



APHA 2025

ANNUAL MEETING & EXPO

Making the Public's Health a National Priority

Washington, D.C. | November 2-5, 2025

Research has shown that public health efforts to prevent disease are more cost effective - and humane - than treating chronic health conditions, so now is the time to invest in our nation's health. Health is a human right; let's make it a national priority.

The APHA Annual Meeting and Expo is the largest public health gathering of the country that bring about 12,000 professionals and partners from around the world to engage, collaborate and grow. SPH faculty and students will deliver 19 presentations including both, oral and poster formats at the expo. We are incredibly proud of our presenters from the University of Memphis School of Public Health.

The details of presentations with links to their abstracts are as follows:

Food insecurity, special education, and mental health among children in the United States: National Survey of Children's Health 2022

Charllote Boateng, Mphil and Xinhua Yu, MD, PhD, MS
University of Memphis, Memphis, TN

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Background: In 2023, 17.9 % of households with children under 18 years were affected by food insecurity. This impedes child's development due to lack of nutrition and increases the likelihood of mental health problems and learning disabilities. The effect of food insecurity on the mental health of children needs to be explored further. This study examines the impact of food insecurity on children's mental health aged 0 to 17 years in the US.

Objectives: To assess the impact of food insecurity on self-reported mental health of children aged 0 to 17 years.

Methods: Using data from the 2022 National Survey of Children's Health (N=54,103), adjusted odds ratios and 95% confidence intervals were calculated from multivariate logistic regressions using R.

Results: Children experiencing food insecurity were more likely to report mental problems than those with sufficient foods (33.0% vs. 24.4%, OR: 1.52, $p < 0.001$). Those with food insecurity were also more likely to be enrolled in special education (19.6% vs. 9%, OR: 2.46, $p < 0.001$). Older children (6-11 years: OR = 0.39, $p = 0.001$; 12-17 years: OR = 0.33, $p < 0.001$) had lower odds of having mental problems compared to children aged 0 to 5 years. Family income status and racial/ethnic backgrounds were not statistically significant.

Conclusion: Food insecurity was significantly associated with mental health problems and enrollment in special education among children in the US. Advocating for policies that provide sufficient food to children can decrease the prevalence of these challenges, leading to a healthier start for children in America.

Epidemiology Public health or related research Social and behavioral sciences

Estimating global prevalence of chemsex practice: A meta-analysis approach

Frans Judea Samosir, MPH¹, Rameshwari Prasad, MBBS, MPH¹, Rory Pfund, PhD¹ and Satish Kedia, PhD, MPH²

(1)University of Memphis, Memphis, TN, (2)University of Memphis School of Public Health, Memphis, TN

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Chemsex, or sex under the influence of substances, has severe mental and physical health outcomes and leads to adverse social consequences. Despite its growing prevalence, global estimates of chemsex vary widely depending on the socio-ecological and structural determinants. A comprehensive synthesis of empirical evidence is needed to estimate the global prevalence of chemsex. This study aims to estimate the global prevalence of past-year and lifetime engagement in chemsex among adults using meta-analysis. Scopus, PubMed, and PsycInfo were searched to identify studies reporting engagement in chemsex. Inclusion criteria included the study population being 18 years or older. Studies were excluded if they were qualitative or exclusively sampled individuals who engaged in chemsex. Two reviewers independently screened and extracted data. A random-effects meta-analysis was performed to calculate the pooled prevalence estimates where the number of individuals engaged in chemsex was the numerator and the number of participants in the study was the denominator. Subgroup analyses were based on continent and country. The study included 41 studies (2009-2021) from 15 countries across Europe, Asia, and North and South America, with a total sample size of 29,686 adults. The pooled prevalence of chemsex was estimated at 33% (95% CI:0.26, 0.40) among adults worldwide, with significant heterogeneity ($I^2=99.93\%$, $p<0.0001$). Additionally, continent ($p=0.196$) and country ($p=0.291$) level moderators did not significantly predict differences in chemsex prevalence. This study provides a comprehensive, global estimate of chemsex prevalence among adults (1 in 3 adults practice chemsex). Despite regional differences, there is no significant difference in chemsex practice between countries and continents. Future research should investigate methodological inconsistencies across studies, including variations in sampling, chemsex definitions, and measurement tools. These insights inform harm reduction strategies and research on the socio-ecological and structural determinants of chemsex-related risks.

Keywords: *chemsex, sexualized drug use, global prevalence, harm reduction*

Advocacy for health and health education Conduct evaluation related to programs, research, and other areas of practice Implementation of health education strategies, interventions and programs Planning of health education strategies, interventions, and programs Public health or related public policy Social and behavioral sciences

Abstract

Evaluation of the effectiveness of “Cook Well, Be Well” nutrition education and cooking class program in promoting healthy dietary habits

Edmore Madondo¹, Sharon Moore², Gabriella Huffstetler², Elaina Kaufman², Butch Odom², Kimberly Boone, MS, RDN, LDN², Fawaz Mzayek, MD, MPH, PhD³ and Debra Bartelli, DrPH⁴
(1)The University of Memphis, Memphis, TN, (2)Church Health, Memphis, TN, (3)University of Memphis, Memphis, TN, (4)Memphis, TN

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Background: An unhealthy diet is a significant public health problem due to its association with chronic diseases. Church Health, a faith-based healthcare organization, implemented "Cook Well Be Well" (CWBW), a nutrition program in Memphis, Tennessee that educates adult participants about the Mediterranean diet, Model for Healthy Living (MFHL), and healthy cooking techniques to prevent and manage chronic diseases. The study aim was to evaluate the effectiveness of the CWBW program in promoting healthy dietary habits.

Methods: Secondary data from CWBW, a pre-post intervention program were analyzed. Outcomes of interest included Mediterranean diet scores, MFHL scores, and cooking confidence scores. A paired samples t-test was used; mean difference (md) of the scores, 95% CI, p-value, and effect size (Cohen's *d*) were reported.

Results: There were 357 participants. Of these, 52.4% were females, African Americans (28.6%). Overall scores improved significantly (md= 5.27 95% CI: 4.31, 6.23, $p < .01$, Cohen's $d = 0.57$). Participants' Mediterranean diet scores (md= 1.17 95% CI: 0.79, 1.54, $p < .01$, Cohen's $d = 0.32$), cooking confidence scores (md = 2.67 95% CI: 2.13, 3.22, $p < .01$, Cohen's $d = 0.51$), and MFHL scores (md = 1.43 95% CI: 1.06, 1.80, $p < .01$, Cohen's $d = 0.40$) increased significantly from pre to immediate post-intervention. Changes were observed across genders, education levels, ethnic groups, income levels, and employment status.

Conclusion: Comparison of pre- and immediate post-survey data indicated that the CWBW nutrition education and cooking class program significantly improved participants' cooking skills, MFHL scores, and adherence to Mediterranean diet principles.

Administer health education strategies, interventions and programs Chronic disease management and prevention Conduct evaluation related to programs, research, and other areas of practice Epidemiology Implementation of health education strategies, interventions and programs Planning of health education strategies, interventions, and programs

Abstract

The role of self-esteem in the association between cardiovascular health and flourishing

Sharmila Acharya, MHPE and **Kallol Kumar Bhattacharyya, MBBS MA PhD**
University of Memphis, Memphis, TN

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Background: Individuals' cardiovascular health is a leading public health concern globally. However, it is still unclear how different psychosocial attributes may mediate the associations between cardiovascular health and overall well-being.

Methods: We examined participants enrolled in the Midlife in the United States (MIDUS) wave 3 study. Data were merged from the main self-administered questionnaire (SAQ) and the biomarker projects ($N = 2,573$). Participants' cardiovascular health scores were created based on Life's Essential-8 parameters defined by the American Heart Association. We used structural equation models to examine the associations between ideal cardiovascular health and overall well-being, which was measured by a composite flourishing score, including emotional, psychological, and social well-being, while controlling for covariates (socio-demographics, health, and functional status). We further examined whether participants' self-esteem mediates the association between cardiovascular health and flourishing.

Results: Findings suggested that ideal cardiovascular health, assessed by Life's Essential-8 parameters, has a positive and significant association ($b = 0.414$; $SE = 0.146$; $p = .004$) with composite flourishing. Although self-esteem has a positive and significant association ($b = 0.800$; $SE = 0.017$; $p < .001$) with composite flourishing, it does not mediate the relationship between cardiovascular health and flourishing. The associations are bidirectional.

Conclusions: The current study extends earlier research showing the impact of cardiovascular health on individuals' well-being; however, more research is needed to explore how various psychosocial attributes may boost the above relationship. Fresh policy and practice recommendations are needed to validate the current findings on more vulnerable populations, such as long-term care residents.

Advocacy for health and health education
Assessment of individual and community needs for health education
Chronic disease management and prevention
Protection of the public in relation to communicable diseases
including prevention or control
Public health or related public policy
Social and behavioral sciences

Abstract

Neonatal Outcomes of Postpartum Women with Hypertensive Disorders in Pregnancy: A Retrospective Study from a Tertiary Hospital in Bangladesh

Shongkour Roy, PhD Candidate and Michael Arthur Ofori, PhD, MPhil
Memphis, TN

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Background: Hypertension disorder in pregnancy (HDP) is associated with negative maternal and fetal health outcomes. The small for gestational age (SGA: birth-weight < 10th centile) newborns were highly associated with HDP in early pregnancy compared to large for gestational age (LGA: birth-weight > 90th centile).

Objective: The study's aim was to examine factors associated with adverse outcomes (stillbirths, SGA, and LGA) among postpartum HDP women at tertiary-level hospitals in Bangladesh.

Methods: We studied a total of 400 postpartum HDPs such as severe pre-eclampsia/eclampsia women, using secondary data from the Population Council. We used descriptive statistics for frequencies and percentages, along with logistic regression, to investigate the adverse outcomes of newborns among HDP women.

Results: Among HDP women, we found 152.5 stillbirths per 1000 live births, 8.9% LGAs, and 7.7% SGAs. The prevalence of both newborns with SGAs and LGAs was associated with severe pre-eclampsia/eclampsia, which was 80.0% and 37.9%, respectively. It was 3.17 times more likely for women with severe pre-eclampsia/eclampsia to have a stillbirth (adjusted odds ratio [AOR]: 3.17, 95% CI: 1.05–10.5) compared to women with chronic/gestational hypertension. The newborns with LGAs were less likely (AOR: 0.41, 95% CI: 0.13–1.24, $p=0.10$), and SGAs were more likely (AOR: 5.0, 95% CI: 0.63–40.2) to have severe pre-eclampsia/eclampsia than women with chronic/gestational hypertension.

Conclusion: The adverse outcomes for newborns with severe pre-eclampsia/eclampsia are notably severe. Women who birth their newborns with severe pre-eclampsia/eclampsia often have SGA, which increases the risk of low birth weight and stillbirth.

Chronic disease management and prevention Clinical medicine applied in public health Epidemiology Public health or related nursing Public health or related public policy

Abstract

Health Diplomacy Advancing Public Private Partnerships in Health Equity: A Scoping Review

Shongkour Roy, PhD Candidate¹, Brian McGoldrick, PhD¹, Niharika Jha, PhD student, MPH¹, Michael Arthur Ofori, PhD student¹, Zebunnesa Zeba, MPH¹, Nidhi Mittal, MSHI¹, Stella Dockery, MPM¹, Nichole Saulsberry-Scarboro, PhD², Michelle Taylor, MD, DrPH, MPA³ and Ashish Joshi, PhD¹

(1)University of Memphis, Memphis, TN, (2)PH-IDEAS, University of Memphis, Memphis, TN, (3)Shelby County Health Department, Memphis, TN

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Background

Health Diplomacy drives global health governance by helping countries collaborate, shape health policies, and build international relationships. Health diplomacy through public-private partnerships (PPPs) has become more important as globalization continues to link public health challenges. PPPs are particularly effective in enhancing disaster preparation and promoting health equity. Despite its increasing significance, there is an absence of thorough scholarly research that integrates the essential attributes of health diplomacy and its multidimensional influence on health equity.

Objective

The objective of this paper is to identify essential attribute of health diplomacy and investigate the role of PPPs in promoting health equity at local, global, and glocal levels.

Methods

Following Arksey and O'Malley's scoping review framework, we conducted a systematic search across PubMed, Scopus, and PsycINFO, yielding 494 articles. Our inclusion criteria focused on peer-reviewed publications that conceptualize or analyze health diplomacy, with an emphasis on its role in fostering PPPs and promoting health equity. We selected 47 articles that met the criteria and performed thematic analysis using Dedoose.

Results

Our scoping review found fundamental attributes of health diplomacy in promoting health equity via PPPs. These include fortifying collaborative governance, emergency readiness, and aligning with sustainable development goals. Our results indicate that at the local level, health diplomacy have strengthened community health systems by improving resource mobilization, cooperation among NGOs, and capacity development for digital innovations using PPPs. Health diplomacy is critical at the global level for advancing equitable access to vital medications, improving pandemic preparation, and enabling coordinated responses to public health crises via multisectoral cooperation. At the glocal level, health diplomacy helps address PPPs to transnational health challenges, such as non-communicable diseases, while ensuring that global health policies are adapted to fit local contexts effectively.

Conclusions

This scoping review illustrates the key role of health diplomacy in leveraging PPPs to address health inequities. By fostering collaborative governance, enhancing emergency preparedness, and ensuring equitable access to health resources, health diplomacy serves as a key driver in building resilient health systems. Strengthening health diplomacy efforts would help build resilient health systems and promote health equity globally.

Advocacy for health and health education Ethics, professional and legal requirements Public health administration or related administration Public health or related laws, regulations, standards, or guidelines Public health or related organizational policy, standards, or other guidelines

Mothers' Experiences of Respectful Maternity Care during Labor: A Descriptive Phenomenological Study at The KNUST Hospital of Ghana

Brandy Bonnah¹, Adwoa Fosuaa², Gifty Dwomoh², Veronica Dzomeku, Professor² and Michael Arthur Ofori¹
(1)The University of Memphis, Memphis, TN, (2)Kwame Nkrumah University of Science and Technology, KNUST., Kumasi, Ghana

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Background:

Childbirth is a significant life event where quality of care greatly impacts maternal well-being. However, disrespectful and abusive treatment during childbirth remains problematic in many healthcare settings, affecting women's experiences and satisfaction.

Objective:

To assess the perceptions of mothers on respectful maternity care during labor.

Methods:

This qualitative study used a descriptive phenomenological approach to examine mothers' experiences with respectful maternity care during childbirth at a secondary-level hospital in Kumasi, Ghana. Individual, face-to-face interviews were conducted with 12 purposively sampled mothers receiving antenatal and postnatal services, using a semi-structured interview guide in English. Data was analyzed through inductive thematic analysis using NVivo 20.0

Results:

Women viewed respectful maternity care as the absence of verbal abuse, consideration of their choices, concern for their well-being, and access to knowledgeable providers. The study revealed both positive experiences (friendly care, attention to needs) and negative ones (mistreatment, lack of informed consent, delayed care), which significantly influenced maternal satisfaction.

Conclusion:

The study emphasizes the importance of respectful maternity care in enhancing childbirth experiences and satisfaction. Healthcare providers need training in respectful communication and informed consent. Hospital management should increase maternity staffing and establish feedback mechanisms to ensure women's voices are heard.

Advocacy for health and health education Planning of health education strategies, interventions, and programs Provision of health care to the public Public health or related nursing Public health or related research

Abstract

Faith-based medical neglect in homeschooling communities: Barriers to psychological and neurodevelopmental healthcare access.

Hannah Badley¹, Aeryn L. Longuevan¹, Jonah Stewart, PhD² and Latrice C. Pichon, PhD, MPH, CHES³
(1)The University of Memphis, Memphis, TN, (2)The Coalition for Responsible Home Education, Boston, MA,
(3)The University of Memphis, Memphis, TN

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Background:

Faith-based medical neglect refers to the withholding of necessary medical care from a child by a caregiver or parent due to religious beliefs. This issue may be particularly prevalent in homeschooling communities, where restricted access to healthcare can be especially detrimental for children with psychological or neurodevelopmental disorders. This study aims to investigate how conservative religious ideologies within homeschooling communities may contribute to obstacles in obtaining essential therapeutic interventions to address mental and neurodevelopmental health issues.

Methods:

This qualitative study will analyze 61 retrospective testimonials from formerly homeschooled individuals collected by a national nonprofit in the homeschool space, the Coalition for Responsible Home Education (CRHE). Using Reflective Thematic Analysis (RTA), the study will examine how religious beliefs influenced healthcare decision-making among homeschooling families to determine the extent to which homeschooling may lead to faith-based medical neglect. The data consists of written testimonies of varying lengths, ranging from brief paragraphs to detailed personal accounts, and will be coded iteratively for emergent themes related to the medical neglect of homeschooled children due to a parent's religious beliefs.

Results:

This research seeks to identify how conservative religious ideologies within homeschooling communities may create barriers in access to care for mental health conditions and neurodevelopmental disorders. Additionally, this research aims to provide insights into how religious norms and spiritual or moral frameworks may impact access to evidence-based medical care, potentially exacerbating mental health issues and neurodevelopmental disorders.

Conclusions:

The goal of this study is to enhance understanding of how faith-based medical neglect can occur in homeschooling communities and affect access to psychological and neurodevelopmental healthcare. Findings will inform policy and advocacy efforts aimed at improving healthcare access and support for individuals within faith-based homeschooling communities. Addressing these issues may reduce health disparities and improve mental health and educational outcomes for homeschooled youth.

Advocacy for health and health education Diversity and culture Other professions or practice related to public health Social and behavioral sciences

Abstract

Personality Traits and Alcohol Use Disorders (AUD): A Scoping Review of Studies Using the COGA Dataset

Pamela Graham, Hannah Badley and William Bigler, PhD
The University of Memphis, Memphis, TN

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Background:

Alcohol use disorders (AUDs) are influenced by both genetic and environmental factors, yet the role of personality traits in the development of AUDs remains underexplored. The Collaborative Study on the Genetics of Alcoholism (COGA) is a large-scale epidemiological study that has provided valuable genetic data on AUDs, but the relationship between personality traits and AUDs progression as measured in this study has not been comprehensively reviewed.

Objective(s):

This scoping review aims to synthesize studies utilizing the COGA dataset to examine the relationship between key personality traits and AUDs to explore how these traits, assessed across various COGA study waves, may influence AUDs.

Methods:

A search across five databases—PubMed, Scopus, COGA Database, PsychINFO, and CINAHL—identified 212 studies published between 1989-2025. Eligible studies must be peer-reviewed, published in English, and focus on personality traits and AUDs using COGA data. Exclusion criteria include studies not using COGA data and studies not focused on personality traits.

Results:

Study selection is ongoing, and the final number of studies is yet to be determined. The goal of this review is to synthesize findings regarding the role of personality traits in AUD risk and progression and how these traits may interact with genetic factors in the development of AUDs.

Conclusion:

This review will deepen understanding of AUD-specific, COGA-related methodologies and findings, offering valuable insights into how its structured approach can inform research on other epigenetic studies on AUDs, SUDs, and mental health disorders.

Chronic disease management and prevention Epidemiology Public health or related education Social and behavioral sciences

Exploring gender-based health inequities and access to sexual health education in homeschooling communities: A qualitative study

Hannah G. Badley¹, Aeryn L. Longuevan² and Latrice C. Pichon, PhD, MPH, CHES²
(1)The University of Memphis, Memphis, TN, (2)The University of Memphis, Memphis, TN

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Background: Youth in homeschooling communities may experience gender-based health inequities and differential access to sexual education and reproductive healthcare. This qualitative study utilizes 61 testimonials from the Coalition for Responsible Home Education (CRHE) to examine the intersection of homeschooling, gender identity, and access to reproductive healthcare. The written testimonials varied in length, ranging from two paragraphs to several pages of text.

Methods: Through Reflective Thematic Analysis (RTA) and an Adapted Gender Analysis Framework (A-GAF), two coders developed a data dictionary and coded the text around family dynamics, barriers and facilitators to Sexual and Reproductive Healthcare (SRH) access, and the influence of conservative religious ideologies on gender identity development among previously homeschooled individuals.

Results: Six emergent themes included 1) Family Dynamics and Roles, 2) Mother as Gatekeeper, 3) Us vs. Them, 4) Failure of State and Federal Safety Nets, 5) Creation and Manipulation of Reality, and 6) Barriers and Facilitators to Sexual and Reproductive Healthcare (SRH) and Comprehensive Sexuality Education (CSE). Findings revealed gendered educational experiences of homeschooled youth, particularly in conservative religious contexts, and provided insights into gender equity and sexual health outcomes in homeschooling environments.

Conclusions: This study demonstrates that homeschooling decreased the presence of gender equity and limited access to evidence-based sexual health education, especially for those individuals homeschooled within the purview of larger conservatively religious communities.

Advocacy for health and health education Diversity and culture Social and behavioral sciences

Abstract

Social Factors Influencing Cognitive Decline in Middle-aged and Older Adults with Type II Diabetes

Prada House, MPH and Xinhua Yu, MD, PhD, MS
University of Memphis, Memphis, TN

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Background: Aging is linked to cognitive decline, often preceding significant neurological disorders. While biological and genetic factors are well-studied, the impact of social determinants of health (SDOH)—which account for 80% of health outcomes—remains underexplored in aging populations. This study investigates how social factors influence cognitive function in middle-aged and older adults in the U.S.

Objectives: To assess the impact of social factors on self-reported cognitive decline in middle-aged (45-64) and older adults (65 or above) in the U.S.

Methods: Using data from the 2022-2023 Behavioral Risk Factor Surveillance System (N=132,033), adjusted odds ratios (AORs) and 95% confidence intervals (CIs) were calculated from logistic regressions using SAS 9.4.

Results: Among middle-aged adults, psychological stress (AOR: 4.81), loneliness (AOR: 1.88), financial stress (AOR: 1.94), and income under \$15,000 (AOR: 4.67) were strongly associated with cognitive decline. In older adults, stress (AOR: 2.71), loneliness (AOR: 1.56), financial stress (AOR: 2.28), and low income (AOR: 2.60) also predicted cognitive decline. Men had higher odds of cognitive decline than women (AOR: 1.22). all $p < 0.001$. There was no statistical differences between racial/ethnic groups.

Conclusion: SDOH significantly impact cognitive health, with more on middle-aged adults than older adults. Addressing structural social factors is crucial for improving cognitive health outcomes in the at-risk populations. Public health interventions targeting these social determinants can help reduce disparities and prevent cognitive decline, ultimately improving quality of life and reducing the burden on healthcare systems.

Assessment of individual and community needs for health education Epidemiology Public health or related public policy Public health or related research Social and behavioral sciences

Abstract

Transforming Academia for Equity: Implementation at the University of Memphis

Marian Levy, DrPH, RD¹, Debra Bartelli, DrPH², Fawaz Mzayek, MD, MPH, PhD¹, Xinhua Yu, MD, PhD, MS¹, Clarion Harris, PhD, MA¹, Andrea Jacobo, DrPH¹, Briana McNeil, M.Ed.¹, Kimberly Harris, PhD³ and Sandra Silva, MM⁴

(1)University of Memphis, Memphis, TN, (2)The University of Memphis, Memphis, TN, (3)Educa Consulting, Durham, NC, (4)Change Matrix LLC, Denver, CO

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With funding from the Robert Wood Johnson Foundation (RWJF) and in partnership with the Association of Schools and Programs in Public Health (ASPPH) through the *Transforming Academia for Equity* (TAE) grant, the University of Memphis (UofM) School of Public Health (SPH) began a systematic, coordinated process to develop a strategic plan of action that supports historically underrepresented scholars and students. A 10-person guiding team was formed, consisting of UofM SPH administrators and faculty; graduate students; and experienced campus administrators from three other UofM colleges (Law, Education, and Communication & Fine Arts). The guiding team benefitted from ongoing technical assistance from Change Matrix's team of Adaptive Change Specialists (ACS), provided through the RWJF. A data-driven approach included annual climate surveys of faculty, staff, students, and recent alumni about their perceptions of inclusion and equity in SPH policies, practices, and culture. Nine listening sessions were held with SPH stakeholders (faculty, staff, students, and alumni) to elicit feedback to inform our school's vision and strategic plan of action. We identified priorities and developed activities and training sessions that included ongoing cultural humility/anti-bias and inclusion training for UofM SPH faculty and staff; a Community Agreement to promote a safe, respectful environment; and a cohort-based mentoring program (Academic Equity Fellows) for underrepresented doctoral and master's students. Salient processes and metrics have been embedded in the SPH's revised Strategic Plan. After two years of implementation, we remain committed to fostering an inclusive community in which students, staff, and faculty are valued, represented, heard, and respected.

Administration, management, leadership Diversity and culture

Abstract

Career Advantages of Artificial Intelligence Credentials in Public Health: A Mixed Methods Study

Ricky Leung, PhD¹, Rameshwari Prasad, MBBS, MPH¹, Joomi Kim¹ and Keith Kwok, MPhil, BSc²
(1)University of Memphis, Memphis, TN, (2)Hang Seng University of Hong Kong, Hong Kong, Hong Kong

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Artificial Intelligence (AI) credentials are increasingly recognized as valuable assets across various sectors, including public health. Previous research conducted by large organizations has primarily relied on surveys and lacks in-depth qualitative insights. A richer understanding of the impact of AI credentials on career advancement—using qualitative methods—can significantly inform educational strategies.

This study examines how public health students, alumni, and mid-career professionals perceive the impact of AI credentials on their career opportunities, particularly in relation to promotions, salary, and job mobility. It also explores implications for public health education and practice, including strategies for employers to assess and quantify the financial value of AI credentials.

Employing a mixed methods design, the study combines survey data with structured interviews and focus groups involving public health students, alumni, mid-career professionals, and educators. These qualitative components explore practical applications of AI training and ethical considerations, offering nuanced insights often overlooked in prior studies.

Preliminary findings suggest substantial perceived benefits from obtaining AI credentials. Participants reported improved prospects for promotion, higher salary potential, and greater ease in transitioning between roles within public health organizations. There was also strong interest in practical AI training, particularly in the application of Generative AI (GenAI) for health promotion, proposal development, and academic writing. While participants acknowledged the potential value of additional skills—such as prompt-based programming, analytics, and informatics—they emphasized the importance of flexible educational frameworks tailored to specific job functions and organizational settings. Furthermore, they underscored the need for AI to be used ethically and transparently. These findings support ongoing efforts to expand educational opportunities that promote responsible AI use in public health.

To enhance the reach and relevance of AI education, educators and institutions may consider offering innovative, nontraditional programs such as certificates, micro-credentials, and non-degree courses. Developing an evidence-based, structured framework for responsible AI education—adapted to institutional and professional contexts—will be essential to advancing the field.

Administer health education strategies, interventions and programs
Advocacy for health and health education
Assessment of individual and community needs for health education
Planning of health education strategies, interventions, and programs
Public health or related education
Social and behavioral sciences

Household Composition, Youth Violence, and Child Mental Health: Integrating Systematic Review and Empirical Findings

Clarion Harris, PhD, MA¹, Marian Levy, DrPH, RD², Latrice Pichon, PhD, MPH, CHES³, Meredith Ray, PhD² and Wesley James, PhD, MS²

(1)Memphis, TN, (2)University of Memphis, Memphis, TN, (3)The University of Memphis, Memphis, TN

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Background: Household composition significantly influences children's mental health, yet comprehensive understanding across different family structures remains limited. Integrating systematic review insights and empirical data can provide a more nuanced perspective, particularly regarding grandparent-headed and single-parent families.

Methods: This abstract presents an integrated analysis of a three-paper dissertation examining household composition, youth violence, and child mental health. This dissertation includes three studies: (1) a systematic review of 21 studies examining youth violence in grandparent-headed households, including degrees of violence, and identifying key protective and risk factors; (2) a comparative analysis using data from the National Survey of Children's Health (2018–2019 and 2021–2022 NSCH data; n=59,936 and n=93,669, respectively), examining mental health outcomes across household types; and (3) an analysis of bullying behaviors using 2021–2022 NSCH data, focused on household structure and demographic factors.

Results: The review highlighted elevated youth violence risks in grandparent-headed households. Emotional bonds and extended family support were protective. Empirical findings showed increased odds of depression in single-parent (AOR=1.8, 95% CI [1.6–2.0]) and GHH (AOR=2.2, 95% CI [1.7–2.7]) households. Behavioral problems were more likely in single-parent (AOR=1.7, 95% CI [1.5–1.9]) and GHH (AOR=3.2, 95% CI [2.6–4.0]) households. Bullying perpetration was elevated in two-parent non-married (AOR=1.5), single-parent (AOR=1.3), and GHH (AOR=1.5) households.

Conclusions: This integrated analysis shows that non-traditional household structures are associated with elevated youth violence, mental health, and behavioral risks. Public health interventions must address these disparities through targeted, family-centered strategies that strengthen household resilience and child well-being.

Social and behavioral sciences

Household composition and its impact on bullying behaviors in children: Results from a national survey

Clarion Harris, PhD, MA¹, Marian Levy, DrPH, RD², Latrice Pichon, PhD, MPH, CHES², Meredith Ray, PhD² and Wesley James, PhD, MS²
(1)Memphis, TN, (2)University of Memphis, Memphis, TN

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Background: Bullying is a significant public health issue, affecting mental health, social development, and academic outcomes. While research has focused on individual and school-based factors, the role of household composition in bullying behaviors is less explored. This study examines how different household structures (two-parent, single-parent, and grandparent-headed households) influence the likelihood of children bullying others and being bullied, with attention to gender, race, and number of children in the household.

Methods: Data from the 2021-2022 National Survey of Children's Health (NSCH; n = 104,995) were used to assess associations between household composition and bullying behaviors among children aged 6–17. Logistic regression models controlled for race, gender, and household size, while examining effect modification by these factors.

Results: Children in single-parent (AOR = 1.3, 95% CI: 1.2–1.3) and grandparent-headed households (AOR = 1.5, 95% CI: 1.4–1.7) were more likely to engage in bullying. These children also had higher odds of being bullied (Single-parent: AOR = 1.1, 95% CI: 1.1–1.2; Grandparent-headed: AOR = 1.2, 95% CI: 1.1–1.3). Gender and race moderated these associations, with male and White children showing higher rates of bullying and victimization.

Conclusion: Household composition significantly influences bullying behaviors, particularly for children in non-traditional family structures. The findings highlight the need for family-based interventions and integrated anti-bullying strategies that address both family dynamics and demographic factors.

Social and behavioral sciences

Abstract

The Role of Health Diplomacy in Global Health Crises, conflicts and peace-making: A Scoping Review

Niharika Jha, PhD student, MPH¹, Zebunnesa Zeba, MPH¹, Michael Arthur Ofori, PhD student¹, Shongkour Roy, PhD Candidate¹, Nidhi Mittal, MSHI¹, Brian McGoldrick, PhD¹, Stella Dockery, MPM¹, Nichole Saulsberry-Scarboro, PhD², Michelle Taylor, MD, DrPH, MPA³ and Ashish Joshi, PhD¹

(1)University of Memphis, Memphis, TN, (2)PH-IDEAS, University of Memphis, Memphis, TN, (3)Shelby County Health Department, Memphis, TN

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Introduction: Health diplomacy, the intersection of global health and international relations, plays a crucial role in addressing transnational health challenges. It facilitates cooperation among governments, international organizations, and stakeholders to strengthen health security, equity, and crisis response. In the face of growing global health crises, diplomatic efforts are essential for resource mobilization, policy coordination, and capacity building.

Objectives: The goal of this study is to review the extant literature to examine the role of health diplomacy in global health crises, conflicts, and peace-making, focusing on key actors, strategies, and challenges to enhance future emergency preparedness and response.

Method: This scoping review followed the Arksey and O'Malley framework to systematically map the role of health diplomacy in global health crises and conflicts. A literature search was conducted across multiple databases, including PubMed, Scopus, and Web of Science, to identify relevant peer-reviewed articles and gray literature. A total of 594 studies were screened based on predefined inclusion and exclusion criteria. Data were extracted, charted, and thematically analyzed to identify patterns and lessons for future crises. The review adhered to PRISMA-ScR guidelines to ensure methodological rigor and transparency.

Result: Findings indicate that health diplomacy facilitates cross-border collaboration, enhances outbreak response efficiency, and strengthens health systems resilience. It also contributes to conflict resolution and peace-making efforts by fostering dialogue, building trust, and promoting equitable access to healthcare. However, challenges such as political conflicts, unequal resource distribution, and limited enforcement of international agreements hinder its effectiveness. Key actors in health diplomacy include governments, international organizations, non-governmental organizations, healthcare professionals, and local communities, each playing a vital role in shaping policies and facilitating collaboration during health crises. Strengthening multilateral cooperation, enhancing transparency, and reinforcing global governance mechanisms are critical for improving health diplomacy's impact on future health emergencies.

Conclusion: Health diplomacy plays a vital role in global health crisis response by fostering international collaboration, coordinating resources, advancing healthcare capacity and promoting conflict resolution and peace building.

Diversity and culture Implementation of health education strategies, interventions and programs Public health or related public policy

Trend and association of suicidal ideation/attempt with social media use and sleep patterns among USA adolescents

Niharika Jha, PhD student, MPH¹, Bikram Adhikari, MPH¹, Biraj Neupane, PhD student, MPH², Kami Geron, MA¹, Michelle Jeu, MPH¹, Lori Ward, PhD, MS¹, Ashish Joshi, PhD¹ and Xinhua Yu, MD, PhD, MS¹
(1)University of Memphis, Memphis, TN, (2)University of Illinois, Urbana-Champaign, Champaign, IL

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Introduction: Suicide is the second leading cause of death among youth aged 10–24 globally, with suicide rates in the U.S. rising by 62% from 2007 to 2021. This study examined the trends of suicidal ideation and number of suicide attempts across before, during and after COVID-19 pandemic periods, and their association with social media use and sleep patterns among U.S. adolescents.

Methods: We analyze secondary data of 65,777 adolescents from the Youth Risk Behavior Surveillance System (YRBSS) collected before, during, and after the COVID-19 pandemic. Outcomes were suicidal ideation and suicide attempts, with social media use and sleep patterns as predictors. We performed weighted descriptive and presented numerical variables as mean and standard deviation, and categorical variables as weighted frequency and percent. We determined the association between outcome variable and predictor variables using chi-square test, univariable logistic regression and multivariable logistic regression adjusting for age, gender, grade level, mental health status, and substance use. Results were presented as odds ratio and its 95% confidence interval (CI).

Results: The findings showed that the percentage of adolescents reporting suicidal ideation rose from 15% to 17% from 2019/17 to 2021 and then to 21% in 2023. The analysis revealed significant shifts in suicidal ideation and number of suicide attempts, with increased odds of suicidal ideation in 2021 (OR = 1.334, CI: 1.171, 1.520) compared to 2017–2019, and reduced odds in 2023 (OR = 0.715, CI: 0.595, 0.859). Frequent social media use was associated with 41.0% higher odds of suicidal ideation (OR = 1.410, CI: 1.194, 1.666) and 43.3% higher odds of suicide attempts (OR = 1.433, CI: 1.168, 1.758). Sleep patterns also impacted outcomes, with participants sleeping 8 or more hours showing increased odds of suicidal ideation (OR = 1.654, CI: 1.068, 2.562), while 5 to 7 hours of sleep was linked to a reduction in suicide attempts (OR = 0.673, CI: 0.544, 0.834).

Conclusion: This study underscores the impact of social media use and sleep patterns on adolescent suicidal ideation and attempts. Findings highlight the need for targeted interventions to address these factors and improve adolescent mental health.

Biostatistics, economics Epidemiology Public health or related research Social and behavioral sciences

Abstract

Heart Disease and Stroke as Risk Factors for Cognitive Impairment and Dementia Among Older U.S. Adults: The Health and Retirement Study

Mark'Quest Ajoku, PhD, MS, MPH¹, Xinhua Yu, MD, PhD, MS², Meredith Ray, PhD², Abu Mohd Naser, PhD, MPH, MBBS³, Satish Kedia, PhD, MPH⁴, Morgan Bromley, PhD, MPH¹ and Easter Protiva Gain, PhD, MPharm²
(1)Memphis, TN, (2)University of Memphis, Memphis, TN, (3)The University of Memphis, Memphis, TN,
(4)University of Memphis School of Public Health, Memphis, TN

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Background: Cognitive changes in individuals before and after an incident CHD event are not well understood. We aim to examine how heart disease events accelerate cognitive impairment (CI) and the risk of dementia.

Methods: We conducted a survival analysis to assess the impact of cardiovascular disease on cognitive function and risk of dementia among the U.S. elderly population using data from wave 3 through wave 15 for the early cohorts of the U.S. Health and Retirement Study (HRS). We used Cox proportional hazard models to evaluate the impact of the association.

Results: This analysis included 12,249 participants. Most of the participants were female (58%) with a mean age of 58 years at baseline and an average follow-up of nearly 30 years. Most of the participants were White/Caucasian (75%), high school graduates, married/partnered, and had a total wealth of more than \$150,000. There was a 21% increased risk of CI/dementia among those with heart disease. Among older female participants with heart disease, the hazard ratio (HR) was 1.28, indicating a 28% increased risk of CI/dementia. For those who had a stroke, the HR was 2.08 (95% CI, 1.81-2.38) for CI/dementia compared to those without a stroke. Strokes among males and females were statistically significant with a HR of 1.84(95% CI, 1.49-2.78) and 2.31(95% CI, 1.89-2.73) for CI/dementia, respectively.

Conclusion: In our study, heart disease occurrences or stroke were associated with accelerated cognitive function decline/dementia. More research is needed to examine the causality between heart disease events and cognitive changes.

Chronic disease management and prevention Epidemiology

Abstract

Methodological Assessment of Social Media–Based Interventions for Substance Use Disorders: A Review of Causal Inference, Engagement Metrics, Misinformation Risk, and Ethical Considerations

Rameshwari Prasad, MBBS, MPH, Frans Judea Samosir, MPH and Ricky Leung, PhD
University of Memphis, Memphis, TN

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Background:

Social media platforms offer scalable, accessible channels for delivering interventions targeting substance use disorders (SUD). However, the methodological rigor of these interventions remains underexplored. Critical gaps persist in establishing causal validity, measuring participant engagement, addressing misinformation risks, and integrating evolving ethical frameworks, factors essential for advancing evidence-based digital public health practice.

Objective:

This systematic review, completed in July 2025, critically evaluated recent social media–based SUD interventions to assess causal inference, engagement metrics, misinformation risk, and ethical considerations.

Methods:

A systematic search of PubMed, PsycINFO, CINAHL, and Scopus was conducted per PRISMA 2020 guidelines, with a protocol registered in PROSPERO. Search terms were designed to capture studies evaluating social media–based interventions for the prevention or treatment of SUD. Two reviewers independently screened studies and resolved discrepancies through consensus. Eligible studies evaluated social media-based interventions for SUD prevention or treatment. Risk of bias was assessed using RoB 2 for randomized controlled trials (RCTs), MMAT for mixed-methods studies, and JBI checklists for cross-sectional, qualitative, and observational study designs. A structured narrative synthesis with thematic coding integrates findings across heterogeneous designs.

Results:

Forty-four studies were included: Sixteen RCTs, nine cross-sectional, six mixed-methods, seven qualitative, and five observational. Fifteen RCTs demonstrated moderate to weak causal validity. Twenty-nine studies reported varied engagement metrics, and twenty-three addressed misinformation risks. Facebook was the most used platform, followed by Reddit, Twitter, Instagram, and YouTube. Substances targeted included alcohol, tobacco, cocaine, morphine, and opioids. Ethical considerations such as privacy, data security, and algorithmic bias were inconsistently reported.

Conclusions:

Despite emerging evidence, methodological limitations in causal inference, participant engagement measurement, and misinformation risk control remain. Study heterogeneity and a lack of longitudinal designs with large, diverse, and small samples limit generalizability. Future research should prioritize rigorous, transparent methodologies and adaptive ethical frameworks to support equitable, trustworthy digital public health interventions.

Basic medical science applied in public health Clinical medicine applied in public health Ethics, professional and legal requirements Implementation of health education strategies, interventions and programs Public health or related organizational policy, standards, or other guidelines Social and behavioral sciences