff to feel comfortable taking that next step of getting involved. This is where championing a culture of diversity within workplace and supporting peer structures like employee resource groups (ERGs) can provide the means for low-cost interventions to increase organizational involvement and provide a space for professional development to those who may feel more comfortable in a group setting.[6]

Employee resource groups, or similar employee support groups, provide a like-minded community to address the challenges being faced by the group. These groups provide a space for peers to engage with the challenges they face in the workplace together but also provide a space for leadership to get involved and provide broad development opportunities to an entire group instead of relying on highly motivated individuals to express interest. Employee resource groups provide a means to develop relationships, provide mentoring opportunities, and can reduce turnover among those involved.[6] Encouraging and supporting the creation of diverse teams ensures there are a greater number of perspectives and experiences considered and can provide a welcoming space for employees of all backgrounds and degree of experience to feel comfortable engaging with the project at hand or organization as a whole.[5] Providing a space for early career staff to be included and engaged can build self-confidence while providing a leadership development opportunity. Ultimately, the commitment from organizational leadership to support developmental opportunities like ERGs or including early career staff on projects or teams encourages engagement and contributions from their employees.[7]

STRENGTHS AND LIMITATIONS

This survey included a large representative sample of leadership of Ohio public health departments and addressed a range of perceptions regarding most recent public health workforce development challenges. Potential limitations regarding the survey include the unvalidated nature of the survey questions, although pretesting was conducted to assess compliance, which was satisfactory. Further development and validation in a larger sample may corroborate the findings. Moreover, while the scope of the survey focused on the perceptions of public health leadership, most of the public health workforce does not have leadership roles within a health department. This may provide common results perceived among leadership that are generally not perceived among the rest of the workforce. Lastly, the smaller sample of participants from large and very large health departments may result in not capturing the overall perceptions of leadership among that group across the state.

PUBLIC HEALTH IMPLICATIONS

The perceptions of the early career public health workforce collected in this survey show that, while there are some unique differences around the state of Ohio regarding professional development and preparedness, most leaders believe that there are enough opportunities provided for early career staff to meet the needs of their health department. The results highlight the need for continued professional development, the need for more effective top-down communication within health departments, and continued investment in preparing early career staff to take on more complex tasks. Additionally, unique challenges were identified among early career staff including communication skills and willingness to take advantage of the opportunities being provided. Improving communication and reevaluating communication styles to better connect with their early career workforce's needs from the top down may improve overall commitment, readiness, and preparedness of early career staff. Moreover, pairing enhanced communication with the inclusion of early career staff as part of diverse teams, and supporting the creation of employee resource groups dedicated to supporting and developing early career staff may improve their development, commitment to the organization, and retention during a time of uncertainty in the public health sector across the United States. Additional data beyond the scope of this survey, from non-leadership public health staff, for example, could provide greater depth of responses from which to draw conclusions.

AUTHOR CONTRIBUTION

Logan Williams is the corresponding author and sole author.

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APPENDIX – Survey Questions

Public Health Leadership Perceptions of Early Career Workforce Survey
The purpose of this survey is to collect your perceptions of the early career public health workforce and assess the professional/leadership development opportunities at your agency or local health department. This survey is expected to take approximately 6 minutes to complete. Thank you for your participation and if you have any questions or concerns, please contact Logan Williams by email at williams.1890@wright.edu.
* Required

Please provide a little information about yourself
The information below is strictly for response tracking purposes and your responses will be de-identified prior to the publishing of findings.

1. Please provide your name.
2. Please provide the name of the organization where you are currently employed. *
3. Please provide the title of your current position. *

Early Career Workforce Perceptions
Please answer the following questions on your perceptions of the Early Career Public Health Workforce and the development/leadership opportunities provided to them.

4. Early career staff are prepared to take on roles at your agency. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

5. In what ways are Early Career staff unprepared for roles at your agency? *

   [   ]

6. In what ways can early career staff be better prepared to take on a role at your agency? *
   - ○ Shadowing Opportunities
   - ○ Health Department Internships
   - ○ Role-Centric College Curriculums
   - ○ Other

7. Early career staff are empowered to develop professionally through training and continued education. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

8. Early Career staff have the opportunity to get involved with the organization beyond their daily role. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

9. What barriers may prevent early career staff at your workplace from getting involved with the organization beyond their daily role? *
Check all that apply.
   - ○ Limited Opportunities
   - ○ Limited Support from Supervisors
   - ○ Limited Support from Peers
   - ○ Heavy Workloads
   - ○ None
   - ○ Other

10. Early career staff are provided opportunities to develop and demonstrate leadership skills. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

11. What opportunities are provided to Early Career Staff to develop and demonstrate leadership skills? *
   - ○ Agency Committees
   - ○ Employee Resource/Support Groups
   - ○ Leadership Trainings
   - ○ Other

12. If an important role were to suddenly come open, you are confident an early career professional at your organization is prepared to fill it. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

13. Your organization is doing enough to prepare the next generation of public health professionals. *
   - ○ Strongly Disagree
   - ○ Disagree
   - ○ Neither Agree nor Disagree
   - ○ Agree
   - ○ Strongly Agree

14. General Comments
Please use the box below to express any general comments about your perceptions of the early career public health workforce or expand on any of the above questions.

   [   ]