

## The Bird Dancer: Social Rejection and Social Suffering



**Photo 4.1** Gusti Ayu Suartini

### 4.1 STORY SUMMARY

Gusti Ayu Suartini is a petite Balinese woman born to a high-caste family in the late 1970s in a small rural village in Central Bali. Gusti is the youngest of four siblings with one older brother and two older sisters. She grew up helping around the family compound, feeding the pigs and cows, cooking meals, and preparing the many offerings required for Balinese religious life.

She attended elementary school and as a little girl was known for being a bright and diligent student.

However, when she was nine, Gusti began exhibiting behaviors that seemed bizarre and totally inappropriate, such as suddenly yelling out obscene or shocking words like “bastard dog.” Her normal calm physical demeanor became punctuated with strange and twitching movements, and these odd behaviors slowly increased and magnified until Gusti was frequently spitting, clicking her teeth, and hitting herself. Her family and community were shocked and had no idea what was wrong with her. They thought perhaps she was ill, but she said she felt fine. Despite her protestations to the contrary, her family decided that she was purposefully misbehaving. She was frequently punished by her classroom teacher for her actions, and because of her perceived defiance in “refusing” to stop, as well as her family’s embarrassment at her condition, in the fourth grade Gusti was taken out of school, never to return.

Over time it became clear to her family that the behaviors were out of Gusti’s control. This led to more worry; Gusti’s jerky movements looked like those of trance dancers who are temporarily possessed by spirits in certain Balinese dances such as *Manuk Rawa*, or the Swamp Bird Dance. Neighbors openly mocked her by calling her “the bird dancer,” and people speculated as to whether she was permanently possessed, insane, or spiritually unwell. Others in the village feared that her mysterious illness was contagious and began to shun her.

Gusti suffered as she moved into adolescence and watched her friends pull away and her family grow increasingly frustrated. Her siblings suffered as well, as the stigma of an unknown illness in the family tainted their lineage and rendered them undesirable as marriage partners. In the face of these social difficulties, Gusti and her family steadfastly searched for a cure. They consulted with multiple traditional Balinese healers, known as *balian*. Most of these healers agreed that Gusti’s problems were the result of black magic (B.B. *kena gelah anak*), a common diagnosis in Bali. They suggested that perhaps someone was jealous of Gusti’s goodness and had therefore cursed her. Other healers suggested that the family had displeased an ancestor with improper ritual offerings. They prescribed treatments according to Balinese theories of disturbance and well-being in order to restore Gusti to health, none of which seemed to offer her any lasting relief.

In addition to seeking help from healers, Gusti consulted psychiatrists and neurologists. Finally, when she was in her late teens she was diagnosed with Tourette Syndrome (TS) by Dr. I Gusti Putu Panteri, a psychiatrist

working in a private psychiatric hospital. TS is a neurological disorder that manifests in uncontrollable physical movements or vocalizations called tics. Before the late 1800s, TS was unheard of, but it is now a fairly familiar, if still rare, condition increasingly recognized across the globe.

Dr. Panteri prescribed medication, including the antipsychotic Haloperidol and the tri-cyclic anti-depressant Imipramine. While these alleviated symptoms to a degree, they also caused nausea and excessive fatigue, which prevented Gusti from carrying out her everyday activities. Gusti felt these side effects were more impairing and unpleasant than the symptoms they were intended to cure. Furthermore, because the family could not always afford ongoing treatment due to the medication's expense, Gusti experienced only partial alleviation of her symptoms. These interminable efforts to resolve Gusti's problem significantly stressed the family. Her brother accused Gusti of not trying hard enough to "control" herself, occasionally mocked Gusti's behaviors, and sometimes even physically lashed out at her in a futile attempt to end her tics.



**Photo 4.2** Gusti Ayu gets treated by a *balian* who uses massage therapy

A potential opportunity for reprieve presented itself when Gusti developed a romance with a young man in her village. They dated for about three months. He treated her kindly, brought her gifts, and said he did not mind

Gusti's movements. He proposed marriage, and she longed to accept, but he was of a lower caste than her family, and therefore her parents forbade the union. Gusti regretfully acquiesced. A few times in desperation she tried to run away, but her family locked her up to prevent her escape. Feeling increasingly trapped and anguished, struggling with the symptoms of her disorder and the ensuing frustration of inefficacious cures, filled with grief from feeling like a burden to her family yet simultaneously boxed in by them, on multiple occasions Gusti considered killing herself so that her parents could be free of her as the source of their troubles, and she could be free of them too.

Over time, Gusti became certain that to ease her suffering she needed to establish her independence. She moved to the capital city of Denpasar and found work as a maid. She made new friends who accepted her tics and encouraged her to accept them as well, to be kind to herself, and not to isolate herself in shame. This new situation was a highly positive change for Gusti. She was newly proud and confident to be taking care of herself without being a financial "burden" on anyone. She was happy to be out of the oppressive environment of her village, only occasionally making the trip back for major ceremonies. With the support of her new friends she developed effective coping mechanisms to respond to the teasing and stares that she encountered at times in the city. The comfort and focus her new life afforded her eased her anxiety, which in turn seemed to lessen her tics—a commonly observed phenomenon for those with TS.

The challenge that persists for Gusti, despite her change of milieu and increased independence, is her search for a husband. Her longing for love and marriage is simultaneously deeply personal and socially motivated: Gusti wants a soul mate to share her life with, but she also wants to fulfill her responsibility as a Balinese woman by marrying someone of her caste and bearing children, in order to continue her family line and ensure the reincarnation of her soul. While she is proud of her hard-earned independence and thankful for her supportive friends, Gusti's smile often is imbued with a certain sadness. Her deepest wish is to find a life partner to love and with whom she might start a family, a future that increasingly seems like it will slip through her fingers since she is now in her thirties, a decade past the age when most Balinese women get married and have children.

## 4.2 AN ETIC EXPLANATION: TOURETTE SYNDROME

One of Gusti's pressing concerns is what is causing her disordered movements and vocalizations. One way to determine this is to place them in a biomedical, and more specifically psychiatric, framework or "etic grid." The section below elaborates on this model.

Gusti was diagnosed by both Javanese and American psychiatrists as having TS. TS is a neurological disorder characterized by multiple, repetitive, involuntary physical movements and verbal outbursts known as tics that occur many times a day, causing some impairment in social or occupational functioning (Serajee and Mahbulul Huq 2015; McNaught and Mink 2011; Swain et al. 2007). Tics usually appear in childhood but their anatomical location, frequency, and severity may change over time (Serajee and Mahbulul Huq 2015; Freeman 2015). The first symptoms are often bouts of a single visible tic, most frequently eye blinking or small facial twitching. Other initial symptoms can include tongue protrusion, squatting, sniffing, hopping, skipping, throat clearing, stuttering, shouting or barking, or complex full-body motions (Fernandez et al. 2015; Swain et al. 2007). Verbal tics may often entail the involuntary use of obscenity, known as "coprolalia" (Ganos et al. 2016; Kobierska et al. 2014). Tics may be suppressed with a degree of voluntary control; however, such suppression often brings feelings of increasing tension only relieved by completing the tic. Some people with TS report repetitive thoughts or compulsions to perform particular movements; the syndrome can be associated with family histories of attention deficit/hyperactivity disorder (ADHD), which is indicated by impulsivity, hyperactivity, and distractibility, or obsessive-compulsive disorder (OCD), which is indicated by recurrent and persistent thoughts, impulses, or images perceived as intrusive, inappropriate, and anxiety-provoking, and may be accompanied by either clinical or sub-clinical levels of these conditions (Yu et al. 2015; O'Rourke et al. 2011). Besides these co-morbid disorders there are no additional impairments associated with TS and no inherent barriers to success or achievement for those with the condition. While symptoms can range from mild to severe, most people with TS fall into the "mild" category. Tics can wax and wane, most commonly exacerbated by stress, fatigue, and negative emotional states and ameliorated by stress relief, pleasure, or intense focus (Nagai et al. 2009; Singer and Walkup 1991).

TS is a neurobiological disorder with a genetic component. Although the etiology, primary site, mechanism, and pattern of transmission still remain to be determined (Crane et al. 2011; Ercan-Sencicek et al. 2010; McMahon

et al. 2003; Saka and Graybiel 2003; Yoon et al. 2007), both structural and functional abnormalities of the brain have been implicated, including dysfunctional dopamine receptors and disinhibition in the sensorimotor and limbic basal-ganglia-thalamocortical (BGTC) circuits and the corticostriatal-thalamo-cortical (CSTC) pathways (for a review of these findings, see Felling and Singer 2011). Various medications can help reduce symptoms (Scahill et al. 2006), while cognitive behavioral therapy (CBT) may help channel disruptive tics into more socially acceptable behaviors (O'Connor et al. 2009), and stress relief therapies, such as biofeedback, may decrease their incidence (Nagai et al. 2009).

Research into TS increasingly suggests that it is a neurodevelopmental disorder; two of the largest functional magnetic resonance imaging (fMRI) studies of TS to date identified age-related abnormalities in neurological networks and connectivity, suggesting atypical maturational changes in the brain (Marsh et al. 2008; Church et al. 2009). However, tics and symptoms of TS can often subside in young adulthood (Felling and Singer 2011), even if the individual with TS receives little targeted treatment or therapy.

Interest and research in TS have increased markedly in the last twenty years. Once thought of as one of the rarest disorders (incidence of one in a million), TS is now recognized as considerably more prevalent. Epidemiologic literature suggests there are similar rates cross-culturally (Staley et al. 1997). Some medications, in categories as diverse as anti-psychotic, benzodiazepine, selective serotonin reuptake inhibitors (SSRI), anti-seizure, central adrenergic inhibitors, and stimulant medications, have been tried in cases of TS and have proven variably helpful in reducing symptoms (Lizano et al. 2016; Serajee and Mahbubul Huq 2015; Lan et al. 2015; Rice and Coffey 2015; Budman 2014; Yamamuro et al. 2014; Lewis et al. 2010; Ghanizadeh 2010; Weller and Weller 2009; Arana-Lechuga et al. 2008; McKay and Storch 2009). CBT may also help a person with disruptive tics channel these into more socially acceptable actions (McKay and Storch 2009). Various stress relief therapies, such as biofeedback, may also decrease the incidence of tics (Hawksley et al. 2015; Nagai et al. 2014).

Given the increasingly sophisticated understanding of TS neurobiology, transcultural psychiatric and medical anthropology research contends that even the most “hard-wired” or “biological” of neuropsychiatric disorders will be culturally shaped in terms of symptom expression, recognition and labeling, and social context and outcome (Lemelson 2003a; Desjarlais et al. 1995). Family and community response plays a central role in the subjective experience and outcomes of people with TS,<sup>1</sup> underscoring the importance

of positive support and illustrating the painful and harmful long-term effects of stigma, particularly during crucial stages of development (Hodes and Gau 2016; Bharadwaj et al. 2015). Gusti's TS symptoms were moderate, but because these symptoms were unfamiliar in her rural village, they elicited grave concern from herself and her family, significantly affecting both the daily and long-term course of her life. Gusti struggled for many years to overcome the suffering that resulted from the web of cultural significance spun around TS in the context of rural Balinese values and beliefs, social and familial structure, and health care practices. Frameworks of meaning that rendered Gusti cursed, possessed, contaminated, contaminating, or at fault in her illness actively contributed to her suffering while offering little relief for her symptoms, and ultimately compelled her to leave her community.

### 4.3 TRADITIONAL HEALING, EXPLANATORY MODELS, AND THERAPEUTICS FOR NEUROPSYCHIATRIC DISORDERS IN BALI

The questions of illness, meaning-making, and efficacious response beg a deeper discussion of local models of health care, in particular the networks of traditional healing and therapeutics which are still commonly used in Bali. These treatments are often beneficial, and are frequently successfully integrated with Western medicine and modalities (Ferzacca 2001; Thong et al. 1993). In some areas they are the only or predominant form of health care and treatment (Hay 2001). Anthropologists have suggested that traditional healers often help make meaning out of an illness episode and thus may in certain cases be more equipped to cure it, an idea that fits well with anthropological notions that exploring a culture's explanatory models, structures of meaning, belief systems, and so forth will generate a more meaningful and efficacious way to look at illness experience (Jilek 1993). Drawn from the same culture of their patients, indigenous explanatory models often provide the meaning that Western or biomedical explanatory models lack. Yet, while traditional explanatory models for illness may provide an understandable and integrated system of meaning for these disorders, they may be unsuccessful in relieving symptoms or effecting cure. What if, as in the case of TS, the indigenous explanations are not syntonic with the phenomenological reality of differing psychopathological states, such as the repetitive, meaningless tics of TS? What if the available systems of meaning do little to relieve symptoms or suffering? What if the practices themselves are deleterious to the physical and/or psychological health of the sufferer (Edgerton 1992)?

Balinese healing mobilizes complex intertwined explanatory models for illness or ill fortune: magic and sorcery, reincarnation, poisoning, improper enactment of rituals, and imbalance (Lemelson 2003b), and healers use a cornucopia of transformational symbols in their practices (Csordas and Lewton 1998). However, these complex, multilayered, and multivalent explanatory models were not particularly helpful for Gusti. She visited over a dozen *balian* (Keeney and Mekel 2004; Connor 1982; Connor et al. 1986; Mustar 1985) who offered competing explanatory models for her illness: she had been poisoned (B.B. *kena cetik*); her home was ritually impure (B.B. *leteh*); her illness was supernatural in origin and her family had to make an offering to appease the spirits. Healers variably asked her to create a rice offering; go to the ocean to pray to spirits; gather “filthy things” such as the hair of a monkey, a black dog, and a black cat, to be used in a purifying ritual; drink her own urine; and go to a graveyard at midnight—a terrifying and spiritually dangerous place for Balinese—and pray. Herbal specialists prescribed tinctures made from roots and barks and others submitted her to a series of often painful massages, spinal adjustments, and other physical treatments, some of which involved the placement of burning hot metal on her skin, leaving scars, and the application of caustic substances to her eyes. One massage therapist asked Gusti to remove her shirt for a massage, seemed to be touching her in a sexualized manner, and made her deeply uncomfortable.



**Photo 4.3** Gusti laments her brother's treatment of her



For Gusti, some treatments were neutral or occasionally positive experiences. For example, she met with one healer who said that her symptoms were caused by a spirit occupying a grinding stone in her compound yard and that this spirit had been neglected and needed offerings to be appeased and exorcised. Gusti, while somewhat skeptical, said that the healer's diagnosis seemed credible because it echoed other interpretations provided by previous healers. The sense that this diagnosis was of divine origin was underscored by the healer's otherwise inexplicable knowledge of the grinding stone. Perhaps also in part responding to this healer's kindness and empathy in listening to her story, Gusti said that after that healing her "heart was opened" and she felt encouraged by knowing that if she followed the procedure as detailed by the healer, she might feel better. In other cases, the traditional treatments caused Gusti additional suffering in the form of physical pain, disgust, or shame, some so awful that she "felt like she was going to die." Ultimately, neither Gusti nor the other Balinese with TS described above reported long-lasting or significant improvement or relief from such diagnosis or labeling or the corresponding treatments (Lemelson 2003b).

In the case of a neuropsychiatric disorder such as TS, a neurobiological perspective may offer the opportunity for treatments that are both more faithful to the patient's experience of their symptoms and more efficacious in alleviating them, suggesting that to relieve the symptoms of the disorder, neurotransmitter systems would have to be altered. This perspective frees people from the quest for meaning in their illness experience wherein symptoms are experienced as meaningless. While perhaps counterintuitive, in the case of TS such a biological model may in and of itself bring great relief, but is still not a perfect or foolproof solution: The neuroleptic medications often used in the biological treatment at times have disruptive or unpleasant side effects. For Gusti, aside from being physically unpleasant, these side effects made her unable to work and stressed her already tense relationship with her family.

#### 4.4 QUESTIONS OF GENDER, CASTE, AND KINSHIP

Gusti's case raises the question of the role gender plays in the interpretation and long-term ramifications of having a neurological disorder: what constraints are imposed, what opportunities are afforded to men and women in Bali, and how these intersect with neurological disorder. An intersectional analysis underscores the significance of gender and caste in Gusti's story.

Gendered expectations for behavior may affect the way a neuropsychiatric disorder such as TS may be experienced and interpreted on an embodied level. Cultural context provides corporeal scripts, constructing a habitus of physical postures, behaviors, and comportment (Bourdieu 1977). This habitus may be significantly gendered (McNay 1999); put simply, men and women are taught and allowed to move in different ways. Throughout Bali, women are expected to move smoothly and gracefully (Belo 1970; Wikan 1990) and master their emotions—even subtle expressions of anger or displeasure may be shameful. The female ideal is contained and submissive (Jennaway 2002; Parker 1997). Men, while also called upon to maintain a composed demeanor, are allowed a wider range of dynamic physical expression, normatively socially self-projecting, bolder, and noisier (Parker 1997). A distillation of these differences can be found in Balinese performing arts and the way women and men move in the dances and dramas for which they are internationally renowned. In traditional productions, women typically play the roles of princesses, nymphs, temple attendants, or birds of paradise. Their movements are sinuous, refined, and often incorporate gestures of obeisance (McPhee 1956). One of the few times women are freed of these constraints is during moments of trance possession, when they perform with stiff, jerky, or otherwise unruly movements (Belo 1960). When exhibited outside the confines of sanctioned ritual performance, such movements may still be interpreted as signs of possession but so-called peripheral possession (Seligman and Kirmayer 2008), which reflects a disturbance in cosmological order and vulnerability in the one possessed. Suryani (1984) described the Balinese phenomenon of *bebainan*, “attacks” believed to be caused by malignant spirits sent through sorcery to prey on young women, causing brief episodes of screaming, rude speech, and physical rigidity or loss of control. Those considered most vulnerable to such an attack are those thought to be “mentally weak” or sinful. These gendered interpretations of physical comportment appear to have been at play in the response to Gusti’s non-normative movements and vocalizations; some villagers negatively compared her to possessed performers while others thought she might be *bebai*.

The structure of marriage in the caste system in Bali offers more nuance to issues of gender in the context of neuropsychiatric disorder. Until the present day, the Balinese have organized according to clan, ancestral kinship groups known as *dadia*<sub>2</sub> and caste (Geertz and Geertz 1975a). There are four main castes in Bali. Sudras make up approximately 90% of the population and are generally laborers and farmers. The other 10% are divided into

the gentry castes, which include Wesyias, who were traditionally merchants; Satrias, who were traditionally warriors and kings; and Brahmans, who were traditionally priests and teachers. The adherence to the caste system varies throughout Bali; nevertheless, it still influences certain aspects of behavior and affiliation. People of different castes receive different names and titles; for women, *Ida Ayu* is the title for women of Brahman caste, and *Gusti* is the title for those of Satria castes (Lansing 1995).

The caste system comes into play in marriage. Marriage is of primary importance because it provides extended kin networks of support, economic stability, status, and ideally a loving partnership, but also because it leads to children. Children are important in Balinese culture due to beliefs that the reincarnation of ancestors, crucial to the liberation of the soul in Balinese Hindu beliefs (Geertz and Geertz 1975b; Pringle 2004), occurs through the patrilineal family line (Hobart et al. 2001; Lemelson 2014). In seeking a mate, men are permitted to marry a woman of a lower caste, in which case the woman is given a new title and experiences a rise in status, but women are discouraged from marrying lower-caste men (Geertz and Geertz 1975b). If a woman chooses to marry an unsuitable partner despite this proscribed prohibition, she must leave her home and elope (B.B. *ngerorod*), potentially jeopardizing her relationship with her family; in the contemporary context, she may only be temporarily ostracized (Geertz and Geertz 1975b; Jennaway 2002). This may help explain why *Gusti's* parents forbade her to marry a man of lower caste (B.B. *nyerod*), even though it represented both a chance for love and relief for their family. If *Gusti* had been a man, she could marry a woman of lower caste, a match that might have been desirable for such a woman, who would rise in status despite being married to someone with a visible “disorder” or “sickness.”

In Balinese society, men have more agency than women in determining their own marital fate because men, with the input of their families, actively choose their mates, asking for the woman’s hand in marriage, while women must wait to be chosen. This is compounded by a pervasive fear of spinsterhood, which in women’s minds is associated with a lack of offspring, the threat of financial instability or destitution, and a lack of social power (Jennaway 2002; Lemelson 2014).

In *Gusti's* case, TS may act as a lens that magnifies the vulnerabilities of her structural position within kin and broader social networks (Yang et al. 2014). *Gusti's* TS has been met with frustration and at times violence in her family because they believe her problem may be due, for example, to black magic or ancestral curse, but also because of her position in her family. She is

an unmarried and perhaps an unmarriageable woman, and as such is perceived as a burden on the family. This structurally vulnerable position opens her up to the threat of gender-based violence and abuse, which exacerbates her condition.

Gusti's case also raises compelling questions about the nature of suffering in the context of difference. The film *The Bird Dancer* opens with the questions "What is the nature of suffering? How much of the pain and despair people feel is caused by processes internal to them, and how much are they affected by their interactions with the social world they live in?" Can the suffering caused by physical or neurological impairments be distinguished from the suffering caused by how these impairments are interpreted?

Scholarship on mental illness, difference, and disability has provided theoretical frameworks for distinguishing these. Kleinman famously introduced the difference between disease, what is biomedically wrong with the patient, and illness, the "innately human experiences of symptoms and suffering" (Kleinman 1991) encompassing explanatory models and reactions to disease based on life histories, values, and personal narratives. Global disability scholars Ingstad and Whyte (Whyte and Ingstad 1995) applied the framework of "local moral worlds" to examining disability in global contexts, arguing that "concepts of personhood, causality and value" (p. 281) are crucial to understanding the interpretation of any difference or impairment in any cultural place. These frameworks parse the basic biological fact of human variation from the exclusion or marginalization that so often accompanies it, addressing how this variation gets labeled, shaped, and responded to, and what the effects and choices are for people caught in these webs of significance.

Writing specifically about TS, Buckser terms these issues of interpretation as "semantic symptoms" or "symbolic discontinuities between particular cultural systems and particular disease processes" that can create conflicts and challenges as disabling as physical symptoms (Buckser 2006). Buckser suggested that while TS is neurological in origin, it is primarily a dialogic condition defined by "the ongoing need to attach meaning to what are quite literally empty gestures" (Buckser 2006).

Hollenbeck, a neuroscientist who has TS, called it "a disease of the onlooker," asserting that those with TS who do well are those surrounded by "compassionate onlookers" (Hollenbeck 2003). In Gusti's case, attention must be paid to the structural and cultural elements that might challenge an activation of compassion in onlookers. The social, corporeal, and

psychocultural world Gusti was living in shaped the reaction to her TS's symptoms as views about health, witchcraft, physical demeanor, gender roles, and the caste system and marriage customs in a rural location combined to lend a disturbing significance to Gusti's TS symptoms. These sociocultural elements were the most pressing elements of the illness experience for Gusti, not her tic symptoms, and yet this sociocultural context may have worsened her symptoms. Family rejection, stress, and negative affect—also known as high levels of EE (Jenkins and Karno 1992)—can exacerbate neuropsychiatric disorders and negatively impact long-term prognosis, including for developing children and adolescents (Asarnow et al. 1994) and those with TS specifically (Lin et al. 2007). Focus on meaningful activities and stress relief often leads to a decrease in tic symptoms, while anxiety or inactivity may cause an increase in tic frequency and severity as well as contribute to mood disorders such as depression, which can be co-morbid with TS (Robertson 2006). It is possible that the family judgment and frustrating quest for a cure Gusti endured contributed to a stress-response syndrome (Horowitz and Reidbord 2014; Wilson and Raphael 2013) and exacerbated her symptoms, as did her removal from school and the foreclosing of opportunities for other potentially positive activities. Gusti's tics have persisted, although waxing and waning; they often subside when she is surrounded by her friends and co-workers, but flare up when she anticipates making a visit to her home village for ritual celebrations (cf Ni Ketut Kasih's story in Chap. 8), perhaps because she anticipates returning home or is under more internal pressure thinking about offerings and responsibilities, indicating how oppressive and anxiety-provoking this milieu was.

Perhaps unsurprisingly, over the course of many years, what is at stake in Gusti's life has changed, as have her key concerns. Initially, finding a label, explanation, and cure for her troubling symptoms was primary. After more than a decade of stress, stigma, and ineffective treatments, Gusti's priorities changed. She no longer focused on finding a cure, but instead she longed to find relief from her family's judgment and pressure. When given the opportunity, Gusti chose to leave her family and natal village to find work and a measure of independence. From Gusti's perspective, she flourished in her new city environment, and while her TS's was not cured by moving to the city, much of her emotional distress was. It was not traditional treatment or medication that brought Gusti relief, but a change of environment. As she explains it:

Now things seem better because I found work and so I'm free from my family's home. I wasn't happy at home, often hearing things from people in the village, you know, insulting me like that. Now, I feel very calm. When I'm home and I'm insulted, I get upset again, and I think about my illness.

Gusti is delighted by the level of social support she has in her community of “compassionate onlookers,” namely, her co-workers, and the kindness they show her. Almost with amazement she recounts how these co-workers share their food with her, give her rides, spend their free time with her, and sometimes prepare her a meal.

As of 2013, Gusti still frequently feels itchy, needs to spit, and in quiet moments or during casual conversation she hits her own face and body. However, she has accepted herself and no longer considers her tics a health concern.

#### 4.5 THE COMPLEXITIES OF PSYCHIATRIC TREATMENT AND THE VALUE OF EMPATHY

When conducting clinically oriented research in cultural psychiatry, or PCE in the field, respondents and researchers may have divergent understandings about the activities and purposes of research, and different goals for its outcome. These disparate ideas and orientations may lead to miscommunication.

Gusti and her family entered the research with hopes that the research team would provide a cure for Gusti's mysterious affliction. Despite having been informed that the researchers (B.I. *peneliti*) and anthropologists were interested in Gusti and her illness, but were not there to provide treatment, for this first and several subsequent interviews the family believed the lead researcher was a doctor—in fact, Gusti initially believed that the lead researcher was the head of the WHO. From the family's perspective, the participation of a Western “doctor” in the interview raised their hopes. They asked numerous questions about the symptomatology and etiology of Gusti's illness, and Dr. Panteri provided information about TS, including its causes, symptoms, and the types of treatment available in America and elsewhere in the world.

The medically oriented nature of the initial interviews may have compounded the family's view of the researchers and what they thought could be done for them. When Gusti or her family had questions for the researchers about causes, symptoms, and prognosis, it was important to

re-orient them toward local resources, such as community health centers (*Pusat Kesehatan Masyarakat*, known as *Puskesmas*), local psychiatrists and neurologists, and other medical resources.

The lead author would receive an update from Gusti and her family on the progression of her illness, and if asked, would frame this for them within the discourses of the clinical and research literature on TS and similar disorders. While the research team was exploring multiple factors beyond treatment for Gusti's condition, there was mounting pressure to find a "cure."

While reviewing the footage in the interim between film shoots, it became apparent that there were scenes with Gusti and her family being interviewed, but no interviews or material with Gusti alone. Indeed, interviews where family members were participants in the interview process with patients or subjects were the norm, not the exception, when shooting in Indonesia, but it seemed that conducting an interview with Gusti apart from her family might allow deeper insight into the way their anxiety over a cure was influencing her experience of her tics. While there are not strict gendered prohibitions against a man and an unmarried young female being alone together, it would be culturally non-normative and would not occur as a matter of course. A specific request needed to be made for such an interview. Under the guise of following Gusti into the field to film her daily farming chores, she was able to be interviewed by herself.

This more intimate setting led to a productive interview with more information about Gusti's private desires and fervent hopes for a partner, which would at once meet her needs for loving companionship while releasing her family from the burden of trying to cure her, as Balinese patrilineal kinship meant Gusti could move out of her natal compound and become part of her husband's patriline (Lemelson 2014). She also disclosed how some family members had become increasingly angry and critical (if not outright violent) toward her. These disclosures were compelling because they highlighted issues that were more "at stake" for Gusti than the drier clinical discussions of her illness. Gusti was quite intelligent and an acute observer of the complex familial and community dynamics of which she was a victim.

After interviewing and filming Gusti for over a decade, she had become close friends with the lead author and local collaborators. In 2009, we took Gusti out to dinner after interviewing her about her illness and her life. As Gusti was saying goodbye at the end of the evening, she began to cry and asked, "Why are you friends with me? Don't you feel ashamed to be seen

with me? Don't you find me disgusting?" These poignant statements struck us quite deeply. Gusti was assured she was cared for very much; the local collaborators and crew were proud to be her friends, and were genuinely impressed by her fortitude and dignity in the face of her difficult circumstances.

To those living outside Gusti Ayu's daily reality, the symptoms of her TS might not seem so significant, but her emotional outcry indicated an internalization of the local interpretation of her difference, which had turned her into an outcast and contributed to the feelings of low self-worth and hopelessness that were such a significant part of her experience. It became important to determine a narrative structure for the film that would communicate how her comparatively minor symptoms could be so devastating and all-consuming.

During subsequent private interviews, Gusti began disclosing other material about her life that previously would have been difficult to discuss in front of her parents and siblings, such as her feelings of resentment toward her brother, her lingering affection for a potential mate who was of a different caste, and her feelings of despair and hopelessness and being a continual burden on her family that had grown unbearable to the extent that she had considered suicide. Ultimately, these concerns were so significant that it turned out that Gusti's story was about stigma and social suffering and not so much about her symptoms. But Gusti was in very real distress.

In the first interview after returning to the field in 2000, it was apparent that Gusti's condition had deteriorated. Her older brother plaintively asked, "I beg you, with all my respect, we want her to get well, or at least 90%. What is the method by which she can be healed?" Because TS is a biologically based neuropsychiatric disorder, the symptoms can, at times, be relieved or at least well managed by medication. If medications could reduce Gusti's symptoms, they could potentially also alleviate the family problems that were a reaction to these symptoms, and as a result, soothe her emotional anguish.

At this point Gusti's original treatment provider, Dr. Panteri, had had a stroke and was unavailable for home visits, so Gusti was encouraged to see another of the several neurologists on Bali for a consultation, and was provided a small sum of money for the visit. A return team research visit to Bali later that year included the Javanese psychiatrist Dr. Mahar Agusno, who evaluated Gusti Ayu. Although Dr. Mahar is perhaps unfamiliar with the specifics of Balinese culture, he is a sensitive and well-trained psychiatrist



and is very interested in cultural psychiatry. After interviewing and diagnosing Gusti, Mahar prescribed her several medications and offered to supervise her remotely from his home in Yogyakarta, Central Java. Unfortunately, hopes for ongoing long-distance treatment were not realistic, so on another return trip to Bali the support of Dr. Made Nyandra, a thoughtful and caring local Balinese psychiatrist, was sought.

Despite these adjustments, and while well-intentioned, such forms of medical intervention can be both inadequate and even potentially harmful. In this instance, offering of this kind of care reinforced Gusti's family's narrative that her problems really did stem from her disordered biology (seen in Indonesia as "*penyakit syaraf*" or a "nerve illness") (Wicaksana 2008), as expressed in her TS symptoms, and perhaps even seemed to capitulate to the idea that the real and best way to ameliorate her suffering would be to reduce these symptoms—an approach that perhaps seemed to concur with her family's desperate quest to "cure" her. This replicated some of the attributional problematics of biomedical psychiatry, where the cause of the illness is located in the patient's self and biology; most importantly, it went against the alternate narrative Gusti was slowly and bravely trying to construct for herself—that perhaps her most significant difficulties were social, and resided in how her family and community were reacting to her difference.

#### 4.6 LAST ENCOUNTERS

Ultimately, after long-term fieldwork, Gusti's key goals of working with the lead author were based on her initial understanding of his role in the research—specifically, the clinical reduction of her symptoms, if not a cure—were in fact little impacted by the relationship. As the research continued, Gusti's main concern repeatedly returned to the intractability of her condition, and her inability to get married and achieve the culturally valued role of wife and mother and fulfill associated responsibilities; those aspects of her role fulfillment were most important for Gusti's sense of satisfaction and her overall happiness.

That being said, there were other, perhaps more intangible effects of the relationship Gusti formed with the lead author, local research team, and to some extent, the crew that did contribute to her feeling that she was valued and had a supportive social world. Through conversations, Gusti discussed the multiple dilemmas she was situated in because of her gender, family position, and illness status (although of course she did not use those terms

and concepts in interpreting her own experience). Over the course of many interviews, Gusti gained a sympathetic ear, achieved insight that the repeated exploration of her condition afforded, and earned—and after she moved out of her family home, actually kept or spent as she saw fit—the small amounts of cash that she was paid for each interview.

In one of the earliest interviews with Gusti Ayu, when her sense of isolation, social rejection, and family conflict was at its worst, she revealed she had made these sorts of prayers:

‘God, if I’m like this forever I can’t stand it anymore. It’s better if I die. If you still want me to be alive, please give me . . . tell me the medicine I must take so that I can recover soon.’ That’s how I pray.

A decade later, after moving out of her family compound, working a meaningful job in a fair trade factory, finding a new group of friends, both at work and in the community, Gusti had this to say about her community:

Before, when I went out people used to laugh at me, mocked me, swore at me, but (after watching the film) now they seem to realize and regret, ‘Ah, why did we humiliate her, she is seriously ill.’

About her friends:

My friends care for me—they give me attention; when I want to drink something they make it for me.

About her work:

I feel really grateful that I work here. I have my salary that I can save, I have my own life now.

Regarding her family:

I go home and bring my mom a little money from my work. I avoid my brother.

He is too ashamed to ask me for money.

And finally about her future:

I have my own life here; I'm free. My future is now a bright road for me, and I'm very grateful. I can take care of my own finances. . . I don't have to get stressed out and confused. . . My life feels more comfortable. Because all I was doing before was looking for treatments and cures. . . Now, no one has control over my life, my life doesn't feel oppressed, and that's what makes me happy. . . Yes, the future seems so bright for me now.

## NOTE

1. A culturally informed reader interested in TS in Indonesia may wonder at the overlap between TS and Latah, a culture-bound syndrome found throughout Southeast Asia sometimes called the hyperstartle syndrome. Latah involves a hypersensitivity to sudden stimulation or fright, with associated behaviors including echopraxia, the involuntary repetition of another's actions; echolalia, or the automatic repetition of another's vocalizations; coprolalia; and dissociative response (see Simons (1996) for a complete review). Jilek (Jilek 1995) notes that even in the nineteenth century, neurologists noticed a phenomenological similarity between TS and Latah, and Gilles de la Tourette himself erroneously assumed Latah-type reactions to be cases of TS, a belief echoed by later psychological anthropologists (Devereux 1980). Although the Balinese recognize Latah (in Bali known as *gigian*), it is not as common as in other areas of Indonesia, such as Java, and has apparently declined in frequency in the last two decades (Simons 1996).

## REFERENCES

- Arana-Lechuga, Yoaly, Oscar Sanchez-Escandón, Nancy de Santiago-Treviño, Carlos Castillo-Montoya, Guadalupe Terán-Pérez, and Javier Velázquez-Moctezuma. 2008. Risperidone Treatment of Sleep Disturbances in Tourette's Syndrome. *Journal Neuropsychiatry Clin Neurosci* 20 (3): 375–376. doi:10.1176/appi.neuropsych.20.3.375
- Asarnow, Joan Rosenbaum, Martha Tompson, Elizabeth Burney Hamilton, Michael J. Goldstein, and Donald Guthrie. 1994. Family-Expressed Emotion, Childhood-Onset Depression, and Childhood-Onset Schizophrenia Spectrum Disorders: Is Expressed Emotion a Nonspecific Correlate of Child Psychopathology or a Specific Risk Factor for Depression? *Journal of Abnormal Child Psychology* 22 (2): 129–146. doi:10.1007/BF02167896
- Belo, Jane. 1960. *Trance in Bali*. New York: Columbia University Press.
- . 1970. *Traditional Balinese Culture; Essays*. New York: Columbia University Press.
- Bharadwaj, Prashant, Mallesh M. Pai, Agne Suziedelyte, and National Bureau of Economic Research. 2015. Mental Health Stigma. In *NBER Working Paper*

- Series No 21240*. Cambridge, MA: National Bureau of Economic Research. <http://dx.doi.org/10.3386/w21240>
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Vol. 16. New York: Cambridge University Press.
- Buckser, Andrew. 2006. The Empty Gesture: Tourette Syndrome and the Semantic Dimension of Illness. *Ethnology* 45 (4): 255. doi:[10.2307/20456601](https://doi.org/10.2307/20456601)
- Budman, Cathy L. 2014. The Role of Atypical Antipsychotics for Treatment of Tourette's Syndrome: An Overview. *Drugs* 74 (11): 1177–1193. doi:[10.1007/s40265-014-0254-0](https://doi.org/10.1007/s40265-014-0254-0)
- Church, Jessica A., Damien A. Fair, Nico U.F. Dosenbach, Alexander L. Cohen, Francis M. Miezin, Steven E. Petersen, and Bradley L. Schlaggar. 2009. Control Networks in Paediatric Tourette Syndrome Show Immature and Anomalous Patterns of Functional Connectivity. *Brain* 132 (1): 225–238.
- Connor, Linda. 1982. The Unbounded Self: Balinese Therapy in Theory and Practice. In *Cultural Conceptions of Mental Health and Therapy*, ed. A. Marsella. Dordrecht: Reidel.
- Connor, Linda, Patsy Asch, and Timothy Asch. 1986. *Jero Tapakan: Balinese Healer*. Cambridge: Cambridge University Press.
- Crane, Jacquelyn, Jesen Fagerness, Lisa Osiecki, Gunnell Boyd, S. Evelyn Stewart, David L. Pauls, and Jeremiah M. Scharf. 2011. Family-Based Genetic Association Study of DLGAP3 in Tourette Syndrome. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 156 (1): 108–114.
- Csordas, Thomas J., and Elizabeth Lewton. 1998. Practice, Performance and Experience in Ritual Healing. *Transcultural Psychiatric Research Review* 35 (4): 435–512.
- Desjarlais, Robert, Leon Eisenberg, Byron Good, and Arthur Kleinman. 1995. *World Mental Health: Problems and Priorities in Low-Income Countries*. Oxford: Oxford University Press.
- Devereux, George. 1980. *Basic Problems of Ethnopsychiatry*. Chicago: University of Chicago Press.
- Edgerton, Robert B. 1992. *Sick Societies: Challenging the Myth of Primitive Harmony*. New York: Free Press.
- Ercan-Sencicek, A. Gulhan, Althea A. Stillman, Ananda K. Ghosh, Kaya Bilguvar, Brian J. O'Roak, Christopher E. Mason, et al. 2010. L-Histidine Decarboxylase and Tourette's Syndrome. *New England Journal of Medicine* 362 (20): 1901–1908. doi:[10.1056/NEJMoa0907006](https://doi.org/10.1056/NEJMoa0907006)
- Felling, Ryan J., and Harvey S. Singer. 2011. Neurobiology of Tourette Syndrome: Current Status and Need for Further Investigation. *The Journal of Neuroscience* 31 (35): 12387–12395.
- Fernandez, Hubert H., Andre G. Machado, and Mayur Pandya. 2015. *A Practical Approach to Movement Disorders: Diagnosis and Management*. Second ed. - New York: Demos Medical Publishing, LLC.

- Ferzacca, Steve. 2001. *Healing the Modern in a Central Javanese City*. Durham: Carolina Academic Press.
- Freeman, Roger. 2015. *Tics and Tourette Syndrome: Key Clinical Perspectives*. London: Mac Keith Press.
- Ganos, Christos, Mark J. Edwards, and Kirsten Müller-Vahl. 2016. "I Swear It Is Tourette's!": On Functional Coprolalia and Other Tic-Like Vocalizations. *Psychiatry Research* 246 (30): 821–826. doi:[10.1016/j.psychres.2016.10.021](https://doi.org/10.1016/j.psychres.2016.10.021)
- Geertz, Clifford, and Hildred Geertz. 1975a. *Kinship in Bali*. Chicago: University of Chicago Press.
- Geertz, Hildred, and Clifford Geertz. 1975b. *Kinship in Bali*. Chicago: University of Chicago Press.
- Ghanizadeh, Ahmad. 2010. Methionine Sulfoximine as a Novel Hypothesized Treatment for Tourette's Syndrome. *Journal of the Neurological Sciences* 293 (1–2): 126.; author reply 126-7. doi:[10.1016/j.jns.2010.03.017](https://doi.org/10.1016/j.jns.2010.03.017)
- Hawksley, Jack, E. Cavanna Andrea, and Nagai Yoko. 2015. The Role of the Autonomic Nervous System in Tourette Syndrome. *Frontiers in Neuroscience* 9: 117. doi:[10.3389/fnins.2015.00117](https://doi.org/10.3389/fnins.2015.00117)
- Hay, M. Cameron. 2001. *Remembering to Live: Illness at the Intersection of Anxiety and Knowledge in Rural Indonesia*. Ann Arbor: University of Michigan Press.
- Hobart, Angela, Urs Ramseyer, and Albert Leemann. 2001. *The People of Bali*. Hoboken: Wiley-Blackwell.
- Hodes, Matthew, and Susan Shur-Fen Gau. 2016. Positive Mental Health, Fighting Stigma and Promoting Resiliency for Children and Adolescents. In *ScienceDirect*. Restricted to UCB, UCD, UCI, UCLA, UCM, UCR, UCSC, UCSD, and UCSF. London: Academic Press is an imprint of Elsevier, <http://uclibs.org/PID/283721>
- Hollenbeck, Peter J. 2003. A Jangling Journey: Life with Tourette Syndrome. *Cerebrum* 5 (3): 47–60.
- Horowitz, Mardi J., and Steven P. Reidbord. 2014. Memory, Emotion, and Response to Trauma. In *The Handbook of Emotion and Memory: Research and Theory*, ed. Sven-Åke Christianson, 343–356. New York: Lawrence Erlbaum Associates.
- Jenkins, Janis H., and Marvin Karno. 1992. The Meaning of Expressed Emotion: Theoretical Issues Raised by Cross-Cultural Research. *American Journal of Psychiatry* 149: 9–21.
- Jenaway, Megan. 2002. *Sisters and Lovers: Women and Desire in Bali*. Lanham: Rowman & Littlefield Publishers.
- Jilek, Wolfgang G. 1993. *Traditional Medicine Relevant to Psychiatry*. In *Treatment of Mental Disorders: A Review of Effectiveness*, ed. Giovanni de Girolamo, Norman Sartorius, Gavin Andrews, G. Allen German, and Leon Eisenberg. Washington, DC: American Psychiatric Press.

- . 1995. Emil Kraepelin and Comparative Sociocultural Psychiatry. Special Issue: Emil Kraepelin and 20th Century Psychiatry. *European Archives of Psychiatry and Clinical Neuroscience* 245 (4–5): 231–238. doi:[10.1007/BF02191802](https://doi.org/10.1007/BF02191802)
- Keeney, Bradford, and I. Wayan Budi Asa Mekel. 2004. *Balians : Traditional Healers of Bali, Profiles of Healing*. Philadelphia: Ringing Rocks Press.
- Kleinman, Arthur. 1991. *Rethinking Psychiatry: From Cultural Category to Personal Experience*. New York: Free Press.
- Kobierska, Magdalena, Martyna Sitek, Katarzyna Gocyla, and Piotr Janik. 2014. Coprolalia and Copropraxia in Patients with Gilles De La Tourette Syndrome. *Neurologia i Neurochirurgia Polska Pol* 48 (1): 1–7. doi:[10.1016/j.pjnns.2013.03.001](https://doi.org/10.1016/j.pjnns.2013.03.001)
- Lan, Chen-Chia, Chia-Chien Liu, and Ying-Sheue S. Chen. 2015. Quetiapine and Clozapine Combination Treatment for Tourette’s Syndrome in an Adolescent Boy: Potential Role of Dopamine Supersensitivity in Loss of Treatment Response. *Journal of Child Adolescent Psychopharmacology* 25 (2): 188–190. doi:[10.1089/cap.2014.0118](https://doi.org/10.1089/cap.2014.0118)
- Lansing, John Stephen. 1995. *The Balinese, Case Studies in Cultural Anthropology*. Fort Worth: Harcourt Brace College Publishers.
- Lemelson, Robert. 2003a. Obsessive-Compulsive Disorder in Bali: The Cultural Shaping of a Neuropsychiatric Disorder. *Transcultural Psychiatry* 3: 377–408.
- . 2003b. Traditional Healing and It’s Discontents: Efficacy and Traditional Therapies of Neuropsychiatric Disorders in Bali. *Medical Anthropology Quarterly* 18 (1): 48–76.
- . 2014. *Bitter Honey*. 81 min. Watertown: Documentary Research Resources. <http://www.der.org/films/bitter-honey.html>
- Lewis, Kendra, Lewis Rappa, Devon A. Sherwood-Jachimowicz, and Margareth Larose-Pierre. 2010. Aripiprazole for the Treatment of Adolescent Tourette’s Syndrome: A Case Report. *Journal of Pharmacy Practice* 23 (3): 239–244. doi:[10.1177/0897190009358771](https://doi.org/10.1177/0897190009358771)
- Lin, Haiqun, Liliya Katsovich, Music Ghebremichael, Diane B. Findley, Heidi Grantz, Paul J. Lombroso, et al. 2007. Psychosocial Stress Predicts Future Symptom Severities in Children and Adolescents with Tourette Syndrome and/or Obsessive-Compulsive Disorder. *Journal of Child Psychology and Psychiatry* 48 (2): 157–166.
- Lizano, Paulo, Ami Popat-Jain, Jeremiah M. Scharf, Noah C. Berman, Alik Widge, Darin D. Dougherty, and Emad Eskandar. 2016. Challenges in Managing Treatment-Refractory Obsessive-Compulsive Disorder and Tourette’s Syndrome. *Harvard Review of Psychiatry* 24 (4): 294–301. doi:[10.1097/HRP.000000000000121](https://doi.org/10.1097/HRP.000000000000121)
- Marsh, Rachel, Andrew J. Gerber, and Bradley S. Peterson. 2008. Neuroimaging Studies of Normal Brain Development and Their Relevance for Understanding

- Childhood Neuropsychiatric Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry* 47 (11): 1233–1251.
- McKay, Dean, and Eric A. Storch. 2009. *Cognitive-Behavior Therapy for Children: Treating Complex and Refractory Cases*. New York: Springer Pub.
- McMahon, William M., Alice S. Carter, Nancy Fredine, and David L. Pauls. 2003. Children at Familial Risk for Tourette's Disorder: Child and Parent Diagnoses. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 121 (1): 105–111.
- McNaught, Kevin S.P., and Jonathan W. Mink. 2011. Advances in Understanding and Treatment of Tourette Syndrome. *Nature Reviews Neurology* 7 (12): 667–676. doi:[10.1038/nrneurol.2011.167](https://doi.org/10.1038/nrneurol.2011.167)
- McNay, Lois. 1999. Gender, Habitus and the Field Pierre Bourdieu and the Limits of Reflexivity. *Theory, Culture and Society* 16 (1): 95–117. doi:[10.1177/026327699016001007](https://doi.org/10.1177/026327699016001007)
- McPhee, Colin. 1956. *A House in Bali*. New York: Day and Co.
- Mustar, Lukman. 1985. Pengaruh Faktor-Faktor Psiko-Sosio-Kultural Dalam Interaksi Antara Pengobatan Tradisional Dan Kliennya Di Palembang, Semarang, Bali (the Effect of Psycho-Socio-Cultural Factors in the Interaction between Traditional Therapy and Its Patients in Palembang, Semarang, Bali). Indonesia.
- Nagai, Yoko, Andrea Cavanna, and Hugo D. Critchley. 2009. Influence of Sympathetic Autonomic Arousal on Tics: Implications for a Therapeutic Behavioral Intervention for Tourette Syndrome. *Journal of Psychosomatic Research* 67 (6): 599–605. doi: [10.1016/j.jpsychores.2009.06.004](https://doi.org/10.1016/j.jpsychores.2009.06.004)
- Nagai, Yoko, Andrea E. Cavanna, Hugo D. Critchley, Jeremy J. Stern, Mary M. Robertson, and Eileen M. Joyce. 2014. Biofeedback Treatment for Tourette Syndrome: A Preliminary Randomized Controlled Trial. *Cognitive and Behavioral Neurology* 27 (1): 17–24. doi:[10.1097/wnn.0000000000000019](https://doi.org/10.1097/wnn.0000000000000019)
- O'Connor, Kieron P., Anick Laverdure, Annie Taillon, Emmanuel Stip, François Borgeat, and Marc Lavoie. 2009. Cognitive Behavioral Management of Tourette's Syndrome and Chronic Tic Disorder in Medicated and Unmedicated Samples. *Behaviour Research and Therapy* 47 (12): 1090–1095.
- O'Rourke, Julia A., Jeremiah M. Scharf, Platko Jill, S. Evelyn Stewart, Cornelia Illmann, David A. Geller, et al. 2011. The Familial Association of Tourette's Disorder and Adhd: The Impact of OCD Symptoms. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 156B (5): 553–560. doi:[10.1002/ajmg.b.31195](https://doi.org/10.1002/ajmg.b.31195)
- Parker, Lynette. 1997. Engendering School Children in Bali. *Journal of the Royal Anthropological Institute* 3 (3): 497–516.
- Pringle, Robert. 2004. *A Short History of Bali: Indonesia's Hindu Realm*. Crows Nest: Allen & Unwin.

- Rice, Timothy, and Barbara Coffey. 2015. Pharmacotherapeutic Challenges in Treatment of a Child with “the Triad” of Obsessive Compulsive Disorder, Attention-Deficit/Hyperactivity Disorder and Tourette’s Disorder. *Journal of Child and Adolescent Psychopharmacology* 25 (2): 176–179. doi:[10.1089/cap.2015.2522](https://doi.org/10.1089/cap.2015.2522)
- Robertson, Mary M. 2006. Mood Disorders and Gilles De La Tourette’s Syndrome: An Update on Prevalence, Etiology, Comorbidity, Clinical Associations, and Implications. *Journal of Psychosomatic Research* 61 (3): 349–358. doi:[10.1016/j.jpsychores.2006.07.019](https://doi.org/10.1016/j.jpsychores.2006.07.019)
- Saka, Esen, and Ann M. Graybiel. 2003. Pathophysiology of Tourette’s Syndrome: Striatal Pathways Revisited. *Brain and Development* 25: S15–S19. doi:[10.1016/S0387-7604\(03\)90002-7](https://doi.org/10.1016/S0387-7604(03)90002-7)
- Scahill, Lawrence, Gerald Erenberg, Cheston M. Berlin, Cathy Budman, Barbara J. Coffey, Joseph Jankovic, et al. 2006. Contemporary Assessment and Pharmacotherapy of Tourette Syndrome. *NeuroRx* 3 (2): 192–206.
- Seligman, Rebecca, and Laurence J. Kirmayer. 2008. Dissociative Experience and Cultural Neuroscience: Narrative, Metaphor and Mechanism. *Culture, Medicine and Psychiatry* 32 (1): 31–64.
- Serajee, Fatema J., and A.H.M. Mahbubul Huq. 2015. Advances in Tourette Syndrome: Diagnoses and Treatment. *Pediatric Clinics North America* 62 (3): 687–701. doi:[10.1016/j.pcl.2015.03.007](https://doi.org/10.1016/j.pcl.2015.03.007)
- Simons, R. 1996. *Boo! Culture, Experience and the Startle Reflex*. New York/Oxford: Oxford University Press.
- Singer, Harvey S., and John T. Walkup. 1991. Tourette Syndrome and Other Tic Disorders Diagnosis, Pathophysiology, and Treatment. *Medicine* 70 (1): 15–32.
- Staley, Douglas, Roxburgh Wand, and Gary Shady. 1997. Tourette Disorder: A Cross-Cultural Review. *Comprehensive Psychiatry* 38 (1): 6–16. doi:[10.1016/S0010-440X\(97\)90047-X](https://doi.org/10.1016/S0010-440X(97)90047-X)
- Suryani, Luh K. 1984. Culture and Mental Disorder: The Case of Bebainan in Bali. *Culture, Medicine and Psychiatry* 8 (1): 95–113.
- Swain, James E., Lawrence Scahill, Paul J. Lombroso, Robert A. King, and James F. Leckman. 2007. Tourette Syndrome and Tic Disorders: A Decade of Progress. *Journal of the American Academy of Child and Adolescent Psychiatry* 46 (8): 947–968. doi:[10.1097/chi.0b013e318068fbcc](https://doi.org/10.1097/chi.0b013e318068fbcc)
- Thong, Denny, Bruce Carpenter, and Stanley Krippner. 1993. *A Psychiatrist in Paradise: Treating Mental Illness in Bali*. In *Bangkok*. Cheney Wash: White Lotus.
- Weller, Elizabeth B., and Ronald A. Weller. 2009. Olanzapine as Treatment for Children and Adolescents with Tourette’s Syndrome. *Current Psychiatry Reports* 11 (2): 95–96. <https://www.ncbi.nlm.nih.gov/pubmed/19302761>



- Whyte, Susan Reynolds, and Benedicte Ingstad. 1995. Disability and Culture: An Overview. In *Disability and Culture*, ed. S.R. Whyte and B. Ingstad, 3–32. Berkeley: University of California Press.
- Wicaksana, Inu. 2008. *Mereka Bilang Aku Sakit Jiwa: Refleksi Kasus-Kasus Psikiatri Dan Problematika Kesehatan Jiwa Di Indonesia*. Yogyakarta: Kanisius.
- Wikan, U. 1990. *Managing Turbulent Hearts: A Balinese Formula for Living*. Chicago: University of Chicago Press.
- Wilson, John P., and Beverley Raphael. 2013. *International Handbook of Traumatic Stress Syndromes*. Berlin/Heidelberg: Springer Science & Business Media.
- Yamamuro, Kazuhiko, Manabu Makinodan, Toyosaku Ota, Junzo Iida, and Toshifumi Kishimoto. 2014. Paliperidone Extended Release for the Treatment of Pediatric and Adolescent Patients with Tourette’s Disorder. *Annals of General Psychiatry* 13: 13. doi:[10.1186/1744-859X-13-13](https://doi.org/10.1186/1744-859X-13-13)
- Yang, Lawrence H., Fang-Pei Chen, Kathleen Janel Sia, Jonathan Lam, Katherine Lam, Hong Ngo, et al. 2014. “What Matters Most:” a Cultural Mechanism Moderating Structural Vulnerability and Moral Experience of Mental Illness Stigma. *Social Science and Medicine* 103: 84–93.
- Yoon, Dustin Y., Christopher A. Rippel, Andrew J. Kobets, Christina M. Morris, Jennifer E. Lee, Phillip N. Williams, et al. 2007. Dopaminergic Polymorphisms in Tourette Syndrome: Association with the Dat Gene (Slc6a3). *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 144 (5): 605–610.
- Yu, Dongmei, Carol A. Mathews, Jeremiah M. Scharf, Benjamin M. Neale, Lea K. Davis, Eric R. Gamazon, et al. 2015. Cross-Disorder Genome-Wide Analyses Suggest a Complex Genetic Relationship between Tourette’s Syndrome and Ocd. *American Journal of Psychiatry* 172 (1): 82–93. doi:[10.1176/appi.ajp.2014.13101306](https://doi.org/10.1176/appi.ajp.2014.13101306)