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Global Mental Health Training in the Rollins School of Public Health's Certificate in Public
Mental Health

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Global Mental Health (GMH) training is a timely and relevant topic in public health today. The goal of this project was to get an idea of the overall coverage of GMH classes in the Certificate in Public Mental Health at Emory University's Rollins School of Public Health (RSPH) to gauge where there may be overall thematic content gaps and to create a deliverable to address a possible need for further training within the certificate. A comparative analysis was used review information from four institutions of higher learning in the United States, all of which focused on mental health, in order to assess GMH content and gaps in coverage. The result was that more course content could be added to address gaps in GMH training and practice. This project produced a tentative class description with a tentative class title as a deliverable through this special study. The deliverable supports more comprehensive training in GMH, which might lead to a lower burden of mental illness globally.

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Chapter 1: Introduction

Emory University is located in Atlanta, Georgia in the southeastern portion of the United States. Rollins School of Public Health (RSPH) is part of Emory University, and it offers multiple certificates students can earn in addition to their Master of Public Health (MPH) degree. The Certificate in Public Mental Health (CPMH) is an important opportunity at RSPH because it can train students in the topic of mental health, and ultimately it can hopefully lessen the future burden of mental illness. The certificate program will benefit from evaluation to determine if it can be more comprehensive by including more training for students interested in Global Mental Health (GMH). Specifically, this thesis seeks to assess whether an additional class in the field of GMH is beneficial for the CPMH at RSPH. Therein, the research question for this thesis is the following: **What are the gaps in coverage of GMH class content in the RSPH public mental health certificate when compared to GMH class content at other institutions?** Also, the hypothesis of this paper was that another class would be beneficial to expanding the offerings contained within the CPMH at RSPH. In order to address the research question, this thesis will 1) define public health, global health, and GMH, 2) describe the GMH burden, 3) explore current training programs, and 4) work to better understand the context of classes in GMH and locate potential overall thematic gaps in the GMH class offerings at RSPH through a comparative analysis. It is important to look at the four points listed because they will collectively assist in answering the research question.

While there are a variety of classes offered within the CPMH, there are only two classes currently offered through RSPH that focus on GMH. With that in mind, areas 1-3 above will be discussed in the literature review. While the literature review section provides an idea surrounding the overall potential need for additional training in GMH, the comparative analysis

in this thesis hopes to address the research question in terms of what content gaps might be present, for the CPMH at RSPH.

Each chapter of this thesis is carefully planned to address the research question and develop a deliverable. Chapter Two reviews the relevant literature for a greater understanding of the current context of GMH. Chapter Three of this thesis provides an understanding of the methods and analysis contained in this paper. Chapter four provides the results of the analysis, and the final chapters provide a deliverable, implications of the deliverable, and future directions.

I am seeking to understand if additional coursework could benefit the skills and training opportunities for students in the certificate at RSPH given that there are currently two GMH classes offered through the CPMH at RSPH. Therein, I am seeking to identify any gaps in the GMH content in the CPMH at RSPH.

Chapter 2: Literature Review

To help understand the importance of GMH coursework in public health, this review of the literature will explore the global burden of mental health, the most common worldwide mental health conditions, the global prevalence of mental health, and the GMH response and impact. This paper will also explore the GMH training programs, and the CPMH at RSPH to better understand training models for GMH. The information from this review will later be used to help inform a proposed class if a gap in GMH content is found for the RSPH CPMH in addition to establishing a basis for this research question.

Global Burden of Mental Health

Understanding the global burden of mental health is crucial to understanding the importance of GMH study, training, and practice. The World Health Organization [WHO] (2022b) stated that “mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community” (para. 2). With a global rise in conditions of mental health (World Health Organization [WHO], 2022d) the applied research, training and practice in this area is critical. This section of the literature review will take a deeper look into the information surrounding the recent global burden of mental health.

The health of the population includes mental health as an integral aspect and as a top cause of global disability and burden (Brown School at Washington University in St. Louis, 2022; GBD 2019 Mental Disorders Collaborators, 2022). One of the most comprehensive analyses and reviews of the global burden of mental health conditions comes from the Global Burden of Disease Study (GBD 2019 Mental Disorders Collaborators, 2022). This study assesses years lived with disability (YLDs), prevalence, disability-adjusted life-years (DALYs), and years

of life lost (YLLs) on the regional, national, and global levels through a Global Burden of Disease Study 2019 systematic analysis (GBD 2019 Mental Disorders Collaborators, 2022) that is conducted regularly.

Since 1990, there has not been a reduction in the global mental disorder burden, one of the highest contributors to the overall burden per GBD 2019 data (GBD 2019 Mental Disorders Collaborators, 2022). Data from the WHO showed that a top cause of disability is depression (World Health Organization [WHO], 2023). Further, Dattani et al. (2021) presented data from 2017 and documented the worldwide prevalence at over 3 percent for depression and anxiety, at over 0.8 percent for drug use disorder, at over 0.5 percent for bipolar disorder, at over 0.2 percent for schizophrenia, at over 0.1 percent for eating disorders, and at over 1 percent for alcohol use disorder. Dattani et al. (2021) listed the worldwide prevalence at over 10 percent in 2017 for all conditions of mental health. That said, thriving as a human is partially dependent on mental health (Arias et al., 2022).

Mental health conditions can occur in people of all ages, and suicide statistics in people of younger ages will be mentioned here. In young people aged 15-29 years, the fourth leading cause of death is suicide (WHO, 2023). The prevalence of any mental health condition in adolescents and children worldwide is about 20 percent (WHO, 2022d).

Coronavirus Disease 2019 and the Global Mental Health Burden

The disease burden from anxiety and depression was further exacerbated by the worldwide Coronavirus Disease 2019 (COVID-19) (World Health Organization [WHO], 2022c). COVID-19 exacerbated depression and anxiety, in 2020, among those who were already diagnosed (WHO, 2022c). However, COVID-19 has impacted the broader mental health system as well and this will be discussed more in a later section.

Climate Change and Global Mental Health

The relationship between climate change and the mental health burden is also important to mention due to its expansive, global reach (Lawrance et al., 2021). It is imperative to appreciate the conditions that people need to thrive (Lawrance et al., 2022). The increasingly severe and frequent climate and weather events can worsen the well-being and mental health of people (Lawrance et al., 2022). Climate change can create significant loss in resources due to natural disasters, and resulting systematic changes to the economy and to policies that can effect communities. As an example, agricultural practices could become difficult in some regions due to climate change (United States Environmental Protection Agency, 2022). Significant stressors and resulting mental health challenges can be likely after a loss of resources or jobs. Societal and other changes could be expected to potentially make it difficult for people to thrive.

However, proactive efforts toward helping people can be within reach. It is anticipated that more programs and interventions that address fears, loss, grief, and secondary trauma related to climate change might be needed. People can be equipped with skills and information from new developments in the area of public and global mental health (Lawrance, et al. 2022).

While the prevalence of mental health problems might increase due to climate change, issues in finding access to mental health services globally continues. Dévora Kestel, Director of the Department of Mental Health and Substance Abuse at WHO, stated, “there are nearly 1 billion people living with mental health conditions, yet in low- and middle-income countries, 3 out of 4 do not have access to needed services” (WHO, 2022e, para. 5). Further, Kestel stated, “by ramping up mental health and psychosocial support within disaster risk reduction and climate action, countries can do more to help protect those most at risk” (WHO, 2022e, para. 5). Therein, there is work to be done regarding climate change and mental health.

There are important points to note about GMH. Anxiety and depression are two of the most prevalent conditions of mental health worldwide (Dattani et al., 2021) and the global burden of mental health is high. COVID-19 has impacted mental health in important ways and climate change is an important component in relation to the future of mental health. As seen throughout this section, the burden of mental health is expansive globally. The information provided was important because it helped to illuminate a need for the research question regarding GMH training coverage gaps in the CPMH at RSPH.

Global Mental Health Impact and Response

Mental health conditions have a significant burden on the global community. There are many costs in relation to GMH, both human and financial, that can be associated with not providing attention to health concerns. It is important to consider the economic costs, in addition to the human costs that were considered earlier in this review to understand more about the the significance of the burden.

Studies have assessed the financial costs associated with mental conditions globally (Arias et al., 2022; The Lancet Global Health, 2020). To make a case for GMH investment, Arias et al. (2022) set out to demonstrate the global burden of mental health conditions through cost estimates. This study, formed from the Global Burden of Disease Study data in 2019, found the financial burden at around five trillion in US dollars (USD) (Arias et. al, 2022). Other data shows that every year, about one trillion USD in lost productivity is related to depression and anxiety (The Lancet Global Health, 2020). And that by 2030, the cost in terms of productivity loss due to mental health problems is projected to be at more than 5 trillion USD (The Lancet Global Health, 2020). This is an expected rise from the 2010 yearly estimate of over around 2 trillion USD (The Lancet Global Health, 2020).

Expanding the care reach for persons with mental health conditions has the potential to reduce the economic impacts of those conditions. A study by Patel (2014) stated the following:

The central issue, from a global perspective, is not just the enormous burden and staggering numbers of people affected by mental disorders, but the fact that the vast majority of these persons do not receive the care we know can greatly improve their lives. (para. 5)

People not receiving the care they need for their mental health is a core problem within GMH (Patel, 2014). In conjunction with this, there are many things that have been proposed as potential ways to better GMH. For instance, the WHO (2023) stated the following:

Increased investment is required on all fronts: for mental health awareness to increase understanding and reduce stigma; for efforts to increase access to quality mental health care and effective treatments; and for research to identify new treatments and improve existing treatments for all mental disorders. (para. 4)

Coronavirus Disease 2019 and Global Mental Health Impact and Response

A notable event that put a spotlight on GMH, COVID-19, changed the landscape of mental health. Therein, COVID-19 is a timely and relevant component to discuss in this literature review as it can also relate to the economic impacts. The world has seen a greater urgency in improving systems of mental health due to worldwide crises that are ongoing, such as COVID-19 (World Health Organization [WHO], 2022a). Also, the COVID-19 pandemic brought highlighted the topic of mental health, and it had implications for mental health worldwide such as re-envisioning the system of mental health and, with that, new opportunities and training.

With COVID-19 seemingly entering the recovery phase, the response to GMH is changing as COVID-19 highlighted the existing capacity and the deficits that exist in our health systems, and further the interrelation between mental health and overall quality of life and productivity. Moreover, it can be argued that services in mental health have been altered forever by the pandemic emergency response (McCartan et al., 2021). The COVID-19 crisis has created changes in mental health response around the world. Many of the changes in response are still on-going and there is reason to believe that positive impacts could result from this experience, if utilized. For example, McCartan et al. (2021) found the following:

Opportunities to build on positive elements emerging from crisis include the adaptability of community-based care; the importance of lived experience in services; improving interagency collaboration; appropriate use of digital healthcare; and connecting physical and mental health. (pp. 5 & 6)

Thus, there have been different outcomes within the response to mental health during COVID-19.

So far, this literature review has provided a more detailed view of the GMH landscape. The burden of mental health worldwide including the human and financial costs associated with the burden, the data regarding common conditions of mental health worldwide, and the response and impact toward mental health worldwide all necessitate a greater need for training in GMH. Due to changes related to the COVID-19 pandemic, the need for innovation within GMH is critical. To better understand and inform this need, this literature review will turn to look at mental health training programs worldwide, and information about the curriculum within the CPMH at RSPH.

Global Mental Health Training Programs

Public health professional training is important when considering the burden of GMH and the changing state of the field in conjunction with ongoing, consistent training needs. For this thesis, it is important to understand the differences between public health, global health, and GMH. There are many definitions that scholars and organizations have used for public health, global health, and GMH.

Public Health

CDCFoundation (2023) stated, “public health is the science of protecting and improving the health of people and their communities” (para. 1). In the 1900s, education at the graduate level started in public health (Council on Education for Public Health [CEPH], 2023b). In the 1940s, an accreditation process was formally started for public health education at the graduate level (CEPH, 2023b). Public Health training is widespread and occurs inside and outside the university setting with academic training and applied practice, respectively. Some specific areas of study, and skills acquired in public health, can include monitoring and evaluation, qualitative research, and program management. In addition to GMH, topical areas of focus include examples such as nutrition, sexual and reproductive health, and infection diseases.

Global Health

Global health is a field of study that came to be known later. Koplan et al. (2009) defines global health as the following:

. . . an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasises transnational health issues, determinants, and solutions; involves many disciplines within

and beyond the health sciences and promotes inter-disciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care. (p. 1995)

While public health focuses on populations and issues in the United States, global health is distinct from public health in that it focuses on populations outside of the United States and populations that have immigrated into the United States such as refugees or asylum seekers. Some specific areas of study in global health can include human rights, qualitative research, and humanitarian emergency planning. For example, at RSPH students are offered classes in global health such as one entitled, *Epidemiological Methods in Humanitarian Emergencies* and *Program Management* (Emory University [EU], 2022b). A job might include work in epidemiology that takes place in global emergency situations. Therein, global health training and study can vary.

Global Mental Health

GMH is a rising area of sub-study within global health that can be defined in different ways. However, for the purpose of this analysis the definition of GMH from the American Psychiatric Association (APA) will be used in conjunction with the prior understanding of global health above. The American Psychiatric Association [APA] (2023) stated that “global mental health involves the study, research, and practice of improving mental health for all people worldwide” (para. 2). There are different certificate and degree training options for mental health when considering graduate-level professional training at Master of Public Health/Master of Science in Public Health (MPH/MSPH) programs. The following section will describe the roles of public health professionals in GMH and definitions of training.

Training for Global Mental Health Public Health Professionals. Existing GMH curricula are comprehensive and cover a wide range of topics including cultural

competency, ethics and human rights, and more as GMH has become more widely acknowledged (APA, 2023). When reviewing training programs, mental health specializations, and certificates, some programs within formal educational offerings in the field of public health were found. However, GMH was not found to be a certificate, program, or specialization by itself. Therein, if someone is looking for training specifically in GMH, the options seem limited.

It is clear that GMH training within public health training is a critical and timely topic. In order to address the proposed research question and to provide a foundation for the comparative analysis in the next chapter, it is important to better understand the current training at RSPH to assist in knowing if additional training is beneficial for the CPMH at RSPH.

Rollins School of Public Health Curriculum

Emory University's RSPH is accredited by the Council on Education for Public Health (CEPH) (Council on Education for Public Health [CEPH] (2023a). The CEPH (2023b) has stated its mission as the following: "CEPH assures quality in public health education and training to achieve excellence in practice, research and service, through collaboration with organizational and community partners" (para. 1). Moreover, it is important to note that RSPH and Columbia University shared a 4th place ranking for the best schools of public health in 2022 (U.S. News & World Report L.P., 2023).

Emory University RSPH offers both an MPH and an MSPH. There are six departments within RSPH: 1) Biostatistics and Bioinformatics, 2) Behavioral, Social, and Health Education Sciences, 3) Gangarosa Department of Environmental Health, 4) Epidemiology, 5) Health Policy and Management, and 6) Hubert Department of Global Health (Emory University, 2023a). In addition, there are eleven options for certificates

for students pursuing a degree at RSPH and the CPMH is one of the certificates offered (Emory University [EU], 2023b). It includes approximately nineteen class offerings that cover topics such as health and mindfulness, public health and violence, epidemiology, and more (Emory University, 2023c). While RSPH students can focus their academic training in global health and even specialize in mental health via the CPMH, there are only two GMH classes in the CPMH. This thesis seeks to understand if the current amount of GMH content offered to students is sufficient for those interested in GMH training through the CPMH, or if the certificate would benefit from having additional content due to GMH content gaps that might be located.

Relevance of Study and Current Problem Summary

RSPH trains students to become public health leaders and offers students a chance to earn a Certificate in Public Mental Health in addition to their MPH/MSPH and departmental focus. This thesis seeks to understand if additional training could be added to the current GMH training in the certificate. A comparative analysis will be conducted in order to answer the research question, and to have a better idea of the training opportunities and to identify relevancy and content coverage. Once the comparative analysis is completed, a new tentative class title and description may be proposed for the CPMH at RSPH.

Summary

This chapter reviewed the literature on GMH by looking at information surrounding the documented burden, global health response, and training. Anxiety and depression are two of the most prevalent mental health conditions experienced worldwide (Dattani et al., 2021). The burden of mental illness has a high cost both economically and in health. Climate change is an important topic in relation to mental health and future training. Also, there is a need to bolster

training in GMH, to help safeguard against the potential effects of climate change on mental health worldwide. In addition, the system of mental health and the burden has been impacted by COVID-19. Also, training and job opportunities in GMH are expansive. Overall, it is important to note that the situation surrounding GMH could benefit from further training offered in the topic, and a comparative analysis will be used to explore the potential GMH content gaps in the CPMH at RSPH.

Chapter 3: Methods

Introduction

The goal of the current section is to review GMH class offerings provided at comparable university locations to assess the content coverage of GMH classes and to identify opportunities for additional coursework for the CPMH at RSPH. If an opportunity is found, then the next step will be to develop a newly proposed class description to enhance the GMH training in the certificate at RSPH.

Research Design

A comparative analysis was determined to be the best-suited method for this thesis because, via comparisons, it illuminates the similarities and differences in information between RSPH and other university locations to determine what training may be added. Moreover, a comparative analysis was a meaningful way to identify what newly proposed class content might be added to RSPH because it helps provide further elaboration regarding explanation and not only comparison.

A comparative analysis occurs when two or more “units” of comparison are selected for comparison in an attempt to explain or elucidate a broader understanding, rather than to only describe or compare and contrast (Pickvance, 2001, p. 11). For the purposes of this thesis the “units” are university institutions.

Inclusion Criteria

There were many criteria for inclusion in this study. First, programs, specializations, and certificates were identified using specific search terms on the Association of Schools and Programs of Public Health (ASPPH) Finder¹. Programs and schools accredited by CEPH are

¹ <https://programfinder.aspph.org>

represented by the voice of the ASPPH (Association of Schools and Programs of Public Health [ASPPH], 2022) so the ASPPH is important for this study. The ASPPH finder allows one to search and review programs based on a variety of criteria, including specific areas of teaching and practice (Association of Schools and Programs of Public Health [ASPPH], 2023). The specialization, program, or certificate mentioned in the context of this paper are collectively referred to as “domains” for the duration of this paper, unless noted otherwise.

Two methods of inclusion were conducted in this study. First, the domains were identified using specific search terms on the ASPPH Academic Program Finder. The following terms were selected:

1. Under “Area of Study,” “Mental Health” was selected;
2. Under “Institution” all “CEPH accredited” institutions were selected;
3. Under “Degree,” “CERT/ND - Certificate or Non-Degree,” the “MSPH – Master of Science in Public Health,” and all the MPH programs including joint programs (see Appendix A);
4. All the listed “Delivery Methods” were included, and;
5. No other filters were included.

Secondly, the programs identified through the ASPPH program finder were thoroughly reviewed. Any domain that was concluded to have GMH classes was kept for the comparative analysis. Please see Appendix A for a full list of the inclusion criteria selected on the ASPPH Finder and for a full list of the included GMH classes.

Exclusion Criteria

My evaluation of classes excluded classes that had been cancelled or discontinued; classes that were visibly capstone-, thesis-, or practicum-based; classes that were student

research-based; classes that were clearly not geared toward the topic of mental health based on the title; and core classes that might be taken as a requirement for an MPH degree such as biostatistics and epidemiology.

Please see Appendix B for a full list of over one-hundred classes that were excluded. Any exclusions occurred to keep the analysis relevant to the goal of locating potential gaps in class offerings in GMH in the CPMH at RSPH through the assessment of GMH content coverage in the CPMH at RSPH. Please see Table 1 for the findings from the initial round of inclusion and exclusion criteria. The following section covers the procedures involved in executing the study.

Procedures

Step 1

Locate relevant programs for comparison (see Table 1). The following seven universities were located through the ASPPH Academic Program Finder Search: Brown School of Public Health (BSPH) at Washington University in St. Louis, the Rutgers School of Public Health (Rutgers SPH), the RSPH at Emory University, the Colorado School of Public Health (CSPH), the College of Public Health (CPH) at the University of South Florida, the School of Public Health (SPH), at Boston University, and the Bloomberg School of Public Health (Bloomberg SPH) at Johns Hopkins University.

Step 2

Research the seven institutions and create a full list of classes (see Appendices A and B for a list of included classes and a list of excluded classes) in order to produce a table of findings to reveal the units selected for this comparative analysis. The APA (2023) stated, “global mental health involves the study, research, and practice of improving mental health for all people worldwide” (para. 2). Using this definition and the process described here, I

determined what classes were deemed relevant. I first screened class titles to see if there was a clear indication that the topic was a GMH class. For example, if the title stated “Global Mental Health” then it would be selected. If a topic looked like it might be a GMH topic, but I could not tell, then I checked the class description for details if it could be located. If a class was general, but it seemed applicable to GMH it was included as a GMH class. Another example of a class that would be selected is one that might be based on a global population in the United States such as refugees. Therein, the classes were not required to be focused outside the United States.

The information located was used to create Table 1. The table consisted of the seven universities found in Step 1. In addition, the table included a review of five certificates in Mental Health, two MPH programs with a Mental Health emphasis, and two program specializations, one of which was a concentration. For this thesis, a program specialization was any MSPH/MPH program that could optionally be focused on Mental Health.

Table 1 was an essential component of this chapter. The table helped to illuminate what universities had GMH classes and the categories of topics for the classes. The table included the names of the universities, domain titles, the number of GMH classes offered, and what seemed to be the primary topics of those GMH classes. Those findings allowed for a further deduction of which units would be used for the comparative analysis.

Table 1**Initial Findings**

GMH Class Findings	GMH Class		GMH Class Main Subject				
	Specialization Location	# of GMH Classes	LMIC (Y/N)	MVP (Y/N)	Climate Change (Y/N)	Refugees (Y/N)	Other** (Y/N)
BSPH	• Mental and Behavioral Health Specialization	0					
Rutgers SPH	• MPH in Population Mental Health	0					
RSPH*	• Mental Health Certificate	2					Y
CSPH*	• MPH in Population Mental Health & Wellbeing • Population Mental Health and Wellbeing Certificate	1		Y			
CPH	• Concentration in Behavioral Health	0					
Boston SPH*	• Mental Health and Substance Use Certificate	1	Y				
Bloomberg SPH*	• Mental Health Policy, Economics and Services Certificate Program • Public Mental Health Research Certificate	5	Y		Y	Y	Y

Note. Table 1 is a consolidated list of GMH class findings.

Abbreviations: Marginalized and Vulnerable Populations (MVP), Low- and Middle-Income Countries (LMIC); Yes/No (Y/N); School of Public Health (SPH); The College of Public Health (CPH); Colorado School of Public Health (CSPH), Rollins School of Public Health (RSPH); Brown School of Public Health (BSPH)

*Denotes the school of Public Health analyzed **Denotes any other prominent class subjects

Step 3

The information about the GMH classes selected in Step 2 was then compared with the information from RSPH. The GMH classes in the domains selected for the analysis were

compared with the GMH classes at RSPH in order to conduct the comparative analysis, which included not only comparison, but also an attempt at explanation regarding how any gaps located might add to the content for the CPMH at RSPH. The information compared included the information from the GMH classes selected for the comparative analysis. The information included the class titles and the class descriptions to gain a comparison of the overall thematic differences and similarities to locate gaps in class content that might be missed by simply looking at the themes I created in Table 2. Table 1 shows the overall findings for the domains and the GMH classes that met the initial inclusion and exclusion criteria specified above and elucidated which domains and classes would be used for the comparative analysis.

Step 4

Data was created from the results and themes. Themes were generated (see table 2).

Table 2***GMH Content Themes***

GMH Theme Findings	GMH Class		GMH Themes
	GMH Class Identified	GMH Class in #*	Theme Emphasis Identified**
RSPH	<ul style="list-style-type: none"> • <i>Global Mental Health</i> • <i>Mental Health in Complex Humanitarian Emergencies</i> 	2 out of 19	<ul style="list-style-type: none"> • GMH • Humanitarian Emergencies and Mental Health
CSPH	<ul style="list-style-type: none"> • <i>Global Mental Health: Theory & Method (also known as) Culture & Mental Health</i> 	1 out of 22	<ul style="list-style-type: none"> • Research in GMH
Boston SPH	<ul style="list-style-type: none"> • <i>Cross-Cultural Approaches to Mental Health in Low- and Middle-Income Countries</i> 	1 out of 12	<ul style="list-style-type: none"> • GMH
Bloomberg SPH	<ul style="list-style-type: none"> • <i>Qualitative and Quantitative Methods for Mental Health and Psychosocial Research in Low Resource Settings</i> • <i>Climate Change and Mental Health: Research, Practice, and Policy Perspectives</i> • <i>Stigma and Mental Health: Issues and Interventions</i> • <i>Promoting Mental Health and Preventing Mental Disorders in Low and Middle-Income Countries</i> • <i>Mental Health and Psychosocial Needs of Refugees After Resettlement in High Income Countries</i> 	5 out of 51	<ul style="list-style-type: none"> • LMICs/High Income Countries and GMH • Climate Change and GMH • Stigma and GMH

Note. Table 2 provides a list of GMH themes that might be added to RSPH.

Abbreviations: Low- and Middle-Income Countries (LMIC); Yes/No (Y/N); School of Public Health (SPH); Rollins School of Public Health (RSPH); Colorado School of Public Health (CSPH)

*Denotes number of GMH classes out of total number of classes analyzed **Denotes major themes

found

Ethical Considerations

IRB approval was waived for this project given that it is an evaluation that is not meant to generalize findings to a broader population. As this project consisted of a reviewing public

information it was not considered human subject research, and Emory IRB approval was not required.

Chapter 4: Results

The research question for this paper is the following: **What are the gaps in coverage of GMH class content in the RSPH public mental health certificate when compared to GMH class content at other institutions?** In order to help answer this question, a comparative analysis was conducted with the following four schools or “units”: Emory University Rollins School of Public Health (RSPH), Colorado School of Public Health (CSPH), Bloomberg School of Public Health (SPH), and Boston SPH. First, information about the CPMH at RSPH was provided. Then, the GMH class offerings were compared to each other. The comparison was important because gaps or areas where class work might be added to RSPH were located, and explanation was provided where relevant during this comparative analysis. This research and comparative analysis have been completed to address the question of whether expanding the GMH offerings for students at RSPH would be possible.

Emory University Rollins School of Public Health Certificate in Public Mental Health

To provide a foundation for comparison, the CPMH at RSPH will be discussed first. Emory University RSPH is in Atlanta, GA and it provides studies toward different majors in public health. Emory University [EU] (2022c) described the mission for RSPH as follows, “the Rollins School of Public Health of Emory University impacts health and well-being through excellence in teaching, research, and the application of knowledge in partnership with domestic and global communities” (para. 1).

Students at RSPH have the option to earn the CPMH. The CPMH at RSPH is described as the following, “this interdepartmental program addresses the interface of mental health and public health and is intended to enhance the competencies of students

concentrating in any of the school’s departmental programs” (Emory University [EU], 2022a, para. 1). EU (2022a) stated the following competencies for the CPMH:

- Describe the epidemiologic burden of mental illness on US and global populations.
- Describe the major theories on the etiology of mental illness or categories of mental illness.
- Evaluate empirical evidence on social determinants of mental illnesses or categories of mental illness.
- Describe how cultural differences affect the experience of mental illness and the seeking of health services.
- Identify population-based interventions that would reduce the onset of mental illnesses or categories of mental illness.
- Describe how populations in the US receive and finance mental health services.
- Identify policy initiatives that would improve access to mental health services in the U.S.
- Identify gaps in coverage for mental health services in the US and global settings and their consequences for mental health. (para. 2)

Results from the Comparative Analysis of Program, Specialization, and Certificate Global Mental Health Offerings

Unit I (Rollins School of Public Health). The Certificate in Public Mental Health Global Mental Health Offerings

There were two GMH classes within the CPMH. These were discussed below.

The *Introduction to Global Mental Health* class was described as the following by EU (2022b):

This course focuses on the history and current state of global mental health. The goal of this course will be to explore global influences and cultural variances of mental health. We will explore these effects on incidence and prevalence, early identification and intervention, access to care, and measurement and evaluation. Social determinants of mental health and mental illness will be reviewed with emphasis on low and middle-income countries (LMICs). This course will also focus on closing “gaps” to mental health care globally, with specific focus on promising practices for mental health promotion and illness prevention, and the adaptation and application of psychological treatments in LMICs. (para 63)

The *Mental Health in Humanitarian Emergencies* class was described as the following by EU (2022b):

This course covers essential principles necessary to understand and address mental health issues in complex humanitarian emergencies. Using epidemiological and ethnographic approaches, the course highlights: mental health surveys, outcome evaluation methods, best practices and evidence-based interventions for beneficiary populations, and preparation and training for emergency responders and aid workers. (para. 25)

A full list of the classes reviewed for this program, whether they were included in this study or not, was placed in the appendices. Overall, two out of 19, of the CPMH classes reviewed at RSPH were found to be GMH classes (see Table 2). The *Mental Health in Humanitarian Emergencies* class seems to be a unique offering in GMH content with the topic of emergencies and GMH. The *Introduction to Global Mental Health* class appears to be a broad overview for GMH.

Unit II (Colorado School of Public Health). MPH in Population Mental Health & Wellbeing and Population Mental Health and Wellbeing Certificate Global Mental Health Offerings

The following classes were considered for assignment as GMH classes at CSPH:

- *Global Mental Health: Theory & Method*
- *Mind, Medicine, & Culture*

The first class found was the *Mind, Medicine, & Culture* class. However, a description could not be located for this class so it could not be determined whether or not it was a GMH class.

The *Global Mental Health: Theory & Method* was determined to be a GMH class. The *Global Mental Health: Theory & Method* class was described as a “cross-cultural study of mental health and healing; cultural, clinical, and biological perspectives; integrations of theory and method” (Colorado School of Public Health, n.d, p. 26).

The GMH class identified in this section could potentially add more in terms of GMH-specific method and theory to the content at RSPH, but otherwise the overall thematic content seemed similar. This class is important to consider because, as seen earlier in this paper, the global burden of mental health is high and populations all around the world need to be reached. While method and theory are not always taught in an applied manner, it can help a student to understand more about how to engage specific populations in order to hopefully lessen the global burden of mental health. Overall, in order to understand GMH, students need to understand how to engage the populations they might work with, so they can be adequately trained.

Unit III (Bloomberg School of Public Health). Mental Health Policy, Economics and Services Certificate Program and Public Mental Health Research Certificate Global Mental Health Offerings

There were not any GMH assigned classes for the Mental Health Policy, Economics and Services Certificate Program so it was not discussed. The GMH classes for the Public Mental Health Research Certificate are discussed below.

Climate Change and Mental Health: Research, Practice, and Policy Perspectives was described by Johns Hopkins University (n.d.d) as the following:

Examines mental health concepts of disorder, distress, well-being, and resilience in the context of climate change. Focuses on research, policy, and practice perspectives on 1) climate change exposures and their impacts on mental health and well-being, 2) social and environmental justice in climate change and mental health, 3) resilience, psychosocial adaptation, and action. Presents data on direct and indirect mental health and psychosocial impacts of chronic and acute climate change exposures. Discusses inequalities in climate change impacts on mental health with examples from across local and global contexts. Explores individual and community-level resilience, psychosocial adaptation, and areas of priority action (para.1)

A discussion of climate change and GMH would be a unique contribution to the CPMH at RSPH, so the overall thematic content seemed different and not similar to what the CPMH at RSPH offers. Climate change is an important topic in GMH, as stated earlier. Climate change can be seen as important to mental health globally. For instance, certain climate and weather circumstances that go along with the global direct climate warming impacts can worsen the well-being and mental health of all people (Lawrance et. al, 2022). Furthermore, the topic can be important to students overall regarding training enhancement given the timely nature of climate change.

Promoting mental health and preventing mental disorders in low and middle-income countries was described as the following by Johns Hopkins University (n.d.c):

Focuses on research and intervention approaches in low- and middle-income countries in the field of mental health prevention and promotion. Particularly emphasizes populations exposed to adversity and challenges students to bridge the gap between research and practice in this area. Discusses the determinants of mental health and how they can be targeted at different life stages and different socio-ecological levels (e.g., family, school, and neighborhood). Addresses such questions as ‘What is resilience, and how can it be promoted?’, ‘How can interventions prevent depression in women exposed to intimate partner violence?’, and ‘How do poverty, violence and malnutrition impact mental health?’. Uses real-world examples, and follows a case method approach. (para. 2)

This class could add a more intensive focus to GMH for the CPMH at RSPH in relation to LMICs. Those who live in LMICs encompasses over 85 percent of the population globally (Rathod, 2017), so it is important to consider class information regarding LMICs. It is important that students are trained to help the population they might work with in order to hopefully lessen the global burden of mental health. However, the current class description for *Introduction to GMH* at Emory already includes somewhat of a similar focus to what the description for the *Promoting mental health and preventing mental disorders in low and middle-income countries* class includes.

Qualitative and Quantitative Methods for Mental Health and Psychosocial Research in Low Resource Settings was described as the following by Johns Hopkins University (n.d.a):

Introduces mental health as an integral part of global health research, including using qualitative and quantitative methods to conduct needs assessments and to monitor and

evaluate interventions. Presents and critiques qualitative strategies for integrating local cultural perspectives into research models. Examines qualitative and quantitative methods of adapting psychiatric assessment tools for use cross-culturally and presents challenges for developing interventions for use in low-resource contexts. Encourages use of critical and creative thinking skills throughout to discuss the issues involved in this important area of study. (para. 2)

The class described above could add GMH research components specific to GMH and LMICs in the CPMH at RSPH, so the CPMH was not really similar thematically. Research in health services is a priority of GMH (Collins, 2020), so students in the CPMH at RSPH might benefit from the alternate training that is specifically set to be geared toward GMH. Overall, an additional research component might be helpful to add to the certificate at RSPH to enable students to be more prepared to research in the field and to potentially help to lower the global burden of mental health.

Mental Health and Psychosocial Needs of Refugees After Resettlement in High Income Countries was described as the following by Johns Hopkins University (n.d.e):

Provides a broad understanding of the refugee resettlement process and presents data on the epidemiology of mental health and psychosocial problems among refugees resettled in high income countries like the U.S. Introduces methods for measurement and evaluation of these problems and prepares students to be able to design mental health studies among this population. Explores mental health treatment options and service utilization among resettled refugees in high income countries. (para. 3)

GMH is important in every part of the world including low-, middle-, and high-income countries and the class content reviewed could add to the CPMH at RSPH primarily because of

its focus on high-income countries as it seems the overall thematic content has little similarity with the CPMH overall. In terms of mental health services, high-income countries seem to be in an ongoing crisis (Sashidharan et al., 2016). For training purposes, it is important for students to also learn about GMH in high-income countries to hopefully lessen the burden of GMH.

Stigma and Mental Health: Issues and Interventions was described as the following by Johns Hopkins University (n.d.b):

Provides a broad understanding of the interrelationship between stigma and mental health. Focuses on health consequences of stigma for individuals living with mental health disorders. Introduces students to intervention strategies for reducing mental health-related stigma at different health systems and ecological levels, with a focus on the role of mental health service users in stigma reduction. Prepares students to incorporate anti-stigma approaches into their own work. (para. 2)

This class could add a specific focus on stigma and GMH to the CPMH at RSPH, and seemed different in the thematic content focus compared to the CPMH at RSPH. The impact of stigma is high. Consequences of stigma are major for all and for individuals with mental health conditions in particular (Shoib et al., 2022), so it is important for students to understand stigma and the effects of stigma related to mental health conditions to be able to help potentially lower the burden of global mental health. Globally, mental health condition related stigma is highly prevalent (Shoib, et al., 2022). Also, the reduction of stigma is something that could better GMH (WHO, 2023). Therein, a primary focus on reducing stigma in GMH could be positive to add to the content of the certificate at RSPH.

Unit IV (Boston School of Public Health). Mental Health and Substance Use Certificate
Global Mental Health Offerings

There was one GMH class assigned to the Mental Health and Substance Use Certificate at Boston University (BU), *Cross-Cultural Approaches to Mental Health in Low- and Middle-Income Countries*, and it was described as the following by Boston University [BU] (n.d.):

Mental health is relatively new to the global health agenda. At the 54th World Health Assembly in 2001, the WHO and health ministers from around the world made an impassioned argument that mental health disorders be systematically measured and addressed in all countries. Since then critical progress has been made in understanding the global burden of mental illness and the challenges faced by those in need of care in low and middle-income countries or in contexts marked by armed conflict or natural disasters. Likewise, the role of culture in defining ways in which mental illness manifests itself has been incorporated into international diagnostic manuals. Nevertheless, change has been slow and many who need mental health services continue to go without diagnosis or treatment and confront ongoing stigma and discrimination. Class sessions and assignments provide students with a chance to explore the critical role played by the social, cultural, and economic context in shaping mental health and illness. (para. 1)

The brief class description for the *Introduction to GMH* class at RSPH did not differ much from the brief class description for the *Cross-Cultural Approaches to Mental Health in Low- and Middle-Income Countries* class above. Therein, this brief class description will not be used to inform the deliverable due to the overall thematic content similarity.

Summary

Chapter four of this thesis has provided an understanding of the findings of this study from the comparative analysis. A comparative analysis illuminated that similarity and difference between the classes provided an idea of general GMH content gaps in the CPMH at RSPH. A

number of important and timely topics were identified that could be added to the CPMH at RSPH through this review and comparison. These include discussions of climate change, more focus on LMICs, countries of high income, stigma, and research skills (see Table 2). Thus, there is opportunity to consider new course topics for the CPMH at RSPH. In addition to a relevant class deliverable, a new class should reflect GMH needs gleaned through the literature review of this thesis, RSPH certificate class content that is not currently available, and the overall objectives of the CPMH at RSPH.

Chapter 5: Deliverable

Proposed Global Mental Health Class with Description

I found that a class in GMH might be beneficial for the Certificate in Public Mental Health (CPMH) at RSPH, as evidenced by a review of the GMH content gaps revealed in the comparative analysis. Several opportunities for further GMH content were found based on the overall thematic differences in classes identified.

Table 2 shows the classes and themes identified in the comparative analysis. Out of Unit I (RSPH) and Unit II (CSPH), 2 of the GMH classes found were in the **Research in GMH** theme, 1 of the GMH classes was found in the **Climate change and GMH** theme, 1 of the GMH classes was found in the **Stigma and GMH** theme, and 2 of the GMH classes were found in the **LMICs/High Income Countries and GMH** theme. The other themes from the table were not used for the deliverable due to a conclusion of overall redundant content or because they were themes assigned to the CPMH at RSPH. While many classes could be tentatively proposed based on the information in this paper, this thesis recommends one tentative class title and description. The findings in this paper suggest that a tentatively proposed class and description within the theme of **Climate change and GMH** might be a good option to add to the CPMH at RSPH.

The content gap in the theme of Climate change and GMH located through the comparative analysis was a timely topic to address when considering the burden of mental illness globally, and climate change and mental health seems to be gaining momentum. Societies around the world are looking at two of the most important challenges of our time: mental health and climate change (Lawrance et al., 2021). Globally, finding mental health services is challenging. The impact and complications of climate change could further disrupt access to services. Also, climate change can create impacts on societies that can thwart people's ability to thrive. Mental

health promotion and interventions for experiences such as loss and grief related to climate change can be developed by trained professionals in the mental health field, some being public health practitioners (Lawrance et al., 2022). The potential for interventions and skills that could be developed is important to note because it helps to further the reasoning for a class that might allow students to learn more about what might be done, while developing students' entrepreneurial skills in the field of mental health. Therein, more can be offered in the CPMH at RSPH to prepare students for such challenges that they might face regarding climate change and mental health globally.

Class Description

The tentative title of the new GMH class proposed for the Mental Health Certificate at RSPH is *Global Mental Health: Climate Change and Mental Health*. This class will examine the following overarching topic: Climate change and the related global mental health promotion and mental illness prevention strategies. The **description** of the newly proposed, tentative GMH class is the following:

Global mental illness prevention and global mental health promotion, as explored within the context of climate change, will include a discussion of aspects of resilience and adaptation within the context of climate change and mental health focusing on locations worldwide. Further, possible global mental health innovations will be discussed in a real-world context.

Potential Learning Objectives:

- 1) Generate real-world ideas for global mental health promotion along with a practicing mental health professional

- 2) Understand climate change and global mental health, and discussion of global mental health resilience
- 3) Integrate the social determinants of health into a better understanding how people can thrive, even during climate change

Chapter 6: Discussion, Conclusion, and Recommendations

In summary, this paper has provided a proposed tentative class title and class description for the CPMH at RSPH, since it was found that there are opportunities for timely GMH content at the CPMH at RSPH. Chapter One of this paper provided an introduction, while chapter two provided an important review of the literature surrounding many components of the state of GMH. Chapter Three and Chapter Four provided an understanding of the design and methodology found in this paper and provided a comparative analysis in order to locate gaps in content between the CPMH at RSPH and GMH content at other institutions. Chapter 5 provided a deliverable that was proposed for the CPMH at RSPH. This chapter will discuss other items surrounding the work done in this paper.

Limitation and Delimitations

This thesis sought out to find if a new class in GMH would be beneficial for the CPMH at RSPH by assessing for GMH content gaps in the certificate at RSPH. While I was successfully able to identify an opportunity to increase course content there were some limitations. The first limitation was the inability to locate all the information deemed necessary for all the universities identified in the initial search. For instance, there was a class description that could not be located. If a class description cannot be located, then the overall GMH content gaps are less likely to be determined in a more precise way. Moreover, there were not many certificates, specializations, or MPH/MSPH programs that focus on Mental Health, nor were there many GMH classes offered. The lack of GMH class focus seemed to suggest that more training is needed in the GMH area of study. However, with the content available this allowed me to hone in on what classes could be added to the certificate at RSPH.

A second limitation was the use of class descriptions instead of class syllabi in order to determine GMH content gaps. Syllabi can change between different instructors and from one class to the next. Moreover, syllabi offer more detail about course objectives, topics, and performance activities to assess skills and learning. Therein, a future study might opt to review class syllabi to get a more precise understanding of what is covered in the GMH classes.

A third limitation was the subjectivity involved in this project. There was an inherent subjectivity in the comparative analysis since I was looking for general comparisons between the differences and similarities in class content based on my understandings. Also, subjectivity was involved in identifying classes as GMH classes based on course titles and descriptions. Thus, there may be classes that I did not select that another author might choose to select for comparison, or that I might have selected at another time. However, definitions were provided in this paper to help assign more objectivity in class selection.

Further, the information located was from publicly facing sources. Future research might delve further in to see if there are more classes that might have been missed in this study, and a researcher could gather student opinions on the tentative class offering proposed to see if there would be interest in the class. Also, since the proposed class has not been tested, future research on class effectiveness might be positive if the class ends up being implemented. Even though there have been limitations, with the increasing importance of mental health worldwide it was important to set out to see what might be added, if anything, to the CPMH at RSPH.

Strengths

Many strengths were part of this project. The comparative analysis was a strength because it allowed for an overview of certain aspects regarding the current situation surrounding the GMH classes reviewed through this paper and highlighted opportunities to broaden course

content. The classes located helped to inform the development of a tentatively and newly proposed GMH class for RSPH. Further, the literature review revealed strong support for additional class content and training, and illuminated contemporary issues to be considered for a new GMH course in the CPMH at RSPH.

Public Health Implications

The finding of this study is significant for the future of Public Health training in GMH. The hypothesis of this paper was that another class may be needed to expand the offerings contained within the CPMH at RSPH. The mechanism by which justification of additional training was found occurred through the literature review and the completed comparative analysis. There were several themes generated through the comparative analysis and there were multiple potential tentative class ideas that could have been proposed for the CPMH at RSPH. However, it seemed that climate change and GMH would be the natural class topic selection due to the information found in the literature review and in the comparative analysis. And while the tentatively proposed class title and description in this thesis have not been used or tested, it is expected that the class proposed, titled, *Global Mental Health: Climate Change and Mental Health*, could pose many benefits for the future of Public Health and for GMH.

The tentative class deliverable in this thesis can potentially provide many positive public health implications for the future. First, mental health service access is problematic globally. Dévora Kestel illuminated that only about 25 percent of individuals in LMICs have access to the services they need for conditions of mental health (WHO, 2022e). The tentative class could allow for students to come up with innovative ways to address mental health access to services.

Second, innovation is needed within the context of climate change and mental health. COVID-19 has provided an opening for innovation in the mental health field. The tentative class

proposed could allow for training that might help students become better prepared to try to lessen the future burden of mental health globally through creation of entrepreneurial ideas toward mental health promotion.

Third, the global burden of mental health weighs on the economy. By 2030, the cost of productivity loss because of mental health problems could be at more than 5 trillion USD (The Lancet Global Health, 2020). In addition, climate change can weigh on economies due to things like changes in agricultural settings that might create job losses. Therein, addressing the issues surrounding mental health and climate change by teaching students skills and helping them think about innovations might have economic benefits in the future.

Finally, the proposed deliverable in this thesis could help lessen the global burden of mental health. The information students learn about climate change and mental health might also be able to be extended to other situations in GMH since climate change is such a far-reaching topic. The future of GMH can hopefully become brighter through the information in this thesis.

Summary

In conclusion, this special study has helped to strengthen and broaden the training options in the CPMH at RSPH and ultimately, to possibly strengthen the future of GMH. More research would need to be done to conclude how helpful the newly proposed class might be. However, the public health implications of this special study can be seen as considerable in scope and can be seen as a point of hope for a brighter future in GMH.

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Appendix A

List of Inclusion Criteria from the ASPPH Search that were Selected Manually During the Search in Order to Meet the Parameters of the Study

Under “Area of Study”:

“Mental Health”

Under “Degree”:

“CERT/ND - Certificate or Non-Degree”

“MPH - Master of Public Health”

“MPH/JD - Master of Public Health/Juris Doctor”

“MPH/MBA - Master of Public”

“MPH/MD - Master of Public Health/Doctor of Medicine”

“MPH/MPA - Master of Public Health/Master of Public Administration”

“MPH/MSN - Master of Public Health/Master of Science in Nursing”

“MPH/MSW - Master of Public Health/Master of Social Work”

“MSPH - Master of Science in Public Health”

Under “Institution”:

“A.T. Still University College of Graduate Health Studies”

“American University of Beirut - Faculty of Health Sciences, Graduate Public Health Program”

“Arcadia University College of Health Sciences MPH Program”

“Baylor University Public Health Program”

“Boston University School of Public Health”

“Brown University School of Public Health”

“Campbell University Master of Science in Public Health Program”

“Case Western Reserve University MPH Program”

“Chamberlain University MPH Program”

“Charles R. Drew University of Medicine and Science MPH Program in Urban Public Health”

“Claremont Graduate University”

“Colorado School of Public Health”

“Columbia University Mailman School of Public Health”

“Consortium of Eastern Ohio Master of Public Health Program”

“Cornell University MPH Program”

“Creighton University MPH Program”

“CUNY Graduate School of Public Health and Health Policy”

“Dartmouth - Geisel School of Medicine MPH Program”

“DePaul University Master of Public Health Program”

“Des Moines University Department of Public Health”

“Drexel University Dornsife School of Public Health”

“East Carolina University MPH Program”

“East Tennessee State University College of Public Health”

“Emory University Rollins School of Public Health”

“Florida A&M University Public Health Program”

“Florida International University Robert Stempel College of Public Health and Social Work”

“George Mason University College of Public Health”

“George Washington University Milken Institute School of Public Health”

“Georgia Southern University Jiann-Ping Hsu College of Public Health”

“Georgia State University School of Public Health”

“Harvard T.H. Chan School of Public Health”

“Hofstra University MPH Program”

“Icahn School of Medicine at Mount Sinai, Graduate Program in Public Health”

“Indiana University Richard M. Fairbanks School of Public Health - Indianapolis”

“Indiana University School of Public Health - Bloomington”

“Johns Hopkins Bloomberg School of Public Health”

“Kent State University College of Public Health”

“Loma Linda University School of Public Health”

“Long Island University, Brooklyn Master of Public Health Program”

“Louisiana State University Health Sciences Center School of Public Health”

“Louisiana State University Shreveport and Louisiana State University Health Shreveport”

“Loyola University Chicago Parkinson School of Health Sciences and Public Health, Public Health Programs”

“Meharry Medical College Division of Public Health Practice”

“Mercer University Department of Public Health”

“Michigan State University MPH Program”

“National Institute of Public Health of Mexico (Instituto Nacional de Salud Publica)”

“National Taiwan University College of Public Health”

“New York Medical College, School of Health Sciences and Practice, and Institute of Public Health”

“New York University School of Global Public Health”

“North Dakota State University Department of Public Health”

“Northeastern University MPH Program”

“Northwestern University Feinberg School of Medicine Program in Public Health”

“Ohio State University College of Public Health”

“Oregon Health & Science University/Portland State University School of Public Health”

“Oregon State University College of Public Health and Human Sciences”

“Pennsylvania State University Public Health Program”

“Purdue University Department of Public Health”

“Rutgers School of Public Health”

“Sacred Heart University Master of Public Health Program”

“Saint Louis University College for Public Health and Social Justice”

“San Diego State University School of Public Health”

“Southern Connecticut State University Public Health Program”

“St. Ambrose University, Master of Public Health Program”

“St. Catherine University Public Health Program”

“St. George's University Department of Public Health and Preventive Medicine”

“Stony Brook University Program in Public Health”

“SUNY Downstate School of Public Health”

“Temple University College of Public Health”

“Texas A&M School of Public Health”

“Texas Tech University Health Sciences Center School of Population and Public Health”

“Thomas Jefferson University, College of Population Health - MPH Program”

“Touro University - California MPH Program”

“Tufts University School of Medicine, Public Health Program”

“Tulane University School of Public Health and Tropical Medicine”

“UCLA Jonathan and Karin Fielding School of Public Health”

“Uniformed Services University of the Health Sciences Public Health Program”

“University at Albany School of Public Health”

“University at Buffalo School of Public Health and Health Professions”

“University of Alabama at Birmingham School of Public Health”

“University of Arizona Mel and Enid Zuckerman College of Public Health”

“University of Arkansas for Medical Sciences Fay W. Boozman College of Public Health”

“University of California, Berkeley School of Public Health”

“University of California, Davis MPH Program”

“University of California, Irvine - Program of Public Health”

“University of Cincinnati College of Medicine MPH Program”

“University of Florida College of Public Health and Health Professions”

“University of Georgia College of Public Health”

“University of Hawai‘i at Mānoa Public Health Program”

“University of Hong Kong MPH Program”

“University of Illinois at Chicago School of Public Health”

“University of Illinois at Urbana-Champaign College of Applied Health Sciences”

“University of Iowa College of Public Health”

“University of Kansas School of Medicine KU - MPH Program”

“University of Kentucky College of Public Health”

“University of Louisville School of Public Health and Information Sciences”

“University of Maryland School of Medicine Public Health Programs”

“University of Maryland School of Public Health”

“University of Massachusetts Amherst School of Public Health and Health Sciences”

“University of Memphis School of Public Health”

“University of Miami Department of Public Health Sciences”

“University of Michigan School of Public Health”

“University of Michigan-Flint Master of Public Health”

“University of Minnesota School of Public Health”

“University of Nebraska Medical Center College of Public Health”

“University of Nevada, Las Vegas School of Public Health

“University of Nevada, Reno School of Public Health”

“University of New England Graduate Program in Public Health”

“University of New Mexico College of Population Health Master of Public Health”

“University of North Carolina at Charlotte Public Health Programs”

“University of North Carolina Gillings School of Global Public Health”

“University of North Dakota Master of Public Health Program”

“University of North Texas Health Science Center School of Public Health”

“University of Oklahoma Health Sciences Center Hudson College of Public Health”

“University of Pennsylvania Master of Public Health Program”

“University of Pittsburgh School of Public Health”

“University of Puerto Rico Graduate School of Public Health”

“University of Rochester Graduate Public Health Programs”

“University of South Carolina Arnold School of Public Health”

“University of South Florida College of Public Health”

“University of Southern California Programs in Public Health”

“University of Texas Health Science Center at Houston School of Public Health”

“University of Texas Medical Branch School of Public and Population Health”

“University of Toledo Master of Public Health Program”

“University of Utah Public Health Program”

“University of Vermont Larner College of Medicine MPH Program”

“University of Virginia MPH Program”

“University of Washington School of Public Health”

“University of Wisconsin-Milwaukee Joseph J. Zilber School of Public Health”

“Upstate Medical University Public Health Program”

“Vanderbilt University Institute for Medicine and Public Health”

“Virginia Commonwealth University Graduate Public Health Programs”

“Virginia Tech Public Health Program”

“Walden University College of Health Sciences and Public Policy”

“Washington University in St. Louis - Brown School Public Health Programs”

“West Virginia University School of Public Health”

“Wright State University MPH Program”

“Yale School of Public Health”

Under “Delivery Method”:

“Online/On-Campus Hybrid”

“On-Campus”

“Online”

Domains and Classes Included in the Comparative Analysis to Meet the Parameters of the Study

Programs/Certificates/Specializations Included:

1. Mental Health Certificate at Emory University RSPH
2. MPH in Population Mental Health & Wellbeing at Colorado School of Public Health
3. Population Mental Health and Wellbeing Certificate at Colorado School of Public Health
4. Public Mental Health Research Certificate at Johns Hopkins Bloomberg School of Public Health
5. Mental Health and Substance Use Certificate in Context

Classes Included:

1. Emory University RSPH
 - a. *Global Mental Health*
 - b. *Mental Health in Complex Humanitarian Emergencies*
2. Colorado School of Public Health
 - a. *Global Mental Health: Theory & Method or Culture & Mental Health*
3. Johns Hopkins Bloomberg School of Public Health
 - a. *Qualitative and Quantitative Methods for Mental Health and Psychosocial Research in Low Resource Settings*
 - b. *Climate Change and Mental Health: Research, Practice, and Policy Perspectives*
 - c. *Stigma and Mental Health: Issues and Interventions*
 - d. *Promoting Mental Health and Preventing Mental Disorders in Low and Middle-Income Countries*
 - e. *Mental Health and Psychosocial Needs of Refugees After Resettlement in High Income Countries*
4. Boston University School of Public Health

- a. *Cross-Cultural Approaches to Mental Health in Low- and Middle-Income Countries*

Appendix B

List of Classes that Were Excluded From the Search to Meet the Parameters of the Study

1. Mental Health and Substance Use Certificate at The School of Public Health at Boston University
 - a. *Mental Health and Public Health: A Social and Behavioral Sciences Perspective*
 - b. *Alcohol, Tobacco, and Other Drug Use: People, Populations, and Policies*
 - c. *Epidemiology of Mental Health*
 - d. *Mental Health Law*
 - e. *Women and Substance Use*
 - f. *Preventing Mental Health Disorders Among Women, Children, and Adolescents*
 - g. *Introduction to Mental Health Services*
 - h. *Mental Health Advocacy*
 - i. *Stress as a Public Health Problem*
 - j. *Trauma, Trauma-Informed Care, Recovery & Resilience*
2. MPH in Population Mental Health at Rutgers School of Public Health
 - a. *Adult Psychopathology for Public Health*
 - b. *Alcohol Use, Society, and Health: A Public Health Perspective*
 - c. *Program Planning and Evaluation*
 - d. *Mental Health Services and Systems*
 - e. *Stigma and Mental Health*
 - f. *Health Behavior and Policy Research Design and Methods*
 - g. *Long Term Effects of Child Inequality & Adversity*
 - h. *Mental Health and Aging*

- i. Health Care Economics*
 - j. Population Health & Public Policy*
 - k. Other general degree requirements and electives that were not relevant*
- 3. Concentration in Behavioral Health at The College of Public Health at the University of South Florida
 - a. Mental Health Informatics*
 - b. Translational Research Methods in Child & Adolescent Behavioral Health*
 - c. Service Learning in Adolescent Behavioral Health I*
 - d. Wraparound Interventions and Systems of Care*
 - e. Community-Based Behavioral Health Interventions for Culturally Diverse Youth*
 - f. Applications in Dissemination and Implementation Science*
 - g. Drug & Alcohol Use/Abuse*
 - h. Co-Occurring Mental & Substance Use Disorders*
 - i. Eval. & Research Methods in Community Health*
 - j. Foundations in Behavioral Health Systems*
 - k. Survey of Planning, Eval., & Accountability*
 - l. Foundations in Adolescent Behavioral Health*
 - m. Service Learning in Adolescent Behavioral Health III*
 - n. Creating Cultural Competence in Behavioral Health Organizations*
 - o. Program Development & Implementation in Children's Mental Health*
 - p. Women's Mental Health*
 - q. Comorbidity of Mental & Physical Disorders*
 - r. Epidemiology of Mental Disorders*

- s. *Advanced Research Education in Adolescent Behavioral Health*
 - t. *Service Learning in Adolescent Behavioral Health II*
 - u. *Child and Adolescent Behavioral Health Policy*
 - v. *Child & Adolescent Behavioral Health*
 - w. *Applied Leadership in Children's Behavioral Health*
 - x. *Financing of Children's Mental Health Services*
 - y. *School-Based Mental Health Services*
4. Mental and Behavioral Health Specialization at Brown School Public Health
- a. *Mental and Behavioral Health Epidemiology*
 - b. *Behavioral Health Policies and Services*
 - c. *TPS: Global Mental Health*
 - d. *TPS: Mental Health Prevention and Promotion*
 - e. *Fundamentals of Public Mental Health for Public Health*
 - f. *Public Mental Health*
5. Certificate in Public Mental Health at Emory University RSPH
- a. *Violence as a Public Health Problem*
 - b. *Mindfulness and Health*
 - c. *Prevention of Mental and Behavioral Disorders*
 - d. *Injury Prevention and Control*
 - e. *Psychosocial EPI*
 - f. *Long Term Care Policy and Practice*
 - g. *Mental Health/Medical Interface*
 - h. *Mental Health and Well-Being*

- i. Perspectives on Mental Health*
 - j. Human Learning & Memory*
 - k. Cognitive Neuroscience*
 - l. Behavioral Neuroscience*
 - m. Special Topics in Psychology*
 - n. Directed Reading*
 - o. Psychology & Ethics*
 - p. Topic Seminars: Psych: Grantwriting*
 - q. Topic Seminars: Psych: Prof. Psych Issues Consultation*
6. MPH in Population Mental Health at Colorado School of Public Health
&
Wellbeing and Population Mental Health and Wellbeing Certificate at Colorado School
of Public Health
- a. Mental Health*
 - b. Intimate Partner Violence: Epidemiology, Theory & Prevention*
 - c. Adolescent Development*
 - d. Adolescent Health*
 - e. Health & Human Rights*
 - f. Injury & Violence Epidemiology & Prevention*
 - g. Introduction to Public Health Emergency Preparedness*
 - h. Opioid Use, Overdose and Public Health*
 - i. Mental Health and Technology*
 - j. Substance Use: A Public Health Perspective*

- k. *Health Aspects of Aging*
 - l. *Health & Human Rights*
 - m. *Public Health Emergency Preparedness & Community Resiliency*
 - n. *Behavioral Health Systems & Policy*
 - o. *Mental Health & Well-being Promotion*
 - p. *Methods in Research & Evaluation*
 - q. *Population Mental Health Systems, Policy, & Advocacy*
 - r. *Social & Behavioral Factors & Health, and Epidemiology*
 - s. *Advanced Psychology: Health Psychology*
 - t. *Maternal & Child Health*
 - u. *Mind, Medicine, & Culture*
 - v. Other general degree requirements and electives that were not relevant
7. Public Mental Health Research Certificate at Johns Hopkins Bloomberg School of Public Health
- a. *Grant Writing for the Social and Behavioral Sciences*
 - b. *Psychopathology for Public Health*
 - c. *Suicide As a Public Health Problem*
 - d. *Academic & Research Ethics at BSPH*
 - e. *Suicide Prevention: Problem Solving Seminar*
 - f. *Public Health Approaches in Autism and Developmental Disabilities*
 - g. *Public Health and the Good Life*
 - h. *Psychiatric Epidemiology*
 - i. *Epidemiology of Major Mental Disorders*

- j. Social, Psychological, and Developmental Processes in the Etiology of Mental Disorders*
- k. Prevention of Mental Disorders: Public Health Interventions*
- l. Introduction to Mental Health Services*
- m. Digital and Mobile Health Research in Public Mental Health*
- n. Seminars in Research in Public Mental Health*
- o. Doctoral Seminar in Public Mental Health*
- p. Psychopathology for Public Health*
- q. The Science of Narrative: Intersectionality of Storytelling and Public Health*
- r. Statistics for Psychosocial Research: Measurement*
- s. Public Mental Health*
- t. Psychiatric Genomics*
- u. Mental Health and the Law*
- v. Methods in Implementation Science*
- w. Racism and Public Mental Health*
- x. Social, Psychological, and Developmental Processes in the Etiology of Mental Disorders*
- y. Stigma and Public Health: Issues and Interventions*
- z. Prevention of Mental Disorders: Public Health Interventions*
- aa. Seminar On Statistical Methods for Mental Health*
- bb. The Epidemiology of Substance Use and Related Problems*
- cc. Writing Publishable Manuscripts for the Social and Behavioral Sciences*
- dd. Neuroimaging: Methods and Applications in Mental and Behavioral Health*

- ee. Introduction to Behavioral and Psychiatric Genetics*
- ff. Brain and Behavior in Mental Disorders*
- gg. Childhood Victimization: a Public Health Perspective*
- hh. The Intersection of Mental and Physical Health*
- ii. Mental Health in Later Life*
- jj. School-Based Preventative Interventions and Research*
- kk. Mental Health and the Gut*
- ll. Knowledge for Managing County and Local Mental Health, Substance Use, and Developmental Disability Authorities*
- mm. Sleep and Public Health*
- nn. Mixed Methods for Research in Public Health*
- oo. Causal Mediation Analysis*
- pp. Current Issues in Military Mental Health*
- qq. Methods for Handling Missing Data in Psychosocial Research*
- rr. Autism Spectrum Disorder in Public Health*
- ss. The Science of Narrative: Why Storytelling Is Important to Research*
- tt. Mobile Mental Health Research: Planning and Conducting Ecological Momentary Assessment*
- uu. Strategies for Success: Public Mental Health Career Development and Beyond*
- vv. Grant Writing: NIH and Other Funding Sources*
- ww. Propensity Score Methods in Non-Experimental Research in Mental Health*
- xx. Prevention Research in Mental Health*
- yy. Creating Trauma Informed and Healing Policies and Practices*