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Context-responsive psychiatry in low-resource settings: A narrative review and evidence synthesis

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Abstract

Mental health systems in low-resource and transitional settings face a persistent mismatch between high clinical need, limited specialist capacity, and the complexity of psychiatric morbidity across the lifespan. This narrative review and evidence synthesis examines context-responsive psychiatry as a practical approach to strengthening care in settings where resources are constrained but psychiatric burden is substantial, including contexts across Africa, Asia, and Southeast Asia. The review integrates evidence across neurodevelopmental disorders, child and adolescent psychiatry, perinatal mental health, psychosis, mood disorders, substance-use disorders, neurocognitive impairment, psychopharmacology, quality improvement, and service delivery. It draws on locally generated clinical evidence from sub-Saharan Africa while positioning these findings alongside international literature relevant to Asian and Thai mental health systems. Across the evidence, several priorities emerge: early identification, culturally appropriate assessment, brief psychosocial interventions, pragmatic pharmacological decision-making, attention to neurocognitive and medical comorbidity, family involvement, workforce development, and system-level quality improvement. The review argues that effective psychiatric care requires clinically rigorous, culturally sensitive, ethically grounded, locally feasible, and system-aware approaches that preserve evidence-based standards while adapting delivery to real-world constraints.

Keywords: Global Mental Health; Service Integration; Neurocognition; Psychosocial Interventions; Psychopharmacology

1. Introduction

Mental, neurological, and substance-use disorders are major contributors to global disability, premature mortality, impaired functioning, family burden, and social exclusion [1], [2]. Despite growing recognition of mental health as a public-health and development priority, many health systems continue to face a substantial mismatch between clinical need and available care, particularly where specialist workforce, essential psychotropic medicines, psychological therapies, community services, and follow-up systems are limited [2], [3], [4]. These challenges are not confined to one region. They are relevant across many low-resource and transitional settings, including parts of Africa, Asia, and Southeast Asia, where psychiatric services must respond to common mental disorders, severe mental illness, substance-use disorders, neurodevelopmental conditions, perinatal mental health needs, neurocognitive impairment, and the psychiatric consequences of chronic medical illness and injury [3], [4], [5].

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Global mental health has correctly emphasized the need to reduce the treatment gap and expand access to care. However, service expansion alone is insufficient when clinical models are transferred without adequate attention to local realities. Psychiatric care is shaped by cultural explanations of illness, stigma, family structures, help-seeking pathways, poverty, medicine availability, comorbid physical illness, staff safety, health-system governance, and the feasibility of sustained follow-up [2], [4], [5]. Evidence from low-resource clinical settings shows that barriers to care often include delayed presentation, limited mental-health literacy, shortage of medicines and supplies, staff constraints, weak continuity of care, and the need for stronger community engagement and quality improvement [6], [7].

Context-responsive psychiatry offers a practical framework for addressing these challenges. It does not replace evidence-based practice; rather, it requires that evidence-based interventions are adapted ethically and clinically to the setting in which care is delivered. This is particularly important where brief psychosocial interventions, family-mediated care, pragmatic psychopharmacology, metabolic monitoring, neurocognitive assessment, and service-level quality improvement must operate within real-world constraints [8], [9], [10]. Therefore, this narrative review and evidence synthesis aims to examine context-responsive psychiatry as an approach for strengthening psychiatric practice in low-resource settings, integrating locally generated evidence with international literature relevant to diverse health systems, including Asian and Southeast Asian contexts.

2. Materials and Methods

This article was designed as a narrative review and evidence synthesis. The review was conducted to examine how psychiatric care can be adapted to low-resource and transitional health systems while remaining clinically rigorous, ethical, and evidence-based. The approach was informed by established principles for high-quality narrative reviews, including clear justification, explicit aims, transparent literature selection, balanced interpretation, and appropriate referencing [11].

The evidence base consisted of two complementary sources. First, twenty five peer-reviewed articles and manuscripts were purposively included because they represented locally generated evidence across major domains of psychiatric practice, including child and adolescent psychiatry, neurodevelopmental disorders, psychosis, substance-use disorders, mood disorders, perinatal mental health, neurocognitive impairment, psychopharmacology, service delivery, and quality improvement. Second, additional international literature was identified through targeted searches of PubMed/MEDLINE, Google Scholar, World Health Organization publications, and relevant clinical guideline repositories. Search terms included combinations of “global mental health”, “low-resource settings”, “contextual psychiatry”, “task sharing”, “psychosocial intervention”, “psychopharmacology”, “neurocognition”, “substance use disorder”, “child psychiatry”, “perinatal mental health”, “quality improvement”, “Asia”, “Southeast Asia”, and “Thailand”.

Priority was given to peer-reviewed articles, international guidelines, systematic reviews, major global reports, and studies relevant to low- and middle-income countries. Sources were selected for conceptual relevance, clinical applicability, methodological credibility, and contribution to the review question. The synthesis was organised thematically rather than by diagnosis alone, allowing comparison across clinical, cultural, pharmacological, neurocognitive, and health-system domains.

No meta-analysis was performed because the included studies were heterogeneous in design, population, setting, intervention, and outcome measures. As this was a review of existing literature, no new human or animal participants were recruited.

3. Results and Discussion

3.1. Conceptual foundation of context-responsive psychiatry

Context-responsive psychiatry may be defined as an approach to mental-health care that preserves the principles of evidence-based practice while adapting assessment, treatment, follow-up, risk management, and service delivery to the realities of the setting in which care is provided. It recognises that psychiatric disorders do not present in isolation from culture, family structure, poverty, health-system capacity, medicine availability, comorbid physical illness, stigma, and local help-seeking pathways. This approach is particularly relevant in low-resource and transitional settings, where the burden of mental, neurological, and substance-use disorders is high, but specialist services, psychological therapies, diagnostic investigations, and continuity-of-care systems may be limited [1], [2], [3], [4], [5].

The concept is not an argument for lowering clinical standards. On the contrary, context-responsive psychiatry requires disciplined clinical reasoning, ethical safeguards, and careful use of available evidence. Its central principle is that international guidelines must be interpreted through local feasibility without losing their scientific and human-rights foundations. For example, the World Health Organization's Mental Health Gap Action Programme supports task-sharing and integration of mental health into non-specialist services, but safe implementation still requires training, supervision, referral pathways, and clear clinical thresholds [4]. Similarly, regional policy frameworks in Southeast Asia emphasise service integration, community-based care, stigma reduction, and improved access, but each country must translate these priorities into locally workable models [5].

In clinical practice, context-responsive psychiatry has four interrelated dimensions. The first is clinical responsiveness: psychiatric assessment must include developmental stage, medical comorbidity, neurocognitive function, substance use, medication exposure, and risk. Recent work on integrated psychiatric assessment has argued that the mental status examination, focused neurological screening, and structured risk formulation should not be separated, because fragmentation may delay recognition of delirium, neurological disease, self-harm risk, violence risk, or unsafe transitions of care [12]. The second is cultural responsiveness: clinicians must understand explanatory models, family decision-making, stigma, spiritual interpretations, and the social meanings attached to mental illness. The third is resource responsiveness: treatment plans must consider what medicines, investigations, professionals, family supports, and follow-up systems are realistically available. The fourth is system responsiveness: psychiatric care must be supported by quality-improvement methods, safety monitoring, reliable handover, and measurement of outcomes that matter to patients, families, staff, and services [7], [13].

This framework is especially important because evidence-based interventions do not automatically produce benefit when transplanted into new settings. Brief psychosocial interventions, parent-mediated care, psychoeducation, motivational interviewing, metabolic monitoring, and safety bundles depend on fidelity, attendance, workforce capacity, supervision, acceptability, and continuity [8], [9], [10], [13]. Context-responsive psychiatry therefore provides a bridge between global recommendations and everyday clinical reality. It supports a form of care that is scientifically informed, culturally sensitive, ethically grounded, feasible under constraint, and adaptable across diverse low-resource and transitional settings, including African, Asian, Southeast Asian, and Thai mental-health systems.

3.2. Mental-health burden, access barriers, and service realities

The need for context-responsive psychiatry is most visible where the burden of mental, neurological, and substance-use disorders intersects with constrained service capacity. Globally, mental disorders account for a substantial and persistent share of years lived with disability, while many affected individuals experience delayed care, social exclusion, reduced productivity, family strain, and premature mortality [1], [2]. In low-resource and transitional settings, this burden is intensified by uneven specialist distribution, limited access to psychological therapies, inconsistent availability of psychotropic medicines, weak community follow-up, and fragmented referral pathways [2], [3], [4].

The treatment gap is not simply a numerical shortage of services. It reflects a deeper mismatch between clinical need and the organisation of care. Many patients first seek help through family networks, traditional or religious systems, general medical services, emergency departments, or informal community pathways before reaching specialist psychiatric care. These routes may provide support, but they can also delay diagnosis and treatment when symptoms are misunderstood, heavily stigmatized, or interpreted primarily through non-medical explanatory models [3], [4]. This is particularly relevant for psychosis, substance-use disorders, perinatal depression, neurodevelopmental disorders, and neurocognitive impairment, where early recognition and sustained engagement strongly influence outcomes.

Evidence from service-based studies in low-resource settings shows that barriers to mental-health care are frequently multidimensional. They include limited mental-health literacy, poverty, transport costs, stigma, staff shortages, medicine stock-outs, perceived negative staff attitudes, long waiting times, and weak continuity after discharge [6]. Psychiatric readmission may similarly reflect not only illness severity, but also inadequate follow-up, social stressors, unemployment, family burden, substance use, and limited rehabilitation options [14]. These findings support the view that strengthening mental-health care requires attention to the whole pathway from first contact to recovery, rather than focusing narrowly on diagnosis and prescription.

Service quality and safety are also central. Psychiatric care often involves risks related to self-harm, aggression, coercion, medication adverse effects, diagnostic overshadowing, and unsafe transitions between inpatient, outpatient, primary-care, and community services [13]. Quality-improvement approaches, including Plan-Do-Study-Act cycles, structured handover, safety monitoring, and staff engagement, can help services adapt evidence-based principles to local

operational realities [7], [13]. Thus, context-responsive psychiatry requires health systems to be clinically competent, culturally aware, accessible, safe, and capable of learning from routine practice.

3.3. Neurodevelopmental and child psychiatry

Neurodevelopmental and child psychiatric disorders illustrate why context-responsive psychiatry must begin early in life and extend beyond the clinic. Conditions such as autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), intellectual and language difficulties, and childhood-onset psychosis affect communication, learning, behaviour, family functioning, school participation, and long-term social development. In low-resource and transitional settings, these disorders are often under-recognised or diagnosed late because specialist child mental-health services are scarce, developmental surveillance may be limited, and families may first seek help through educational, religious, traditional, or general medical pathways rather than specialist psychiatry [2], [4], [5].

ASD provides a clear example of the need for scalable, family-centred intervention. Global evidence suggests that ASD affects approximately 1% of children, although prevalence estimates vary substantially according to diagnostic methods and service access [15]. In settings where speech therapy, occupational therapy, behavioural therapy, and specialist child psychiatry are limited, parent-mediated interventions are particularly relevant because they train caregivers to use therapeutic strategies within daily routines. A local quasi-experimental study of 60 children with ASD found significant improvement in functional language and social communication after a brief parent-mediated intervention, while overall autism severity did not significantly change [8]. Improvement was associated with older child age, caregiver attendance, and parent fidelity, suggesting that outcomes depend not only on the intervention itself but also on caregiver engagement, coaching quality, and the family's ability to practise strategies consistently. This is consistent with broader evidence that parent-mediated interventions can improve parent-child interaction and selected child outcomes, although effects vary across settings and require attention to fidelity, supervision, and adaptation [16], [17].

ADHD similarly demonstrates the importance of pragmatic, developmentally informed care. Assessment should not rely on symptoms alone, but should include parent and teacher reports, functional impairment, developmental history, comorbidity, learning difficulties, sleep problems, substance exposure in older adolescents, and differential diagnosis [18]. In low-resource settings, the challenge is not only clinical diagnosis but also access to sustained behavioural support, school collaboration, and appropriate medicines. Standard pharmacological options such as methylphenidate and atomoxetine may be unavailable, unaffordable, or difficult to monitor consistently. Consequently, families and clinicians may consider complementary or alternative strategies. A review of omega-3 fatty acids in ADHD argued that such supplementation may be considered as adjunctive or alternative support, especially where families are reluctant to use conventional medication, although it should not be presented as a replacement for established evidence-based care when such care is available [19]. A small quasi-experimental study reported improvement in attention, executive functioning, and memory among children with ADHD after four weeks of fluoxetine, but the sample was limited and the findings should be interpreted as exploratory rather than definitive [20]. Such evidence is valuable because it reflects real-world therapeutic constraints, but it also reinforces the need for larger controlled studies before changing standard practice.

Childhood-onset psychosis and schizophrenia represent the severe end of child psychiatry. Although rare, these conditions carry major risks for cognitive development, education, social functioning, family relationships, and future disability. Assessment requires careful exclusion of epilepsy, intoxication, infection, neurodevelopmental disorders, mood disorders, trauma-related symptoms, and other medical or neurological causes of psychotic-like presentations [21]. Management should include antipsychotic treatment when indicated, psychoeducation, family support, school liaison, psychosocial rehabilitation, safety monitoring, and long-term follow-up [21]. In context-responsive psychiatry, child mental-health care must therefore be multidisciplinary, family-inclusive, school-aware, culturally sensitive, and realistic about available resources.

3.4. Psychosis, severe mental illness, and continuity of care

Psychosis and severe mental illness are central tests of whether a mental-health system is genuinely context-responsive. These conditions are associated with relapse, disability, stigma, family burden, premature mortality, homelessness, violence exposure, self-harm risk, and repeated admissions when care is fragmented or delayed [2], [3], [4]. In low-resource and transitional settings, the clinical challenge is intensified by late presentation, limited early-intervention services, inconsistent access to antipsychotic medication, weak community follow-up, and variable availability of psychological, family, and rehabilitation interventions [4], [22]. Therefore, the management of psychosis must move beyond acute symptom control and include early identification, adherence support, physical-health monitoring, family engagement, relapse prevention, rehabilitation, safeguarding, and safe transitions of care.

First-episode psychosis is particularly important because the early phase of illness offers an opportunity to reduce relapse and improve long-term functioning. International guidelines recommend antipsychotic treatment alongside psychological interventions, family work, psychoeducation, relapse prevention, and attention to social recovery [23], [24]. However, evidence from low- and lower-middle-income countries suggests that early-intervention models require adaptation to local workforce capacity, service organisation, family roles, medication supply, and follow-up systems [22]. A randomized controlled trial among 84 treatment-naïve patients with first-episode psychosis found that medication adherence, psychiatric symptoms, and functioning improved over 12 weeks in both treatment-as-usual and treatment-as-usual plus psychoeducation groups, but adjunctive psychoeducation did not produce a statistically significant additional effect on adherence [9]. Improvement was more strongly associated with socioeconomic context and willingness to take medication than with trial allocation [9]. This finding is clinically important: psychoeducation remains valuable, but adherence in low-resource settings is rarely solved by information alone. It often requires motivational work, affordable medication, family involvement, stigma reduction, accessible follow-up, and practical support for daily treatment routines [25].

Continuity of care is equally important after acute stabilization. Psychiatric readmission may reflect illness severity, but it may also indicate weak discharge planning, poor medication continuity, social stress, unemployment, substance use, limited rehabilitation, and inadequate community support. A descriptive study of psychiatric adult readmission found that no single sociodemographic factor strongly explained readmission, although single and unemployed patients, younger patients, and patients experiencing stress were more frequently represented [14]. Such findings support a pathway approach to severe mental illness: discharge preparation, medication reconciliation, family involvement, early post-discharge review, community linkage, relapse-sign monitoring, and attention to social determinants.

Physical-health care must also be embedded in psychosis management. Antipsychotic treatment can reduce psychotic symptoms and relapse risk, but it may also increase cardiometabolic risk, particularly with some second-generation antipsychotics. A cross-sectional study of patients receiving antipsychotic medications found impaired fasting blood glucose in 11.1% and diabetes in 10.0% of participants, supporting routine low-cost monitoring of weight, body mass index, waist circumference, and blood glucose in psychiatric settings [26]. Context-responsive psychiatry therefore requires psychiatric services to treat serious mental illness without neglecting preventable physical morbidity.

Severe mental illness may also present with complex family, cultural, legal, and safeguarding dimensions. Integrated psychiatric assessment models emphasise that the mental status examination, focused neurological screening, and structured risk formulation should be linked rather than performed in isolation, because diagnostic, neurological, and risk information often converge in acute psychiatric presentations [12]. Induced delusional disorder, also described as Folie à deux or shared psychosis, illustrates this complexity. Case-based literature describes how a dominant psychotic belief may be transmitted within a close and socially isolated relationship, especially where dependence, limited external corrective feedback, and shared cultural or religious interpretations are present [27], [28]. The reported case of a married couple demonstrates how untreated psychosis, family isolation, shared delusional beliefs, child safeguarding failure, delayed help-seeking, forensic consequences, and long-term rehabilitation needs may intersect in a single presentation [28]. This does not imply that cultural or religious beliefs are pathological in themselves; rather, it shows the need for careful phenomenological assessment, risk-sensitive family evaluation, and respectful differentiation between culturally accepted beliefs and fixed psychotic symptoms associated with harm or impaired functioning.

For context-responsive psychiatry, psychosis care must therefore be longitudinal, multidisciplinary, and system-aware. Acute treatment should be connected to family work, physical-health monitoring, relapse prevention, social rehabilitation, safeguarding, community follow-up, and legal or forensic pathways when indicated. This is especially relevant in low-resource and transitional settings, where delays in treatment, weak continuity, and limited community support can transform treatable psychiatric illness into disability, family crisis, or preventable harm.

3.5. Substance use, behavioural addictions, and harm reduction

Substance-use disorders and behavioural addictions are major priorities for context-responsive psychiatry because they sit at the intersection of mental health, public health, family functioning, criminal justice, injury prevention, infectious disease, and socioeconomic vulnerability. Globally, alcohol and psychoactive drug use contribute substantially to preventable morbidity and mortality, while treatment coverage remains inadequate in many settings [29]. The World Health Organization reported that alcohol consumption was attributable to approximately 2.6 million deaths per year, while psychoactive drug use accounted for approximately 0.6 million deaths, with the majority of these deaths occurring among men [29]. In low-resource and transitional settings, the burden is often compounded by stigma, limited specialist addiction services, weak referral pathways, inconsistent medicine availability, and poor integration between psychiatric, primary-care, emergency, and community services [2], [3], [4].

Alcohol-use disorder illustrates the need for pragmatic and locally evaluated interventions. Brief psychosocial interventions such as motivational interviewing are widely recommended because they are structured, patient-centred, and potentially feasible in settings with limited specialist capacity. However, their effectiveness depends on timing, fidelity, patient readiness, staff training, supervision, and continuity after discharge. A randomized controlled trial among 84 hospitalized adults with alcohol-use disorder found substantial short-term harm reduction overall, with median Alcohol Use Disorders Identification Test scores decreasing from 25 to 11 after six weeks, but motivational interviewing did not show a statistically significant added benefit over treatment as usual [10]. This finding does not invalidate motivational interviewing; rather, it demonstrates that interventions with strong international reputations must still be tested under local service conditions. In context-responsive psychiatry, harm reduction should therefore include brief intervention, relapse-prevention planning, family engagement, linkage to continuing care, and attention to poverty, employment, stigma, and comorbid mental illness.

Help-seeking behaviour is another critical determinant of outcomes. A mixed-methods study among individuals with substance-use disorders found that service use was influenced by health-system, sociocultural, socioeconomic, and individual factors, including staff availability and attitudes, shortages of supplies and medicines, limited mental-health literacy, and stigma [6]. These findings show that poor engagement should not be interpreted simply as lack of motivation. For many patients, the pathway to care is shaped by affordability, transport, family beliefs, previous service experiences, fear of judgement, and uncertainty about where to seek help. Strengthening addiction care therefore requires community education, respectful clinical communication, task-sharing, integration into primary care, and reliable referral pathways.

Behavioural addictions further expand the agenda for low-resource psychiatric systems. Gambling disorder has long clinical and social roots, but its impact is changing as betting technologies, online platforms, and mobile financial systems become more accessible. A review of pathological gambling described gambling-related harm as an emerging clinical and public-health concern, including financial loss, family disruption, psychological distress, and comorbidity with substance use and mood disorders [30]. The World Health Organization's recognition of gaming disorder in the International Classification of Diseases, 11th Revision, similarly reflects the growing need to identify behavioural patterns involving impaired control, increasing priority over other activities, and continuation despite negative consequences [31]. These conditions require careful assessment because excessive gambling or gaming may coexist with depression, anxiety, ADHD, bipolar disorder, substance use, or social adversity.

A context-responsive approach to addiction care should therefore avoid both moral judgement and therapeutic nihilism. It should combine screening, brief intervention, harm reduction, relapse-prevention planning, family support, comorbidity assessment, community linkage, and policy awareness. In Asian and Southeast Asian settings, including Thailand, this is especially relevant where alcohol use, stimulant use, online gambling, digital gaming, tourism-related risks, migration, and urban-rural inequalities may interact with local patterns of stigma and service access. Effective care must be clinically sound, culturally acceptable, affordable, and connected to wider public-health and social-support systems.

3.6. Neuropsychiatry and neurocognitive impairment

Neuropsychiatry is a core component of context-responsive psychiatry because many psychiatric presentations are shaped by neurological disease, brain injury, chronic medical illness, medication effects, and cognitive impairment. This is especially important in low-resource and transitional settings, where specialist neurology, neuropsychology, neuroimaging, rehabilitation, and long-term community support may be limited. The global burden of disorders affecting the nervous system is substantial, with stroke, neonatal encephalopathy, migraine, dementia, diabetic neuropathy, meningitis, epilepsy, autism spectrum disorder, nervous-system cancers, and neurological complications of preterm birth contributing heavily to disability and premature mortality [32]. For psychiatric services, this means that assessment cannot be restricted to mood, thought, behaviour, and perception alone; it must also include attention, memory, executive function, neurological signs, medication exposure, functional decline, and risk.

Stroke is one of the clearest examples of the psychiatry-neurology interface. It is a leading cause of death and disability globally, and survivors frequently experience depression, anxiety, cognitive impairment, emotional dysregulation, fatigue, behavioural change, and reduced quality of life [33], [34]. These complications may interfere with rehabilitation, medication adherence, family functioning, and return to work. A review of post-stroke neuropsychiatric presentations highlighted the importance of recognising post-stroke depression, anxiety, mania, psychosis, catastrophic reactions, pathological affect, and cognitive impairment as clinically meaningful conditions rather than secondary concerns [34]. In resource-constrained systems, simple screening for mood, cognition, suicidality, functional ability, and caregiver

strain may be more feasible than specialist assessment for every patient, but it still requires training, referral pathways, and integration between psychiatry, neurology, primary care, and rehabilitation services.

Road traffic accidents are another major source of neuropsychiatric morbidity. Traumatic brain injury and related trauma may result in executive dysfunction, slowed information processing, irritability, depression, anxiety, post-traumatic symptoms, poor impulse control, and reduced occupational functioning. A cross-sectional study of adult road traffic accident victims found frequent executive-function impairment and speed-of-information-processing deficits, with significant compromise in quality of life [35]. Such findings are highly relevant for many African, Asian, and Southeast Asian countries, where road injury burden, emergency-care limitations, and rehabilitation gaps may leave survivors with unrecognised cognitive and emotional disability. Context-responsive psychiatry should therefore include cognitive screening after head injury, psychoeducation for families, risk assessment, vocational advice, and referral to rehabilitation where available.

Chronic medical illness may also produce neurocognitive vulnerability. In children with sickle cell disease, cerebral hypoxia, silent infarction, pain, school absence, and chronic illness burden can affect attention, memory, executive function, learning, and quality of life. A comparative study of children with sickle cell disease identified deficits in executive function, attention, and memory, and concluded that regular developmental neuropsychological testing should be considered to support early intervention [36]. This is an important reminder that child psychiatry and paediatrics should not operate in isolation. Children with chronic illness may require educational support, family counselling, cognitive assessment, and coordinated medical-psychological care.

Parkinson's disease and other neurodegenerative disorders further demonstrate the need for integrated psychiatric thinking. Depression, anxiety, apathy, psychosis, impulse-control symptoms, sleep disturbance, cognitive decline, and medication-related behavioural changes may all complicate neurological illness. Antidepressants are frequently used in neurological practice for depression, anxiety, neuropathic pain, panic symptoms, and migraine prevention, but they require careful diagnosis, monitoring, and attention to interactions and adverse effects [37]. Dopamine agonists such as pramipexole are also clinically relevant at this interface. Reviews of pramipexole in Parkinson's disease and neuropsychiatry describe its role in motor symptoms, motor fluctuations, and selected non-motor symptoms, including affective symptoms and quality-of-life outcomes [38], [39]. However, context-responsive prescribing requires careful monitoring for adverse effects, polypharmacy, impulse-control symptoms, daytime somnolence, hallucinations, and cognitive vulnerability, particularly in older adults and in services where follow-up may be inconsistent.

Taken together, the reviewed evidence supports a practical principle: psychiatric assessment in low-resource settings should routinely include a brief neuropsychiatric lens. This does not mean that every patient requires advanced investigations. It means that clinicians should actively ask whether symptoms may reflect stroke, epilepsy, delirium, traumatic brain injury, neurodevelopmental disorder, chronic medical illness, neurodegeneration, substance use, or medication effects. Context-responsive psychiatry therefore strengthens clinical safety by linking mental status examination, focused neurological screening, cognitive assessment, risk formulation, and feasible referral pathways [12].

3.7. Psychopharmacology under constraint

Psychopharmacology in low-resource and transitional settings requires a careful balance between scientific evidence, medicine availability, affordability, safety monitoring, clinical urgency, and patient acceptability. Context-responsive psychiatry does not justify unsafe improvisation or departure from evidence-based standards. Rather, it recognises that prescribing decisions are often made in environments where specialist supervision, laboratory monitoring, therapeutic alternatives, long-term follow-up, and continuous medicine supply may be limited. In such settings, rational prescribing must be simple, safe, clinically justified, and linked to monitoring systems that are feasible in routine care.

Essential medicines policy is therefore central to psychiatric care. The World Health Organization Model List of Essential Medicines is designed to guide countries and regions in developing national essential medicines lists according to local priorities, disease burden, and treatment guidelines [40]. For mental-health systems, this principle is especially important because medication gaps can undermine continuity of care for psychosis, bipolar disorder, depression, epilepsy, alcohol withdrawal, and child psychiatric conditions. A context-responsive approach requires not only the presence of medicines on a list, but also reliable procurement, affordable access, prescriber training, side-effect monitoring, patient education, and clear referral pathways.

Bipolar disorder illustrates the importance of matching evidence to feasibility and phase of illness. Lamotrigine has an established role in bipolar depression and maintenance treatment, especially where depressive relapse is a major concern, but it requires slow titration and careful monitoring for rash and severe cutaneous adverse reactions [41]. A

review on lamotrigine in bipolar depression emphasised its clinical relevance as an anticonvulsant mood stabiliser, particularly for depressive phases of bipolar disorder [42]. In low-resource settings, its usefulness depends on correct diagnosis, patient education, availability of safe titration schedules, and the ability to review patients promptly if adverse effects occur.

ADHD pharmacotherapy presents another practical challenge. International guidelines recognise methylphenidate and other stimulant or non-stimulant options as important treatments, but these medicines may be unavailable, highly regulated, unaffordable, or inconsistently supplied in many settings [43]. Local exploratory work has examined alternatives such as omega-3 fatty acids and fluoxetine in ADHD-related neurocognitive impairment [19], [20]. These studies are valuable because they reflect real-world constraints, but they should be interpreted cautiously. Omega-3 supplementation may be considered adjunctive support, while fluoxetine findings require larger controlled studies before wider recommendation. The clinical lesson is not that standard care should be replaced, but that resource-limited settings need pragmatic trials, careful monitoring, and transparent discussion of evidence strength.

Autism spectrum disorder further demonstrates the limits of medication-centred care. In adults with autism, psychiatric comorbidity, epilepsy, obesity, self-harm, catatonic features, aggression, mood symptoms, obsessive-compulsive symptoms, and psychosis-like presentations may complicate assessment and management [45]. However, pharmacological treatment does not address the core developmental features of autism and should be reserved for clearly defined target symptoms, comorbid psychiatric disorders, severe behavioural disturbance, or risk-related presentations. A review of adult autism emphasised that many adults require social, behavioural, rehabilitation, caregiver-supported, and lifelong adaptive support more than long-term psychopharmacological intervention [45]. In low-resource settings, this distinction is crucial. Over-prescribing may expose patients to sedation, metabolic harm, extrapyramidal symptoms, cognitive dulling, or polypharmacy without improving communication, independence, or social functioning. Context-responsive prescribing in autism should therefore begin with diagnostic clarification, collateral history, environmental assessment, sensory and communication needs, family education, and behavioural strategies before medication is considered.

Psychopharmacology also requires attention to physical-health safety. Antipsychotic treatment is essential for many patients with psychosis, but metabolic adverse effects can be overlooked where laboratory access is limited. Consensus recommendations on second-generation antipsychotics have long emphasised monitoring of weight, glucose, and lipid-related risk [44]. Local evidence showing impaired fasting glucose and diabetes among patients receiving antipsychotic medication supports the need for low-cost metabolic monitoring using weight, body mass index, waist circumference, and blood glucose where lipid testing is not consistently available [26].

Finally, prescribing often crosses the boundary between psychiatry and neurology. Antidepressants are used not only for depressive disorders but also in neurological practice for post-stroke depression, neuropathic pain, anxiety, and other syndromes [37]. Dopamine agonists such as pramipexole may improve motor symptoms and selected non-motor symptoms in Parkinson's disease, including mood and quality-of-life outcomes, but require monitoring for somnolence, hallucinations, impulse-control problems, cognitive vulnerability, and polypharmacy [38], [39]. Context-responsive psychopharmacology therefore means choosing medicines that are evidence-informed, locally available, affordable, acceptable, and safe enough to monitor under real service conditions.

3.8. Psychosocial interventions and family-centred care

Psychosocial interventions are central to context-responsive psychiatry because they address needs that medication alone cannot resolve. In low-resource and transitional settings, this is especially important because many patients live within extended family systems, face stigma, experience poverty-related stress, and depend on caregivers for treatment access, adherence, daily functioning, and crisis response. Psychosocial care may include psychoeducation, family work, behavioural strategies, motivational interviewing, rehabilitation, caregiver coaching, school liaison, community engagement, relapse-prevention planning, and brief structured interventions adapted to local services [3], [4].

Family-centred care is particularly important in neurodevelopmental disorders. In autism spectrum disorder, parent-mediated intervention can extend therapeutic input beyond specialist clinics by training caregivers to use communication and interaction strategies in everyday routines. A quasi-experimental study of children with autism found significant improvement in functional language and social communication after brief parent-mediated intervention, while broader autism severity did not significantly change [8]. This finding is clinically meaningful because it suggests that caregiver coaching may improve practical developmental outcomes even when specialist therapy resources are limited. However, outcomes were linked to caregiver attendance and fidelity, showing that psychosocial interventions require active participation, supervision, and realistic support for families [8]. Evidence from systematic

reviews similarly indicates that parent-mediated interventions may improve parent-child interaction and selected child outcomes, although effects vary and depend on intervention quality, training, and fidelity [16], [17].

In severe mental illness, psychoeducation and family involvement are often recommended to improve understanding, adherence, relapse recognition, and engagement with services [23], [24]. Nevertheless, psychosocial interventions should not be assumed to work automatically in every context. A randomized controlled trial of adjunctive psychoeducation in first-episode psychosis found improvement in adherence, symptoms, and functioning over time in both groups, but no statistically significant additional adherence benefit from psychoeducation compared with treatment as usual [9]. This does not make psychoeducation unimportant. Rather, it shows that education alone may be insufficient when adherence is also shaped by poverty, stigma, medicine access, family beliefs, side effects, and follow-up barriers [9], [25]. Context-responsive psychoeducation should therefore be practical, repeated, culturally understandable, family-inclusive, and linked to problem-solving rather than delivered as information only.

Psychosocial intervention is also essential in addiction care. Motivational interviewing is internationally recognised as a patient-centred intervention that supports behaviour change, but its effectiveness depends on clinical context, therapist skill, readiness to change, and continuity after discharge. In a randomized controlled trial among hospitalized patients with alcohol-use disorder, alcohol-related harm decreased substantially overall, but motivational interviewing did not show a statistically significant added benefit over treatment as usual at six weeks [10]. This finding supports a cautious but constructive interpretation: brief interventions are valuable, but they need implementation support, follow-up, relapse-prevention planning, family engagement, and linkage to continuing care.

Perinatal and adolescent mental health provide another important example of why psychosocial and family-centred care must be embedded in routine services. Teenage pregnancy is often accompanied by social stigma, educational interruption, economic insecurity, relationship instability, family conflict, and anxiety about motherhood. A cross-sectional study of 105 pregnant teenagers aged 13 to 17 years found that prenatal depression was associated with attempts to abort, stress, social support, household income, education level, and marital status [46]. Psychosocial variables were especially important, with stress, anxiety, self-esteem, and social support showing meaningful associations with depression [46]. These findings support the integration of mental-health screening into antenatal care, especially for adolescents. In context-responsive psychiatry, perinatal mental-health care should include early detection, supportive counselling, family engagement, social-support strengthening, safety assessment, and referral pathways for severe depression, self-harm risk, intimate-partner violence, substance use, or safeguarding concerns. This is highly relevant to low-resource and transitional settings, where teenage pregnancy and prenatal depression may remain hidden because of shame, poor screening, limited adolescent-friendly services, and weak linkage between maternal health and mental-health care.

Adult autism further illustrates the limits of medication-centred practice and the need for lifelong psychosocial support. Adults with autism may experience comorbid depression, anxiety, obsessive-compulsive symptoms, bipolar symptoms, epilepsy, aggression, catatonia, self-harm, and psychosis-like presentations; however, many require social support, communication assistance, behavioural strategies, vocational support, caregiver involvement, and environmental adaptation more than long-term pharmacological intervention [45]. In such cases, psychosocial care is not an optional supplement but the foundation of humane and effective treatment.

Across diagnoses, the central lesson is that psychosocial interventions must be adapted rather than merely imported. Their success depends on cultural acceptability, family structure, literacy, language, transport, cost, service capacity, staff training, supervision, fidelity, and follow-up. Context-responsive psychiatry should therefore combine evidence-informed psychosocial methods with local clinical judgement, caregiver partnership, and service-level support. In African, Asian, Southeast Asian, and Thai settings, this approach is particularly relevant because family involvement, community reputation, stigma, and access barriers often strongly influence whether psychiatric care is accepted, continued, and translated into recovery.

3.9. Quality improvement, safety, and system strengthening

Context-responsive psychiatry cannot depend only on individual clinical skill. It also requires systems that are safe, reliable, measurable, and capable of learning from routine practice. Psychiatric services carry distinctive safety risks, including self-harm, suicide, aggression, restraint and seclusion, absconding, diagnostic overshadowing, medication adverse effects, unsafe discharge, staff injury, and poor continuity between inpatient, outpatient, primary-care, and community services [13]. These risks may be intensified in low-resource and transitional settings where staffing is limited, infrastructure is weak, medicine supply is inconsistent, and specialist supervision is difficult to sustain.

Quality improvement provides a practical method for addressing these problems without waiting for ideal resources. Unlike traditional audit alone, quality improvement uses structured problem identification, small tests of change, measurement over time, feedback, and local adaptation. The Plan-Do-Study-Act cycle is especially useful because it allows teams to test feasible changes in real clinical environments, learn quickly, and refine interventions before wider implementation [47]. Reporting standards such as SQUIRE 2.0 also emphasise that improvement work should describe the context, intervention, study of the intervention, measures, results, interpretation, and limitations clearly enough to support learning and transferability [48].

Local evidence supports the relevance of this approach in psychiatric care. A Plan-Do-Study-Act quality-improvement study in a mental-health facility demonstrated that structured safety and security management can strengthen operational reliability and improve the therapeutic environment [7]. The wider psychiatric safety literature similarly argues that effective improvement combines standardised safety practices with local workflow adaptation, leadership support, staff engagement, measurement, and rights-based governance [13]. This is important because psychiatric safety is not only about preventing violence or self-harm. It also includes reducing coercion, protecting dignity, improving communication, monitoring physical health, recognising medical mimics of psychiatric illness, and ensuring safe transitions of care.

Several domains are particularly suitable for quality-improvement work in low-resource psychiatry. First, transition safety can be improved through discharge checklists, medication reconciliation, family involvement, relapse-sign education, and early post-discharge contact. This is relevant because psychiatric readmission may reflect weak continuity, poor social support, substance use, unemployment, or inadequate community follow-up rather than illness severity alone [14]. Second, medication safety can be strengthened through simple metabolic-monitoring bundles for patients receiving antipsychotic medication, including weight, body mass index, waist circumference, blood glucose, and side-effect review [26], [44]. Third, diagnostic safety can be improved by linking the mental status examination with focused neurological screening and structured risk formulation, particularly when delirium, epilepsy, stroke, traumatic brain injury, intoxication, or neurocognitive impairment may mimic or complicate psychiatric illness [12]. Fourth, perinatal and adolescent mental-health pathways can be improved by embedding depression screening, psychosocial assessment, and referral procedures into antenatal care [46].

System strengthening also requires attention to the workforce. Staff cannot provide safe and compassionate care if they work in unsafe environments without supervision, training, psychological support, or clear escalation pathways. Therefore, quality improvement in psychiatry should include staff safety, team communication, incident review, debriefing, supervision, and non-punitive learning cultures. In Asian and Southeast Asian settings, including Thailand, these principles are highly relevant for services facing urban-rural inequalities, rising demand, specialist shortages, and the need to integrate mental health into primary care, maternal health, emergency care, neurology, and community services. Context-responsive psychiatry is therefore not only a clinical framework; it is also a system-improvement framework that connects evidence-based care with safety, dignity, feasibility, and continuous learning.

3.10. Relevance for Asia, Southeast Asia, and Thailand

Although several locally generated studies included in this review come from African clinical settings, the conceptual lessons are relevant to many low-resource and transitional health systems in Asia and Southeast Asia, including Thailand. The purpose is not to assume that African and Asian mental-health systems are identical, but to identify transferable principles: early recognition, culturally informed assessment, family involvement, pragmatic prescribing, integration with primary care, attention to neurocognitive and physical comorbidity, and service-level quality improvement.

Southeast Asian mental-health systems face diverse challenges, including uneven distribution of specialist services, urban-rural access gaps, stigma, increasing demand for child and adolescent mental-health care, substance-use and behavioural-addiction concerns, population ageing, and the need to integrate mental health into maternal health, neurology, emergency care, rehabilitation, and community services [5]. These priorities align closely with the evidence synthesized in this review. For example, caregiver-mediated autism intervention, psychoeducation for psychosis, alcohol-use harm reduction, antenatal depression screening, metabolic monitoring, and neuropsychiatric assessment are all potentially useful, but only when adapted to local service capacity, culture, language, family structure, and follow-up systems [8], [9], [10], [26], [46].

Thailand provides a particularly important context for this framework because it combines comparatively developed health infrastructure with continuing regional inequalities, tourism-related health pressures, ageing populations, family-centred care traditions, and evolving needs in addiction, perinatal mental health, neurodevelopmental disorders,

and community psychiatry. Context-responsive psychiatry can therefore support Thai and Southeast Asian services by encouraging adaptation rather than direct importation of models developed elsewhere.

The central lesson is that evidence-based psychiatric care must be locally executable. A guideline, medicine, screening tool, or psychosocial intervention has limited value if it cannot be delivered safely, affordably, acceptably, and continuously. For Asia and Southeast Asia, context-responsive psychiatry offers a flexible framework for strengthening care while respecting cultural, economic, workforce, and health-system realities.

3.11. Proposed framework for context-responsive psychiatric practice

The evidence synthesized in this review supports a practical framework for context-responsive psychiatric practice in low-resource and transitional settings. The framework is not intended to replace existing guidelines, but to help clinicians, services, and policymakers apply evidence-based care in settings where resources, workforce, culture, family structures, and service pathways strongly shape clinical outcomes.

First, assessment should begin with the patient's clinical presentation, but should not end there. A context-responsive assessment should include diagnosis, developmental stage, physical comorbidity, neurocognitive function, substance use, medication exposure, family context, cultural explanatory models, functional impairment, and immediate risk. Linking the mental status examination with focused neurological screening and structured risk formulation is especially important where delirium, epilepsy, stroke, traumatic brain injury, intoxication, or neurocognitive impairment may complicate psychiatric presentations [12].

Second, treatment selection should consider both evidence and feasibility. A medication, psychotherapy, screening tool, or psychosocial intervention is useful only if it can be delivered safely, affordably, acceptably, and consistently. For example, antipsychotic treatment should be linked to metabolic monitoring, bipolar depression treatment should include safe titration and adverse-effect education, and neurodevelopmental conditions should not be managed through medication alone when caregiver coaching, school support, behavioural strategies, and rehabilitation are more appropriate [8], [26], [42], [45].

Third, families and caregivers should be treated as partners in care whenever clinically and ethically appropriate. Family involvement is central in child psychiatry, autism, psychosis, substance-use disorders, perinatal mental health, chronic neuropsychiatric illness, and relapse prevention. However, family participation should be guided by consent, confidentiality, safeguarding, and awareness of possible family conflict or coercion.

Fourth, services should prioritise continuity. Many poor outcomes in low-resource psychiatry are not due to incorrect diagnosis alone, but to weak follow-up, medicine interruption, poor discharge planning, transport barriers, stigma, and lack of community linkage. Continuity can be strengthened through discharge checklists, medication reconciliation, early post-discharge contact, relapse-sign education, family engagement, and referral pathways [14].

Fifth, quality improvement should become part of routine psychiatric practice. Context-responsive services should measure what matters: safety incidents, readmissions, treatment adherence, metabolic monitoring, follow-up attendance, patient and family experience, staff safety, and implementation fidelity. Small, locally tested changes using Plan-Do-Study-Act cycles can help services improve care without waiting for ideal resources [47], [48].

Finally, local evaluation is essential. Interventions developed in high-income settings should not be imported uncritically. Parent-mediated intervention, psychoeducation, motivational interviewing, antenatal depression screening, metabolic monitoring, and neuropsychiatric assessment may all be valuable, but they require adaptation, supervision, and outcome monitoring within the setting where they are used [8], [9], [10], [46]. The proposed framework therefore rests on six linked actions: assess context, adapt evidence, involve families, monitor safety, strengthen continuity, and evaluate locally.

3.12. Research and policy implications

The evidence reviewed in this manuscript has several implications for research, policy, and service planning in low-resource and transitional mental-health systems. First, psychiatric research should move beyond documenting the treatment gap and increasingly examine how interventions can be delivered safely and sustainably under real-world constraints. Locally embedded pragmatic studies are needed to evaluate brief psychosocial interventions, family-mediated care, metabolic monitoring, neurocognitive screening, perinatal mental-health pathways, addiction care, and quality-improvement methods in routine clinical settings [8], [9], [10], [26], [46], [47].

Second, policy should prioritise integration of mental health into existing health platforms. In many low-resource settings, patients with psychiatric disorders present through antenatal clinics, emergency departments, primary care, neurology services, paediatric services, rehabilitation units, schools, traditional or community pathways, and inpatient medical wards before they reach specialist psychiatry. Integration is therefore not optional; it is necessary for early detection and continuity. Particular attention should be given to child and adolescent mental health, perinatal depression, substance-use disorders, psychosis, neurocognitive impairment, and the psychiatric consequences of neurological disease and injury [4], [5], [32], [46].

Third, workforce development should become a central policy priority. Context-responsive psychiatry requires more than increasing the number of psychiatrists. It requires training nurses, clinical officers, psychologists, social workers, primary-care clinicians, rehabilitation staff, teachers, and community health workers to recognise common and severe mental disorders, provide brief psychosocial support, identify risk, refer appropriately, and support long-term follow-up. Task-sharing should be implemented with supervision, clinical governance, and referral thresholds rather than as a substitute for specialist care [4].

Fourth, psychopharmacology policy should focus on both access and safety. Essential psychotropic medicines must be consistently available and affordable, but medicine access should be linked to rational prescribing, patient education, adverse-effect monitoring, and physical-health screening. This is especially important for antipsychotic metabolic monitoring, mood stabiliser safety, antidepressant use across psychiatric and neurological indications, and prescribing in neurodevelopmental and neurocognitive disorders [26], [37], [40], [42], [44], [45].

Fifth, mental-health policy should explicitly include families and communities. Family involvement can improve engagement, relapse recognition, developmental support, antenatal care, addiction recovery, and rehabilitation. However, family participation must be balanced with confidentiality, consent, autonomy, safeguarding, and protection from coercion or stigma.

Finally, quality improvement should be embedded into mental-health governance. Services should routinely monitor safety incidents, readmission, medicine continuity, follow-up attendance, restraint and seclusion, metabolic screening, patient experience, family experience, and staff safety. For Asian and Southeast Asian settings, including Thailand, these priorities support a practical agenda: strengthen access, adapt interventions locally, protect safety and dignity, integrate services, build the workforce, and evaluate outcomes continuously.

3.13. Limitations of the review

This review has several limitations. First, it was designed as a narrative review and evidence synthesis rather than a systematic review or meta-analysis. Therefore, although the literature was selected carefully and thematically, the review did not use a formal systematic search strategy, risk-of-bias assessment, or quantitative pooling of outcomes. Second, the included evidence is heterogeneous, covering different populations, diagnoses, interventions, study designs, outcome measures, and health-system contexts. This heterogeneity is appropriate for a broad conceptual synthesis, but it limits direct comparison across studies.

Third, several locally generated studies cited in this review were single-site, cross-sectional, quasi-experimental, case-based, or exploratory. Such studies are valuable because they reflect real-world psychiatric practice in low-resource settings, but their findings should be interpreted cautiously and not overgeneralised. Fourth, although the review is intended to be relevant to Asia, Southeast Asia, and Thailand, many empirical examples were drawn from African clinical settings. Transferability therefore depends on careful local adaptation rather than direct application.

Fifth, the review may be affected by publication and language bias, as it relied mainly on accessible English-language literature, published articles, international guidelines, and author-provided manuscripts. Finally, the concept of context-responsive psychiatry remains an evolving framework. Further empirical work is needed to test how this approach influences clinical outcomes, service quality, patient experience, family engagement, safety, and cost-effectiveness across different low-resource and transitional health systems.

4. Conclusion

Context-responsive psychiatry offers a practical and clinically meaningful framework for strengthening mental-health care in low-resource and transitional settings. The evidence synthesized in this review shows that psychiatric practice cannot be reduced to diagnosis and prescription alone. Effective care must account for developmental stage, family

context, cultural meanings, stigma, physical comorbidity, neurocognitive impairment, medication availability, service continuity, staff capacity, and patient safety.

Across the reviewed domains, several consistent priorities emerged: early identification, family and caregiver involvement, culturally appropriate assessment, pragmatic psychopharmacology, brief psychosocial interventions, metabolic and neurocognitive monitoring, quality improvement, and integration of mental health into wider health systems. These priorities are relevant not only to African settings from which many local examples were drawn, but also to Asian and Southeast Asian contexts, including Thailand, where services must respond to changing patterns of child and adolescent mental health, substance use, perinatal depression, neuropsychiatric illness, ageing, and community-based care needs.

The central message of this review is that evidence-based psychiatry must be locally executable. Interventions developed in well-resourced settings require careful adaptation, supervision, ethical safeguards, and outcome monitoring before they can be safely and sustainably applied elsewhere. Context-responsive psychiatry therefore bridges global recommendations and everyday clinical reality. It supports care that is scientifically informed, culturally sensitive, resource-aware, family-inclusive, system-oriented, and grounded in the dignity and safety of patients, families, and healthcare workers.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that they have no financial or non-financial conflicts of interest related to this manuscript.

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