Collaboration Across the Curriculum: Urban Planning & Public Health

Lula Geyre

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Collaboration Across the Curriculum: Urban Planning & Public Health

Abstract
The way our communities are designed impacts our health, and there is an increasing need for collaboration between urban planners and public health professionals. Yet, it is not clear to what extent universities are preparing public health and planning students to work together. Our research will shed light on this important topic by evaluating the course requirements for both of these disciplines in accredited institutions and look at how they are addressing interprofessional issues such as land development, transportation policies, air/water quality, and community growth issues. The current study explores the availability of interdisciplinary courses in accredited undergraduate and graduate programs in urban planning and public health using document review of course catalogs and published curriculum information. I looked at 72 masters and 16 bachelor’s Urban Planning programs using the PAB website, and 173 Masters schools/programs and 8 standalone baccalaureate programs, on the CEPH website while primarily focusing on Masters programs. I prepared coded data using Microsoft Excel and word to analyze my findings. I found that urban planning programs had more available interdisciplinary courses with 25% of the universities having 1 or more required courses on health, and only 5% of MPH programs required courses on planning.

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COLLABORATION ACROSS THE CURRICULUM:
URBAN PLANNING & PUBLIC HEALTH

By
Lula Geyre
A Senior Thesis Submitted to the
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Honors College
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with Honors in Public Health

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Firstly, I would like to express my deepest gratitude to my faculty mentor Dr. Walsh for suggesting this research topic to me and providing me with her expertise and immense knowledge, and for allowing me to borrow her necessary textbooks to become more familiar with this topic. She challenged me to become a better writer and her guidance has shown me what a good researcher should be. I couldn’t have done this without her patience, advice, and encouragement. My sincere thanks to the Honors College for awarding me the Undergraduate Fellowship Award and Undergraduate Stimulus Award. The financial support gave me more time to work on this research and accomplish my set goals. Lastly, I want to thank my family for providing me with emotional support throughout this journey. Their motivation and kindness made this process more enjoyable.
ABSTRACT

The way our communities are designed impacts our health, and there is an increasing need for collaboration between urban planners and public health professionals. Yet, it is not clear to what extent universities are preparing public health and planning students to work together. Our research will shed light on this important topic by evaluating the course requirements for both of these disciplines in accredited institutions and look at how they are addressing interprofessional issues such as land development, transportation policies, air/water quality, and community growth issues. The current study explores the availability of interdisciplinary courses in accredited undergraduate and graduate programs in urban planning and public health using document review of course catalogs and published curriculum information. I looked at 72 masters and 16 bachelor’s Urban Planning programs using the PAB website, and 173 Masters schools/programs and 8 standalone baccalaureate programs, on the CEPH website while primarily focusing on Masters programs. I prepared coded data using Microsoft Excel and word to analyze my findings. I found that urban planning programs had more available interdisciplinary courses with 25% of the universities having 1 or more required courses on health, and only 5% of MPH programs required courses on planning.

Key words: Urban Planning, Public Health, Curriculum, Healthy Cities, Interdisciplinary
INTRODUCTION

When people think of Public Health they simply think of the health of a community, preventing sickness, tracking disease outbreaks, promoting wellness as a whole, and ensuring people lead healthy lives. It’s easy to consider diet, exercise, genetic build, and access to clinical care when the term “health” comes to mind. Too often, we fail to consider the other numerous aspects of health such as the built environment and the overall condition of a communities that one lives in. In fact, there are many different theories linking cities to health. Urban planners develop and design an environment that is safe for us to live in such as physical facilities in towns and cities. They are concerned with land use and creating thriving cities that work for residents, transportation, and industry. They also develop programs and policies that will protect us as a community. The way urban planners design our cities evidently impacts our health.

For an example, issues related to land use could potentially lead to cardiovascular disease and asthma. Lack of sidewalks can potentially decrease physical activity in the community. It’s important to know that public health professionals and urban planners share the same goal which is to improve the well-being of populations, especially those who live in vulnerable communities. They also tackle factors that affect one’s health including the social, economic, and environmental determinants of health, and use the same methods and tools to assess the needs of cities. The two professionals organize frameworks that would encourage individuals to live an overall healthy life.
International movements have already recognized these common goals and perspectives and began collaborating the two disciplines to push for healthier and sustainable towns. There are also national efforts to increase collaboration amongst professionals in the fields of public health and urban planning which is a great start to creating healthy communities across the nation. Researchers study these linkages and partnerships, but are now furthering their studies to less obvious priorities, such as building model courses to prepare students for collaboration.

According to Srinivasan, O’Fallon, and Dearly (2003) there are health benefits to a sustainable community. “While research has focused on the negative public health consequences of the built environment, there has been very limited focus on the benefits of living in sustainable communities” (Pg. 1) they say, and policy makers need to make note of this. Healthy sustainable cities are important which is why public health leaders should push for a way to work with urban planners and policy makers in overlapping areas. If public health leaders get more involved, then it potentially leads to a healthier outcome of planning, (Morris, 2006). Morris says if urban planners consider the health of the population when designing facilities and formulating plans then there will be an improvement in our community’s overall health. Encouraging the two professionals to work together is one thing but where do we start in order for them to successfully work together?

The partnership between the American Public Health Association (APHA) and the American Planning Association (APA) is a great example of successful collaboration. The two professional organizations recognize that they share a common goal, which is to improve the life of all citizens. APHA and APA continue to work together in creating
projects that tackle overlapping themes such as nutrition and physical activity. They understand that the way we design our communities, transportation systems, and housing impacts our health. Their efforts to collaborate in creating projects is a great initiative to create healthy communities across the nation.

Although there are clear overlapping themes between the two disciplines, there needs to be a new direction to ensure a successful collaboration.

Educating, empowering, and training future planners and health professionals in their undergraduate and graduate program courses will be a good start to a strong collaboration. If students are given the opportunity to learn about both programs then there would be great interconnectedness. Yet, it is not clear to what extent universities are preparing public health and planning students to work together.

The purpose of this literature review is to shed light on this important topic as well as demonstrate the importance of our four-part research question:

1) **Do undergraduate planning programs incorporate health in their curriculums?**

2) **Do undergraduate public health programs address planning in their curriculums?**

3) **Do graduate planning programs cover health?**

4) **Do graduate public health programs teach planning?**

**History of Planners and Public Health Professionals Coming Together**
The two disciplines worked together professionally to prevent the spread of disease by designing zoning laws. For example during the 1800s, they worked on bettering inadequate housing and working conditions that caused outbreaks of cholera and typhoid. In addition, planners weaved out populations suspected of causing these kind of diseases by using the power of the state (Corburn, 2004). According to Corburn (2004) soon after that they diverged, despite their efforts of social betterment, preventing urban outbreaks of infectious disease, and from working collaboratively to improve the health of urban population. Urban Planners started focusing on economic and policy development, and physical design, while public health began working closely with physicians instead, to focus on germ theory, immunization plans, and other clinical interventions (Corburn, 2004).

The World Health Organization began a global initiative called Healthy Cities Movement in the early 1980’s. Academics and activists from all of the world met to brainstorm ideas to push for a reconnected city and public health. This was an idea to improve a healthy city plan and create networks of places who wanted to become healthy (Corburn, 2009). The United States didn’t execute their plan until the 1990’s (According to Corburn). By 1993, the International Society of City and Regional Planners (ISOCARP) congress entitled their focus “City Regions and Well Being: What can Planners Do to Promote the Health and Well-Being of people in the city-regions?” Cities that participated in this Healthy Cities movement not only had to put together a health profile with an overall health plan for their city, but they also had to show how they would execute this plan across political agencies and if there were any changes in resource allocations (Corburn, 2009) (Pg. 58). Corburn (2009) also states that eventually
they were required to develop an office that will be responsible for reporting the objectives and outline of the city plan. This office should be established within the municipal government because the Healthy Cities movement strongly encouraged the local government to play a role in health promotion he says.

It is clear that there are many challenges in reconnecting the fields of Urban Planning and Public Health. An important challenge to recognize is how land use effects Public Health and places also known as the built environment. For an example, how the lack of sidewalks contributes to lack of physical activity. This creates a habit to poor health because it discourages people to walk/bike. This leads to outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer. (Macera, 2003)

Planning is more than developing neighborhoods and designing an urban environment. We must consider the “geographic neutrality” assumption of environmental laws as well (Corburn, 2004). This will lead the two fields to challenge how physical and social environments effect our health. It’s obvious that urban planners have political power but as a profession that has that powerful influence, they should manage problems with power and value. Corburn (2004) says an example of this would be conflicts between local communities and state or private sectors.

Corburn (2004) also finds that more research in the 21th century is recognizing the importance of reconnecting Public Health and Urban Planning. The Institute of Medicine came out with a report in 2001 titled “Rebuilding the Unity of Health and the Environment” where it discussed how the social, economic, aesthetic, political, and overall built environment should be considered when thinking about the term “environment.” In 2000, The National Center for Environmental Health of the Centers for
Disease Control and Prevention provided many examples of how transportation and land use planning impact obesity, asthma, and mental health. (as cited in Corburn, 2004). “Healthy People 2010” emphasized eliminating health disparities and listed it as the number one priority. It also stated that collaboration between the two disciplines will help accomplish this (as cited in Corburn, 2004). Although Healthy People 2010 has since been replaced by Healthy People 2020, eliminating health disparities remains a priority.

There is also action taking place from the government. In 2006, the US Department of Health and Human Services put together a plan called Action Agenda to climate health disparities within vulnerable populations with the impact of the built environment; they also made this the number priority of the federal agency (as cited in Corburn, 2009).

**Partnership between American Public Health Association and American Planning Association**

In the US, the American Planning Association (APA) and The American Public Health Association (APHA) are the leading professional organizations for urban planners and public health professionals, respectively. APA and APHA have come up with strategies to support each other in many ways. One of them is the Plan4health project. This project brings together communities to address population health goals and to overall strengthen the two disciplines (APA, 2017). Plan4health is three years long and it encourages health to be included in non-traditional sectors. Their hopes are that both professionals will apply their skills and practices to address issues for the purpose of improving health of their communities. Their interdisciplinary approach creates
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partnerships with other organizations from many different sectors. Many different coalitions made up of APA, APHA, nonprofit organizations, universities, parks and reaction departments, etc. work with communities to access healthy food and work on where people live, work, and play. Plan4health is a perfect example for a healthier communities and an equitable future. This is a great opportunity for the two to practice team building and health advocacy while challenging leadership in both disciplines. (APA, 2017)

According to APA (2017), there is also “The Planning and Community Health Center” which is a program that is nationwide. This center uses research, place-based investments, and education as tools to collaborate the public health and planning practice. They focus on active living, healthy eating, and health in planning policies. This center understands that urban planners should help create healthy and safe spaces for everyone. They have been working on plan4health along with other projects such as the “Growing Food Connections” which is a project that joined the University of Buffalo to target food deserts in rural communities nationwide. The APA assisted them by developing policy tools and trainings to help reconnect the government with local farmers and the overall vulnerable population. Another example is the “Essential Info Packet: Planning & Zoning for Health in the Built Environment” which is a free resource that was funded by the centers for disease control and prevention. EIP is a great tool for planners to learn how to integrate health and policy. This guides them to consider the overall built environment when doing their work (APA, 2017).

Some of their completed projects include the “Healthy Communities Through Collaboration” which is a project that took place in 2003 where the APA collaborated
with the National Association of County and City Health Officials (NACCHO) and provided recommendations and strategies to reconnect land use planning, community design, and public health. “Planning for Public Health” multi-year research study finds out what communities are doing to integrate public health in planning, what planning goals and objectives clearly include health policy such as transportation, evaluate, and conduct case studies. “Benefits of Street Scale Features for Walking and Biking” is a project that explores how street features such as sidewalks can impact physical activity. It focuses on economic and social outcomes as well (APA, 2017).

Social Determinants of Health and Environmental Health Promotion Model

Northridge, Sclar, and Biswas (2003) studied the pathways through which social, political, and economic processes combined with the physical design of cities affect the overall health of urban populations. According to the U.S. Census Bureau (2010), most Americans lived in urban areas. This model includes the built environment and social context as determinants of health (Berg, 2012).

Columbia University introduced a joint urban planning and public health framework for people to use in health impact assessments. Dr. Schulz and her group at the University of Michigan piggy backed off this idea and developed a conceptual model for racial disparities in health. They used this example for what we call the Social Determinants of Health and Environmental Health Promotion Model (Figure 1).

The model has four factors, the first being the fundamental level which has 3 domains: the natural environment, macrosocial factors, and inequalities. The second is the intermediate level. This has 2 domains which are the built environment (land use,
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transportation systems, and buildings) and the social context (community investment, public and fiscal policies, and civic participation). Northridge and Schulz emphasize this factor because they believe the impact of the built environment is subject to policy changes and interventions in these domains could prove effectiveness in healthier cities.

The third factor is called Proximate. This influences health and well-being and has two main domains: stressors (violent crime, financial insecurity, and environmental toxins), and social integration and social support (including the shape of social networks and the resources available within networks). Because public health professionals focus on health behaviors such as dietary practices and health screenings, health behaviors are included as a transitional domain. The last factor is Health and Well-being which includes health outcomes such as obesity, injury and violence, respiratory health, and others and well-being includes hope/despair, life satisfaction, and happiness. (Northridge, Sclar, and Biswas, 2003)

Figure 1: Social Determinants of Health and Environmental Health Promotion (Adapted from: Northridge, Sclar, and Biswas, 2003)
The green box in Figure 1 indicates efforts traditionally thought of as the domain of urban planning and the blue box indicates traditional public health. However, the model illustrates the interconnectivity between the different factors and highlights the need for professional collaboration.

This model leads to many potential collaboration opportunities, Northridge and Sclar and Biswas (2003) also review Public Health literature finding that there is evident research that links the effects of housing to health. They state that it’s important to converting these types of studies and research about the built environment and health to action. According to Northridge, Sclar, and Biswas, methods like the health impact assessment is a great tool that will analyze the population health effects of activities that include dealing with housing, transportation, labor, energy, and education. Northridge and Biswas attended a meeting in 2002 where professionals from eight different disciplines and 10 countries from across the globe at the Harvard School of Public Health in Boston, Massachusetts. They discussed ways to use this methodology on policies including Urban Planning. There was great appreciation on the part of Urban Planning and Public Health professionals that are involved in the federal and local political processes (Northridge, Sclar, and Biswas 2003). Recognizing what these policies enact is a useful start to when it comes to putting the found research on the built environment and health toward planning for healthy and sustainable cities. According to Northridge, Sclar and Biswas, Public Health overall lacks literature that measures the physical design of the neighborhoods and communities that it studies. Current Urban Planning literature fails to distribute health determinants within social groups including demographics such as age, gender, class, sexuality, and race/ethnicity. Northridge, Sclar. and Biswas’
recommendations and strategies to move towards environmental health promotion will help reduce social, health, and environmental inequalities. Which is why it is important to understand what environmental health means before examining these interventions to improve the overall health of populations.

**Environmental Health**

The term Environment has a broad definition. Corburn, (2009) defines it as “physical hazards such as noise, air, water, and soil pollution; energy, water use, and water disposal; built environments of housing, parks, schools, streets, and other infrastructure; economic environments such as employment and housing affordability; and sociocultural environments such as historic resources and community aesthetics (Pg. 62). The rest of the physical environment is the natural environment, since waterways and parks have been modified by man. The built environment is the center for urban dwellers while the natural environment is fundamental to our well-being (Hanna & Coussens, 2001). Land use, environmental pollution, and social and/or community character are the common categories for planners when they organize an environmental review. Environmental review is a practice that helps planners identify potential environmental impacts. To better guide them with this process, local, state, and federal government created documents to tackle challenging questions such as what counts as an environmental impact.

According to The World Health Organization (WHO) the term health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This definition should inspire us to think of environmental health
like that so that we could shift the view to a more diverse approach (as cited as Hanna & Coussens, 2001). The field of Environmental Health has taught researchers, faculty, and students all about health hazards that impact humans, such as air pollution causing respiratory disease, climate change potentially spreading infectious diseases, and how neurotoxicity is sometimes caused by heavy metal (Hanna & Coussens, 2001). It has also taught us how human health is directly linked to the built environment. Hanna and Coussens describe this as an issue where we should act locally because we have to take into account the environmental consequences of how we built everything around us. While addressing the built environment has many opportunities it also has many challenges. Where should we start? Hanna and Coussens suggest that an environmental justice framework would be a great place to start. The principle that all communities should have equal protection means that health is cutting edge of the environmental justice concept.

These issues also tap into social injustice. According to Hanna & Coussens (2001), children from low-income families are eight times more likely to suffer from lead poisoning than children from higher-income families and African Americans children are five times more likely to be lead poisoned than white children. For example, back in April 2014, the city of Flint switched its water supply from Detroit’s Lake Huron to its own Flint River in efforts to save money. Residents soon after began raising concerns regarding the water taste, odor, and color. Many health accusations emerged as well (Attisha, Sadler, and Schnepp, 2016). All of these issues resulted in Safe Drinking Water Act violations. With all of the changes that Flint underwent, it was obvious that the distribution system was outdated. These changes resulted to lead contamination within its
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water sources affecting many young children and pregnant women. Public health and urban planners recognize that everyone regardless of race, socioeconomic status or location deserves a healthy environment.

Public health and urban planning need to work together to prevent events like the Flint Water Crisis from recurring in the future. Public health professionals should have a say in areas of air quality, housing, and vector control (Morris, 2006). This could potentially lead to a healthier outcome of planning Morris says. If urban planners focus on health when formatting these plans, then there will be an improvement in our community's overall health.

Model Curriculum

As more researchers are understanding the divide between public health and planners, educators are also getting involved (Botchwey et al. 2009). Botchwey et al. came up with a model curriculum for an interdisciplinary course on the built environment and public health. They believe this could potentially bridge the divide so that future planners could consider the health implications of their design, land use, or transportation decisions and future public health leaders could work closely with urban planners, zoning boards, and city councils about the built environment. Undergraduate, graduate, or continuing education students and faculty could benefit from such courses and get an opportunity to exchange ideas. Potential courses could set a stage for successful future collaboration across both fields (Botchwey et al. 2009).

When Botchwey's et al. article was published in 2009, courses on integrating the topic of the built environment and health were rare to come by in both disciplines.
According to a 2005 report on the built environment and physical activity, dual degrees in public health and planning did not include courses on this topic. Public health and planning presenters discussed two disciplines at the 2006 American Public Health Associations annual conferences called “Teaching the Built Environment-Health Connection.” (as cited in Botchwey et al. 2009).

Botchwey and colleagues believe there needs to be more done, which is why they contacted planning and public health faculty across the U.S who work at the intersection of the built environment and public health. Additionally, they conducted an internet search for courses on the two topics. They googled words and phrases such as planning for healthy cities, GIS, public health, and built environment and public health. Their results were limited, finding only 6 courses in universities across the U.S. These universities were Boston University (BU); Emory University/Georgia Institute of Technology (EU/GT); The University of California Berkeley, The University of Illinois at Chicago (UIC); The University of Texas at Austin (UT) and The University of Virginia (UVA). UVA, UT, AND UIC were taught through the planning program, while BU, and UCB were taught through public health programs or schools. EU/GT was taught through joint public health and planning programs. These courses at these universities were taught at the graduate level. Only one class allowed both graduate and undergraduate students to enroll (Botchwey et al. 2009).

Botchwey et al. contacted professors/instructors that taught these courses to obtain more information on reading lists, assignment, and student enrollment. They found that these courses were structured as a seminar which included discussions, oral presentations, classroom/off campus exercises and guest speakers. Students learn and
practice skills necessary to develop design policies to tackle public health issues like obesity. The courses were all designed similarly. First they taught the history and foundation of the interdisciplinary approach, followed by specific topics such as transportation, health disparities, food security, zoning, climate change, healthy homes and neighborhoods, sustainable communities, and others. Students also learn to use health impact assessments and environmental impact assessments as tools to apply to their practice.

Course and faculty evaluations reported that students enjoyed learning from those of the other disciplines. They also said that class discussions, guest lectures, and field trips gave them the opportunity to expand their knowledge of both viewpoints. Faculty enjoyed having students from both disciplinary backgrounds but found it difficult at times because students had different terminology, prior knowledge, and writing styles. Another issue was how joint courses in both disciplines presented inconsistent academic calendars. These comments, along with the inspiration of course design expert L. Dee Fink, led the researchers to design a course that ensures "foundational knowledge and learning opportunities" for those interested in taking an interdisciplinary course on the built environment and public health (Botchwey et al. 2009).

Fink teaches the importance of integrating situation factors, learning objectives, interactive learning activities, and feedback and assessment. For example, having students build an environment that addresses and attempts to decrease the prevalence of a specific chronic disease. Designing case studies is another good example of active-learning. Feedback and assessment procedures are helpful because they bring to light any issues and suggest strategies for improvement such as expanding lectures to include areas
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of their interest. Objectives from the 6 universities studied were reviewed to create a 15-week model that was organized into 4 units. The courses break off into units that connects with their core values of their discipline. They look at topics such as the natural/physical environment, built environmental health disparities, socioeconomic and diverse cultures, and health policy just to name a few. At the end of the course students must submit learning portfolios that are cumulative sharing personal experiences and ultimately what they learned. This model curriculum will hopefully guide faculty and students to bridge the gap between the two disciplines.

Moving Forward

The study described above was done in 2007 moving forward to 2017 it is time to reassess a program that will encourage future urban planners and public health professionals to work together.

This study will assess contemporary collaborative practice in higher education by raising questions such as "do undergraduate planning students typically take courses that address the health implications of their work?" and "do graduate students in public health take courses that describe the impact of the built environment on health?" Looking closely at undergraduate and graduate programs in public health and urban planning will be a good start in understanding if Urban Planning and Public Health programs train future professionals in relationships of planning to health. It's important to pay close attention to course requirements for both of these disciplines in accredited institutions and look at how they are teaching professionals to work together in addressing areas such as land development, transportation policies, air/water quality, and community growth.
issues. Collecting data on the available interdisciplinary courses in accredited undergraduate and graduate programs in Public Health and Urban Planning is necessary for illustrating the interconnectedness between both curriculums. Collect our data on the available interdisciplinary courses in accredited undergraduate and graduate programs in public health and urban planning. This will allow us to learn how urban planning and public health professionals are trained to work together in academic programs. Analyzing what barriers keep both disciplines from working together and also indicating ways both professionals could learn and grow from one another is a good start to interdisciplinary collaboration.
METHODS

To answer the research question of if planning and public health programs prepare students to collaborate professionally, I used a document review method to explore online course catalogs for accredited planning and public health programs.

The Planning Accreditation Board (PAB) accredits 72 masters and 16 bachelor's programs in 77 North American Universities. Students who have graduated from any one of these programs have the opportunity of doing so from an accredited program. This site is very reliable because each university has to update their information on performance to PAB, such as student achievement, number of degrees attained, cost of one academic year, student graduation rates, percentage of students who pass the AICP exam, and lastly the employment rate.

The Council on Education for Public Health (CEPH) is another reliable website that is recognized by the US Department of Education. I looked at 173 Masters schools/programs 8 standalone baccalaureate programs, excluding the schools whose catalogs were not in English. CEPH accredits schools of public health and public health programs that are offered in various universities. This agency ensures that public health education has quality in practice, research, service, and partner with organizations and communities. The masters of public health (MPH) is the primary degree that is offered on this website. For this research, I only looked at bachelor's programs that were included for universities that did not have Masters, masters of public health, and masters of urban planning. My primary focus was Masters levels programs because practice degrees for
doctorates typically prepare for research/academia and not all audience for collaborating in professional fields.

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<th>What counts as a class about health?</th>
<th>What counts as a class about planning?</th>
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<td>Population health</td>
<td>Urban planning</td>
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<td>Public health</td>
<td>Community planning</td>
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<td>Disease</td>
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<td>Built environment</td>
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<td>Medicine</td>
<td>Land use</td>
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<td>Health organizations</td>
<td>Air quality</td>
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<td>Health (&quot;fiscal health&quot;)</td>
<td>Water quality</td>
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<td>Health Disparities</td>
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<td>Epidemiology</td>
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<td>Global Health</td>
<td>GIS</td>
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<td>Environmental Health</td>
<td>Geography</td>
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First, I went to the accredited programs that were listed on the PAB and CEPI websites and visited the university websites and course catalogs for each program. Then I reviewed required and elective courses for each. After reviewing each course description, I confirmed their proper categorization using key words to identify potential relevance to the study (Table 1). For planning courses to count as a class about health I looked for
words like population health, public health, disease, medical, medicine, health organizations, health disparities, epidemiology, global health, social equity, and environmental health. For public health classes to count as planning the words urban planning, community planning, regional planning, built environment, land use, air quality, water quality, transportation, environmental justice, GIS, and geography are what I looked for. These words gave us an idea of how content overlaps in addressing areas such as land development, transportation policies, air/water quality, policy planning, community improvement, environmental justice, and health assessment.

I used Microsoft Word to transcribe and organize what each university had to offer specifically about each discipline. I had a total of three word documents that listed each university name, website, name of undergraduate/graduate public health or urban planning program and department. For undergraduate and graduate Public Health programs, I copied relevant course descriptions and noted if there were 1 or more required course about planning, 1 or more elective courses, if they’re cross listed, if there are courses about GIS/mapping, if there are environmental health courses, if there is a dual degree option and lastly if there is an accelerated program option. For planning programs, I listed if there are 1 or more required courses about health, 1 or more elective courses, if they’re cross listed, if there are courses about social equity and environmental planning, if there is an accelerated program option and if there is a dual degree option. Word let us include detailed notes for reference and discussion. I then transferred this information onto a spreadsheet using Microsoft Excel. This allowed us to prepare coded data for analysis.

This data was used to analyze our four-part research question:
1) Do undergraduate planning programs incorporate health in their curriculums?

2) Do undergraduate public health programs address planning in their curriculums?

3) Do graduate planning programs cover health?

4) Do graduate public health programs teach planning?

I analyzed the data using descriptive statistics. Specifically, I calculated the proportion of programs that offered courses in each category. These results are presented in the next section.
RESULTS

Undergraduate Analysis

When I looked at if there are Undergraduate Planning programs that mention health in their curriculum or undergraduate Public Health programs that mention planning in their curriculum, I found that there are 16 universities accredited by the Planning Accreditation Board where the highest degree offered was a bachelors and 8-standalone baccalaureate programs in Public Health accredited by the Council on Education for Public Health.

Urban planning.

Of the 16 universities, only 12% of schools had 1 or more required courses that explored the role of health in Planning. These courses explored planning for healthy cities and the past and present relationship between Public Health and the built environment. (Figure 2). Of the programs that gave students 1 or more elective course option, 12% explored health (Figure 3). I also looked at courses that were intended to be about collaboration and courses that have overlapping content despite not being marketed as such. Finally, 44% of the programs offered courses that may address Public Health topics, such as Social Justice, Social Determinants, and Inequity, although they were not identified as health courses by the university. (Figure 4).
Figure 2: Proportion of undergraduate planning programs with required courses about public health

![Pie chart showing percentages for required courses about public health]

Figure 3: Proportion of undergraduate planning programs with elective courses about public health

![Pie chart showing percentages for elective courses about public health]
Figure 4: Undergraduate planning programs with courses that may address public health topics

Undergraduate Planning programs with courses that may address Public Health topics

Public health.

Of the 8-standalone Public Health baccalaureate programs, 37% programs had 1 or more required courses about planning (Figure 5). There were no programs that gave students an elective course option that directly explored planning, but most (86%) of the universities have courses that may address planning topics such as Environmental Health, Sustainability, and GIS (Figure 6). Course requirements in the Environmental Health Departments of public health programs mention planning concepts such as sustainable sanitation, water quality, wastewater, transportation policies, and environmental health policy and law.
Figure 5: Undergraduate public health programs with required courses about planning

Undergraduate Public Health Programs with Required Courses about Planning

- Yes: 37%
- No: 63%

Figure 6: Undergraduate public health programs with courses that may address planning topics

Undergraduate Public Health Programs with Courses that May Address Planning

- Yes: 14%
- No: 86%
Graduate Analysis

I also looked at 72 Graduate Planning Programs, and 173 Masters of Public Health (MPH) programs to report whether or not graduate Planning Programs and Public Health programs are mentioning their counterparts in their curriculum. Forty-six of the schools I looked at were dually accredited in Planning and Public Health.

Urban planning.

My findings include that of the 72 Planning Programs, 25% of the universities have 1 or more required courses on health (Figure 7), and 46% of the programs offer 1 or more elective courses about health (Figure 8). Courses that tap into public health topics such as Social Justice were 80% of the programs (Table 2).

Figure 7: Graduate planning programs with required courses about public health
Figure 8: Graduate planning programs with elective courses about health

![Graduate Planning Programs with Elective Courses about Health](image)

Table 2: Additional characteristics of graduate planning programs

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<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Dual Planning and MPH Degree</td>
<td>21%</td>
</tr>
<tr>
<td>Courses about Social Justice</td>
<td>80%</td>
</tr>
<tr>
<td>Accelerated BS/MUP program</td>
<td>24%</td>
</tr>
</tbody>
</table>
Public health.

For MPH programs, 5% had 1 or more required courses about Planning (Figure 9), and 21% of the universities offered 1 or more elective course options about Planning (Figure 10). Most schools (95%) tapped into environmental health and 40% had courses on GIS/Mapping (Table 3).

Figure 9: Graduate public health programs with required courses about planning
Figure 10: Graduate public health programs with elective courses about planning

Table 3: Additional characteristics of graduate public health programs

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Degree MPH and Planning Degree</td>
<td>6%</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>95%</td>
</tr>
<tr>
<td>GIS/Mapping</td>
<td>40%</td>
</tr>
<tr>
<td>Accelerated program</td>
<td>25%</td>
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</table>
Accelerated bachelors to masters

I also found that these Graduate level courses have accelerated programs. where exceptional undergraduate students could quickly obtain a graduate level Planning or Public Health degree. I reported that 24% of Planning programs give this accelerated/combined option to their students (Table 2), and 25% of Public Health programs offer this degree (Table 3).

Dual degree option

Another degree option offered in many of the universities I looked at, is a Dual Masters in MPH and MUP. Twenty-one percent of the accredited Planning Programs I looked at had a dual MPH/MUP degree (Table 2). While only 6% of accredited Public Health programs offered a dual degree.

The preceding paragraph refers to dual degree programs regardless of the accreditation status of the second program. However, 46 universities are specifically accredited by both PAB and CEPH. Of these 46 dually accredited schools, 14 schools offered an MPH/MUP degree, although 3 universities only mentioned it on their Planning website.
DISCUSSION

This study used document review to evaluate the following research questions:

1) Do undergraduate planning programs incorporate health in their curriculums?

2) Do undergraduate public health programs address planning in their curriculums?

3) Do graduate planning programs cover health?

4) Do graduate public health programs teach planning?

After reviewing many course catalogs, I discovered that undergraduate and graduate level Planning and Public Health courses mention many of the same topics, including socioeconomic issues, environmental justice, and health disparities.

Urban Planning programs

Most MUP courses (80%) tap into Public Health topics. Some Planning programs offer students methods and tools such as the Health Impact Assessment course, which prepares students to analyze the potential health impacts of proposed policies and projects that assist decision-makers about these impacts. Of the 72 graduate Planning Programs, 25% required 1 or more courses about health. Planning concentrations on social justice, transportation, and sustainability connect the communities I live in to environmental issues, and require students to learn about sustainable transportation systems, climate change, equity. Students also explore how inequalities in urban environment and housing quality contribute to health disparities. These concentrations also study special
populations such as the poor, the elderly, the disabled, homeless, and minorities. Planning programs that offered courses on the built environment did a great job at exploring what makes a healthy city, and almost half of the programs (46%) offered an elective course about health.

Public Health programs

Public health programs also study special populations just as Planning programs do, and they tackle all the factors that affect one's health. Public Health schools that had an Environmental Health concentration (95%) did a great job in examining the health problems certain groups face and its association with environmental hazards in a built environment. Another concentration that taps into the built environment is the Community Health Education concentration. This concentration examines how land use and transportations can have positive and negative effects on health. It touches on topics such as obesity, air quality, mental health, physical activity, and environmental justice. While 86% of MPH programs address planning concepts, only 5% require a specific planning course, this is a problem because it indicates that MPH programs do not recognize these overlapping topics with Urban Planning professions.

Public Health students are also taught to use methods and tools. There is considerable interest amongst students to learn how to use Geographic information system, 40% of the programs had a course on GIS/mapping. This course teaches students to create objective measures to analyze the relationship topics such as the relationship between physical activity and the built environment. While the two have overlapping themes in their courses there is still some untapped potential to collaborate.
Untapped Potential for collaboration

Most Planning courses mention health in their curriculum or at least offer students a list of electives that has one or two courses on health. To improve their curriculum, I suggest implementing health policy to their courses that discuss public policy. Planning schools should also offer more community health assessment courses since they already offer other assessment tools and methods.

While 86% of MPH programs address planning concepts, only 5% require a specific planning course, this is a problem because it indicates that MPH programs do not recognize their intersection with other professions. Public health programs need to do better overall, I suggest making a course on the built environment required for students in the environmental health and community health department, rather than just an elective course. Another common concentration in Public Health schools/programs is the Healthcare Administration track. I believe this concentration could potentially discuss policies and designs for diverse populations. Other courses in Public Health include community health assessment and health impact assessment. Along with these courses, curriculums could also potentially include an environmental impact assessment course. Public health courses on economic and social determinants of health could potentially relate the methods used in health disparities research to economic policies taught in planning courses.

Lastly, another great potential for collaboration would be perhaps cross listing built environment courses in planning programs with public health courses in the
environmental health concentration. It was not evident whether or not these courses were cross listed. This will give students opportunities to learn together.

**Dual Programs**

A dual MPH and MUP is offered in many of the universities I looked at. Graduate students seeking this option have the opportunity to receive both degrees. This option prepares students to work in positions that integrate the two disciplines, for example they can work in community planning positions making sure there is air/water quality and waste disposal systems, or transportation planning making sure there are sustainable transportation systems while keeping in mind health, equity, and accessibility. Students who earn both degrees will learn how to increase pedestrian safety and make sure all citizens participate in fostering environmental health. A dual MPH/MUP course also teaches the relationship between food access, fitness, and public policies. I also suggest that dually accredited schools should mention the dual degree option on their Public Health academic page as well, not just they’re on their Planning website. This partnership will help students come up with the best practices and overall plan for healthier communities.

**Limitations**

There may be some discussion of these shared subjects that is not evident in the course titles and descriptions. Our document review approach only captures the major themes from a course. Some course catalogs did not have a list of course elective due to
the fact that students would choose an elective course with their advisor. There were also a couple Universities that I had to disregard because their catalogs were not in English.
CONCLUSION

There has been significant progress since Botchwey et al. initial study, but there is still room to improve. I believe that exploring Urban Planning and Public Health in schools and programs will help us illustrate interconnectedness between both curriculums and the potential for improved interprofessional education. Overall more Planning and Public Health programs should require a course or concentration about connecting both disciplines. Although, planning programs seem to be doing better, there is great potential to re-integrating the two disciplines to their original roots. It is very important that we observe Public Health and Planning policies and strategies to get a clear understanding of what could potentially be taught in programs. Planning and Public Health co-learning is a great start to empowering and encouraging students and professionals to successfully collaborating. If Urban Planners consider how designing and developing cities impact our community’s overall health, and public health leaders get more involved with decision-making policies in the overlapping topics I just discussed, then we can create healthier and sustainable cities.
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