

# Leveraging Behavioural Health Data for Policy Innovation: Closing the Loop Between Community Insights and Public Health Decision-Making

Feyikemi Akinyelure<sup>1</sup>

<sup>1</sup>Dora-Care Behavioral Foundation,  
Lagos State, Nigeria

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**Abstract:** Behavioural health is widely recognized as an important aspect of public health, influencing outcomes such as mental well-being, chronic disease management, and community resilience. However, despite expanding volumes of behavioural health data collected through clinical systems, internet platforms, and social services, public health policies frequently remain separated from both these data and the lived realities of the communities they intend to serve. The aim of this review is to investigate how behavioural health data can be applied to develop innovative, inclusive, and evidence-based public health policy. The findings highlight that community-driven data gathered through participatory methods such as focus groups and citizen-generated platforms provides useful context that improves the relevance and accuracy of behavioural health interventions. Advanced analytics tools can help with real-time risk forecasting, intervention prioritization, and resource optimization, especially when combined with clinical and advanced data sources. Furthermore, policy innovation in behavioural health necessitates technical solutions; institutional capacity building, ethical data governance, and the political commitment to shift power and knowledge within health institutions. Therefore, bridging the gap between behavioural health data and public health decision-making is a strategic imperative.

**Keywords:** Health Equity, Health Services, Policy Implementation, Public Health, Data-Driven Policy.

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## I. INTRODUCTION

The growing burden of behavioural health challenges, which includes substance use disorders, chronic stress, and related psychosocial illnesses, has emerged as a major priority for global public health systems (Wainberg et al., 2017; Moitra et al., 2023). Behavioural health is inextricably linked to social well-being, economic productivity, and long-term health outcomes; nonetheless, it has long been overlooked in policy discussions and under-represented in health data systems (Powell et al., 2024).

Health policymaking has relied mainly on epidemiological data and national health surveys, which frequently fail to reflect the complex social, cultural, and environmental determinants of behavioural health (Kirkbride et al., 2024). These conventional data sources may ignore localized patterns of mental discomfort, community-specific

coping techniques, or informal support networks, all of which play an important role in population health. Furthermore, there is a constant disconnect between the generation of behavioural health data and its useful application in real-time policy decisions (Purtle et al., 2020). While large-scale health databases and surveillance systems provide valuable indicators, they frequently lack granularity, timeliness, and contextual richness, rendering them ineffective for responsive and inclusive policymaking (Maddah et al., 2022). To bridge this gap, a paradigm shift that recognizes communities as active providers of ideas and collaborators in designing health systems, rather than passive beneficiaries of treatment, is required.

Community insights gained through participatory research, community health assessments, focus groups, and internet platforms are an essential supplement to conventional data. These insights represent the daily reality of many

populations, such as their behavioural health requirements, service choices, challenges to access, and perceptions of systemic injustices (Javaid et al., 2024). Therefore, integrating bottom-up knowledge into policy frameworks can improve the relevance, equality, and long-term viability of public health programs. This integration hence requires deliberate structures, tools, and institutional commitment to transform community-driven data into effective policy solutions (Oehring & Gunasekera, 2024). As the urgency to address mental health and behavioural issues grows, fuelled by factors such as urbanization, social inequality, pandemics, and shifting population dynamics, there is a need for policy responses that are data-driven and community-oriented. Without such processes, even the most advanced data systems risk becoming disconnected from those that they are intended to serve (Tonne, 2021). Therefore, this review aims to investigate how behavioural health data, when effectively integrated with community-generated insights, can be applied to develop innovative, inclusive, and evidence-based public health policy.

## II. OVERVIEW OF BEHAVIOURAL HEALTH DATA

Behavioural health refers to the connection between a person's behaviours and their mental, emotional, and physical well-being. It includes clinical conditions like depression, anxiety, substance use disorders, and trauma-related disorders, and a broader range of behaviours and coping mechanisms that affect health, such as sleep patterns, eating habits, physical activity, stress management, interpersonal relationships, and health-seeking behaviours (Gautam et al., 2024). Behavioural health takes a more holistic approach than conventional biomedical approaches, which focus largely on pathology and physiological symptoms. It recognizes that individual behaviours are determined by a complex interaction of psychological, social, cultural, and environmental elements. Chronic stress, for example, caused by economic hardship or exposure to violence, can result in dangerous behaviours, poor mental health, and physical diseases (Patterson et al., 2025). Behavioural health also reflects the dynamic interaction between the individual and society, thus collective stressors such as climate anxiety, urban overpopulation, and institutional discrimination can have a significant impact on population-level health outcomes (Deivanayagam et al., 2023).

Behavioural health is becoming increasingly recognized as an important component of public health planning and development. However, its incorporation into policy and service delivery has been hampered by stigma, underfunding, and a lack of intersectoral cooperation. Generally, behavioural health is strictly defined as mental illness or psychiatric care, leaving out preventative and community-based interventions (Gibson et al., 2021).

Furthermore, socioeconomic variables such as housing, education, food security, and community cohesiveness are frequently overlooked in behavioural health frameworks, despite their crucial role. To effectively address behavioural health in public policy, the scope must be broadened beyond clinical diagnoses to include a life-course, systems-oriented perspective that represents the various ways people experience, express, and manage behavioural health concerns (Novilla et al., 2023).

Behavioural health data is information that captures many aspects of people's psychological well-being, mental health disorders, behavioural patterns, and contacts with health care providers. It combines clinical and non-clinical data sources, such as diagnostic records, prescription data, and therapy notes, with survey responses, social media activity, mobile health app metrics, and qualitative assessments of actual experience (Thakkar et al., 2024). This information can be obtained through a variety of routes, including national health surveys, electronic health records (EHRs), psychiatric service utilization databases, school-based assessments, criminal justice systems, and community-based participatory research (Paatela et al., 2023). Recently, technological improvements have enabled real-time, user-generated data collection via digital platforms, wearable devices, and AI-powered tools, opening up new avenues for early detection, personalized therapy, and system-wide study of behavioural health patterns (Shajari et al., 2023).

In addition, the broad spectrum and complexity of behavioural health data provide considerable obstacles. Unlike biometrics or laboratory results, behavioural health data is frequently subjective, fluid, and heavily impacted by cultural norms and sociopolitical settings (Muhoza et al., 2022). For instance, distress or coping behaviours may differ among ethnic groups, gender identities, or age cohorts, making it difficult to develop standardized data sets that are both valid and inclusive. Furthermore, behavioural health data is extremely sensitive, presenting ethical considerations about privacy, permission, and possible misuse (Burke-Garcia et al., 2022). Many people are hesitant to disclose behavioural health disorders for fear of stigma, discrimination, or legal ramifications, resulting in data gaps that distort public health assessments and reinforce existing inequities. In this regard, governance remains a major form of complexity, such that behavioural health data is frequently compartmentalized across sectors (health, education, law enforcement), making integration and analysis challenging (Poddar & Chhajer, 2024). However, Khan et al., (2024) indicated that despite these drawbacks, behavioural health data, when properly collected, ethically maintained, and intelligently evaluated, has immense potential to inspire policy innovation. It can reveal service gaps, identify emerging hazards, and lay the groundwork for developing culturally relevant, evidence-based solutions that address the needs of communities.

### III. COMMUNITY INSIGHTS INTO PUBLIC HEALTH CONCERNS

Community insights are experiential knowledge, lived realities, cultural views, and localized understandings of health concerns derived directly from populations affected by public health interventions (Hood et al., 2023). In comparison to typical epidemiological data, which frequently provides a top-down, statistical portrayal of illness trends and health behaviours, community insights are founded on the opinions, perspectives, and observations of individuals facing health difficulties in real time (Okunade et al., 2023; Mesquita et al., 2025). These ideas are frequently gathered through participatory methods such as focus group discussion, community health dialogues, ethnographic research, town hall meetings, storytelling, and citizen-generated data platforms.

Additionally, statistical data may show that mental health services are underutilized in a rural area, such that policymakers can learn about residents' concerns of social judgement, a lack of confidentiality in local clinics, or deeply held cultural beliefs that view mental illness as a spiritual problem rather than a medical condition only through conversations with residents thereby revealing the value of community insights (Morales et al., 2020). Similarly, high rates of alcohol use in urban slums may be connected to economic distress, as well as communal trauma, generational marginalization, and a lack of recreational alternatives, realities that emerge vividly in community accounts but are absent from administrative databases (Kalungi et al., 2024; Turyasiima et al., 2025). Hence, without these qualitative insights, public health responses may be misplaced, ineffectual, or even destructive. As a result, community insights assist in the translation of raw data into culturally appropriate and socially relevant responses.

#### ➤ Importance of Informed Data Interpretation

Incorporating community insights into public health promotes equity, responsibility, and trust. Historically, many health systems perceived communities as passive users of services rather than active participants in policymaking (Erku et al., 2023). This extractive data gathering technique, in which communities are surveyed or studied but rarely consulted on decisions, can lead to resentment, resistance, and disengagement. However, when communities are asked to define health concerns, design solutions, and assess outcomes together, they become empowered stakeholders. Participatory methods, therefore, produce more substantial, more accurate data and establish the social infrastructure required for successful policy implementation (Palinkas et al., 2025). Mental health projects that are co-designed with locales are more likely to target relevant stressors such as school pressure, peer violence, or internet addiction, as well as employ language and delivery modes that are understandable. This approach elevates public health from a transactional service to a relationship-driven system based on mutual respect and shared ownership (Silva et al., 2023).

Furthermore, utilizing community ideas successfully necessitates purposeful effort and methodological awareness. In this regard, involvement necessitates long-term relationship building, culturally sensitive facilitation, ethical feedback mechanisms, and inclusion of different opinions, particularly those marginalized by gender, disability, ethnicity, or socioeconomic position (Rong et al., 2023). Therefore, translating community insights into policy formats also presents obstacles. Decision-makers frequently prioritize quantifiable measurements and cost-benefit assessments while dismissing rich qualitative data as anecdotal or non-representative.

Table 1: Mechanisms for Gathering Community Insights

Mechanism	Description	Strengths	Limitation	References
Community Health Surveys	Structured questionnaires distributed to community members.	Usually produces quantitative data and can cover large groups.	Nuanced or culturally unique issues may be missed; replies are determined by literacy and question framing.	Ravaghi et al., 2023; Noyes et al., 2020.
Focus Group Discussions	Structured and facilitated discussions to investigate perceptions and experiences.	Encourages open debate, gathers varied perspectives, and fosters group consensus.	Group dynamics and social desirability bias may influence results.	Basnet, 2018; Scheelbeek et al., 2020.
Participatory Action Research	Collaborative research methods mostly involve community members throughout the process.	Empowers communities; increases ownership and capacity; and provides valuable, actionable data.	Long-term engagement and trust-building are required, as well as time and resource investment.	Scheelbeek et al., 2020.
Digital Platforms and SMS Polling	Collect community feedback or perform speedy surveys using mobile phones, apps, or online platforms.	Scalable, low-cost, real-time feedback; usable in distant or low-literacy environments.	Excludes those without internet access; privacy and data ownership concerns may emerge.	Nayak & Narayan, 2019.

#### IV. POLICY INNOVATIONS IN PUBLIC HEALTH

Policy innovation in public health is the creation, adoption, and implementation of creative, adaptive, and frequently cross-disciplinary techniques to improve population health outcomes and address emergent or difficult issues. Unlike conventional policy methods that rely on rigid, top-down mechanisms, policy innovation values flexibility, experimentation, co-creation, and evidence-based decision-making to respond to changing public health requirements (Lyng et al., 2021; Abdul & Olusegun, 2024). It acknowledges that 21st-century health challenges, ranging from noncommunicable diseases and mental health crises to pandemics, urbanization, and climate-related health risks, demand new tools and technologies, and fundamentally new ways of conceptualizing, organizing, and governing health systems (Lyng et al., 2021; Javaid et al., 2024). In this context, innovation encompasses not just technology discoveries but also institutional reform, stakeholder engagement, participatory governance, data integration, and behaviourally informed policy formulation.

In behavioural health, policy innovation is essential. As such, depression, substance addiction, suicide, and chronic stress are all influenced by deeply rooted social, economic, and environmental factors. These concerns frequently span many sectors, including education, justice, housing, and employment, making them resistant to siloed or short-term policy approaches (Amaro et al., 2021). Conventional approaches that focus solely on clinical therapy or crisis response frequently neglect the larger context in which these disorders arise and persist. Innovative behavioural health policies attempt to change from reactive to proactive models by investing in prevention, early intervention, and resilience-building measures. Examples include school-based mental health programs, trauma-informed care in justice systems, financial transfers linked to mental health, and social prescribing initiatives that direct people to community support instead of or in addition to medical therapy (Singh et al., 2022; Galderisi et al., 2024).

Evidence-informed experimentation and flexible policymaking are defining features of policy innovation. This entails piloting novel therapies or delivery models, as well as conducting rapid-cycle evaluations and providing real-time feedback. Governments and public health organizations are increasingly relying on tools like behavioural insights, systems modelling, artificial intelligence, and predictive analytics to help them formulate policies and estimate the probable impacts of various treatments (Haby et al., 2025). Data labs and health innovation units are now prevalent in many high- and middle-income nations, providing safe spaces for experimentation free of typical bureaucratic restraints. These arrangements allow policymakers to test promising solutions on a modest scale, learn from the results, and scale what works, therefore reducing risk and fostering creativity (Monlezun et al., 2025).

Inclusivity and community participation are essential for meaningful policy innovation, with the most effective health policies remaining those that are co-designed with the community they are intended to serve, particularly when dealing with sensitive, stigmatized, or poorly understood behavioural health concerns (Ravaghi et al., 2023; Russell et al., 2023). Mainstream policymaking frequently dismisses local perspectives, cultural nuances, and the lived experience of marginalized communities, resulting in initiatives that are out of sync with community needs. Innovative approaches, on the other hand, place a premium on incorporating community ideas, participatory procedures, and deliberative democracy tools like citizen assemblies, community advisory boards, and digital co-creation platforms (Bosché et al., 2025). Therefore, these processes ensure that policies are more relevant and culturally appropriate, more likely to be accepted and maintained over time. Policy innovation promotes societal accountability and trust in public institutions.

#### V. IMPLEMENTATION OF DATA-DRIVEN ANALYTICS FOR MENTAL HEALTH STRATEGIES

The increasing complexity of behavioural and mental health concerns, exacerbated by increased urbanization, economic uncertainty, sociopolitical instability, and the long-term effects of the COVID-19 epidemic, necessitates the deployment of more flexible, data-driven solutions in public health (Lu & Lin, 2021). Advanced analytics tools have emerged as key enablers in this shift. These systems offer actionable insights by combining big, diversified datasets with artificial intelligence (AI), machine learning (ML), predictive modelling, and natural language processing (NLP) (Ahmed et al., 2024; Nyoni, 2025). In essence, Advanced analytics are altering how governments and organizations allocate resources, create interventions, and respond to new trends in mental health policy and programming.

##### ➤ *Data-Driven Finance and Resource Allocation*

Mental health services have long been underfunded, with funding often given based on out-of-date measures, political lobbying, or insufficient population-level statistics. Advanced analytics tools enable decision-makers to map regional and demographic concentrations of mental health need using real-time indicators such as mobile device digital phenotyping, crisis hotline trends, social media sentiment analysis, and emergency room visit data (Mahomed, 2020). Predictive models can forecast future service demand based on social determinants of health (unemployment, school dropout, and housing insecurity), allowing for a change from reactive budgeting to proactive investment (Torous et al., 2021).



### ➤ Program Design

Modern analytics enable the tailoring of mental health efforts to local requirements and populations. Public health programs are frequently based on national averages and trailing indicators, resulting in generic interventions that may overlook community-specific causes of poor mental health (Lima et al., 2021). Advanced analytics enable program designers to segment data by gender, age, socioeconomic status, geography, and even digital behaviour. Furthermore, machine learning algorithms can assess the efficacy of previous programs by correlating outcome data (e.g., hospitalization rates, medication adherence, patient satisfaction) to intervention variables. This retrospective learning loop facilitates continual improvement and dynamic program adaption, ensuring that mental health programs are responsive and evidence-based (Kanyongo & Ezugwu, 2023).

### ➤ Real-Time Data Sources

Importantly, the incorporation of real-time data sources such as social media, digital wearables, mobile health apps, and online behavior has broadened the scope of mental health. Sentiment analysis methods can detect population-wide mood and anxiety trends, particularly during disruptive events such as pandemics or natural catastrophes. Wearables may continuously track sleep patterns, heart rate variability, and activity levels, which are all biomarkers associated with mental health (Leong et al., 2022; Stein & Prost, 2024). Therefore, when paired with standard clinical data, these sources provide a comprehensive view of mental health determinants, benefiting both individual care and system-level interventions. However, this development poses ethical questions regarding monitoring, permission, data privacy, and algorithmic prejudice. As a result, the responsible use of analytics platforms must be guided by robust ethical frameworks, transparent decision criteria, and participatory data governance, which involves affected communities in designing data use protocols (Dailah et al., 2024). Despite these challenges, advanced analytics has enormous potential to transform mental health practices, particularly in low- and middle-income countries where mental health infrastructure is limited and public health systems must do more with fewer resources (Bolton et al., 2023; Atewologun et al., 2025). Therefore, cloud-based analytics systems, open-source modelling tools, and mobile-friendly data gathering technologies are making it easier for even the most resource-constrained settings to use big data for mental health planning.

## VI. CONCLUSION

The combination of behavioural health data and community insights presents an important opportunity to reconsider how public health policy is developed, implemented, and evaluated. As this research has demonstrated, the fragmentation of data systems and decision-making processes remains a significant impediment to solving complex and developing behavioural health concerns. While massive

amounts of data are collected in clinical, social, and digital settings, they are rarely transformed into usable intelligence that reflects communities' experiences and different demands. Concurrently, community opinions, which are diverse in cultural context, experiential knowledge, and social understanding, are usually excluded from formal policy frameworks, reduced to anecdotal status. Therefore, bridging this gap is critical not only for better health outcomes but also for creating more inclusive, transparent, and equitable public health systems.

Advanced analytics platforms, participatory data tools, and multi-sectoral governance models provide viable avenues for integrating behavioural health data into real-world decision-making. These tools and frameworks enable public health actors to detect early warning indications, better allocate resources, adjust interventions with higher precision, and assess effects in real time. However, as stated, technological improvement independently is insufficient. Without ethical measures, trust-building, and a purposeful commitment to diversity, data can be abused, misconstrued, or weaponized to worsen existing imbalances. This transformation therefore requires strategic changes, but also political and cultural will from funders, policymakers, researchers, and practitioners to destroy extractive data systems and replace them with participatory and reflexive alternatives.

## REFERENCES

- [1]. Abdul, K., & Olusegun, J. (2024). *Public Health Policy and Innovations in Healthcare*. [https://www.researchgate.net/publication/383312652\\_Public\\_Health\\_Policy\\_and\\_Innovations\\_in\\_Healthcare](https://www.researchgate.net/publication/383312652_Public_Health_Policy_and_Innovations_in_Healthcare)
- [2]. Ahmed, N., Saha, A. K., Al Noman, Md. A., Jim, J. R., Mridha, M. F., & Kabir, M. M. (2024). Deep learning-based natural language processing in human-agent interaction: Applications, advancements and challenges. *Natural Language Processing Journal*, 9, 100112. <https://doi.org/10.1016/j.nlp.2024.100112>
- [3]. Amaro, H., Sanchez, M., Bautista, T., & Cox, R. (2021). Social vulnerabilities for substance use: Stressors, socially toxic environments, and discrimination and racism. *Neuropharmacology*, 188(188). <https://doi.org/10.1016/j.neuropharm.2021.108518>
- [4]. Atewologun, F., Adigun, O. A., Okesanya, O. J., Hassan, H. K., Olabode, O. N., Micheal, A. S., Ahmed, M. M., Ukoaka, B. M., Idris, N. B., Oso, T. A., & Lucero-Prisno, D. E. (2025). A comprehensive review of mental health services across selected countries in sub-Saharan Africa: assessing progress, challenges, and future direction. *Discover Mental Health*, 5(1). <https://doi.org/10.1007/s44192-025-00177-7>
- [5]. Basnet, H. B. (2018). FOCUS GROUP DISCUSSION: A TOOL FOR QUALITATIVE INQUIRY. *Researcher: A Research Journal of Culture and Society*, 3(3), 81–88. <https://doi.org/10.3126/researcher.v3i3.21553>

- [6]. Bolton, P., West, J., Whitney, C., Jordans, M. J. D., Bass, J., Thornicroft, G., Murray, L., Snider, L., Eaton, J., Collins, P. Y., Ventevogel, P., Smith, S., Stein, D. J., Petersen, I., Silove, D., Ugo, V., Mahoney, J., Chammay, R. el, Contreras, C., & Eustache, E. (2023). Expanding mental health services in low- and middle-income countries: A task-shifting framework for delivery of comprehensive, collaborative, and community-based care. *Cambridge Prisms: Global Mental Health*, 10(16), e16. <https://doi.org/10.1017/gmh.2023.5>
- [7]. Bosché, M., Krust, R., Fung, A., & Pawar, A. S. (2025). Exploring Democratic Deliberation in Public Health: Bridging Division and Enhancing Community Engagement. *American Journal of Public Health*, 115(4), 500–505. <https://doi.org/10.2105/ajph.2024.307998>
- [8]. Burke-Garcia, A., Berkthold, J., Rabinowitz, L., Wagstaff, L., W. Thomas, C., Crick, C., Walsh, M. S., Mitchell, E. W., Verlenden, J. M. V., Puddy, R., Mercado, M. C., Xia, K., Aina, T., Caicedo, L., & Nelson, BA, P. (2022). Assessment of Mental Health and Coping Disparities Among Racial and Ethnic Groups Amid COVID-19 From the “How Right Now” Campaign. *Public Health Reports*, 138(1), 174–182. <https://doi.org/10.1177/00333549221121667>
- [9]. Dailah, H. G., Koriri, M., Sabei, A., Kriry, T., & Zakri, M. (2024). Artificial Intelligence in Nursing: Technological Benefits to Nurse’s Mental Health and Patient Care Quality. *Healthcare*, 12(24), 2555–2555. <https://doi.org/10.3390/healthcare12242555>
- [10]. Deivanayagam T. A., English, S., Hickel, J., Bonifacio, J., Guinto, R. R., Hill, K. X., Huq, M., Issa, R., Mulindwa, H., Heizal Patricia Nagginda, Priscila, Sujitha Selvarajah, Sharma, C., & Delan Devakumar. (2023). Envisioning environmental equity: climate change, health, and racial justice. *The Lancet*, 402(10395). [https://doi.org/10.1016/s0140-6736\(23\)00919-4](https://doi.org/10.1016/s0140-6736(23)00919-4)
- [11]. Erku, D., Khatri, R., Endalamaw, A., Wolka, E., Nigatu, F., Zewdie, A., & Assefa, Y. (2023). Community engagement initiatives in primary health care to achieve universal health coverage: A realist synthesis of scoping review. *PLOS ONE*, 18(5). <https://doi.org/10.1371/journal.pone.0285222>
- [12]. Galderisi, S., Appelbaum, P. S., Gill, N., Gooding, P., Herrman, H., Melillo, A., Myrick, K., Pathare, S., Savage, M., Szmukler, G., & Torous, J. (2024). Ethical challenges in contemporary psychiatry: an overview and an appraisal of possible strategies and research needs. *PubMed*, 23(3), 364–386. <https://doi.org/10.1002/wps.21230>
- [13]. Gautam, S., Jain, A., Chaudhary, J., Gautam, M., Gaur, M., & Grover, S. (2024). Concept of Mental Health and Mental well-being, it’s Determinants and Coping Strategies. *Indian Journal of Psychiatry*, 66(Suppl 2), S231–S244. [https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry\\_707\\_23](https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_707_23)
- [14]. Gibson, L., Clinton-McHarg, T., Wilczynska, M., Latter, J., Bartlem, K., Henderson, C., Wiggers, J., Wilson, A., Searles, A., & Bowman, J. (2021). Preventive care practices to address health behaviours among people living with mental health conditions: A survey of Community Managed Organisations. *Preventive Medicine Reports*, 23, 101495. <https://doi.org/10.1016/j.pmedr.2021.101495>
- [15]. Haby, M. M., Ludovic Reveiz, Thomas, R., & Jordan, H. (2025). An integrated framework to guide evidence-informed public health policymaking. *Journal of Public Health Policy*, 46. <https://doi.org/10.1057/s41271-024-00535-9>
- [16]. Hood, S., Campbell, B., & Baker, K. (2023). Culturally Informed Community Engagement: Implications for Inclusive Science and Health Equity. In *PubMed*. RTI Press. <https://www.ncbi.nlm.nih.gov/books/NBK592587/>
- [17]. Javaid, M., Haleem, A., & Singh, R. P. (2024). Health informatics to enhance the healthcare industry’s culture: An extensive analysis of its features, contributions, applications and limitations. *Informatics and Health*, 1(2), 123–148. <https://doi.org/10.1016/j.infoh.2024.05.001>
- [18]. Kalungi, H., Onesmus Kamacooko, Jane Frances Lunkuse, Namutebi, J., Naluwooza, R., Price, M. A., Ruzagira, E., & Yunia Mayanja. (2024). Prevalence and factors associated with illicit drug and high-risk alcohol use among adolescents living in urban slums of Kampala, Uganda. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-19250-x>
- [19]. Kanyongo, W., & Ezugwu, A. E. (2023). Machine learning approaches to medication adherence amongst NCD patients: A systematic literature review. *Informatics in Medicine Unlocked*, 38, 101210. <https://doi.org/10.1016/j.imu.2023.101210>
- [20]. Khan, M. M., Shah, N., Shaikh, N., Thabet, A., Talal alrabayah, & Sirajeddin Belkhair. (2024). Towards secure and trusted AI in healthcare: A systematic review of emerging innovations and ethical challenges. *International Journal of Medical Informatics*, 195, 105780–105780. <https://doi.org/10.1016/j.ijmedinf.2024.105780>

- [21]. Kirkbride, J. B., Anglin, D. M., Colman, I., Dykxhoorn, J., Jones, P. B., Patalay, P., Pitman, A., Sonesson, E., Steare, T., Wright, T., & Griffiths, S. L. (2024). The social determinants of mental health and disorder: Evidence, prevention and recommendations. *World Psychiatry : Official Journal of the World Psychiatric Association (WPA)*, 23(1), 58–90. <https://doi.org/10.1002/wps.21160>
- [22]. Leong, Q. Y., Sridhar, S., Blasiak, A., Tadeo, X., Yeo, G., Remus, A., & Ho, D. (2022). Characteristics of Mobile Health Platforms for Depression and Anxiety: Content Analysis Through a Systematic Review of the Literature and Systematic Search of Two App Stores. *Journal of Medical Internet Research*, 24(2), e27388. <https://doi.org/10.2196/27388>
- [23]. Lima, I. B. de, Bernadi, F. A., Yamada, D. B., Vinci, A. L. T., Rijo, R. P. C. L., Alves, D., & Furegato, A. R. F. (2021). The use of indicators for the management of Mental Health Services. *Revista Latino-Americana de Enfermagem*, 29. <https://doi.org/10.1590/1518-8345.4202.3409>
- [24]. Lu, X., & Lin, Z. (2021). COVID-19, Economic Impact, Mental Health, and Coping Behaviors: A Conceptual Framework and Future Research Directions. *Frontiers in Psychology*, 12(759974). <https://doi.org/10.3389/fpsyg.2021.759974>
- [25]. Lyng, H. B., Macrae, C., Guise, V., Haraldseid-Driftland, C., Fagerdal, B., Schibevaag, L., Alsvik, J. G., & Wiig, S. (2021). Balancing Adaptation and Innovation for Resilience in Healthcare – a Metasynthesis of Narratives. *BMC Health Services Research*, 21(21), 759. <https://doi.org/10.1186/s12913-021-06592-0>
- [26]. Maddah, N., Verma, A., Almashmoum, M., & Ainsworth, J. (2022). Effectiveness of Public Health Digital Surveillance Systems for Infectious Disease Prevention and Control at Mass Gatherings: A Systematic Review (Preprint). *Journal of Medical Internet Research*, 25. <https://doi.org/10.2196/44649>
- [27]. Mahomed, F. (2020). Addressing the Problem of Severe Underinvestment in Mental Health and Well-Being from a Human Rights Perspective. *Health and Human Rights*, 22(1), 35. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7348439/>
- [28]. Mesquita, S., Lília Perfeito, Paolotti, D., & Gonçalves-Sá, J. (2025). Epidemiological methods in transition: Minimizing biases in classical and digital approaches. *PLOS Digital Health*, 4(1), e0000670–e0000670. <https://doi.org/10.1371/journal.pdig.0000670>
- [29]. Moitra, M., Owens, S., Hailemariam, M., Wilson, K. S., Mensa-Kwao, A., Gonese, G., Kamamia, C. K., White, B., Young, D. M., & Collins, P. Y. (2023). Global mental health: Where we are and where we are going. *Global Mental Health: Where We Are and Where We Are Going*, 25(7). <https://doi.org/10.1007/s11920-023-01426-8>
- [30]. Monlezun, D. J., Omutoko, L., Oduor, P., Kokonya, D., Rayel, J., Sotomayor, C., Girault, M. I., De, E., Oleg Sinyavskiy, Aksamit, T., Dugani, S. B., Garcia, A., & Gallagher, C. (2025). Digitalization of health care in low- and middle-income countries. *Bulletin of the World Health Organization*, 103(02), 148–154. <https://doi.org/10.2471/blt.24.291643>
- [31]. Morales, D. A., Barksdale, C. L., & Beckel-Mitchener, A. C. (2020). A call to action to address rural mental health disparities. *Journal of Clinical and Translational Science*, 4(5), 1–20. National Library of Medicine. <https://doi.org/10.1017/cts.2020.42>
- [32]. Muhoza, P., Saleem, H., Faye, A., Tine, R., Diaw, A., Kante, A. M., Ruff, A., & Marx, M. A. (2022). Behavioral Determinants of Routine Health Information System Data Use in Senegal: A Qualitative Inquiry Based on the Integrated Behavioral Model. *Global Health: Science and Practice*, 10(3). <https://doi.org/10.9745/GHSP-D-21-00686>
- [33]. Nayak, M. S. D. P., & Narayan, K. A. (2019). *Strengths and Weakness of Online Surveys*. ResearchGate. <https://doi.org/10.9790/0837-2405053138>
- [34]. Novilla, M. L. B., Goates, M. C., Leffler, T., Kenneth, N., Wu, C., Dall, A., & Hansen, C. (2023). Integrating social care into healthcare: A review on applying the social determinants of health in clinical settings. *International Journal of Environmental Research and Public Health*, 20(19), 6873–6873. <https://doi.org/10.3390/ijerph20196873>
- [35]. Noyes, J., Booth, A., Moore, G., Flemming, K., Tunçalp, Ö., & Shakibazadeh, E. (2020). Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: Clarifying the purposes, designs and outlining some methods. *BMJ Global Health*, 4(1). NCBI. <https://doi.org/10.1136/bmjgh-2018-000893>
- [36]. Nyoni, R. (2025). Harnessing Data Analytics for Predictive Insights: Advancing Decision-Making with Big Data Innovations. *International Journal of Research Publication and Reviews*, 6(1), 2915–2936. <https://doi.org/10.55248/gengpi.6.0125.0502>
- [37]. Oehring, D., & Gunasekera, P. (2024). Ethical Frameworks and Global Health: A Narrative Review of the “Leave No One Behind” Principle. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 61. <https://doi.org/10.1177/00469580241288346>
- [38]. Okunade, B. A., Adediran, F. E., Maduka, C. P., & Adegoke, A. A. (2023). COMMUNITY-BASED MENTAL HEALTH INTERVENTIONS IN AFRICA: A REVIEW AND ITS IMPLICATIONS FOR U.S. HEALTHCARE PRACTICES. *International Medical Science Research Journal*, 3(3), 68–91. <https://doi.org/10.51594/imsrj.v3i3.621>

- [39]. Paatela S., Kyytsönen M., Saranto K., Kinnunen, U.-M., & Vehko T. (2023). Experiences of electronic health records' and client information systems' use on a mobile device and factors associated with work time savings among practical nurses: A cross-sectional study (Preprint). *Journal of Medical Internet Research*, 26. <https://doi.org/10.2196/46954>
- [40]. Palinkas, L. A., Springgate, B., Cabassa, L. J., Shin, M., Garcia, S., Crabtree, B. F., & Tsui, J. (2025). Methods for community-engaged data collection and analysis in implementation research. *Implementation Science Communications*, 6(1). <https://doi.org/10.1186/s43058-025-00722-z>
- [41]. Patterson, E. H., Miller, C., & Hannapel, M. (2025). Public psychology and holistic approaches to prevention and treatment of depression. *Frontiers in Psychiatry*, 16. <https://doi.org/10.3389/fpsy.2025.1600094>
- [42]. Poddar, A., & Chhajer, R. (2024). Detection and disclosure of workplace mental health challenges: an exploratory study from India. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-19422-9>
- [43]. Popay, J., Halliday, E., Mead, R., Townsend, A., Akhter, N., Bambra, C., Barr, B., Anderson de Cuevas, R., Daras, K., Egan, M., Gravenhorst, K., Janke, K., Kasim, A. S., McGowan, V., Ponsford, R., Reynolds, J., & Whitehead, M. (2023). Investigating health and social outcomes of the Big Local community empowerment initiative in England: a mixed method evaluation. *Public Health Research*, 1–147. <https://doi.org/10.3310/grma6711>
- [44]. Powell, N., Dalton, H., Lawrence-Bourne, J., & Perkins, D. (2024). Co-creating community wellbeing initiatives: what is the evidence and how do they work? *International Journal of Mental Health Systems*, 18(1). <https://doi.org/10.1186/s13033-024-00645-7>
- [45]. Purtle, J., Nelson, K. L., Counts, N. Z., & Yudell, M. (2020). Population-Based Approaches to Mental Health: History, Strategies, and Evidence. *Annual Review of Public Health*, 41(1), 201–221. <https://doi.org/10.1146/annurev-publhealth-040119-094247>
- [46]. Ravaghi, H., Guisset, A.-L., Elfeky, S., Nasir, N., Khani, S., Ahmadnezhad, E., & Abdi, Z. (2023). A scoping review of community health needs and assets assessment: Concepts, rationale, tools and uses. *BMC Health Services Research*, 23(1), 1–20. <https://doi.org/10.1186/s12913-022-08983-3>
- [47]. Rong, T., Ristevski, E., & Carroll, M. (2023). Exploring community engagement in place-based approaches in areas of poor health and disadvantage: A scoping review. *Health & Place*, 81(81), 103026. <https://doi.org/10.1016/j.healthplace.2023.103026>
- [48]. Russell, K., Rosenbaum, S., Varela, S., Stanton, R., & Barnett, F. (2023). Fostering community engagement, participation and empowerment for mental health of adults living in rural communities: a systematic review. *Rural and Remote Health*, 23(1). <https://doi.org/10.22605/rrh7438>
- [49]. Scheelbeek, P. F. D., Hamza, Y. A., Schellenberg, J., & Hill, Z. (2020). Improving the use of focus group discussions in low income settings. *BMC Medical Research Methodology*, 20(1). <https://doi.org/10.1186/s12874-020-01168-8>
- [50]. Shajari, S., Kuruvinashetti, K., Komeili, A., & Sundararaj, U. (2023). The emergence of AI-based wearable sensors for digital health technology: A review. *Sensors*, 23(23), 9498–9498. <https://doi.org/10.3390/s23239498>
- [51]. Silva, B., Bachelard, M., Amoussou, J. R., Martinez, D., Bonalumi, C., Bonsack, C., Golay, P., & Morandi, S. (2023). Feeling coerced during voluntary and involuntary psychiatric hospitalisation: A review and meta-aggregation of qualitative studies. *Heliyon*, 9(2), e13420. <https://doi.org/10.1016/j.heliyon.2023.e13420>
- [52]. Singh, V., Kumar, A., & Gupta, S. (2022). Mental Health Prevention and Promotion—a Narrative Review. *Frontiers in Psychiatry*, 13(13). <https://doi.org/10.3389/fpsy.2022.898009>
- [53]. Stein, O. A., & Prost, A. (2024). Exploring the Societal Implications of Digital Mental Health Technologies: A Critical Review. *SSM - Mental Health*, 6, 100373. <https://doi.org/10.1016/j.ssmmh.2024.100373>
- [54]. Thakkar, A., Gupta, A., & De Sousa, A. (2024). Artificial intelligence in positive mental health: a narrative review. *Frontiers in Digital Health*, 6(1280235). <https://doi.org/10.3389/fdgth.2024.1280235>
- [55]. Tonne, C. (2021). Defining pathways to healthy sustainable urban development. *Environment International*, 146, 106236. <https://doi.org/10.1016/j.envint.2020.106236>
- [56]. Torous, J., Bucci, S., Bell, I. H., Kessing, L. V., Faurholt-Jepsen, M., Whelan, P., Carvalho, A. F., Keshavan, M., Linardon, J., & Firth, J. (2021). The Growing Field of Digital psychiatry: Current Evidence and the Future of apps, Social media, chatbots, and Virtual Reality. *World Psychiatry*, 20(3), 318–335. <https://doi.org/10.1002/wps.20883>
- [57]. Turyasiima M., Akot B. G., Makongwa I., Yusuf, H. M., & Eputai, J. (2025). Addressing High Alcohol Consumption and Alcohol Use Disorders Among Adolescents and Young People in Sub-Saharan Africa: Pathways to Effective Action. *Substance Abuse and Rehabilitation*, Volume 16, 165–175. <https://doi.org/10.2147/sar.s526190>



- [58]. Wainberg, M. L., Scorza, P., Shultz, J. M., Helpman, L., Mootz, J. J., Johnson, K. A., Neria, Y., Bradford, J.-M. E., Oquendo, M. A., & Arbuckle, M. R. (2017). Challenges and Opportunities in Global Mental Health: a Research-to-Practice Perspective. *Current Psychiatry Reports*, 19(5). <https://doi.org/10.1007/s11920-017-0780-z>