

Missouri Public Health Work Force Survey of Recent MPH Graduates: Barriers Faced to Employment in Governmental Public Health Service, 2017. B. Malone, E. Groenweghe, S. Chundru, L. Rallabandi, Y.R. Mopala

Abstract

OBJECTIVES. The purpose of this study was to determine likely reasons for the lack of formally educated public health professionals across health departments in the State of Missouri.

METHODS. The Missouri Public Health Association (MPHA), the largest voluntary professional public health organization in the state, chose to investigate the issue. The Association developed a 28-question survey to graduates of the five (5) university-based public health programs in the State. The survey collected a variety of demographic information, but, most importantly, asked respondents to rank the barriers to working in governmental public health service in the State.

RESULTS. The survey was sent to 860 graduates of the five university programs. A total of 173 graduates responded (20%). All respondents held a Master's Degree in Public Health between graduation years of 2013 and 2016. While 91% identified that they are currently employed, only 63% of respondents were working in governmental public health, and only 39% working in a city or county health department. Respondents cited their reasons for not working in governmental public health and, by far, the leading reason cited was the insufficient starting salary. A total of 75% cited this as the primary reason. Likewise, the lack of promotional opportunities was also cited by 57% of respondents. Other reasons cited included the lack of benefits and pension, difficulty in navigating the merit system, etc.

CONCLUSIONS. The results of this survey reflect similar workforce issues seen in public health systems across the nation. The study helps to identify specific barriers for working in public health in Missouri and provides guidance to those concerned about the public health workforce regarding affirmative steps to take to address the barriers and to implement appropriate systems to recruit, hire and retain appropriately trained professionals. The Association plans to collect additional data in the form of interviews and other qualitative data to more fully understand obstacles to hiring a highly trained and effective public health workforce.

Background

Local, state, and federal public health agencies have an essential role in society for preventing disease, protecting citizens, and promoting a healthier population. Each state in the United States has a state health department and, at the federal level, the US Public Health Service, as part of the Department of Health and Human Services carries out public health duties. The Centers for Disease Control and Prevention is the principal federal agency to serve as liaison to state and local practitioners across the nation. In the state of Missouri, there are 115 independent local health agencies made up of counties and cities. All of these public health agencies work together to provide needed services to the community. However, just as within any other organization, staff that are sufficiently trained and educated to do their duties is essential for success.

In the field of public health, the post-baccalaureate degree most commonly obtained to prepare professionals for further career advancement is a Master of Public Health (MPH) degree. Other professional public health degrees include a Master of Science in Public Health and Doctor of Public Health. Just as with other career fields, obtaining and retaining public health professional that are sufficiently trained in their field is of the utmost importance. However,

because each state and county has their own public health agency, the field of public health has a unique challenge in recruiting and retaining professionals with advanced degrees. In Missouri, this is also a challenge for the public health field as the public health workforce has to be spread across 115 independent local health departments throughout the state, some of which are located in very rural areas or that have a very small staff.

A looming question for the administrators of Missouri local public health agencies is how the rising ages of the public health workforce will impact their capability in providing comprehensive public health services. More than 30% of the federal work force is estimated to be retired by December, 2017 (Coronado, Polite, Glynn, Massoudi, Sohani, & Koo, 2014, p 432-441). According to the Association of State and Territorial Health Officials' (ASTHO) Public Health Workforce Interests and Needs Survey (PH WINS), since 2008 91% of all state health agencies have experienced job losses due to attrition and 21% of the state health employees are planning to leave their current position in the immediate year (ASTHO, n.d.). Thus, attracting new graduates and simultaneously retaining the current workforce has become a great challenge for state government public health agencies. This survey was distributed to 40,000 state health agency employees with a response rate of 48%. The state public health workforce statistics reveal that 70% of the employees are Whites and 74% of them are above 40 years of age. The Hispanic, American Indian groups and younger populations appear to be underrepresented (ASTHO, n.d.).

Additional results of the PH WINS, administered by ASTHO, shows that 79% of the workers are partly or completely satisfied with their job. However, 38% of them intended to quit the government public health before 2020. Of that 38%, 25% plan to retire and 13% intend to

leave for another job in a field other than public health. The survey also found that 24% of the workers were somewhat dissatisfied with their pay.

Within the past ten years the schools and programs of public health have been teaching practice based education and stronger research application to their students (Coronado, Koo, and Gebbie, 2014, p S275). However, Coronado, Koo and Gebbie feel there needs to be some educational paradigm change that helps retain these new public health professionals in the state in which they have received their schooling. This migration of students to other states is causing instability in public health practice. In addition, the number of graduates from public health schools and programs who go into direct public health services is reducing. The graduates of Master of Public Health (MPH) programs in the past formed the largest component of long term public health workforce, but now their numbers seem to be diminishing.

In 2016, the Missouri Public Health Association (MPHA), a professional organization of public health practitioners observed the issue of a lack of trained public health professionals across all health departments in Missouri. MPHA leadership was particularly concerned with the new generation of public health graduates who have obtained their MPH degree in recent years, but chose not to stay in Missouri. Anecdotally, it seemed that these students were not staying in Missouri to work in public health once completing their degree. Therefore, MPHA leadership decided that a survey to determine if Missouri MPH graduates were moving to other states is true and if so, what were the reasons for this.

Methods

In order to answer the question of why so few local health departments are served by academically-prepared professionals, MPHA chose to investigate this issue. MPHA developed

a 28 question survey to email to recent MPH degree students. The first part of the survey asked about demographic data such as what school they attended, the year graduated, their gender, age group, race/ethnicity, and state in which they currently reside. The survey then explored if they are currently working in the public health field, what type of work they are currently doing, and their salary information. Finally, and perhaps most importantly, the survey had participants rank barriers to working in the governmental public health field using a Likert scale to measure the intensity of those barriers.

The survey was then uploaded onto an online platform, Survey Monkey, for electronic distribution to participants. This allowed the survey to be e-mailed to participants, where they could then click a hyperlink and take the survey directly on the website. The survey was then distributed to students via email. For some university programs, the survey was directly emailed to the participants by MPHA, while other university programs elected to have an academic advisor or other university staff email the survey.

In total, the survey was distributed to five universities with MPH programs: St. Louis University, Washington University in St. Louis, University of Missouri Columbia, Missouri State University, and some Missouri residents that obtained their MPH from University of Kansas. Once data collection was complete, the data was analyzed using Excel.

Results

The survey was sent to 860 graduates and there was a total of 173 responses, resulting in a response rate of 20%. The response rate for University of Missouri Columbia students was 57 responses or 25%; Missouri State University 17 responses or 39%; University of Kansas 20 responses or 21%; Washington University 45 responses or 23%; and St. Louis University 33

responses or 11%. In total, 33% of responses were from University of Missouri Columbia students, 26% from Washington University, 19% from St. Louis University, 11% from University of Kansas, and 10% from Missouri State University.

All of the students surveyed had obtained a Master's Degree in Public Health between the graduation years of 2013-2016. A total of 28% graduated in 2013, 19% in 2014, 21% in 2015, and 32% in 2016. Therefore a relatively even distribution of graduation years was obtained. The majority (64%) of participants were in-state residential students while the rest were out-of-state students, online students, or international students. Of those, 26% of out-of-state residents, 7% online students, 6% international students and 6% other. The other was mainly students who lived in Kansas and also attended school in Kansas.

The demographic data showed that more survey participants were female (76%) than male (24%) and the predominant age groups were 25-29 (57%) and 30-30 (27%). 76% of participants identified as white, 12% Asian or Pacific Islander, 8% black or African American, and 4% other races or mixed. Despite the fact that the majority of participants obtained their MPH in the state of Missouri, where they lived, only half currently live/work in Missouri. Participants currently live across 33 different states, including Missouri and Washington D.C.

While 91% identified that they are currently employed, only 63% are currently employed in public health. In addition, only 30% are currently employed by governmental public health agencies. Many of the respondents indicated that they worked in a city/county health department (39%), however the largest percent worked in a university setting at 60%. Nearly half of participants stated that they were most likely to seek a non-governmental job in public health for future career endeavors while only 33% would seek employment in a governmental public health position.

The final survey question asked participants to rank the barriers to working in the governmental public health field in Missouri using a Likert scale. The options of strongly agree, agree, neutral, disagree, and strongly disagree were provided. The question specifically asked participants what they believe the barriers to working in the governmental public health field in Missouri are and each option used the scale. The response that the largest percent of participants agreed with (strongly agree or agree) was insufficient starting salary at 75%. The second most agreed option was lack of promotional opportunities at 57%. Work environment was the third most agreed with option at 42%. Other options such as lack of benefits and pension, pursuing a career of their own interest, and difficulty in navigating the merit system (online job system for Missouri Department of Health and Senior Services employment) were rated as fairly neutral. The two options that the majority of participants disagreed with as a barrier were a desire to return to their hometown for employment and immigration requirements.

Discussion

The results of this survey reflect similar workforce struggles seen in public health across the country and help to identify specific barriers for working in governmental public health in Missouri. Although the majority of graduates were in-state Missouri residents at the time that they graduated, only half of them are currently working in Missouri. This survey was only regarding students who graduated between the years 2013 and 2016, so this means that within the previous 3 years or less, half of these MPH graduates have left the state. In addition, only 30% of respondents are working in governmental public health. The largest percent of the MPH workforce according to this survey is being employed by universities. This means that the governmental public health system in Missouri is losing many MPH trained professionals to

other states, universities, and other career fields, therefore leaving less Master's degree trained public health professionals to fill governmental public health jobs.

Based on this survey, two barriers were identified by MPH professionals as issues with working in governmental public health in Missouri. The primary barrier is an insufficient starting salary. It can be reasonably assumed that recent MPH graduates are looking for a job that offers a reasonable starting salary and if these graduates feel that Missouri public health jobs do not offer this, it is likely they will look elsewhere. As higher education costs continue to rise, starting salary will become a bigger factor in career decisions for recent graduates. The second barrier identified is a lack of promotional opportunities in governmental public health in Missouri. The majority of survey participants were between the ages of 25 and 30; either just starting or mid-career. In this phase of their professional career, advancement opportunities and room to grow is important.

A reasonable next step would be to collect additional data in the form of key informant interviews and other qualitative data collection to better understand the barriers and difficulties recent MPH graduates face. In addition, research should be done to compare starting salaries in governmental public health with other states. If Missouri's public health field cannot remain competitive in job recruitment, obtaining and maintaining a highly trained public health workforce will continue to be a challenge.

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