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The Psychiatric Cultural Formulation: Applying Medical Anthropology in Clinical Practice

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Abstract

This paper considers revisions to the DSM-IV Outline for Cultural Formulation from the perspective of clinical practice. First, the paper explores the theoretical development of the Cultural Formulation. Next, a case presentation demonstrates challenges in its actual implementation. Finally, the paper recommends a set of questions for the clinician on barriers to care and countertransference. The development of a standardized, user-friendly format can increase the Cultural Formulation's utilization among all psychiatrists beyond those specializing in cultural psychiatry.

Keywords

Cultural psychiatry; applied medical anthropology; psychiatric anthropology; Cultural Formulation; psychiatric history

Introduction: The DSM-IV Outline for Cultural Formulation

This paper traces the origins of the DSM-IV Outline for Cultural Formulation ("Cultural Formulation") to demonstrate obstacles in clinical utility. The Cultural Formulation emerged from the 1991 NIMH Group on Culture and Diagnosis's recommendations for DSM-IV's publication in 1994 (1). The Cultural Formulation encapsulates clinical experience across four domains: cultural identity of the individual, cultural explanations of illness, cultural levels of psychosocial support and functioning, cultural elements of the patient-physician relationship, with a fifth domain for information influencing diagnosis and treatment (2). It was hoped that the Cultural Formulation would allow patients to narrate illness experiences, educate trainees, and stimulate outcomes research (3).

Reactions to the Cultural Formulation suggest limitations in practice. It has been lauded for eliciting mini-ethnographies matching the patient-centered recovery movement (4) as the most significant cultural contribution to psychiatry (5). Journals such as *Transcultural Psychiatry*, *Culture, Medicine and Psychiatry*, and the *Journal of Muslim Mental Health*

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have published cases and elaborated its format. It has also inspired cultural competency initiatives in psychiatric training (6–12). However, its domains can overlap as people conceptualize cultural identity differently (13). Its vague descriptions in DSM-IV may not provide busy clinicians with actual questions (14). Additionally, its narrative format offers challenges for research design (15). The Cultural Formulation is mostly used with ethnic or cultural minorities, not with white patients (16), a pattern anticipated from its inclusion with exotic, culture-bound syndromes (17). This trend reflects concerns that physicians create forms of medicine around social differences rather than examine behaviors of all patients (18).

This paper clarifies two points on the Cultural Formulation. First, what is its theoretical tradition? This history is important since members of the NIMH's original workgroup endorsed a meaning-centered approach that may have neglected socioeconomic factors (19) that could address barriers to treatment. Second, how may tradition limit the Cultural Formulation in practice? Most cases conceive it as a single interview even though explanatory models may change over several intervals (20–21). Moreover, causal explanatory models may limit the range of explanations (22). The next section examines its development followed by a case in which the Cultural Formulation was adapted at different times with the same patient.[i]

The Cultural Formulation Between Medical Anthropology and Cultural Psychiatry

The Cultural Formulation originates from applied medical anthropology and cultural psychiatry. Each dimension has a specific theoretical background.

The cultural identity of the patient is the first dimension (1, 2, 23). Language proficiency, acculturation, and spiritual-religious outlook can impact the course, severity, and articulation of illness (24). Culture influences affect, behavior, cognition, calculation, proverb explanation, and other components of the mental status examination (25). Culture offers the substrate from which individuals fashion identities (26). Consequently, the Cultural Formulation includes questions on cultural origin, cultural resettlement (for refugees), and degree of relatedness in one's cultural group (23).

The cultural explanation of illness is the second dimension (1, 2, 23). Here arises the distinction between the patient's illness as a deterioration in being and function and the physician's biomedical disease model (27). The "new cross-cultural psychiatry" would integrate clinical, anthropological, and epidemiological approaches to study illness (28) through ethnography (29). The psychiatrist, reflecting upon discrepant explanatory models, would treat illness and cure disease (30). Eight questions were proposed as a form of clinical mini-ethnography (31–32) to interpret illness within the patient's world (33) since symptoms do not merely reflect psychobiological phenomena but meanings drawn from cultural forms

[i]The patient allowed me to use his case on the basis that all identifying information such as his name, age, and other demographic characteristics were changed.

of discourse (34). Emphasis on narrative was preferred to reflect patient experience (35). The eight, open-ended questions ground this dimension of the Cultural Formulation (23).

The cultural element of psychosocial supports and levels of functioning is the third dimension (1, 2, 23). Help seeking marks the patient's efforts at care among people and institutions in culturally mediated ways that may not lead to the formal medical sector (36). Three variables were culled from Ramirez's Puerto Rican Octagonal Assessment Schema: perceived social stress, connectedness to social supports, and acquired maturity (1). Questions on help seeking, stressors, supports, and functioning are therefore included in the Cultural Formulation (23).

Finally, the cultural element of the patient-physician relationship is the fourth dimension. The psychiatrist operates with certain assumptions: illness classifications based on European taxonomies; cultural conceptions of emotions and behaviors; instructions from the DSM about disorder hierarchies; and etiologies about neurological dysfunction (37, 38). Western medicine separates mental disorders from other medical phenomena and bases psychotherapy on moral values of perfection, efficiency, and discipline (39). Patients and physicians may differ in illness beliefs or expectations, calling for introspection and negotiation (26). Therefore, the Cultural Formulation asks clinicians to consider culture's contribution to transference and countertransference (23).

In an era of evidence-based medicine, it is instructive to read that six publications provided the Cultural Formulation's structure (1). Members of the 1991 workgroup have mentioned their focus on cultural over socioeconomic factors of health (19, 31). It is worth exploring whether addressing socioeconomic factors can strengthen the Cultural Formulation. Even though it may have been designed with one conception of culture, questions exploring treatment barriers may improve access to care.

Modifying the Cultural Formulation to Address Barriers to Treatment

In my final year of residency, I met a man in his eighth decade of life with life-long bipolar disorder whom I shall call Mr. Rodriguez. We first met in June 2010. No one recalled his original presentation, but the chart included an intake from the 1990s. We spoke in Spanish out of his preference. We met weekly for the first two months as we adjusted medications, biweekly for the third month for observation, and monthly from September until December. Each appointment consisted of forty-five minutes of psychotherapy and medication management. From January until April 2011, we met biweekly after his condition worsened. Mr. Rodriguez's case exemplifies the challenges of implementing the current Cultural Formulation.

Clinical History

Chief Complaint

"I need help!"

History of the Present Illness (HPI)

When we first met, Mr. Rodriguez felt stable and denied symptoms. In the past, there were weeks when he slept only one or two hours nightly, felt distracted with racing thoughts, and spoke too fast. In those instances, he listened to music loudly to drown out a voice calling his name, annoying his neighbors who called their landlord. During these episodes, he also believed that people mocked and target him. Fifteen years prior to his first presentation, he developed chronic depression after his two sons (ages 15 and 22) were murdered in Puerto Rico. He could not describe those circumstances, learning about them only after their mother appeared at his doorstep sobbing. Occasionally, he saw their apparitions upon awakening. Notably, the hallucinations and paranoia occurred only with mood symptoms. He first presented to a primary care clinic that referred him to our facility for treatment.

Medications

His initial regimen –

Valproic Acid 250 mg every morning and 500 mg every night, Perphenazine 4 mg every night, Benztropine 0.5 mg twice daily, Mirtazapine 30 mg by mouth every night, Citalopram 10 mg by mouth every day

Allergies

None.

Psychiatric History and Previous Treatment

Mr. Rodriguez had been an outpatient for thirty years in Puerto Rico. He denied pprevious hospitalizations, suicide attempts, or homicide attempts. He could not how his illness started, but he has taken medications chronically in Puerto Rico and the United States. He stopped medications in the mid-1990s because he did not like taking them. Within weeks, he felt unable to sleep, anxious and agitated, overly energetic, and able to hear a voice and see the images of his children. He then first presented to our clinic. From his initial visit until 2005, he took lithium. In 2008, valproic acid was added after lithium was maximized. He also took perphenazine for sensory hallucinations and cogentin for prophylaxis.

Mr. Rodriguez's substance history is opaque. He denied substance abuse, dependence, or detoxification, though he started smoking cigarettes and drinking sugarcane rum called *cañita* at the age of twelve upon learning farming. He and his friends drank everyday after work until passing out. Consumption increased on weekends and holidays. He estimated drinking three American beer bottles during the workday, but could not remember. He did not recall that alcohol consumption conflicted with work or social responsibilities nor did he remember withdrawal symptoms. He smoked cigarettes until the mid-1990s when he migrated to the United States. His physician then informed him about complications from tobacco. He also stopped drinking then.

Medical and Surgical History

Hypertension, Diabetes Mellitus, Type 2, Coronary Artery Disease, High Cholesterol, Chronic Obstructive Pulmonary Disease, and Arthritis. In 1981, he was hospitalized after his

feet were crushed by a truck. In 1982, a medical rod was inserted in his left femur. He ambulates with a wheelchair.

Social and Developmental History

Mr. Rodriguez was born and raised in Puerto Rico. He met all developmental milestones on time and denied any physical, sexual, or emotional abuse. His parents gave him for adoption to a maternal aunt at the age of three after moving to the United States with his siblings. He was the youngest of seventeen children and does not know their details. He saw his father once at fifteen years and his mother at seventeen years, but had no further contact. He never attended formal schooling. At twelve years old, he started cutting sugarcane with cousins. He worked seasonally, as a farmer, construction worker, and brick maker in Puerto Rico. He maintained short relationships of three to five years with various women, but never married. He did not know how his only two children were murdered. He considered himself a Pentecostal. He had no history of legal problems. He moved to the United States a few weeks prior to presenting to our clinic to follow his girlfriend. He stayed with her and her son for two years before she ended their relationship. Soon after, he informed his primary therapist about his homelessness and has since lived in an assisted living facility for Spanish monolingual patients.

Family History

He had no sustained contact with siblings or parents so he did not know about psychiatric or substance disorders. He denied such history in extended relatives.

Mental Status Exam

Mr. Rodriguez was a well-dressed man who sat in a wheelchair and appeared comfortable. He was pleasant and cooperative throughout our interviews. He described his mood as “happy” and his affect was full range. His speech was spontaneous, fluent, and goal-directed. His thought processes were linear and coherent with intact associations. He denied hallucinations, delusions, or other psychotic phenomena. He denied suicidal and homicidal thoughts. There was no impulsivity. He had great insight and judgment, recognizing that he needed medications to live as desired.

Diagnostic Formulation

Axis I: Bipolar I Disorder, Most Recent Episode Manic, Severe With Psychotic Features

Alcohol Abuse, In Full Sustained Remission

r/o Alcoholic Dementia

Axis II: None

Axis III: Hypertension, Diabetes Mellitus, Type 2, Coronary Artery Disease, High Cholesterol, Chronic Obstructive Pulmonary Disease, Arthritis

Axis IV: Educational Problems, Occupational Problems, Economic Problems

Axis V: 50

Cultural Formulation

I have organized this section according to published guidelines (23). I translated all questions in Spanish. Since the Cultural Formulation interview would take forty minutes, he deferred it to the second appointment.

Cultural Identity

1. *Cultural reference group:* Mr. Rodriguez identified as a Spanish-speaking Puerto Rican. He felt connected to this cultural group and lived in an assisted facility predominantly of Spanish-speaking residents. He and his parents shared the same cultural background and all ex-girlfriends were Puerto Rican.
2. *Language:* Mr. Rodriguez spoke only Spanish as a child. He spoke Spanish exclusively and only established care at medical facilities with Spanish-communicating staff. He could not read or write Spanish and did not know another language. In English, he only exchanged pleasantries such as “Hello,” and “Goodbye.”
3. *Cultural Factors in Development:* Mr. Rodriguez’s biological parents placed him with relatives upon migrating to the United States. He learned farming and construction through older male cousins. His independence within a network of extended relatives might explain a lack of curiosity about his nuclear family. He might have also harbored anger and resentment at abandonment. Traditional gender roles appeared prominent given his emphasis on manual labor, preference for male friends, and fleeting connections with women.
4. *Involvement with Culture of Origin and Host Culture:* Mr. Rodriguez participated in his culture of origin by consuming Puerto Rican music and watching Spanish-language media. He practiced Pentecostal Christianity and went to church daily in his facility with Puerto Ricans. He celebrated Puerto Rican holidays and ate Puerto Rican food daily, prepared in his facility. Iliteracy prevented him from reading newspapers, magazines, or the Internet, so news came from his best friend and other assisted living residents. He missed his independence in Puerto Rico. His limited mobility and finances prevented visits to Puerto Rico since migrating. His involvement with his host culture was superficial. He did not associate with English speakers and limited interactions to those speaking Spanish. He did not follow American media, entertainment, news, or holidays. He liked American desserts such as cookies, but did not eat other American foods.

Cultural Explanations of Illness

Mr. Rodriguez called the problem *insomnio*. He did not remember the first time he fell ill. He had no other name for the illness, nor explanations about its mechanism, treatment, or prognosis, deferring to physicians entirely. He only visited biomedical professionals for the problem and not other healers. He did not know others with *insomnio*.

His illness caused distress in several ways. When he had too much energy, he stayed awake in bed. To slow his thoughts, he listened to music loudly, angering neighbors. His

medications bothered him – the antidepressant caused stomach acidity and the antipsychotic caused involuntary tongue movements that obstructed speech and digestion. However, the medications controlled his symptoms.

Cultural Factors Related to Psychosocial Environment and Levels of Functioning

1. *Stressors:* He denied that stressful situations or events worsened his illness. He described his symptoms to physicians, but not to his community since he was sensitive to alcohol's potential role and did not want friends to judge him since he now attended church regularly.
2. *Supports:* He felt most comfortable discussing healthcare with a best friend who served as his greatest emotional support. This friend attended every appointment – in fact, Mr. Rodriguez asked that his friend be allowed to sit in appointments. He denied other supports. His living facility arranged all daily needs. He only went to church services and medical appointments.
3. *Levels of functioning:* He found it difficult to eat or swallow from his tongue movements due to the medications. He had not worked in over twenty-five years.

Cultural Elements of the Clinician-Patient Relationship

Mr. Rodriguez and I spoke in Spanish. I introduced myself as a physician who studied Spanish and volunteered in Hispanic clinics in medical school. I emphasized that my fluency may occasionally be limited and that I may ask for clarification or turn to a dictionary. He initially explained thoughts and feelings slowly, but stopped within a month after feeling comfortable with my fluency. A filial transference emerged as he started to refer to me as "child" (*muchacho*). He also used the informal *tú* rather than the formal *usted* to address me.

Overall Cultural Assessment

The Cultural Formulation delivered useful information beyond the standard assessment. For example, through the *cultural identity of the individual*, Mr. Rodriguez surfaced as a man who identified intensely as Puerto Rican despite living in the United States for over fifteen years. However, he learned to negotiate social services by receiving steady housing and treatment. Through the *cultural explanations of illness*, Mr. Rodriguez changed his mind from being clinically stable to wanting treatment for side effects. Interestingly, he did not retain a separate understanding of his illness, deferring to physicians. With the *cultural factors related to psychosocial support and level of functioning*, Mr. Rodriguez expressed hope for his best friend to be included in treatment. After checking with the hospital to insure that we would not break confidentiality laws, we documented his consent.

Course and Outcome

The Cultural Formulation focused our treatment as we adjusted his medications. Since he took two anti-depressants – neither optimized fully – we discontinued citalopram over two weeks to counter gastric relaxation from serotonin receptor blockade (40,41), especially since diabetes alone can worsen digestion (42). We increased mirtazapine to 45 mg the third week and his gastric pain ceased. Next, we discontinued perphenazine since his three

hallucinations over the year seemed hypnopompic and hypnagogic. Hallucinations present only in mania can be controlled with bipolar treatment (43), reducing involuntary tongue movements from excess antipsychotics (44). Over two months, we discontinued perphenazine and benztropine.

For three months, he ate and drank successfully. However, his best friend emergently called in the last week of December. Mr. Rodriguez presented in acute mania: distracted, awake for four days, grandiose, hypersexual, with pressured speech and racing thoughts. He listened to music loudly that day, aggravating his neighbors who called the landlord who then contacted his best friend. Mr. Rodriguez's speech was too stilted and tangential to finish a sentence. I tried to extract his explanations of illness, but all he could say was "Help me!" A full physical exam was performed with comprehensive lab work. He agreed to hospitalization.

That week exposed his limited social supports. His blood level for valproic acid showed a sub-therapeutic dose (45 mcg/mL instead of 50–100 mcg/mL for maintenance), despite claiming full adherence to prescriptions. I asked his best friend about this abrupt change. He mentioned that he and his visiting nurse, who came twice weekly, had left the area to be with their families for Christmas. He returned that day to find Mr. Rodriguez in mania. Suspecting that Mr. Rodriguez lost his two major social supports, I called his visiting nursing agency: a substitute nurse had pre-poured his medications for one week. The agency discovered that Mr. Rodriguez confused prescriptions, taking three pills of mirtazapine and one of valproic acid.

Mr. Rodriguez was hospitalized for one week. His inpatient psychiatrists discontinued mirtazapine, raised valproic acid to 500 mg twice daily, added zolpidem at 10 mg at night for sleep, and started clonazepam at 1 mg twice daily for anxiety. I informed him that mirtazapine can flip patients into mania (45,46) and that his valproic level was not therapeutic. He did not like clonazepam since it made him feel restless. Over the next two months, we discontinued clonazepam out of his concerns for feeling too activated, an adverse effect in elderly patients (47). He has stayed on two medications, valproic acid and zolpidem, and felt improved.

Mr. Rodriguez and I have also concentrated on barriers to care. It has been informative to ask specifically about access to treatment during each appointment.

We made key psychosocial interventions by instituting medical transportation and a visiting nurse. We have focused on health literacy: a nurse pre-pours medications daily and provides instructions based on color. An augmented Cultural Formulation on cultural factors related to psychosocial supports has let us tailor treatment to his lifestyle.

Discussion

This case illustrates strengths and weaknesses of the Cultural Formulation. A clear picture emerged of Mr. Rodriguez's treatment expectations: he wanted Spanish-speaking providers, a change in medications, and his friend involved in treatment. These insights centered treatment on his priorities and might be lost in a purely diagnostic interview. At the same time, he possessed no separate explanatory model of illness and deferred completely to

physicians. Reports indicate that certain dimensions of the Cultural Formulation may need adaptation for refugees (48), children and adolescents (49,50), and elders (16). Some have also suggested that it be shortened and included in the standard history (51). With at least four versions circulating (52), cultural psychiatrists could standardize screening questions for relevant cultural issues, expanded as necessary.

Another issue remains clinicians' understanding of culture. Guidelines for the Cultural Formulation define it as "a set of meanings, behavioral norms, values and practices used by members of a particular society, as they construct their unique view of the world" (23:384). However, culture is defined differently in mental health literature depending on discipline (49, 53). For example, this case demonstrates the pertinence of socioeconomic barriers to care, absent from standard textbooks on social history (54–55). The Cultural Formulation may benefit from supplementary materials that translate theories for practicing clinicians. The ability to empathize with the patient's subjective experience of illness is surely as important as the role of culture in clinical care.

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Table 1

The DSM-IV Outline for Cultural Formulation

Cultural Formulation Dimension	Sample Questions
Cultural Identity	Where are you and your family from?
Individual's Ethnic or Cultural Reference Group	Are you and your parents from the same place?
Degree of Involvement with Cultures of Origin and Settlement	How do you identify yourself culturally?
Language Abilities, Use, and Preference	Do you feel connections to any particular groups of people?
	What languages do you know?
	What languages do you speak at home? At work?
	What language would you like to speak with your physician?
	Do you practice a religion now? If so, what?
	Are there religious beliefs that can impact your treatment?
	What activities do you enjoy?
	What are your sources for news and entertainment? For health news?
Cultural Explanations of Illness	What happened when you got sick? How did others respond?
Idioms of Distress Communicating Symptoms or Need for Supports	Have you ever had anything like this? Do you know anyone who has?
Meaning and Severity of Symptoms Compared to the Group	What do you call the problem in your language or when you describe it to provide
Local Illness Categories Used by the Family or Group for Symptoms	What kind of problem is it?
Perceived Causes and Explanatory Models for the Illness	How serious is the problem? How has it affected your life?
Current Preferences and Experiences with Professional and Popular Sources of Care	What are the causes of the problem?
	What do others in your family think about this problem?
	Who have you consulted to get help for this problem?
	What kind of treatment do you want?
	What will the treatment do for you?
	Do you have any concerns about the treatment?
Cultural Factors of Supports and Functioning	What stressful situations or events have played a role in your illness?
Relevant Interpretations of Social Supports, Stressors, and Level of Functioning	How are these stressors affecting your life and family?
Stresses in the Local Social Environment	What do others in our community think about the stresses?
Role of Religion and Kin Networks in Providing Support	How are these stresses viewed in your culture?
	Is there someone you can trust and discuss personal matters with?
	Who else can you turn to?
	What are your main sources of daily and financial support?

Cultural Formulation Dimension	Sample Questions
	How important are family, friends, and community in your life?
	What role does religion and spirituality play in your life?
	How does your illness affect your ability to care for yourself?
	How does your illness affect your ability to work?
	How does your illness affect your interactions with family and others?
	How are these difficulties viewed in your culture?
Cultural Elements of the Physician-Patient Relationship	Questions the clinician can ask for self-reflection:
Individual Differences in Culture and Social Status Between Patient and Clinician	What is my ancestry and cultural reference group?
Problems of Individual Differences in Diagnosis and Treatment	How does my cultural identity relate to the patient's language, values, and relatio
	How do intercultural relations influence eliciting symptoms and their significance?
	How do intercultural similarities mask other sources of social difference or psycho
	How do intercultural differences influence whether this is normal or pathological?
	How do intercultural differences influence treatment and care?

Adapted from References (3) and (23)

Table 2

Questions on Socioeconomic Factors and Barriers to Care

Sample Questions
What do you think about these recommendations? Which would you like to keep or change?
Do you understand these recommendations and how they work?
Do you forsee any problems with your treatment?
Does this treatment interrupt your daily schedule? How?
Can you afford these treatments?
Are there people in your life who might help or hinder your treatment?
Can you afford transportation to the appointment?
Are there problems with housing or food that could limit treatment?