Advanced Education in Kansas Public Health

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It seems that Kansas may be lagging behind the nation in public health workforce educational attainment, as evidenced in recent reports. This is a critical issue facing Kansas and its public health system. The lack of education for top executives and frontline public health workers may result in a reduced utilization of evidence-based practices and also may contribute to the difficulty in communicating the necessity and impacts of public health work in Kansas. This report compiles evidence supporting the necessity and benefits that accompany advanced public health education, barriers and incentives for that education, and also highlights data specific to Kansas.

Possession of advanced public health degrees typically gives advantage to professionals, affording them with competencies in quantitative areas (i.e., biostatistics, toxicology, epidemiology), qualitative areas (i.e., policy analysis, program evaluation, intervention design), and provides qualifications for access to professions sometimes out of reach to other frontline public health workers (health educator, epidemiologist and other managerial positions). There are, however, important benefits for agencies having top executives with advanced degrees. A recent study in the American Journal of Public Health (AJPH) found that graduate training, in addition to leadership practices, may increase the likelihood of the perceived importance of scientific resources among local health department (LHD) practitioners. The study found that individuals possessing advanced public health degrees are two times more likely to value evidence-based research, contrasted with those having a bachelor's degree or lower. The study further identified that individuals within organizations encouraging evidence-based decision-making were more likely to value scientific resources (i.e., systematic reviews, scientific reports and scientific articles). These agencies are more likely to be leaders in their fields for evidence-based decision-making and practices.

Though the benefits are clear for the possession of advanced degrees, barriers exist for agencies desiring top executives with high educational attainment. Paired with the difficulty in competing to hire individuals with advanced degrees, the limited time and funding in place for academic (and even non-academic) education may lead to a public health workforce lacking in public health competencies and undervaluing the importance of scientific resources. Data obtained from the National Association of County and City Health Official's (NACCHO) 2008 and 2013 National Profiles of Local Health Departments studies shows that almost two-thirds of

LHDs surveyed across the nation reported that their top executives possess advanced degrees (master's or doctoral). This proportion is strikingly different for Kansas, as **less than a quarter of top executives in Kansas health departments reported advanced degrees**. This finding is consistent with a 2013 KDHE and WSU Center for Community Support and Research's Kansas Local Health Department Programs survey, as well as the 2015 KDHE Workforce Development Survey for Local Health Departments. Although data was not found for the public health workforce as a whole, it is very likely that a similar (or worse) proportion exists for frontline and other leadership staff in Kansas public health.

The prospect of having highly educated top executives, as well as highly educated frontline staff, is difficult to attain in the current landscape. LHDs have issues with hiring health professionals, frequently due to uncompetitive pay and benefits, with shortages in professional occupations anticipated to worsen due to turnover. Incentives to combat these challenges have been identified by NACCHO as public health leaders working toward a culture that is 1) accommodating on-the-job training, 2) offering salary incentives, and/or 3) making workforce development deliverables for managers in performance evaluations. The latter is consistent with the Public Health Accreditation Board's (PHAB) workforce development domain deliverables (i.e., job descriptions including core competencies, a workforce development plan). The AJPH study was in agreement, finding that grantors and state health departments should provide incentives to support evidence-based practices.

In addition to the barriers in place within agencies to have highly educated personnel, there are additional obstacles which prevent public health professionals from pursuing advanced degrees after they enter the workforce. The 2005 NACCHO Profile found that barriers to professionals voluntarily pursuing training opportunities include increasing workloads and limited resources, including limited financial assistance. Few financial incentives for advanced public health degrees (grants, scholarships, etc.) were found that specifically aim to assist public health staff as non-traditional students. A national research report from Noel-Levitz on adult learners provides additional information on enrollment factors for adult graduate students. Two-thirds of respondents indicated that cost of education and financial aid/scholarship opportunities were a factor in enrollment, with future employment opportunities and availability of evening/weekend courses having a higher reporting rate as factor, 80 percent and 77 percent, respectively. For online graduate students, cost and financial assistance were significantly higher factors (78 percent and 82 percent, respectively) with convenience and schedule/pace also having high impact (97 percent and 94 percent, respectively).

Another issue surrounding the question of whether financial assistance provides necessary incentive to pursue advanced degrees is that research and systematic evidence pertaining to

the impact of an offered grant (loan, work-study, etc.) on the decision to pursue an advanced degree is scarce. A selection published by the National Bureau of Economic Research (NBER) has shown that students may be more attracted to superficial aspects of a grant, like it being a named scholarship and being front-loaded, rather than the amount of grant itself.

Other confounding factors for non-traditional students in the professional workforce (balancing work, family and school; employment status and financial standing) contribute to a greater difficulty in estimating the driving forces behind making the decision to pursue advanced degrees. Another NBER selection strongly suggests that financial assistance reduces dropout rates, having a positive effect on student persistence. The availability of scholarships, however, may strongly influence the decisions for Kansas public health staff who are open to the idea of pursuing advanced degrees. Results from KDHE's 2015 workforce survey found that only a third of total respondents indicated a likelihood of pursuing a degree (or an additional degree) in the future, with only 11 percent projecting a high likelihood. Of those likely to pursue a degree, 39 percent would pursue a bachelor's degree, 56 percent would pursue a master's degree, and 7 percent would pursue a doctoral degree. An MPH would be the primary master's degree pursued. Respondents also indicated willingness to travel within a fifty-mile range for classes. With this in mind, almost two-thirds of total respondents said they would be incentivized to pursue additional education if a scholarship was available (41 percent responded much more likely). iiThe majority of those respondents were still interested in the scholarship if required to serve in public health for a set time period (i.e., two years).

In addition to scholarships, distance education has broken down some barriers to pursuing advanced education and it is becoming much more available for local and remote students. Both Kansas State University and the University of Kansas offer many courses via distance education, however the entire degrees cannot be completed by distance. In addition to online coursework, some programs exist nationally to support working professionals intending to obtain advanced degrees, called "Executive Master's in Public Health" (EMPH) programs. Some programs, such as those offered by the Rollins School of Public Health at Emory University and the University of Washington School of Public Health, offer programs that are almost fully online and only require a small number of focused, multi-day sessions on campus. Other EMPH programs are offered on- site, but course sessions are offered on evenings and weekends. Admissions requirements for these programs are all similar to traditional programs, though online courses typically come with an additional fee which varies among universities.

In conclusion, Kansas is lagging behind the rest of the nation in educational attainment for top public health executives and likely also among frontline staff. There are, however, interventions that may be made which may improve Kansas' situation, including the availability of

scholarships. An increase in the number of top public health executives possessing advanced degrees may serve to improve the capacity of the Kansas public health system to utilize public health sciences and, potentially, to improve the value, perception and delivery of public health services in Kansas.

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¹ Competitive scholarships offered by individual schools are typically available to all eligible students.

[&]quot; The question did not indicate an amount of scholarship offered.