

Barriers and Institutional Dynamics in Public Mental Health Across Income Groups

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Abstract: Public Mental Health (PMH) has increasingly attracted global attention, yet substantial disparities in its implementation persist between high-income countries (HICs) and low- and middle-income countries (LMICs). As the global burden of mental disorders continues to rise, many countries-particularly LMICs-face challenges including limited institutional capacity, workforce shortages, and fragmented policies. This study examines institutional dynamics, barriers, and engagement practices in PMH across income groups, aiming to identify structural strengths and weaknesses that shape organizational contributions. A cross-sectional survey was conducted with 242 respondents from 52 countries, classified according to World Bank income groups. Participants evaluated key PMH components, opportunities, barriers, engagement frequency, and training quality. Statistical analyses included descriptive comparisons, ANOVA, correlation, and linear regression models stratified by income level. While strategic PMH priorities show broad convergence, significant disparities remain in institutional capacity and implementation readiness. Effective PMH reform must therefore be context-sensitive, emphasizing strengthened knowledge systems and networks in LMICs, alongside continued investment in high-quality training infrastructure in HICs. The advancement of global PMH will depend on scalable strategies that address these structural asymmetries.

Keywords: public mental health; income disparities; LMICs; institutional engagement; training quality; implementation barriers

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1. Introduction

Public Mental Health (PMH) encompasses collective actions and policies aimed at improving mental health outcomes at the population level. Its core objectives include promoting mental wellbeing, preventing mental disorders and suicide, reducing mental health-related inequalities, and ensuring effective governance and delivery of mental health services [1]. PMH extends beyond individual treatment, emphasizing upstream interventions that address social, economic, and structural determinants of mental health across diverse populations.

In recent years, mental health has garnered increasing attention from global public health institutions, policymakers, and advocacy groups. Despite this heightened visibility, mental health remains significantly under-resourced compared with physical health, particularly in terms of workforce, funding, and service coverage [2]. This disparity is especially pronounced in low- and middle-income countries (LMICs), where systemic challenges-including limited economic resources, infrastructure deficiencies, and health workforce shortages-constrain the implementation of even basic mental health services [3]. Additionally, the international migration of trained mental health professionals from

LMICs to high-income countries (HICs) further strains already fragile systems in lower-income settings.

Although the burden of mental disorders is rising across all income levels, evidence indicates that PMH interventions-such as preventing disorder onset, mitigating secondary impacts, and promoting mental resilience-are both effective and cost-efficient [4]. Nonetheless, the global distribution of these interventions remains highly uneven. In HICs, treatment coverage remains suboptimal, with only a minority of individuals with mental health conditions receiving adequate care [5]. In LMICs, this gap is even more pronounced, compounded by policy inaction and limited organizational capacity to deliver population-level interventions [6].

Understanding how institutional dynamics-such as training quality, organizational engagement, and resource constraints-differ across economic contexts is critical to advancing global mental health equity. Despite the universal importance of PMH, few studies have systematically compared institutional enablers and barriers across HICs and LMICs using quantitative, cross-country data.

This study seeks to address this knowledge gap by examining the institutional landscape of PMH across countries categorized by income level. Specifically, it aims to:

1. Identify and evaluate key components and developmental opportunities of PMH as perceived by stakeholders in both HICs and LMICs;
2. Analyze the principal barriers to expanding PMH interventions, with particular attention to knowledge, training, policy implementation, and resources;
3. Assess the level of engagement with PMH organizations and the quality of training received by relevant personnel across income groups;
4. Investigate the relationships between organizational workload in key PMH areas and two institutional factors: frequency of contact with PMH organizations and the quality of training provided, examining how these relationships vary by income group.

By addressing these objectives, the study contributes to the evidence base necessary to inform global mental health policy and capacity-building strategies. It provides an empirically grounded assessment of how institutional and systemic factors shape the operationalization of PMH across diverse economic environments.

2. Literature Review

2.1. Effectiveness of Public Mental Health Interventions

Extensive empirical evidence supports the efficacy of Public Mental Health (PMH) interventions across diverse contexts. Public mental health (PMH) initiatives encompass four key domains that have demonstrated measurable impact: the treatment of mental disorders, the prevention of related adverse consequences, the primary prevention of mental illness, and the promotion of mental well-being and resilience. Collectively, these interventions not only enhance mental health outcomes but also reduce the wider societal costs of untreated mental illness, including productivity loss, social marginalization, and increased pressure on healthcare systems. Implementing evidence-based PMH strategies is therefore recognized as a highly cost-effective means of advancing broader public health objectives [7,8].

2.2. Global Landscape of PMH Service Coverage

Despite growing international recognition of PMH's importance, service coverage remains alarmingly inadequate in both high-income countries (HICs) and low- and middle-income countries (LMICs). According to the WHO, fewer than half of individuals with mental health disorders in HICs receive appropriate care, while in LMICs, treatment coverage often falls below 10%, leaving the majority without access to even basic support [9]. These low coverage levels are not solely due to resource constraints but reflect deeper systemic and institutional shortcomings.

A core limitation in LMICs is the chronic underfunding of mental health services. National health budgets in these countries typically allocate less than 2% of total spending to mental health, with even lower proportions directed toward community-based care or preventive services [10]. This is starkly disproportionate to the disease burden posed by mental illness, which accounts for approximately 14% of global disability-adjusted life years (DALYs) but receives a minimal share of public health investment [11].

Furthermore, mental health care delivery in LMICs is often fragmented, uncoordinated, and heavily reliant on centralized psychiatric institutions. Community-based care—a cornerstone of effective PMH systems—remains underdeveloped in many regions due to insufficient trained personnel, inadequate infrastructure, and limited political commitment [12]. The shortage of mental health professionals is particularly severe; in some low-income countries, there may be fewer than one psychiatrist per 100,000 population, compared with more than ten in most HICs.

These disparities reflect not only economic differences but also institutional inertia and policy neglect. Even when mental health policies exist on paper, they are frequently under-implemented due to weak governance structures, limited cross-sector collaboration, and the low political visibility of mental health issues. This has resulted in an "implementation gap" in global mental health—a mismatch between evidence-based interventions and their actual practice [13].

2.3. Structural Barriers in LMICs: Knowledge, Training, and Policy Gaps

The literature consistently identifies institutional and structural barriers that disproportionately affect LMICs. These include inadequate training systems, limited professional knowledge, absence of supervision mechanisms, and policy inaction. Murray et al. highlight the lack of sustainable training models adapted to low-resource settings. Compounding these challenges is the "brain drain" phenomenon, wherein trained mental health professionals migrate from LMICs to HICs in pursuit of better economic and professional opportunities. Such patterns contribute to a persistent and widening gap in PMH capacity, undermining LMICs' ability to deliver population-level mental health care.

2.4. Organizational Engagement, Training, and Institutional Capacity

An expanding body of research underscores the pivotal role of organizational engagement and institutional capacity in the successful implementation of PMH interventions. Beyond macro-level policies and funding structures, the day-to-day functioning of mental health systems depends heavily on how frequently practitioners engage with relevant PMH organizations and the quality of training they receive. These micro-level dynamics directly influence the reach, quality, and sustainability of interventions, particularly in resource-constrained environments.

Regular interaction between frontline professionals and mental health organizations has been linked to improved coordination, knowledge transfer, and adherence to best practices. Such engagement facilitates institutional learning, promotes a shared understanding of community needs, and enables adaptive responses to evolving mental health challenges. Similarly, high-quality professional training equips staff with competencies to deliver evidence-based care, manage complex cases, and contribute to system-wide resilience. Training that integrates both clinical content and community-based strategies is especially vital in PMH, where the focus extends beyond individual treatment to preventive and promotional activities at the population level.

This study seeks to address an empirical gap by quantitatively examining how institutional engagement and training quality correlate with organizational workload in key PMH domains. It also investigates whether these relationships differ systematically across HICs and LMICs, offering insights into which institutional levers may be most impactful in varying economic contexts. By exploring these under-researched dimensions, the study provides a more nuanced understanding of how to build institutional capacity

for public mental health and informs strategic priorities for workforce development and organizational support worldwide.

3. Methodology

3.1. Research Design

This study employs a cross-sectional quantitative research design to examine the institutional dynamics and barriers associated with Public Mental Health (PMH) implementation across countries with varying income levels. The primary objective is to compare perceptions, engagement patterns, and institutional capacities between high-income countries (HICs) and low- and middle-income countries (LMICs), as classified by the World Bank for the 2022-2023 fiscal year. By stratifying participants according to income level, the study aims to identify statistically significant differences and correlations in PMH practices and challenges.

3.2. Sampling and Data Collection

Data were collected through an online questionnaire distributed to members of five international organizations with direct involvement in mental health and public health policy: the European Psychiatric Association (EPA), the World Psychiatric Association (WPA), the World Organization of Family Doctors (WONCA), the World Federation of Public Health Associations (WFPHA), and the European Global Mental Illness Advocacy Network Alliance (GAMIAN-Europe). The survey was also promoted via social media platforms, including Twitter, using a convenience sampling approach. Participation was voluntary and anonymous.

The final dataset comprises 242 respondents representing 52 countries-22 HICs and 30 LMICs-ensuring broad geographic and economic representation of perspectives in global PMH.

3.3. Variables and Measurement

The questionnaire captured a comprehensive set of variables relevant to PMH implementation. Respondents evaluated the importance of core PMH components, including treatment of mental disorders, prevention of onset, mitigation of associated impacts, promotion of mental wellbeing and resilience, assessment of intervention coverage, and improvement of coordination and outcomes. Each item was rated on a five-point Likert scale from 1 ("not important") to 5 ("very important"), allowing for nuanced assessment of perceived priorities in mental health programming.

The survey also assessed perceived opportunities and barriers to PMH development. Barriers-including insufficient resources, lack of training, limited knowledge, and poor policy implementation-were rated using the same five-point scale, facilitating cross-country comparisons of perceived constraints.

To evaluate institutional capacity, respondents reported the frequency of staff engagement with PMH organizations (scored 1 = "no contact" to 5 = "frequent contact") and the perceived quality of professional training (scored 1 = "very poor" to 5 = "very good"). Organizational workload in PMH was measured based on the extent to which institutions were actively involved in key domains of PMH practice. Collectively, these variables provided the empirical basis for analyzing institutional dynamics and identifying differences between HICs and LMICs.

3.4. Data Analysis Strategy

Data were analyzed using IBM SPSS statistical software. Initial descriptive statistics summarized all variables, disaggregated by income group. One-way Analysis of Variance (ANOVA) tests were conducted to detect statistically significant differences between HICs and LMICs across key PMH components, perceived opportunities, primary barriers, engagement frequency, training quality, and organizational workload.

Correlational analyses were subsequently performed to examine linear relationships between organizational workload and two key predictors: frequency of contact with PMH organizations and training quality. Income group-specific linear regression models were then estimated to determine whether the influence of these predictors varied significantly across economic contexts.

To ensure rigor and interpretability, assumptions of normality, linearity, and homoscedasticity were tested prior to regression analysis. Statistical significance was set at $p < 0.05$ for all hypothesis tests.

4. Results

4.1. Key Components and Opportunities in Public Mental Health

Descriptive analysis of survey responses revealed a strong consensus among participants regarding the importance of six core dimensions of Public Mental Health (PMH): treatment of mental disorders, prevention of onset, mitigation of associated impacts, promotion of mental wellbeing and resilience, assessment of intervention coverage, and enhancement of coordination and outcomes. Mean scores for these components consistently ranged from 4.42 to 4.53 on a five-point scale, indicating that stakeholders from both high-income countries (HICs) and low- and middle-income countries (LMICs) perceive these aspects as highly important (see Table 1).

Single-factor ANOVA tests indicated no statistically significant differences between HICs and LMICs across any of the six dimensions (all p -values > 0.05), suggesting a broadly shared understanding across income groups regarding the essential content of PMH. Notably, the dimension with the highest average score was "mitigation of the associated impacts of mental disorders," rated as "very important" by over 75% of respondents. This reflects a common prioritization of secondary prevention and long-term care outcomes as central goals in PMH strategy development.

Regarding future development opportunities, respondents across both income groups emphasized the need to strengthen training and systems that support mitigation of mental health impacts and the improvement of coordination and outcomes. The absence of significant group-level differences in perceived opportunities (p -values > 0.05) further indicates that, despite resource disparities, the strategic vision for PMH advancement is largely aligned across economic contexts (Table 1).

Table 1. Mean Ratings of Key PMH Components and Opportunities Across Income Groups.

PMH Dimension	LMICs Mean	HICs Mean	Total Mean	Sig. (ANOVA)
Prevention of mental disorders from arising	4.47	4.56	4.51	0.544
Prevention of associated impacts of mental disorders	4.45	4.63	4.53	0.204
Treatment of mental disorders	4.59	4.34	4.42	0.310
Promotion of mental wellbeing and resilience	4.53	4.41	4.47	0.361
Assessment of intervention coverage across all domains	4.52	4.53	4.53	0.942
Improving population coverage, coordination, and intervention outcomes	4.46	4.49	4.47	0.832

Note: Ratings based on a 5-point Likert scale (1 = Not Important, 5 = Very Important). No statistically significant differences were observed across income groups.

4.2. Major Barriers to Public Mental Health

While consensus was observed regarding PMH priorities and developmental opportunities, substantial divergence emerged in perceived barriers to implementation. Participants were asked to rate the extent to which factors such as limited resources, time constraints, insufficient knowledge, inadequate training, and poor policy implementation impeded the expansion of PMH interventions in their respective countries.

Among all barriers, "insufficient resources" received the highest average rating across both groups, reflecting its status as a global constraint. However, when disaggregated by income category, significant differences appeared in the domains of knowledge, training, and policy implementation. LMIC respondents reported markedly higher concern regarding "insufficient knowledge" ($p < 0.001$), "inadequate training" ($p < 0.001$), and "policy implementation shortfalls" ($p = 0.040$) compared with their HIC counterparts.

These findings highlight a pronounced structural deficit in institutional readiness and policy translation in LMICs, where workforce development and governance remain critical challenges. In contrast, HIC respondents, while acknowledging these issues, assigned comparatively lower severity scores, suggesting more robust institutional mechanisms for training and policy enactment. The results underscore the need for targeted investments in knowledge systems and capacity-building in LMICs, alongside strengthened policy enforcement mechanisms, to bridge the implementation gap in global mental health.

Figure 1 presents a comparison of mean severity ratings for key PMH barriers between LMICs and HICs. While insufficient resources were consistently identified as the most severe barrier across both groups, LMIC respondents reported significantly higher concerns regarding knowledge gaps, training limitations, and weak policy implementation.

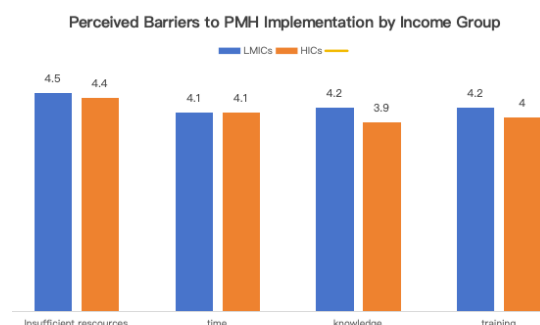


Figure 1. Mean Severity Ratings of PMH Barriers by Income Group.

4.3. Engagement and Training Quality

In addition to examining structural components and barriers, the study assessed institutional engagement using two key indicators: the frequency of staff contact with PMH-related organizations and the perceived quality of training. Across the full sample, the mean frequency of contact was relatively low ($M = 2.67$ on a 5-point scale), suggesting infrequent or intermittent engagement with organizational partners in PMH implementation. This may reflect broader systemic limitations in cross-sectoral collaboration or underdeveloped institutional networks.

In contrast, the perceived quality of PMH-related training was moderately favorable, with an overall mean score of 3.73. This indicates that while opportunities for engagement may be limited, when training is available, it is generally rated as effective or adequate by participants.

Disaggregated by income group, no statistically significant differences were observed between high-income countries (HICs) and low- and middle-income countries (LMICs) in either engagement frequency ($p = 0.459$) or training quality ($p = 0.912$).

Nevertheless, subtle contrasts were noted: respondents from LMICs reported slightly higher contact frequency with PMH organizations ($M = 2.77$) compared to HICs ($M = 2.55$), potentially reflecting a reliance on informal or external collaborations to compensate for internal system gaps. Meanwhile, HIC respondents reported marginally higher training quality ($M = 3.76$) than their LMIC counterparts ($M = 3.71$), suggesting stronger institutional capacity in workforce development. These nuances may reflect differing institutional strategies or constraints across income contexts, even when overall engagement levels are statistically comparable.

Figure 2 compares average contact frequency with PMH organizations and perceived training quality between LMICs and HICs. While engagement frequency is slightly higher in LMICs, training quality is marginally higher in HICs, with neither metric showing statistically significant differences across groups.

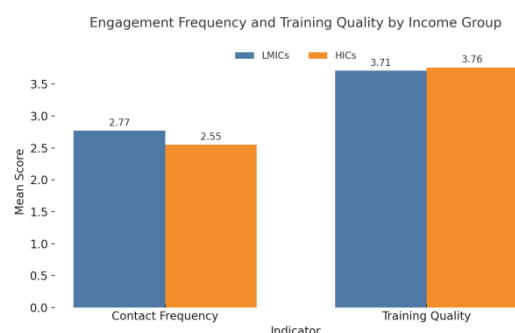


Figure 2. Engagement Frequency and Training Quality by Income Group.

4.4. Correlation and Regression Findings

To further examine the institutional dynamics underlying PMH implementation, the study explored how organizational workload in key PMH domains correlates with staff engagement and training quality. Correlation analyses revealed significant positive relationships between workload and both contact frequency ($r = 0.546$, $p < 0.01$) and training quality ($r = 0.353$, $p < 0.001$). These findings suggest that organizations more actively engaged with PMH networks and those offering higher-quality training tend to contribute more extensively to PMH activities.

To investigate potential differences across income groups, linear regression analyses were conducted separately for LMICs and HICs, revealing distinct patterns of influence. In LMICs, contact frequency emerged as the primary predictor of organizational workload: a one-unit increase in contact frequency was associated with a 5.715-unit increase in reported workload ($p < 0.01$). This underscores the critical role of external organizational engagement in supplementing internal capacity constraints commonly observed in LMICs.

Conversely, in HICs, training quality proved to be the stronger predictor. A one-unit increase in perceived training quality corresponded to a 0.569-unit increase in organizational workload ($p < 0.01$), whereas the effect of contact frequency, although positive, was not statistically significant. This pattern suggests that in HICs, formal training systems are more central to institutional readiness and program delivery, whereas external engagement plays a less dominant role.

Collectively, these findings highlight that while both engagement and training are vital for advancing PMH, their relative impact differs by economic context. Effective policy interventions should therefore be context-sensitive, emphasizing relationship-building and network activation in LMICs and prioritizing the enhancement of training systems and quality standards in HICs.

Figure 4 illustrates the regression-based relationships between organizational workload and the two key institutional predictors: contact frequency in LMICs and

training quality in HICs. While contact frequency exhibits a strong positive influence in LMICs, training quality emerges as the primary predictor in HICs, albeit with a more moderate slope.

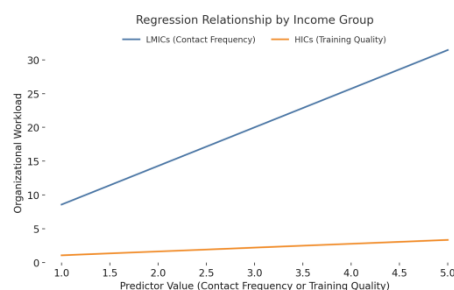


Figure 4. Regression Lines of Organizational Workload by Income Group.

5. Conclusion

5.1. Summary of Findings

This study provides a comparative analysis of the institutional landscape of Public Mental Health (PMH) across high-income countries (HICs) and low- and middle-income countries (LMICs). Drawing on cross-national survey data, the findings reveal both shared priorities and diverging challenges in the operationalization of PMH. Participants from both income groups assigned high importance to core PMH components, including treatment, prevention, and the promotion of resilience, indicating broad global consensus on PMH goals. Similarly, future opportunities, such as enhanced training and improved coordination of interventions, were valued across income contexts.

However, notable discrepancies emerged in perceived barriers to PMH implementation. Respondents from LMICs reported significantly greater challenges related to knowledge, training, and policy execution, highlighting persistent structural weaknesses in health system capacity. Organizational engagement patterns showed moderate contact frequency and satisfactory training quality across both groups, with LMICs demonstrating slightly higher engagement and HICs reporting marginally better training quality. Regression analyses further revealed that in LMICs, organizational workload is more strongly associated with contact frequency, whereas in HICs, it is more closely linked to the quality of training.

5.2. Interpretation of Results

The strong alignment in PMH priorities across countries suggests a global maturation of mental health discourse. The emphasis placed by both HICs and LMICs on prevention and coordination reflects a growing recognition of the need to shift from reactive clinical care toward proactive, population-level PMH strategies (Campion et al., 2022). However, consensus in vision does not necessarily translate into parity in practice.

The barriers identified in LMICs underscore systemic fragilities in knowledge infrastructure and workforce development. These findings support earlier research, which emphasized that implementation gaps in LMICs often stem from insufficient institutional support rather than conceptual misalignment. Despite international commitments, many LMICs lack the policy continuity and training ecosystems required to scale PMH interventions effectively.

The differing predictors of organizational workload across income groups offer critical insight into how PMH is operationalized in distinct contexts. In LMICs, contact frequency with PMH organizations likely reflects reliance on external or informal networks to sustain intervention delivery in the absence of embedded institutional capacity. Conversely, in HICs, established training infrastructures appear to play a more

direct role in facilitating workforce productivity. These distinctions highlight the importance of context-specific levers for enhancing PMH delivery systems.

5.3. Emerging Trends and Implications

Encouragingly, the gap in engagement and training quality between HICs and LMICs appears to be narrowing. LMIC respondents reported similar training experiences and even higher interaction frequency with PMH organizations compared to HIC counterparts. This may reflect recent global initiatives prioritizing mental health in LMIC agendas, such as WHO's Mental Health Action Plan and the expansion of community-based care models. Nevertheless, increased engagement does not automatically translate to structural stability, particularly when training is underfunded or policy enforcement remains weak.

The study also emphasizes the value of investing in organizational networks and partnerships in LMICs, as these serve as critical conduits for knowledge transfer and program implementation. In HICs, further improvements may be achieved by refining training standards, expanding continuing education, and integrating PMH competencies into broader health system reforms.

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