

Reframing Psychiatry's Role in Population Mental Health from Biopsychosocial to Syndemic Care: A Narrative Review

Darien Alfa Cipta^{1,2,3*}, Gabriella Ellenzy¹, Natasha Audi¹, Nindya Nisita¹, Alvin Saputra¹

ABSTRACT

Introduction: Integrating mental health into primary care is essential for global health equity, yet large treatment gaps persist in low- and middle-income countries (LMICs), including Indonesia. Biomedical, disorder-specific models often miss the bidirectional links between mental disorders and physical multimorbidity, especially under conditions of structural stigma and social marginalization. This narrative review proposes a shift toward a syndemic-informed approach that addresses interacting mental, physical, and social drivers of illness. **Methods:** We conducted a narrative review of literature on mental health integration in primary care in LMICs, focusing on: (1) syndemic theory and mental–physical multimorbidity; (2) structural stigma and social determinants; and (3) transdiagnostic, evidence-based behavioral interventions. We synthesized evidence on scalable delivery strategies, emphasizing task-sharing models and brief interventions incorporating Cognitive Behavioral Therapy (CBT), Dialectical Behavior Therapy (DBT) elements, and Motivational Interviewing (MI). **Results:** Findings support a syndemic-informed framework in which mental illness, chronic disease, infectious syndemics (e.g., HIV), and adverse social conditions interact synergistically to worsen outcomes. Transdiagnostic behavioral interventions targeting shared mechanisms—particularly emotion dysregulation—may be more feasible and effective than diagnosis-specific care in resource-limited primary care settings. Task-sharing and stepped-care models show promise for improving access and implementation at scale. **Conclusion:** A syndemic-informed, transdiagnostic strategy offers a pragmatic pathway to integrate mental health into primary care in LMICs. By focusing on shared psychological mechanisms and scalable task-sharing delivery, primary care systems may better address intertwined mental, physical, and social burdens, advancing more equitable population-level outcomes.

Keywords: Mental health integration; Primary care; Syndemics; Transdiagnostic interventions; Task-sharing

1. Department of Psychiatry, Faculty of Medicine, Pelita Harapan University, Tangerang, Banten, Indonesia
2. School of Public Health and Preventive Medicine, Monash University Indonesia, Tangerang Selatan, Banten, Indonesia
3. Community Psychiatry Section, Indonesian Psychiatric Association

* ✉ email: darien.cipta.dc@gmail.com

INTRODUCTION

The separation of mental and physical health services is a historical artifact that contemporary medicine can no longer afford to maintain. While the World Health Organization (WHO) and World Organization of Family Doctors (WONCA) have long advocated for the integration of mental health into primary care as a matter of accessibility and human rights^{1,2}, implementation in Indonesia remains uneven. The nation faces a "dual challenge": urban centers contend with the increasing "medicalization" of mood disorders, while rural services remain heavily focused on the containment of severe psychotic disorders and the eradication of human rights violations such as *pasung* (shackling)³.

The consequences of this fragmentation are severe. In Indonesia, up to 91% of individuals with depression do not receive evidence-based treatment, a figure consistent with the high under-detection rates observed in primary care settings across LMICs³⁻⁵. This treatment gap is not merely a failure of screening; it represents a structural inability to manage the complexity of patients who present with physical complaints that are inextricably linked to psychological distress. To bridge this chasm, we must move beyond simple detection protocols and adopt a comprehensive framework that recognizes the synergistic interaction between biological risk, psychological vulnerability, and social determinants.

METHODS & MATERIALS

We conducted a narrative review to synthesize evidence and frameworks for integrating mental health into primary care in low- and middle-income countries (LMICs), with relevance to Indonesia. This narrative review drew on a targeted, non-systematic search of PubMed and Google Scholar, supplemented by policy and technical reports from key global health bodies, including the World Health Organization (WHO), the World Organization of Family Doctors (WONCA),

and the Joint United Nations Programme on HIV/AIDS (UNAIDS). Searches used combinations of terms related to (1) syndemic theory, multimorbidity, and mental–physical comorbidity; (2) structural stigma, marginalization, and social determinants of health; and (3) transdiagnostic and scalable psychological interventions (e.g., CBT, DBT-informed skills, and Motivational Interviewing), including task-sharing/task-shifting and stepped-care models in primary care.

Sources were purposively selected to reflect LMIC primary care delivery contexts, interactions between mental disorders and chronic or infectious conditions (including HIV), and implementation considerations for resource-limited systems. Evidence was synthesized thematically across three domains: syndemic mechanisms linking mental illness, chronic disease, and adverse social conditions; pathways through which structural stigma and social adversity shape access and outcomes; and the feasibility of transdiagnostic, mechanism-focused behavioral strategies targeting shared processes such as emotion dysregulation. We emphasized brief, adaptable intervention elements and delivery approaches designed for scale via non-specialist providers with appropriate training and supervision.

REVIEWS

Beyond Comorbidity and Biopsychosocial: The Syndemic Framework

While psychiatrists are well acquainted with Engel's biopsychosocial model, which emphasizes the interaction between biological, psychological, and social factors in illness, the syndemic framework extends this logic further by introducing dynamic interaction and structural power relations into the equation. Rather than viewing these domains as parallel influences, syndemic theory emphasizes that diseases and social conditions actively reinforce one another within specific sociopolitical contexts.

The concept of syndemic was first introduced by medical anthropologist Merrill Singer in the 1990s to describe the clustering of substance use, violence, and HIV in marginalized communities in the United States⁶. Singer observed that these conditions did not merely co-occur but interacted synergistically, each worsening the course and outcomes of the others within environments shaped by poverty, stigma, and structural exclusion. In this sense, syndemic theory moves beyond the descriptive nature of "comorbidity" toward an explanatory model that highlights how social inequality becomes biologically embodied.

Conceptually, syndemics differ from the biopsychosocial model in three keyways. First, syndemics emphasize interaction, not just coexistence. Mental disorders and physical illnesses are seen as mutually amplifying rather than parallel conditions. Second, the framework explicitly centers structural determinants such as discrimination, economic marginalization, and health system barriers as active drivers of disease clustering. Third, syndemics adopt a population and public health lens, shifting the focus from individual pathology to patterned vulnerability within communities.

For psychiatry, this perspective is particularly powerful. It reframes mental disorders not only as clinical entities but as products and perpetuators of social suffering. Depression in diabetes, anxiety in HIV, or substance use in marginalized youth are no longer "secondary" conditions but core syndemic mechanisms that shape prognosis, treatment adherence, and mortality. Thus, adopting a syndemic lens allows psychiatry to reclaim its role at the intersection of clinical care, social justice, and public health.

This framework offers a strong theoretical bridge between psychiatry and primary care, where complexity rather than diagnostic purity is the norm. By integrating syndemic thinking into routine practice, clinicians can better understand why standard biomedical approaches often fail and why

scalable, transdiagnostic psychological interventions are essential in resource-limited settings such as Indonesia.

The Bidirectional Link in Chronic Disease

The syndemic logic applies robustly to the management of Non-Communicable Diseases (NCDs), which constitute the bulk of primary care practice. Evidence indicates a bidirectional relationship where depression exacerbates outcomes for chronic conditions such as diabetes and cardiovascular disease through mechanisms of inflammation, autonomic dysregulation, and behavioral non-adherence⁷. In Indonesia, where the burden of NCDs is rising, the failure to address the "depressive driver" of physical illness results in inefficient care and poor prognosis.

Vulnerable Populations and Structural Stigma

The framework is even more critical for marginalized populations, such as Immigrant, People with Disability, Gender and Sexual Minority Individuals, and People Living with HIV (PLHIV). These groups face "minority stress", chronic exposure to stigma, discrimination, and rejection, which fuels a syndemic of mental health disparities and high-risk behaviors⁸. For these patients, mental health interventions are not secondary; they are the gatekeeper to physical health survival, influencing adherence to antiretroviral therapy (ART) and engagement with preventive services⁸.

The Shift to Transdiagnostic and Scalable Interventions

If the burden of disease is complex and syndemic, the intervention model must be robust yet scalable. The traditional "one disorder, one protocol" approach, relying on specialist-delivered psychotherapy, is unfeasible in Indonesia due to the acute scarcity of psychiatrists and psychologists⁹.

Targeting Mechanisms, Not just Diagnoses

A promising solution lies in transdiagnostic approaches, which target

core psychological mechanisms — such as emotion dysregulation, behavioral avoidance, and interpersonal deficits — shared across multiple forms of psychopathology. This makes them especially well-suited for primary care settings, where training providers in numerous disorder-specific protocols is neither feasible nor practical¹⁰.

Cognitive Behavioral Therapy (CBT) and Motivational Interviewing (MI) have long served as the gold standard for addressing specific behaviors such as medication adherence and substance use¹¹. Extensive meta-analyses confirm their efficacy in reducing HIV risk behaviors and improving depressive symptoms¹². While CBT remains a cornerstone of evidence-based care, evidence from sexual and gender minority mental health literature suggests that, in contexts of chronic minority stress and heightened emotion dysregulation, outcomes may be enhanced by integrating DBT-informed skills focused on affect regulation and crisis coping¹³.

Integrating "Third Wave" Approaches

To address these gaps, integrating elements from "Third-Wave" therapies, such as Dialectical Behavior Therapy (DBT) or Acceptance and Commitment Therapy (ACT), offers a complementary advantage. While originally designed for severe personality disorders, the *skills training* components of DBT (Mindfulness, Distress Tolerance, Emotion Regulation, Interpersonal Effectiveness) have demonstrated transdiagnostic utility¹⁴.

By combining the goal-oriented structure of CBT/MI with the acceptance and regulation skills of DBT, clinicians can offer a more holistic toolkit. For instance, a patient may need distress tolerance skills to manage the acute crisis of an HIV diagnosis or a diabetic complication before they can engage in the cognitive restructuring required for long-term lifestyle change. This integrated approach allows providers to "meet patients where they are," addressing the emotional

antecedents of high-risk behaviors (e.g., substance use or non-adherence) as maladaptive coping mechanisms.

Group-Based Delivery as a Vehicle for Scalability

Scalability is the ultimate test of any public health intervention. Group-based delivery of these skills significantly increases the number of patients served per clinician hour while fostering peer support, a crucial factor in reducing the isolation associated with stigma¹⁶. Group settings provide a "social laboratory" where patients can practice interpersonal effectiveness and normalization of their experiences, directly countering the social alienation inherent in "syndemic suffering".

Implementation Science: Adaptation and Task-Sharing

The successful deployment of these interventions in Indonesian primary care relies on rigorous Implementation Science, focusing on cultural adaptation and workforce innovation.

Rigorous Cultural Adaptation

Western-developed interventions cannot be simply transplanted into the Indonesian context. They require systematic adaptation to align with local cultural norms, religious values, and social realities. Frameworks such as the Deconstruction-Reconstruction Matrix (DRM) offer a pragmatic method for this process¹⁵. DRM allows researchers and clinicians to "deconstruct" an intervention into its active theoretical ingredients (e.g., the mechanism of emotion regulation) and "reconstruct" its delivery vehicle (e.g., using local metaphors, communal narratives, or simplified language) to ensure cultural fit without compromising fidelity.

Task-Sharing and Stepped Care

Given the shortage of specialists, Indonesia must embrace Task-Sharing

models, where trained non-specialist health workers (e.g., nurses, lay counselors, or GPs) deliver structured psychological interventions under specialist supervision.

Successful models from the region, such as Singapore's stepped-care ecosystem, demonstrate that primary care physicians can be effectively trained to manage stable mental health cases¹⁶. Similarly, the WONCA MDD Minds initiative illustrates the potential of "Train-the-Trainer" models to rapidly upskill the primary care workforce in culturally adapted mental health competencies¹⁷.

Recommendations for Stakeholders

To actualize this integration, we propose the following strategic actions for professional organizations and policymakers:

- Education: Medical curricula must pivot from a purely biomedical focus to include "Generalist Mental Health Competencies," incorporating basic element skills from MI, CBT, and basic emotion regulation coaching suitable for primary care settings. One example is rather than focusing on one prototypical case such as schizophrenia for medical student, as representing "psychiatry" for undergraduate students, we can also incorporate depression and anxiety in cancer patients and elucidate how the presence of mental disorders might moderate the course of treatment, and overall prognosis. This can be interpreted in the wider context of current problem-based learning, competence-based curriculum.
- Research: Prioritize implementation research that tests the feasibility and cost-effectiveness of adaptable, low-intensity group interventions (again, using some basic element of CBT/DBT skills) in *Puskesmas* settings, rather than focusing solely on prevalence studies¹⁷. The help of digital based, mobile health, and even AI assistance in high patient load setting, with supervision of trained

health professionals, could be the future frontiers in the implementation research of mental health in Indonesia.

- Policy: Advocate for the inclusion of evidence-based psychotherapy and counseling services in national health insurance coverage, recognizing them as essential components of chronic disease management.

ACKNOWLEDGEMENTS

-

REFERENCES

1. World Health Organization and WONCA, "What is primary care mental health?," *Ment. Health Fam. Med.*, vol. 5, no. 1, p. 9-13, 2008.
2. World Health Organization and UNAIDS, *Integration of Mental Health and HIV Interventions, Global HIV Programme*. Geneva, Switzerland: World Health Organization, 2022.
3. D. A. Cipta and A. Saputra, "Changing landscape of mental health from early career psychiatrists' perspective in Indonesia," *J. Glob. Heal. Neurol. Psychiatry.*, 2022, doi:10.52872/001c.37413.
4. Kementerian Kesehatan Republik Indonesia, *Hasil Utama Riskesdas 2018*. Jakarta, Indonesia: Kementerian Kesehatan RI, 2018.
5. A. Fekadu, M. Demissie, R. Birhane, et al., "Under detection of depression in primary care settings in low and middle-income countries: A systematic review and meta-analysis," *Syst. Rev.*, vol. 11, no. 21, 2022, doi: 10.1186/s13643-022-01893-9.
6. M. Singer, "A dose of drugs, a touch of violence, a case of AIDS: Conceptualizing the syndemic," *Free Inq. Creat. Sociol.*, vol. 24, no. 2, pp. 99-110, 1996.
7. J. L. Birk, I. M. Kronish, N. Moise, L. Falzon, S. Yoon, and K. W. Davidson, "Depression and multimorbidity: Considering temporal characteristics of the associations between depression and

- multiple chronic diseases,” *Health Psychol.*, vol. 38, no. 9, p. 802-811, 2019, doi: 10.1037/hea0000737.
8. J. T. Parsons, B. M. Millar, R. L. Moody, *et al.*, “Syndemic conditions and HIV transmission risk behavior among HIV-negative gay and bisexual men in a U.S. national sample,” *Health Psychol.*, vol. 36, no. 7, p. 695-703, 2017.
 9. B. Mustanski, R. Andrews, A. Herrick, R. Stall, and P. W. Schnarrs, “A syndemic of psychosocial health disparities and associations with risk for attempting suicide among young sexual minority men,” *Am. J. Public Health.*, vol. 104, no. 2, p. 287-294, 2014, doi: 10.2105/AJPH.2013.301744
 10. A. C. Tsai and J. Velloza, “Syndemics and health disparities: A methodological note,” *AIDS Behav.*, vol. 20, no. 2, p. 423-430, 2016, doi: 10.1007/s10461-015-1260-2
 11. J. E. Pachankis, M. L. Hatzenbuehler, H. J. Rendina, S. A. Safren, and J. T. Parsons, “LGB-affirmative cognitive-behavioral therapy for young adult gay and bisexual men: A randomized controlled trial of a transdiagnostic minority stress approach,” *J. Consult. Clin. Psychol.*, vol. 83, no. 5, pp. 875–889, 2015, doi: 10.1037/ccp0000037.
 12. N. H. Weiss, T. P. Sullivan, and M. T. Tull, “Explicating the role of emotion dysregulation in risky behaviors: A review and synthesis of the literature with directions for future research and clinical practice,” *Curr. Opin. Psychol.*, vol. 3, pp. 22–29, 2015, doi: 10.1016/j.copsyc.2015.01.013.
 13. D. W. Pantalone, C. A. Sloan, and A. Carmel, “Dialectical behavior therapy for borderline personality disorder and suicidality among sexual and gender minority individuals,” in *Handbook of Evidence-Based Mental Health Practice with Sexual and Gender Minorities*. Oxford, UK: Oxford University Press, 2019.
 14. S. L. Rizvi, A. M. Bitran, L. A. Oshin, Q. Yin, and A. K. Ruork, “The state of the science: Dialectical behavior therapy,” *Behav. Ther.*, vol. 55, no. 6, pp. 1233–1248, 2024, doi: 10.1016/j.beth.2024.02.006.
 15. E. Wu, Y. G. Lee, V. Vinogradov, *et al.*, “Intervention adaptation and implementation method for real-world constraints and using new technologies,” *Res. Soc. Work Pract.*, vol. 33, no. 5, pp. 562–570, 2023, doi: 10.1177/10497315221120605.
 16. Singapore Ministry of Health, “Community Health Assessment Team (CHAT) & Assessment and Shared Care Team (ASCAT) models,” in *Singapore’s Stepped-Care Community Psychiatry Ecosystem*, 2017.
 17. WONCA, “MDD Minds for Primary Care: First meeting of the Master Faculty,” *WONCA News*, Apr. 2023.