Reprint from The Review of DIABETIC STUDIES

The Review Of
DIABETIC
STUDIES OPEN ACCESS

Increasing The Capacity of The Public Health Workforce: The Long-Term Impact of A Capacity Building Intervention To Enhance Community-Based Public Health Prevention Activities

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Abstract

In order to improve community-based work centered on prevention and health promotion, it is imperative that current and incoming public health professionals develop their capacity. The goal of the cohort- based, facilitated, asynchronous online capacity building intervention Public Health Essentials was to increase the professional confidence and strategic skills of public health workers. The authors of this paper present the findings of a longer-term outcomes evaluation, which includes skill retention, skill application, and potential indicators of workforce retention and community health improvement. Previous research focused on the intervention's short-term learning outcomes.

Methods: To evaluate and investigate longer-term outcomes among a sample of Public Health Essentials graduates employed in community public health positions, a sequential mixed-methods research design was employed.

Conclusions: Students who successfully complete Public Health Essentials gain transferable skills that they can use in their future public health work, which may encourage them to pursue a career in public health. It is impossible to overestimate the significance of creating and keeping a skilled, community-focused public health workforce. Online asynchronous capacity building programs that are fully facilitated could be a useful instrument.

Keywords: Public health, Public Health Workforce Development, Public Health Workforce Capacity Building.

Introduction

Even though the United States spends more than $4 trillion annually on health care, there are still too many deaths and large disparities by a wide range of demographics. "Investment in...evidence-based community prevention programs can offer return in decreasing costs associate with targeted morbidity," the American College of Preventive Medicine Policy Committee stated in its 2017 recommendation for increased funding for the public health workforce. The advantages of public health initiatives are widely known, especially when weighed against the high expense of curative medical care in the United States (Dehry Se., 2023; Karasick, 2017).

Through prevention, the field of public health seeks to advance health and well-being. A skilled public health workforce working in both governmental (federal, state, tribal, territorial, county, city) and community (e.g., community-based organizations, healthcare settings, schools) capacities is necessary to carry out community prevention programs. But for decades, the public health system in the United States has been underfunded, which has limited the number of employees and their capabilities. For instance, according to current estimates, at least 80,000 more full-time government public health employees are required just to carry out essential public health tasks (Bishai DM, 2022; DeSalvo KB, 2017).
and long-term studies reveal that there are skills gaps in the government public health workforce today, partly due to the fact that only about 14% of the workforce has received formal public health training; Nongovernment employees do not have access to data (Leider JP, 2023; McKeever J, 2019).
The public health emergency caused by the coronavirus disease 2019 (COVID-19) highlighted the dangers of underfunding public health systems. The public health sector needs more workers, and those workers need more skills, in order to move toward health as a human right. Retaining skilled workers requires, among other things, giving them more opportunities for growth and advancement and boosting their sense of fulfillment (McKeever J, 2019 ; Maani N, 2020).

METHODS:
The PHE intervention's longer-term effects were evaluated and investigated using a sequential mixed-methods study. A standard skill survey and interviews with PHE graduates were used to gather data; focus groups with graduates' workplace supervisors were also conducted. Graduates had to have completed PHE, completed the pre- and post-PHE skills survey included in the online training, and completed PHE within the last three to six months. Supervisors had to have supervised two or more PHE graduates in order to be eligible.

Developing Competence, Knowledge, and Skills:
The core competencies of public health are influenced by fundamental public health knowledge and abilities. Since few people in the public health field have received formal training in the field, providing professional development training as an alternative to degree-granting education is beneficial in meeting the needs of the workforce. Previous studies have demonstrated that PHE, irrespective of background, is successful in enhancing public health competency in strategic skill domains (Kirkland, 2022).
The literature indicates that if learners do not actively use a skill or if they recalibrate their understanding of a skill due to ongoing work, self- assessment may decrease as they discover new ways to grow, even though there was a slight drop in mean of means between the post- PHE skills survey and the follow-up survey. For instance, interviewees gave many concrete examples of how they applied their decision- making and community engagement skills in their work, which the supervisor focus groups confirmed, despite the follow-up survey data indicating a decline in self-assessed proficiency for those skills (Bishai DM, 2022; Dehry SE, 2023).

Putting Knowledge into Practice:
The general goal of training interventions is to increase knowledge and skills, and through applied/action learning and engaged learning strategies, learners can be helped to turn their gains into actions. When upskilling groups of employees to fill important public health positions, this strategy is essential. PHE was created especially for this purpose: to empower students with confidence by assisting them in putting what they have learned into practice through practical and applied assignments that are supplemented with facilitator feedback
(Karasick AS, 2017; Robins M, 2023).
PHE was initially intended to provide low-barrier access training to support a robust workforce while simultaneously ensuring a deep focus on foundational public health frameworks and cross-cutting skills to enable graduates to take on roles unrelated to COVID-19 and contribute to a stronger future public health workforce. Supervisors observed that it was a successful method for their staff members to fully comprehend their public health role, comprehend the intricacies of the public health field, and represent the goals of state and local health departments as well as community-based public health organizations (DeSalvo KB, 2017; Grimm B, 2019).

Employee Contentment and Employee Retention:

The PHE intervention's a priori predicted long-term outcome is employee retention and satisfaction in the public health workforce. Three to six months after finishing PHE, the data presented in this paper cannot yet document effect; however, respondents expressed satisfaction, a sense of relevance, and a desire to continue working in public health. Additionally, supervisors who responded provided concrete instances of how they see PHE graduates as adding genuine value to their team, which may translate into a positive work atmosphere.

Recommendations:

Despite the fact that these findings are encouraging and instructive, their generalizability is limited.

- First, only 46% of respondents participated in the follow-up survey, and while sample demographics were similar to the entire population, it's possible that important viewpoints of nonrespondents would have differed, especially since the PHE graduates who were interviewed chose to participate (as did the supervisors). Participation may be biased toward people who had more positive experiences with PHE, even though the authors' invitations were based on a priori sampling plans.

- Second, learner self-assessment scores are the quantitative survey data that are being reported. Even though the Public Health Workforce Interests and Needs Survey and other skills and learning outcome assessments are widely used, it is crucial to recognize that people's perceptions of their knowledge and abilities can vary based on their individual experiences and backgrounds and are not externally validated. By using previously validated survey instruments and matching longitudinal surveys at the individual level, the authors were able to overcome this difficulty and report on skill changes over time while attempting to account for individual-level variation, such as the tendency to overstate or understate ability. Additionally, because the authors lack a control group, the survey analysis could be interpreted biasedly.

Conclusion:

The workforce's size and capacity must be increased in order to promote public health and disease prevention. Significant, much- needed improvements in community-based public health prevention efforts in the United States require a sizable and skilled public health workforce. PHE sought to strengthen the public health workforce and enhance employees' capacity to enhance community health; results seem encouraging. Just-in-time trainings like PHE that are applied and engaged can be crucial resources for (re)building and keeping the public health workforce. Although the applied and facilitated approach requires funding, competence gains, retention, and application suggest that this could be a worthwhile investment in workforce development and retention. Its online and asynchronous delivery facilitates easy scalability and reach.

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